



PANORAMA  
ISSN: 1909-7433  
ISSN: 2145-308X  
ednorman@poligran.edu.co  
Politécnico Granacolombiano  
Colombia

## UNIVERSITY REFORMS IN ECUADOR: ACCESS TO HIGHER EDUCATION

**Latorre-Villacis, Vianca Mercedes**

UNIVERSITY REFORMS IN ECUADOR: ACCESS TO HIGHER EDUCATION

PANORAMA, vol. 14, núm. 27, 2020

Politécnico Granacolombiano, Colombia

**Disponible en:** <https://www.redalyc.org/articulo.oa?id=343964051015>

**DOI:** <https://doi.org/10.15765/pnrm.v14i27.1524>

<https://journal.poligran.edu.co/index.php/panorama/about/submissions#copyrightNotice>

<https://journal.poligran.edu.co/index.php/panorama/about/submissions#copyrightNotice>



Esta obra está bajo una Licencia Creative Commons Atribución-NoComercial-SinDerivar 4.0 Internacional.

# UNIVERSITY REFORMS IN ECUADOR: ACCESS TO HIGHER EDUCATION

Reformas universitarias ecuatorianas: el acceso a la educación superior

Vianca Mercedes Latorre-Villacis [viancalatorre@yahoo.es](mailto:viancalatorre@yahoo.es)  
*Universidad Autonoma Metropolitana, UAM, México*

**Abstract:** This article aims to review the effects of policies on access to higher education in Ecuador. The method used was a statistical and qualitative analysis of the research methodology: documentary, statistical and with interviews, aimed at producing discussion and recommendations on public policies and the fulfillment of the 2010-2017 objectives. Results show how these changes manifest through university evaluations and their categorization, planning of quality management processes in teaching and relevance of academic offers to ensure applicants' admissions system is meritocratic. This higher education policy has led to a paradoxical situation in the system, both at national level and within higher education institutions.

Higher education; education policy; Ecuador; access; university reform.  
<https://doi.org/10.15765/pnrm.v14i27.1524>

**Keywords:** Higher education, education policy, Ecuador, access, university reform.

**Resumen:** El presente artículo tiene como objetivo revisar los efectos que la política tiene sobre el sistema de ingreso a la educación superior de Ecuador. Como método se realizó un análisis estadístico y cualitativo de la metodología de investigación: documental, estadístico y de entrevistas, para elaborar una discusión y recomendaciones sobre las políticas públicas y el cumplimiento de los objetivos de 2010 a 2017. Los resultados muestran cómo estos cambios se manifiestan mediante las evaluaciones de las universidades y su categorización, la planificación de procesos de gestión de calidad en la enseñanza y la pertinencia de la oferta académica para garantizar que el sistema de ingreso de los postulantes sea de manera meritocrática. La política de educación superior ha provocado una situación paradójica en este sistema, tanto en el ámbito nacional como dentro de cada institución de educación superior.

**Palabras clave:** Educación superior, política de educación, Ecuador, acceso, reforma universitaria.

## INTRODUCTION

The motives that have prompted this investigation are based on the limitations experienced by many applicants before entering university, these include constraints such as tests that lack clarity in terms of what is being evaluated (aptitude or knowledge), inefficiency of these tests' systematic process, shortage in university places and a bottleneck that has been the result of eliminating universities, whilst modifications are being made in terms of how to access this system. The aforementioned factors affecting enrollment behavior from 2012 to date have been studied.

PANORAMA, vol. 14, núm. 27, 2020

Politécnico Gran Colombiano, Colombia

Recepción: 09 Septiembre 2019

Aprobación: 01 Julio 2020

DOI: <https://doi.org/10.15765/pnrm.v14i27.1524>

Redalyc: <https://www.redalyc.org/articulo.oa?id=343964051015>

A debate on quality has taken place amidst the Ecuadorian political and social agenda, it led to deep changes in university reforms through the new 2008 Constitution and the Organic Law on Higher Education (*Ley Organica de Educacion Superior - LOES*), valid since October 12<sup>th</sup>, 2010 (Asamblea Nacional, 2010). These reforms strongly imposed policies for higher education institutions. This process resulted in the definitive elimination of seventeen universities in Ecuador and in a new regulatory system to evaluate, accredit and assure quality after high school, which was proposed in the new 2010 LOES (CES, 2012).

