

An Overview of Postgraduate Education in Latin America and Other Countries of the World

Vidal Castillo Olivares

Universidad Nacional Mayor de San Marcos - Lima - Peru

vicastillo63@gmail.com

Abstract

The globalization of academic training, the development of transversal competencies in the different countries of the world, the diversification and expansion of graduate programs in Latin America, the Caribbean and other regions of the world, reflect the academic movement of graduate students in the different universities. Postgraduate training programs are instruments of the policy of the states of each country and through this purpose universities train specialized professionals of high academic level in the different faculties and academic schools that offer quality education in Latin America and the Caribbean, pointing out some of them in Brazil, Colombia, Argentina, Chile, Peru, etc. In Peru, postgraduate education has undergone some changes with respect to the framework of the new university law N° 30220, Chapter 5, on the academic organization in art. 43, on postgraduate studies with specializations, postgraduate diplomas, specialization masters and research or academic masters, and doctorates. Each university establishes the duration of postgraduate studies and the credits or weights of the subject and these are established according to the university law and its regulations. Private universities are also subject to the governing body, who must authorize the National Superintendence of University Education (SUNEDU) to control and supervise the normal development and operation of such educational institution. This overview to the postgraduate studies in the countries of Europe and Asia, in comparison with Latin America and the Caribbean, the academic level of the professional training of the postgraduate studies in these continents such as Europe and Asia are of the highest level, likewise they grant scholarships to Latin Americans to improve and specialize in masters and doctorates in various universities in Europe and Asia, where there are more than 14 countries that grant scholarships to make postgraduate studies in different specialties, then postgraduate studies (masters, doctorate and specializations) are increasingly strengthened in the scientific and technological research of university education in Latin America, the Caribbean and other regions of the world.

Key words: Postgraduate, Master, Doctorate, University, Student and Quality.

RESUMEN

La globalización de la formación académica, el desarrollo de las competencias transversales en los diferentes países del mundo, la diversificación, la expansión de los posgrados en América Latina, el Caribe y en otros países del mundo, reflejan el movimiento académico de los estudiantes de posgrado en las diferentes universidades de dichas regiones, los programas de formación de posgrado son instrumentos de la política de los estados de cada país y que mediante este fin las universidades forman profesionales especializados de alto nivel académico en las diferentes facultades y escuelas académicas que ofrece las universidades en América Latina y el Caribe educación de calidad, podemos señalar algunas de ellas; Brasil, Colombia, Argentina, Chile, Perú, etc. En Perú la formación de posgrado ha sufrido algunos cambios respecto al marco de la nueva ley universitaria N° 30220, el capítulo 5, sobre la organización académica en el art. 43, sobre estudios de posgrado señalan las siguientes líneas de especialización, Diplomados de posgrado, Maestrías de especialización y maestrías de investigación o académicas, finalmente los doctorados, cada universidad establece la duración de estudios de los posgrados y los créditos o pesos de la asignatura y estas son establecidas de acuerdo a la ley universitaria y su reglamento, además es de carácter obligatorio para las universidades públicas, las universidades privadas

también están sujetos al órgano rector, es decir la promotora debe contar con la autorización de la Superintendencia Nacional de Educación Universitaria (SUNEDU) quien controla y supervisa el normal desarrollo y funcionamiento de dicha institución educativa. Aquí una mirada más a los posgrados en los países de Europa y Asia, en comparación con América latina y el Caribe el nivel académico de la formación profesional de los posgrados de estos continentes como Europa y Asia son del más alto nivel, así mismo otorgan becas de estudios a los latinoamericanos para perfeccionarse y especializarse en las maestrías y doctorados en diversas universidades de Europa y Asia, en la cual se encuentran más de (14) países que otorgan becas para estudiar los posgrados en diferentes especialidades, entonces los estudios de posgrado en (maestría, doctorado y especializaciones) se van fortaleciendo cada vez más en la investigación científica y tecnológica de la formación universitaria en Latinoamérica, el Caribe y otras regiones del mundo.

Palabras clave: Posgrado, Maestría, Doctorado, Universidad, Estudiante y Calidad.