Objectives of the policies implemented by the Secretary of Higher Education, Science, Technology and Innovation (SENESCYT, for its Spanish acronym) focused on:

- Evaluating higher education institutions in a three-stage process (2009, 2012 and 2014).
- Promoting technical and technological education aimed at changing the productive matrix.
- Standardizing the access criteria with a test. Enrollment in this Latin American country reaches eighteen million students who have a Gross Rate of Higher Education (TBES, for its Spanish acronym) of around 38% (CEPAL, 2013).

Therefore, the general objective of this paper is to analyze the policies and its consequences on the higher education system, specifically the institutional evaluation and access policies. Accordingly, the effects of evaluations on higher education institutions will be studied; and the access policy from 2012 to date will be explained based on three analyses axes (meritocracy, transparency and affirmative action), with the aim of noticing effects on applicants (Barbon Perez & Fernandez Pino, 2018; Vega, Medina, Saquicela, & Espinoza, 2019).

### *Research Problem*

Higher education in Ecuador has traversed profound changes since the 2008 Constitution and the 2010 LOES. The institutional performance evaluation of higher education institutions, conducted by the National Council of Evaluation and Accreditation (CONEA, for its Spanish acronym) between June and October 2009, attempted to focus on generating elements to build a more efficient policy in higher education with the ultimate goal of refining and improving it. It all started with the evaluation of Ecuadorian universities, which took place in 2012 and was conducted by the current Council of Evaluation, Accreditation and Quality Assurance of Higher Education in Ecuador (CEAACES, for its Spanish acronym).

Therefore, the work herein starts with an introduction to the university system in Ecuador, according to the programs they offer (2,804 in 2017), and proceeds with the research problem framed by the political and social agenda, which, aside from debating the quality of higher education,

faced a demand than exceeded the existing offer, challenging the State and government's capacity to guarantee continued quality studies with demand surpassing 40,000 students, through a contingency plan with an estimated cost to the State of USD \$3,497,718 (SENESCYT, 2015). Statistics showed that by 2011, 11,196 students registered for the National Test of Higher Education, while in 2017 the number of students registered soared to 292,728.

In terms of the offer, a total of 111,422 university places were available in 2011, but for 2017, the amount was of 123,154. This means that applicants increased by 281,532 and university places by 11,732 (Ramírez, 2018). As demonstrated, a new regulatory system with evaluation, accreditation and quality assurance processes had to be put in place.

Governmental policies promoted segmentation of higher education institutions; moreover, technical and technological institutes were founded to make up for the elimination of universities and polytechnic schools. In 2008, 3,309 programs were offered, out of which 277 were technical and technological. In 2015, 2,012 programs were regularized in public technical and technological institutes. In 2017, 2,804 programs were offered and only 1,060 were offered by public technical and technological institutes (Ramírez, 2018). Hence, there is a pressing need to balance the demand of higher education with the offer by technical and technological institutes; in the period of 2012-2014, 100% of the seventeen universities that were closed were private universities.

It is important to emphasize that higher education is divided in universities and polytechnic schools, subdivided by funding and academic offer, in addition to this, by the recent creation of certain higher institutions to increase academic offer and reconfigure higher education's enrollment (SIGMA, 2015). Amidst this context of strong social segmentation, higher education has become a privileged tool to improve insertion in the social spectrum, while, at the same time, guarantee higher levels of cohesion and integration in a deeply fragmented society. Higher education is being fragmented into socioeconomic levels and into types of higher education institutions.

Depending on the type of higher education institutions, universities have been categorized with letters A, B, C and D, and others, to hierarchize them based on quality, as the following table shows. This has a bearing on meritocratic processes to access universities and could hold students accountable for their social origins and discriminate them based on entry to a certain university.

CATEGORÍA A	CATEGORÍA B	CATEGORÍA C	CATEGORÍA D
<b>Escuela Politécnica Nacional</b>	Escuela Superior Politécnica de Chimborazo	Escuela Superior Politécnica Agropecuaria de Manabí	Universidad Agraria del Ecuador
<b>Escuela Superior Politécnica del Litoral</b>	Pontificia Universidad Católica del Ecuador	Universidad de Especialidades Turísticas	Universidad Laica Eloy Alfaro de Manabí
<b>Universidad San Francisco de Quito</b>	Universidad Casa Grande	Universidad del Pacífico Escuela de Negocios	Universidad Técnica Luis Vargas Torres de Esmeraldas
<b>Universidad de Cuenca</b>	Universidad Católica de Santiago de Guayaquil	Universidad Estatal de Bolívar	Universidad Católica de Cuenca
<b>Universidad de las Fuerzas Armadas (ESPE)</b>	Universidad del Azuay	Universidad Laica Vicente Rocafuerte de Guayaquil	
<b>Universidad de Especialidades Espíritu Santo</b>	Universidad Estadal de Milagro	Universidad Metropolitana	
	Universidad Nacional de Loja	Universidad Nacional del Chimborazo	
	Universidad Particular Internacional SEK	Universidad Regional Autónoma de los Andes	
	Universidad Politécnica Salesiana	Universidad Técnica de Babahoyo	
	Universidad Técnica de Ambato	Universidad Tecnológica Israel	
	Universidad Técnica del Norte	Universidad Estatal Peninsula de Santa Elena	
	Universidad Técnica Estatal de Quevedo	Universidad Particular San Gregorio de Portoviejo	
	Universidad Técnica Particular de Loja	Universidad Tecnológica	
	Universidad Tecnológica Empresarial de Gye	ECOTEC	
	Universidad Tecnológica Equinoccial	Universidad Técnica de Cotopaxi	
	Universidad Tecnológica Indoamérica	Universidad Estatal del Sur de Manabí	
	Universidad de los Hemisferios	Universidad de Otavalo	
	Universidad Estatal Amazónica		
	Universidad Politécnica del Carchi		
	Universidad Iberoamericana		
	Universidad Técnica de Manabí		
	Universidad de las Américas		
	Universidad Internacional del Ecuador		
	Universidad de Guayaquil		
	Universidad Técnica de Machala		
	UNIVERSIDADES DE POSGRADO		
	Instituto de Altos Estudios Nacionales		
	Universidades Públicas del Ecuador		

Table 1.

Universities, polytechnic schools, technical and technological institutes with the highest demand and Categories (2017)

Source: SENESCYT (2017). Compiled by the author.

*Public Problem*

In the framework of the concept of “good living” (*Buen vivir*, in Spanish), education is regarded as a public asset that is free of charge, it is also a priority and strategic area of development. Thus, in the quest for guaranteeing fair access to education, the SENESCYT, through its National System of Placement and Admission (SNNA, for its Spanish acronym), executes the public policy in charge of regulating access to public higher education institutions, following the principles of equal opportunities, meritocracy and transparency (PNBV, 2013).

A critical issue that deserves the greatest concentration of educational policies is access to higher education institutions. According to Ferreyra, Avitabile, Botero, Haimovich and Urzua (2017), there is an upsurge in third-level students in Latin America, but this situation is a sign of warning about the difficulties they face to graduate, the coverage rate went from 21% in 2000 to 43% in 2013 in the region. The increase is equivalent to twenty million students attending one of the ten thousand higher education institutions in Latin America and the Caribbean. Pertaining to Ecuadorian universities, Rene Ramirez, former secretary of SENESCYT, declared that enrollment rose thirteen percentage points since 2006, currently, there are over 303,000 new students.

Which is why the public problem of this research is to find the best possible selection system to access higher education institutions. The definition of “best” aims at harmonizing elements or factors that come closer to a fairer selection system; meaning a system that is not so limited and that balances factors such as meritocracy, transparency and affirmative action.

Changes or reconfigurations of enrollment are influenced by value criteria such as meritocracy, transparency and affirmative action. In that context, the main question posed by this study may be defined as follows: How did the 2010 reforms influence the admissions and placement system used to access higher education in Ecuador? Taking into account the indicators of meritocracy and quality with the variables of reform and access to higher education, the contradiction of shutting down garage universities becomes evident, while at the same time access to higher education was modified; therefore, the following is the hypothesis of this research: 2010 reforms have not been enough to make way for a fairer selection of participants because they emphasize a meritocratic approach above other elements such as affirmative action and development of capacities in contexts of exclusion and transparency.