1. Introduction

This research paper consists of four sections that present the topic of study named "Graduate education in Latin America", that summarizes the central ideas of the study, following an exploratory research methodology that immerses the reader in the formation of graduate programs with internationalization level, in which citizen participation and social demands play an important role to adapt these formations to suit the reality. Merit scholarships, mobility and international migration are also covered. The aim is to cover more than a simple inventory of scientists, technologists and professionals, which in most cases is taken as a traditional indicator, and to interpret the trends in the most critical areas of scientific and technological development.

In this context, the Spanish Agency of International Cooperation for Development (AECID) through the Ibero-American Observatory of Science, Technology and Society, which belongs to the Center for Higher University Studies, proposes to advance in the creation of an Ibero-American space of knowledge, oriented to the necessary transformation of higher education, and articulated around research, development and innovation; a necessary condition to increase productivity by providing better quality and accessibility to goods and services for people, as well as the international competitiveness of the region.

2. Presentation of the subject of study

This paper deals with the topic "Postgraduate Training in Latin America" that presents the university reality of those countries, putting Brazil as the most outstanding example, with an exponential growth of its postgraduate studies throughout a decade. Some documents are also analyzed in relation to the recent trends in the evolution of postgraduate enrollments. "Postgraduate training is sometimes a requirement for greater opportunity in the labor field, even to assume positions" (Flores, 2011 pp. 9 - 11) .

According to Dr. Flores Barboza, the master's degree is a rigorously complex form of training that is fundamental in the academic and professional training required by the labor market in the competition for human resources.

2.1 Current context

2.1.1. Problem.

A problem is a state of deficiency or lack of knowledge and other resources required to minimize or cancel the harmful effects caused by a situation in the face of collective needs.

Postgraduate Education in Latin America and a more detailed view of the situation.

2.1.2. Development of the Topic

Emergence of the Postgraduate studies, according to (Carreño, 2011) its origin is located in medieval universities, characterized by being schools of higher education with corporate autonomy, supportive among

people and promoters of academic freedom. They were interested in an education that combined teaching with the cultivation of scholarship (Brunner, 1973, in Carreño, 2010; Manzo, 2006; and Krotsch, 2001). It was born "in the equivalent degrees of Doctor, Master or Professor, which the medieval universities granted with honorary character or as proof that a graduate or graduate of their classrooms could be considered a learned man and capable of teaching his profession" (Morles, 1997, p. 38). Carreño refers to arguments of several authors to support the development, importance and evolution of postgraduate training in the original context and that this should serve for the expansion in the various university spaces for an authentic academic training of this level of studies.

The creation of graduate programs in Latin America are basic tools of the national institutions in charge of the development of science and technology in higher education, the changes are notorious in terms of the number of scholarships, new mechanisms for quality evaluation, thematic diversification, geographical variety, etc. Support for postgraduate training in science and technology policies and postgraduate training programs are policy instruments of the states, are strategic, and have basic functions assigned to the Science and Technology Councils since the 1950s.

In the Peruvian case, the National Council for Science, Technology and Technological Innovation (CONCYTEC), whose purpose is to regulate, direct, guide, encourage, coordinate, supervise and evaluate the actions of the State in the field of Science, Technology and Technological Innovation and promote and encourage its development through concerted action and complementarity between programs and projects of public institutions, academic, business and social organizations. This function of Concytec tries to change the traditional perspective which is that, instead of focusing on capacity building where the training of researchers had a class role, giving greater emphasis on issues of promoting innovation, technological research or linkage with the productive and social environment to the training of researchers seems to be an important topic, but in reality it is the agenda item of another era (<http://www.librosperuanos.com/editoriales/detalle/139/Concytec>, 2004).

Postgraduate training programs have increased significantly in recent years in the countries of the region. There are certain coincidences in the orientations observed in the countries of the region with respect to their postgraduate programs. We want to talk about promoting public policies in common between sister countries, there are transmission mechanisms proposed by the Organization for Economic Cooperation and Development (OECD), which lead developing countries to adopt policy orientations in force at the same time in developed countries.