## METHOD

The method used was a statistical and qualitative analysis of the research methodology: documentary, statistical and with interviews, aimed at producing discussion and recommendations on public policies and the fulfillment of the 2010-2017 objectives

The research strategies comprised the use of documentary analysis, bibliographic and statistical compilations, with fundamental reading on accountability concerning higher education. Experts in revolution through knowledge and human talent were interviewed, i.e., officials that take part in the process of reforming access to higher education and people indirectly involved or who suffered the consequences of the initial institutional changes. These enable a confrontation of the selection system and complement statistical data with qualitative field work through interviews.

Recent papers and documents published in journals, books and conferences of regional institutional organizations were analyzed. Additionally, sources of international stakeholders are directly described, e.g., United Nations Educational, Scientific and Cultural Organization (UNESCO) and the UNESCO International Institute for Higher Education in Latin America and the Caribbean (IESALC). The approach has a multidisciplinary methodology, judging by the topic of study. On the other hand, a chart of the variables of higher education and access was employed, as seen in the following Table. Moreover, a descriptive methodological approach was developed, which complemented the statistical techniques of the most important databases.

Concepto	Definición	Dimensiones	Definición Operacional	Indicadores
<b>Calidad de la educación superior</b>	El principio de calidad consiste en la búsqueda constante y sistemática de la excelencia, la pertinencia, producción óptima, transmisión del conocimiento y desarrollo del pensamiento mediante la autocritica, la critica externa y el mejoramiento permanente (LOES, Ley Orgánica de Educación Superior, 2010).	Adaptabilidad de la gestión de calidad en el proceso de acreditación, que para efectos de calidad considera: 1) Categorización entendida como la jerarquización de las instituciones de educación superior, por medio de la clasificación académica o segmentación en A, B, C, D, Otras: emblemática y extranjeras (LOES, Artículo 97). 2) Examen nacional de evaluación de carreras y programas académicos para alumnos de último año, centrado en los conocimientos de los programas o carreras respectivos (LOES, Artículo 103). 3) Examen de habilitación para el ejercicio profesional de carreras que pudieran poner en riesgo la vida, salud y seguridad de la ciudadanía (LOES, Artículo 104).	La acreditación tiene que ver con las condiciones de calidad de la institución, carrera o programa académicos durante la etapa de evaluación del ciclo de políticas públicas de educación superior.  A partir de la categorización de las instituciones de educación superior existen universidades de mayor/menor categoría.	Influencia del aseguramiento de la calidad en el ciclo de políticas:  Diseño de la evaluación y autoevaluación universitaria.  Implementación de la autoevaluación, y evaluación externa (LOES, Artículos 99 y 100).

Table 2.

### Operationalization of variables in higher education

Source: LOES (2012). Compiled by the author.

Concepto	Definición	Dimensiones	Definición operacional	Indicadores
<b>Acceso a las instituciones de educación superior</b>	El ingreso a las instituciones de educación superior está regulado por el Sistema Nacional de Nivelación y Admisión (SNNA), para garantizar la igualdad de oportunidades, la meritocracia, transparencia y acceso a la educación superior (LOES, Artículo 81).  El principio de igualdad de oportunidades significa que garantiza a todos los actores de la política de acceso las mismas posibilidades en el acceso, permanencia, movilidad y egreso del sistema, sin discriminación de género, credo, orientación sexual, etnia, cultura, preferencia política, condición socioeconómica o discapacidad (LOES, Artículo	Adecuación de la política de acceso mediante dos componentes (LOES, Ley Orgánica de Educación Superior, 2010):  Nivelación, que toma en cuenta la heterogeneidad en la formación del bachillerato y/o las características de las carreras universitarias (LOES, Artículo 3). Implica una obligación de periodo académico de nivelación.  Admisión, de forma permanente, estableciendo un sistema nacional unificado de inscripciones, evaluación y asignación de cupos en función al mérito. Admisión incorpora el Examen Nacional para la Educación Superior (ENES), donde evalúa conocimientos con fines de exoneración del periodo de nivelación (LOES, 2010).	Es de interés saber la aplicación de pruebas estandarizadas debidamente validadas.  A partir de la reciente encuesta de contexto, se optimiza el acceso mediante la selección de los postulantes que deban o no hacer el ENES.  Es la forma mediante la cual: se reconoce las falencias de los aspirantes por sus estratos socioeconómicos.  La perfección de la educación superior implica la consideración de los orígenes sociales para que se den procesos incluyentes e iguales para todos. Si las carencias económicas implican atrasos educativos, entonces los rezagados pasan al proyecto SNNA, donde se los "nivela" para prepararlos para los ENES.	Incidencia en el ciclo de políticas públicas:  Diseño y administración de la nivelación y de la admisión. Admisión mediante apoyo y seguimiento académico con logística académica. Nivelación mediante habilitación docente, nivelación especial para el Grupo de Alto Rendimiento (GAR), Nivelación General, y Nivelación de Carreras.  Implementación de la política pública para el fomento del ingreso meritocrático e inclusivo al sistema de educación superior.