In the case of research training, for the last two decades there has been a recurrent preaching in several OECD countries about the relative shortage of qualified personnel. There is therefore a need for highly qualified human resources, and the need for university graduates in science and engineering has become evident, which in the long term may become a problem for the installation and expansion of industries that need this refined knowledge.

2.1.3 The Logics of the expansion of support programs for graduate education in Latin America.

These reach Latin American countries are a wave of international opinion and may contribute to the increase of scholarships. In the Peruvian case, the CONCYTEC channels support to postgraduate programs through the financing of research and development projects (master's and/or doctoral theses), including Law 30309, which promotes private investment in scientific research projects, technological development and technological innovation (R+D+i) through a tax benefit applied to income tax. This law seeks to encourage Peruvian companies to innovate and diversify, and that the link between universities and companies becomes even closer.

In the case of Brazil, two internal factors can be identified including the need for the reproduction of scientific communities and the qualification of university teachers. The results of Brazilian policy in this area are undoubtedly remarkable. Figure 1 shows the evolution of the graduation of master's and doctoral students over the last two decades. Taking the Brazilian example, its success is due to an adequate program design and

efficient management, and at the same time the program was being adjusted to the evolution of graduate programs. The most important adjustment was the development of a system for accrediting the quality of the training provided by the master's and doctoral programs.

The dominant paradigm in higher education is that of the hard sciences which guide the processes of teaching, research, quality assessment and accreditation, and resource allocation. However, the current reality shows other trends that contradict the hegemonic model and, in many cases, the mechanisms of reproduction of the academic community that have adapted to this dominant pattern.

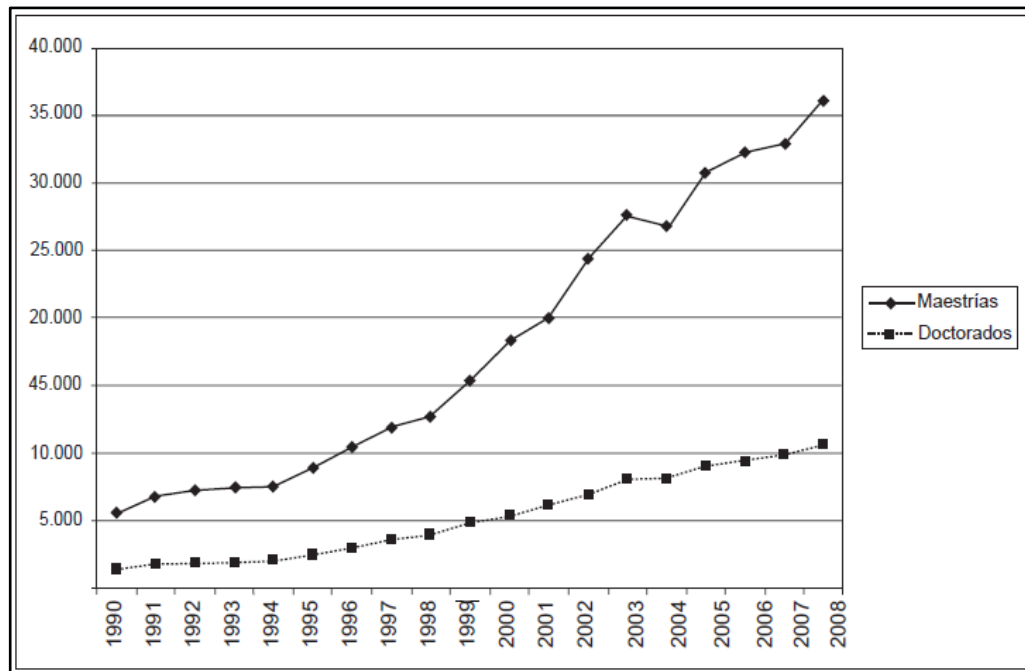


Figure 1. Master's and doctoral graduates in Brazil. 1990 – 2008

Source: (Luchilo, 2010, p. 16)

2.1.4 Privatization

A growing trend in the public policies of the 1990s in relation to graduate programs is that of privatization, understood as the expansion of private graduate programs and the charging of taxes on public sector graduate programs. (Claudio, 2007 p. 18) states that in recent years there has been a significant change in the relationship between the relative weight of the public and private postgraduate sectors in the region.