Table 3.

### Operationalization of access to higher education

Source: SNNA (2014). Compiled by the author.

The analysis left out standards implemented by international organizations for Latin American countries. Based on guidelines by several international organizations dedicated to education, the higher education policy is set in a managerial-like institutional framework, which introduces new operation rules and efficacy and efficiency instruments into the political administrative machine (Roqueñi, 2017). Also, countries adjust their policies, thus, its extension, reach and intention may vary between countries depending on the existing higher education system and on the educational policy that the government has prioritized. Ecuador has an educational policy based on *good living*, as delved into in the first chapter.

## RESULTS

Despite reforms introduced to the higher education sphere in Ecuador and of having been regarded as a favorable area to raise enrollment in practice, shut down of higher education institutions, loss of programs in different fields and applicants' limitations to access the system have corroborated an insufficient redesign of the higher education institutional policy to guarantee access to higher education by any individual.

In order to explain this particular situation, a set of proposals were developed throughout this research which allowed to fulfill the study's

objectives. In a few words, a theoretical framework was defined and the topic's problem was identified to clarify the approach of the Ecuadorian educational policy.

Likewise, and with the objective of determining the feasibility of the equitable policy proposal, a comparison between education systems in the last six years led to a demonstration of the potentialities, strengths and advantages that could be achieved regarding access, due to the fact that the set of installed capacities in each higher education institution (categorized A-D) would allow greater use of said resources, offer, infrastructure, and especially of academic teaching, while prompting the demand of university education at regional level and in cities with more coveted institutions, playing the game of meritocratic policies supported on a transparent system and a quota policy favoring the criteria of affirmative action.

Later on came a study of value criteria of meritocracy, transparency and affirmative action of three previous systems, these systems existed before reaching the conclusion that the last selection system is the most suitable as long as the recommendations herein are applied. Meritocracy (not to the liking of all of the beneficiaries) segregated those who got a place from those who did not. A fact that proved that, despite the rhetoric of the most suitable candidate to get a place, the bottleneck caused by the elimination of higher education institutions and the lack of capacity by existing universities (including State, SNNA and INEVAL) to offer enough programs have exerted more weight with disagreements and pending negotiations to deal with the new problem to be solved: less places for applicants.

Despite conditions to which higher education institutions were subject in order to favor quality, implying interventions to categorize and/or recategorize them in a top-down hierarchy, signs of stagnation are evident. This due to shortcomings discovered in the fieldwork with interviews to key informants of the institutional reform process. In addition to constant divergencies among higher education institutions, as a result of a lack of contextualization process of their situation as public entities (in terms of policies and autonomy), this is an issue in which SENESCYT has lost its goal of changing institutions instead of getting rid of those that failed to fulfill the mandatory requisites and parameters.

Also, factual weaknesses and disadvantages arising from said institutional reforms have been considered, in particular, for the meritocracy variable concerning access. This is why it was defined that, in spite of the considerable political benefits of assigning a category, the absence of coordination between the system and universities, polytechnic schools and technical and technological institutions affects the possibility of meeting the end goal of offering equitable public education for all. Yet, the evaluation policy has been effective and it has fulfilled its objectives (stated in the introduction of this work), it managed to do so through classification, and some higher education institutions have encouraged the application of legal and administrative criteria (academia, research, organization and infrastructure).



However, as for teachers that are forcibly retired at the age of 65, it must be underlined that their age does not immediately imply senility. In fact, there is a premise stating that brilliant people are being disregarded based and forced to retire academia solely due to their age.

On the other hand, criteria of access policy: meritocracy, transparency and affirmative action were fulfilled, but the argument is based on critique towards the lack of installed capacity of higher education institutions and students that are lagging behind as per the system.