Thus, for example, the percentage of graduate students in public institutions throughout the region dropped from 76% in 1994 to 68% in the year 2000. The reality, however, is not homogeneous in all countries. In Bolivia, as another example, the private sector represented 35.4% of enrollment in 2000, in Argentina 19.8% in 2001, in Ecuador 26.06%, and in the Dominican Republic and Puerto Rico 63.6% and 58.8%, respectively.

On the other hand, in Venezuela, private graduate students represented 3.7% in 1973 and increased to 31.2% in 2003. Academic graduate programs are concentrated in a few universities, mainly autonomous universities and those located in metropolitan areas, some of which are called macro-universities (for example, UNAM and UBA) and specialized universities.

In general, doctoral programs are articulated with research programs in the large universities of the public sector, in contrast to lower-cycle postgraduate programs such as specializations, which are concentrated in the private sector. In Venezuela, for example, out of a total of 44 universities, only 5 public and 3 private universities offer 68% of the country's graduate programs.

2.1.5 Graduate Education in Latin America: Expansion, Diversification, Quality Assurance and Internationalization

Three decades ago, graduate education in most countries in the region was related to specialties such as natural sciences and medicine, with few graduates, insufficient to meet the demand for higher education programs that began to grow at accelerated rates. Since then, in the last two decades, university education in Latin America has experienced explosive growth. Enrollment grew from around 7.5 million in 1994 to more than 17 million in 2006.

Most of this expansion was due to undergraduate enrollment, with a greater presence in the social sciences, as stated in the following quotation.

"Human competence and institutional capacity are increasingly closely related. Research and technological development activity today, more than in the past, needs to be housed in institutions or groups for reasons such as: its increasing complexity; the technology involved; the confluence of various disciplines, methods and approaches to problem solving; and the time involved in postgraduate academic training." (Jaramillo, 2010, p. 118).

According to Jaramillo, graduate education responds to the need for human competence, scientific and technological research that seeks to integrate and diversify methods and approaches to learning models in the academic development of the various areas or subjects at the graduate level.

Table 1. Graduate students, Argentina, Chile, Colombia, Mexico. 2000 y 2006

Country	2000	2006	Percentage of growth
Argentina	39725	62870	59.3%
Chile	9486	21407	125.6%
Colombia	55957	66901	19.5%
Mexico	118099	153907	30.3%

Source: (Luchilo, 2010, p. 18)

The graduation data present problems of coverage and internationalization of graduate programs, this Table 2 allows to see the magnitude of growth in the case of master's and doctoral graduates in the region. In terms of diversification, most of the number of graduate programs is concentrated in the capitals and large cities. These programs are sometimes interdisciplinary. That is, they combine more than one discipline.

Table 2. D. graduates in Latin America and the Caribbean by area of knowledge.

Areas of Knowledge	1990	1994	1998		2006
Natural and exact sciences	776	1017	1483	2186	3027
Engineering and technology	268	385	728	1278	1716
Medical Sciences	445	485	880	1590	2040
Agricultural Sciences	166	239	598	938	1473
Social Sciences	309	420	678	1425	1977
Humanities	367	589	1030	1989	2821
Total	2330	3135	5398	9406	13054

Source: (Luchilo, 2010, p. 19)

These programs are sometimes interdisciplinary, that is, they combine more than one discipline. The programs offered may be due to specific labor market niches. Another diversification refers to the type of institution that provides postgraduate training, it can be public or private, in this case it is no longer the university with more tradition and academic trajectory, which has more demand due to the creation of new study centers. It can also be highlighted that some institutions make agreements with foreign institutions to offer a double certification program. The quality of academic programs indicates that since the nineties, national agencies for university accreditation and evaluation have been created as a Latin American manifestation of the European tendencies towards the constitution of an evaluating entity. In the Latin American case, evaluation was presented as an instrument that implied greater control over universities that had a great deal of university autonomy, and this voluntary accreditation model predominates.

The dominant paradigm in higher education is that of the hard sciences, which guides the processes of teaching, research, quality assessment and accreditation, and resource allocation. However, the current reality shows other trends that contradict the hegemonic model and, in many cases, the mechanisms of reproduction of the academic community that have adapted to this dominant pattern (Davila, 2012, p. 141).

In this sense, in Peru postgraduate training since 2014 has undergone some changes with respect to the framework of the new university law No. 30220, chapter 5, on academic organization in art. 43, on postgraduate studies, which point out the following lines of specialization, Postgraduate Diplomas, Specialization Masters and research or academic masters, and doctorate. According to this document, each university establishes the duration of postgraduate studies and the credits or weights of the subject and these are established according to the university law and its regulations. Private universities are also subject to the governing body, i.e., the promoter must have the authorization of the National Superintendence of University Education (SUNEDU), which controls and supervises the normal development and functioning of the university (Iberico, 2014 p. 17) .

So, with the information data on the development of postgraduate training in Latin America, it becomes a major landmark line of academic and professional development that goes beyond the purposes that universities in these regions wish to achieve, in many cases crossing borders and continents and this gives rise to new scenarios of academic training, which is about inserting and integrating postgraduate training in universities in Europe and Asia, where the academic training system is of the highest competitive level, also offering international scholarships in postgraduate studies with benefits of 100% in favor of the scholarship student. These universities are: United States, Oxford of the United Kingdom, Spain, Germany, Canada, Denmark, Australia, France, Italy, Sweden, Norway, Poland, Slovenia, Czech Republic, Slovakia, China and Japan. The duration of postgraduate studies in Europe and Asia are from 24, 36 and 48 months.

Here is a reflection on a article from Arguinbau (2009):

"Scientific production is undoubtedly an index of the growth of the different disciplines and in many cases an unquestionable criterion for assessing, at least in part, quality. It is also a fact that any data, in order to be considered scientific, requires dissemination, which makes it increasingly important not only to promote research, but also scientific communication. In this context, the intention of doctoral training in Europe, in addition to strengthening research sufficiency, is to promote the dissemination of scientific knowledge, thereby contributing to the advancement of the discipline or disciplines in question" (Arguinbau, 2009 p. 95) .

The bibliographic exploration of this topic allows to know the relevant information and research works on postgraduate education in Europe, in which Arguinbau considers that the growth of the different disciplines is based on the unquestionable criteria of valuation as well as scientific production and the strengthening of research efficiency, i.e. it is not enough to be an academic or scholar in the management of

an area or discipline, but for postgraduate students in Europe the most important thing is the production of publications, be it books, journals, papers, monographs, theses, dissertations, essays, etc.

For (Davila, 2012 p. 48) the concept of "internationalization of Higher Education" is beginning to be used to refer to different educational processes that, especially in the last two decades and increasingly more accentuated, occur worldwide in Higher Education, accompanying the phenomenon of globalization in its different dimensions: economic, social, cultural, political. These different phenomena that make up the so-called internationalization of Higher Education involve a wide variety of cooperation experiences in the field of Higher Education, agreements between governments to promote integration, agreements between universities, constitution of institutional networks for academic exchange or research, mobility of students, academics and professionals, and even processes of convergence of educational systems.

According to (Carreño, 2011) both the content and the strategy are part of the decisions made by the teacher in his teaching practice, which is understood as the experiences that the teacher carries out with passion (Litwin, 2008) in the moments of programming, action and evaluation.

This implies that the teacher who trains graduate students should not only bring to the learning space the contents of the topics, but should also use strategies that meet the needs of graduate students in both face-to-face and non-face-to-face study modalities, such as the use of the physical blackboard and the use of the digital blackboard as digital resource.