The proposal of public policy begins with the improvement of higher education institutions' variable of quality, which triggers the second proposal that consists in the policy of fairness in access by modifying the redesign of value criteria (meritocracy, transparency and affirmative action). This entails a process of universalization prior to the evaluation of institutions and a review of teams and laboratories (existing or missing) in higher education.

An important critique to the evaluation policy consists in the drastic decision of eradicating higher education institutions. What is required is the definition of a quota for institutional levels that are not so well equipped, in order to increase the social criteria of contextualization. This is a likely solution, albeit not a very academic one.

Pertaining access policy, the moment meritocracy takes a turn towards egalitarian speech, it completely loses perspective about context and difference of conditions, thus, if equality means providing the same to everybody, equity means justice in every situation. Therefore, in an investor wellbeing State, equity is necessary to obtain effectiveness of equal opportunities. Consequently, one of the first conclusions is the need to prioritize the equal preparation of each individual during the unified general high school (*bachillerato general unificado* - BGU), also known as secondary education.

The problem of whether to hold back or push meritocracy towards the job market becomes evident, a debate emerges concerning the fact that a selection system may assess a person's capacity to attain a score to be admitted to higher education, while the rest of the process (with its advantages and limitations) could simply prove that the person is capable of passing an exam (of many in the foreseeable future) if he or she can get a place to study. However, with change comes resistance, and research studies such as this one, get involved in emerging social movements with the aim of championing radical tendencies to limit or restrict access to higher education.

Although access is mediated by the higher education system and higher education institutions, it is not enough for a test to be an indispensable and legitimate mechanism to enter the system. Interviewees agree on the fact that higher education has a structural problem.

To test the hypotheses, the critique to the selection system is reiterated, an inclusive democratization of access to higher education has not been enough since there are many students lagging behind who decide to leave the system before taking the higher education test, in addition to the fact that the population who decide to take it come from different

social classes. Hence, each applicant's individual inequalities become individual differences, the intention is to hold applicants accountable for not entering a higher education institution, they failed to take advantage of the equal opportunities that were offered to them (Alban Taipe & Mauricio Sánchez, 2018).

Moreover, intellectual merit may open the doors of university to anyone (in theory) because wealth, cultural capital and opportunities are unequally distributed (Shea, 2010); meaning, the consequence of the principle of meritocracy benefits middle and high classes, but affects social groups with larger disadvantages (Barbon Perez & Fernandez Pino, 2018; Jimenez Alvarez, Vega, Capa Mora, Fierro Jaramillo, & Miguitama, 2019; Miranda-Calderon, Angulo-Hernandez, & Roman-Lopez, 2018).

The structure of the universal system in education should focus on equality of results since a very specific public policy problem is identified; instead of accentuating the topic of educational system's equal opportunities, more emphasis should be placed on the fact that each individual's life conditions are different. Universal structures are concerned with generalizing only equal opportunities, creating a lack of preparation and of contextualization of university applicants, and therefore, failure to take discretionary measures and consider individualization. Also, it is assumed that applicants possess the same knowledge and preparation and that students who wish to access different higher education institutions should not be evaluated following the same standards (Jimenez Alvarez et al., 2019).

So, evaluation must take into account a more robust policy of quotas to safeguard access of minorities over majorities with places reserved for them before each test. This is how equal opportunities fail to modify preexisting inequality conditions with which people access services of higher education. The stance of the research herein is that the idea of meritocracy is idealistic because passing prior tests is dependent on applicants' socioeconomic levels of origin.

In terms of selection systems, it is concluded that reforms to admissions and placement systems to access higher education in Ecuador since 2010 have had positive aspects, such as the elimination of garage universities and increased enrollment. But negative aspects prevail, such as the frustration of applicants who fail to get a place in their aspired third-level program, a system limited by a test as mechanism of discriminatory measurement of skills in an unequal context of applicants, lack of installed capacity of higher education institutions, and as a result, a scant offer of places.

It was contradictory to eliminate garage universities while modifying the way to access higher education, this decision led to a "funnel": the system was trying to increase and reconfigure enrollment, plus the number of higher education institutions was declining. Additionally, it placed a very heavy load on universities with popular and in-demand programs. The ideal scenario would be to replicate the same programs in other universities.