According to (Aguirre, 2019) the Reference Models of postgraduate training in the world has a history that dates back to the nineteenth century in Germany with the creation of doctorates in philosophy in the context of the emergence of the modern or scientific university. In a context where the industrial revolution and technological development were emerging, "the integration of research with teaching and doctoral studies focused on the completion and defense of a thesis conceived as the product of an individual scientific research" (Rojas & Mena, 2010). Based on this approach, authors such as Morles & Alvarez (1997) point out that, since their emergence, five systems or models of referent postgraduate degrees have been configured in the world and the others are minor adaptations or modifications made according to the educational and research policies and the idiosyncrasies of each country (Cuellar et al., 2016; López M., 2002). The most significant differences between the postgraduate models are concentrated in variables such as: amount of time or credits of schooling, depth and level of research processes and duration to obtain the degree (Table N° 03).

Table 3 shows and reflects the academic models in the development of postgraduate training in research and specialization of the most advanced knowledge and technologies in the countries of other continents, which are later imitated by other immigrants to transform them into different lines of professional careers in the different faculties and professional schools at the university level in different regions of the world.

Table 3. Academic models applied in regions of the world for developing postgraduate education.

Model	Emphasis	Description
German	Research and deschooling	Pioneer system. It considers very little schooling and is based on research processes and the support of the degree work. Theoretically the duration is 8 to 9 semesters for the doctorate, but in practice a student takes an average of 6 years to graduate. There is no unity of evaluation criteria at the national level. It has a strong link with undergraduate programs for continuity of studies. Degree obtained: 4 semesters = master's degree / 8 semesters = doctorate.
English	High schooling and relevance of the tutor	It has a high schooling component, while the research processes are designed by the tutor, who is assigned a leading role. The undergraduate work has a strong link with the business and governmental sectors. There is great institutional autonomy, although for the doctoral level there are strict national regulations. High degree of specialization. Degree obtained: 4 semesters = master's degree / 6 -

		8 semesters = doctorate.
French	Applied research and scientific breadth	Unity of evaluation criteria at the national level in a very detailed way. Its graduate programs originated in specialized schools and not in universities. High relation of undergraduate work with large research centers with general and not specific orientation. It is noted that the student is not only an expert in a subject, but that he/she has a good general scientific culture. Degree obtained: 3 - 4 semesters = master's degree / 6 semesters = doctorate.
Russian	High level research without schooling	It is a centralized system that focuses on high-level research based on personalized work plans with a view to training scientists and/or teachers. Evaluation systems with external peers (centralized) in addition to the juries assigned by the university. Degree obtained: 8 semesters = doctorate.
American	High specialization and diversity	Emphasis on specialization and consequently great diversity of degrees, particularly in the master's degree category, which is considered the greatest source of innovation. Regulations vary greatly throughout the country, but there is agreement on the preference for rigorous accreditation processes. Degree obtained: 4 semesters = master's degree / 6 - 8 semesters = doctorate.

Source: (Aguirre, Castrillón and Arango; 2019).

According to (Aguirre, 2019) the importance of graduate studies lies in the fact that the substantive functions of Higher Education Institutions (HEI) are no longer only the training of professionals and scientific research (Martin & Etzkowitz, 2000), but also in the social demand made on universities in the so-called "Third Mission", that they strive to transfer the results of their teaching and research processes in a relevant and contextualized way with their environment (Bueno & Casani, 2007). In addition, they constitute the interface between the productive environment with society and academia, which means that they have to be dynamic and flexible in order to provide a timely response to the permanent changes in the demands for knowledge and specialization in the framework of what has been called lifelong education (Life - long Learning; Cruz, 2014).

According to the Association of American Universities, the main challenges of graduate programs at the global level are associated with: i) reducing their duration and increasing variety; ii) increasing the competencies of graduates to achieve high performance in diverse environments and with a global vision supported by ICTs; and iii) having the ability to work with interdisciplinarity (Nyquist & Woodford, 2000). Latin America, for its part, is not exempt from these challenges, even more so with the growth of graduate programs in the last quarter of the 20th century (Cuellar et al., 2016). The response from universities results in the emergence of different trends that involve their identification, characterization and appropriation-adoption in the framework of demanding contexts where accreditation processes and the dynamics of internationalization begin to predominate.

The authors of the journal "espacios" show the importance and challenges of postgraduate studies, indeed studying a postgraduate degree anywhere in the world is not so easy, but it is not impossible, you just need to be willing to break that difficulty. From this point, it is and will be possible to dive into the world of exploration and research of physical and digital texts for an efficient research on a particular topic. Consequently, the authors and co-authors of the paper in the "espacios" journal awaken the motivation of a graduate student for a requirement of internationalization of the training of masters and doctorates in different universities in the world.

3. Conclusions

- 3.1. Throughout its history, the Latin American university, through its graduate programs, has manifested a traditional conflict: to train scientists or professionals in different specialties.
- 3.2. The emergence and impact of private management within the structure and scheme of university higher education is important to consolidate and foresee the employment or jobs offered by the labor market.
- 3.3. The implementation of graduate programs is an urgent need that seeks the personal, professional and institutional development of teachers in a given country, and this implies technological, scientific and humanistic development of students in the university context.
- 3.4. Through graduate programs, a range of knowledge and professional experience is obtained, resulting in a product of being a quality teacher ready for the competitive labor market.
- 3.5. To train professionals in critical and decisive thinking in various fields of postgraduate knowledge, the doctoral thesis accredits and certifies the competitive capacity of the researcher as a good creator, actor and author.

4. Recommendations

- 4.1. Postgraduate academic training should be free of charge because it promotes the specialization of professionals, most of whom are low-income.
- 4.2. Teachers graduated from the graduate school (EPG) of the Universidad Nacional Mayor de San Marcos (UNMSM), due to their own characteristics, must automatically exercise university teaching.
- 4.3. Funding and scholarship programs for postgraduate studies by regional and national governments and private institutions, which have a great impact, especially in the exploitation of natural resources.
- 4.4. Areas with specialization in graduate school (EPG), technologists in mathematics teaching, communication, didactics, methodology, material resources and evaluation should be created.
- 4.5. The government of the day through the Ministry of Culture and the Ministry of Education should promote and encourage the granting of scholarships for postgraduate studies, specialization and professionalization at the national and international level.

References

- Aguirre Castrillon y Arango** Tendencias Emergentes de los Posgrados en el mundo entero [Publicación periódica]. - Colombia : ISSN 07981015, 2019. - 31 : Vol. 40.
- Arguimbau Llorenc** Tesis Doctorales en España: Análisis de la bibliografía específica y su accesibilidad [Libro]. - España : ISSN 1888-0967, 2009.
- Carreño Claudia Ines** Posgrado sobre Desarrollo en América Latina [Publicación periódica]. - Bogotá - Colombia : ISSN 0123 - 1294, 2011. - N° 2 : Vol. Volumen 14.
- Claudio Rama** Los Posgrados en América Latina y el Caribe en la sociedad del conocimiento [Libro]. - México : [s.n.], 2007.
- Davila Mabel** Tendencias Recientes de los Posgrados en América Latina [Libro]. - Buenos Aires - Argentina : Teseo UAL - Investigación, 2012.

- Dabesa, F., & Cheramlak, S. F. .** (2021). School Leadership Effectiveness and Students' Academic Achievement in Secondary Schools of Guraghe Zone SNNPR. Middle Eastern Journal of Research in Education and Social Sciences, 2(2), 1-26. <https://doi.org/10.47631/mejress.v2i2.161>
- Flores Jose** Construyendo la Tesis Universitaria [Libro]. - Lima : Garden Graf S.R.L., 2011.
<http://www.librosperuanos.com/editoriales/detalle/139/Concytec> CONCYTEC [Informe]. - Lima : Dirección: Calle del Comercio 197 - San Borj, 2004.
- Iberico Luis** Nueva ley Universitaria [Libro]. - Lima : "MAS", 2014.
- Jaramillo Hernan** Estudios sobre Resultados e Impactos de los Programas de Apoyo a la Formacion de posgrado en Colombia [Libro]. - Colombia : [s.n.], 2010,.
- Luchilo Lucas** Formacion de Posgrado en America Latina [Libro]. - Brasil : [s.n.], 2010,.
- Luchilo Lucas** Tendencias Recientes en las politicas de apoyo a la formacion de Posgrado en ciencias e ingenieria [Libro]. - Argentina : [s.n.], 2010,.