## DISCUSSION

Future evaluations should be voluntarily conducted by higher education institutions with the aim of improving their quality and participating in the intervention, to ultimately boost institutions' installed capacity by means of more assistance from the State, which would consequently increase university places.

Placement must take place in high school prior to taking the higher education test because higher education institutions cannot be liable for the knowledge level, therefore the State has to act and put in place evaluations for educational units in primary and secondary education, not to close them or shut them down, but to help level private and public schools that are below the academic standard.

Moreover, there must be a strategy to reopen higher education institutions that have been shut down and mechanisms to elevate their service quality. Meaning, not closing down universities but generating cofounding schemes for those institutions that fail to reach established academic standards, providing technical assistance, human resources among other elements.

For instance, professional internship programs could be temporarily implemented in understaffed higher education institutions, this would indirectly impact jobs for young people and alumni could become temporary teachers there.

A survey to high school graduates who plan on enrolling in the higher education system is recommended, the objective is to explore their higher education institutions and professional programs of choice in the system's offer to see if they choose it, the influence at knowledge level in their selection of private higher education institutions, and the combination of study and work of students in public higher education institutions.

The design of the institutional evaluation policy failed to consider the fact that the elimination of higher education institutions would increase the deficit of university places. In the program selection stage, the system could discriminate between two options in programs. Meaning, at the moment of choosing their top option, the student could choose a program related to his/her first choice, e.g., jurisprudence programs.

On the other hand, an increase in the number of places in higher education does not necessarily entail broadening access to a wider array of social groups. Intellectual merit depends on income, cultural capital and opportunities, which are unevenly distributed. Ecuador has tried to expand access without overhauling meritocratic selection; from 2012 to date, many applicants have had scores above the reference score, yet they do not get into the programs of their choice.

The discussion on meritocracy is based on the fact that it is a segregating variable, when students are invited to participate in this process, they feel like they deserve it but, at the same time, they think poor students deserve to be disadvantaged because they have not worked hard, so, they deserve the suffering that comes along with poverty. Despite the fact that the Ecuadorian system brags about evaluating aptitude instead of

knowledge, there is an enduring belief that members of the elite excel at exams and at getting places because they are intelligent and industrious. It is here where the role of a placement stage comes in because the process needs to be modified. It is suggested that placement shifts from higher education institutions to secondary education, as seen in Chapter 3, if the applicant's score in the test is not of at least 600/1,000, he/she must repeat the academic year, therefore, that limitation could dwindle along with flexible modifications.

Throughout this research, it was verified that public universities have 10% of its places for indigenous people, afro Ecuadorians, *Montuvios*, people with disabilities and in prison; 5% of its places for particular universities; and between 5% - 15% for private universities. Nevertheless, a place for the upcoming term could be reserved for applicants whose score was the necessary historic score (extraordinary scores). Also, a minimum increase of 50% on the policy of quotas for historically marginalized people is suggested.

Superiority and efficiency of municipal and private teaching provides students with minimum "aptitude" or knowledge for entry, as per ENES. But they all have the opportunity to access a higher education institution. The problem is not a lack of opportunity but of an analysis of which category of institution they enter based on socioeconomic quintiles, ethnicity and gender. In future research, it would be interesting to know to which categories of higher education institutions did marginalized groups enter, since this would lead to a conclusion if the inclusion was equal or unequal.

Interviews conducted unveiled a critical fact, numerically, there are enough places to deal with the demand, but not qualitatively. Universities had to settle not just with offering places for their potential installed capacity but with planning increases in infrastructure and human talent for offer to be able to grow. Additionally, aside from the fact that professional vocation and places are lacking, the system should focus on improving professional vocation offering programs related with students' top choice.

The proposal of the equitable access policy consists of two stages. First, the test must evaluate aptitude and knowledge as long as these go hand in hand with an increase in racial and socioeconomic quotas with priority in public universities. Likewise, support must be granted to those who are not among marginalized groups with a reserved place, providing that they attain the required scores.

Quantitative growth of female participation in higher education has diminished the focus on gender inequalities; in Ecuador, female presence is expressed through their participation in top performance groups (GAR, for its Spanish acronym) in ENES results for September 2015. The share was of 54% for women and 46% for men. However, this does not imply that the share of female population in knowledge areas is leveled, but that it is mainly concentrated in Social Sciences and Humanities.

In terms of equity, it is argued that the educational system must look for a combination between merit (evaluate aptitude and knowledge) and

affirmative action. Meaning that policy should, aside from entry results, look over students in higher education institutions' capacity to sustain themselves and successfully culminate their program. Also, it is suggested to close the gap between schools with less quality and schools with top quality to assist the former and acknowledge the origins (along with the tools needed to sustain this practice), making them have a sense of belonging. The challenge is that the State has already defined its priority programs. The way to make this viable is with students' social fight to demand their programs of choice.

Finally, it has been argued in this work that the evaluation policy has had drastic effects on education since it segmented its higher education system. Due to this hierarchization, applicants enter higher education institutions with differentiated quality. i.e., every applicant has a place, yet not every institution has the same quality. Second, the access policy has left many applicants behind due to the elimination of higher education institutions and a lack of attention in creating new institutions that are not just technical but also technological.

In sum, the higher education policy has resulted in a paradoxical situation for the higher education system, at national level and within each higher education institution: on the one hand, the closure of higher education institutions based on budget restrictions to the institutions' autonomy, both in public and private sectors, which have become elitist due to limitations of places; and on the other hand, a significant increase of demand in selection tests, with higher education institutions strongly segmented based on academic developments (differentiated in categories A, B, C and D). Therefore, despite having access to technical and technological institutions, beneficiaries are not able to enroll in their program of choice; fostering differentiated quality teaching favors unequal inclusion and persistence of inequalities.

## REFERENCES

- Alban Taípe, M. S., & Mauricio Sánchez, D. (2018). Prediction of university dropout through technological factors: A case study in Ecuador. *Espacios*, 39(52). Retrieved from <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85058960432&partnerID=40&md5=7d707ccfecb33cf1113ef3a20788696f>
- Barbón Pérez, O. G., & Fernández Pino, J. W. (2018). The role of strategic educational management in knowledge management, science, technology, and innovation in higher education. *Educacion Medica*, 19(1), 51–55. <https://doi.org/10.1016/j.edumed.2016.12.001>
- Comisión Económica para América Latina y El Caribe (CEPAL). (2013). *Panorama social de América Latina*. Santiago de Chile, Chile: CEPAL.
- CES. (2012). *Rendición de cuentas 2011-2012*. Quito, Ecuador, pp. 19-20.
- Ferreyra, M., Avitabile, C., Botero, J., Haimovich, F., & Urzúa, S. (2017). *Momento decisivo: la educación superior en América Latina y el Caribe*. Washington, D.C.: Banco Mundial. Licencia: Creative Commons Attribution CC BY 3.0 IGO.

- Jiménez Álvarez, L. S., Vega, N., Capa Mora, E. D., Fierro Jaramillo, N. C., & Miguitama, P. Q. (2019). Learning teaching styles and strategies of University Students of Soil Science . *Revista Electronica de Investigacion Educativa*, 21(1). <https://doi.org/10.24320/redie.2019.21.e04.1935>
- Miranda-Calderón, L. A., Angulo-Hernández, L. M., & Román-López, G. (2018). The national university of Costa Rica program profiles, dynamics and challenges of the costa rican education: A proposal for pedagogical innovation and the production of materials and technological didactic resources. *Revista Electronica Educare*, 22(1). <https://doi.org/10.15359/ree.22-1.10>
- Ramírez, R. (2016). *Universidad urgente para una sociedad emancipada*. Quito, Ecuador: SENESCYT-IESALC.
- Roqueñí, M. (2017). *Expresiones de las desigualdades sociales en espacios universitarios asimétricos*. Ciudad de México, México: Consejo Nacional de Ciencia y Tecnología (Conacyt).
- SENPLADES. (2013a). *Buen Vivir: Plan Nacional del Buen Vivir 2013-2017*. Quito, Ecuador: SENPLADES.
- Shea, M. (2010). Desigualdad de acceso a la educación superior en el Reino Unido. En: *Reencuentro*. Ciudad de México, México: UAM-X, pp. 19-23.
- Vega, F., Medina, J., Saquicela, V., & Espinoza, M. (2019). Towards an E-learning Platform Based on Interactive Visual Elements. 37th International Conference of the Chilean Computer Science Society, SCCC 2018, 2018-Novem. <https://doi.org/10.1109/SCCC.2018.8705246>