

CRITICAL GOVERNANCE DIMENSIONS OF PUBLIC HIGHER EDUCATION INSTITUTIONS COMPARISON IN ECUADOR, A RETRO PERSPECTIVE

X. Peralta¹, W. Morquecho²

¹University of Cuenca (ECUADOR)

²Professional (ECUADOR)

ximena.peraltav@ucuenca.edu.ec, wilsongmv@hotmail.com

Abstract

Nowadays, Governance is an important management tool which is implemented in different fields. One relevant sector is the public Higher Education Institutions-HEIs. Therefore, initially it is presented their decision-making under a management approach in Europe, Asia, United States of America and Latin America. Furthermore, it is described the general situation of public HEIs in Ecuador; consequently, it is identified their management models, which allows to explain governance in this context.

Following, it is described a model of governance assessment which starts identifying the main stakeholders of the public HEIs of the zone six (Ecuador), and evaluates five dimensions: Management and Administration, Participation, Accountability, Autonomy and Transparency. Hence, this article aims to comprehend the influence of two critical dimensions of Governance: Participation and Accountability, in the final assessment, examining their components. The selected methodology is an explanatory case study because it contrasts the indicators results, identifying critical points and generating a precise feedback.

Keywords: University governance, public university, participation, accountability, case study.

1 INTRODUCTION

One of the most remarkable characteristics about Governance, which continues generating new contributions for dissimilar fields, is its transversality because it is studied in political science, management and environmental investigations. Bearing this in mind, Higher Education is also looking for improving its performance while several hitches arise from the management processes.

Furthermore, one important trend is developing models which could measure or evaluate Governance. Thus, the investigations implement mixed typologies and methodologies according to each context. The present article analyses how management influences governance dimensions in the public Higher Education Institutions-HEIs in the zone six of Ecuador, focusing on the critical ones because it permits to comprehend weak points and generate recommendations.

1.1 Decision-making in the public Higher Education Institutions

A significant number of public Higher Education Institutions implement management strategies due to improving the decision-making process. Therefore, it is presented different contexts. The first one is the United Kingdom where was applied the guidelines of the International Reporting Council (IIRC) and content analysis [1]. It established that many HEIs implement Integrated Reporting which allowed to provide financial, environmental, social and governance information.

Whilst, in Europe New Public Management-NPM is related with the introduction of hierarchy and rationality inside the 26 universities, which belong to general and highly specialized technical universities. Therefore, it is adopted managerial practices but NPC [2] does not affect academic characteristics. Meanwhile, in China [3] was applied a Strategic Planning Survey in private universities. The findings were that HEIs attribute high relevance to a five-year plan; the HEIs which have a high level are more determined about their missions; In addition, the university leaders such as professors, heads of schools, and heads of university offices are the foremost influencers.

In the United States of America-USA was implemented a studio, where 5 private universities participated. It was interviewed 22 participants, who are senior leaders. One of the most important

findings was that Strategic Planning is not needed to have strategic initiatives or make strategic decisions; at a senior level it is necessary all the time but at the other levels is not common. Furthermore, considering the context of Latin America the HEIs are focused on Quality, accreditation and institutional evaluation. All of these aims require a continuous improvement approach. Considering all the mentioned cases, following is described the context of Ecuador.

1.2 Public Higher Education Institutions in Ecuador

The Higher Education system of Ecuador is focusing its effort on the quality and networking. This reorientation has evolved positively into a direct relation amid knowledge and learning, becoming a link with the society, as well as, investigation [4]. Nevertheless, it is necessary to analyse the general context of public Higher Education Institutions-HEIs. Ecuador has 218 HEIs which are distributed as Figure 1 indicates.

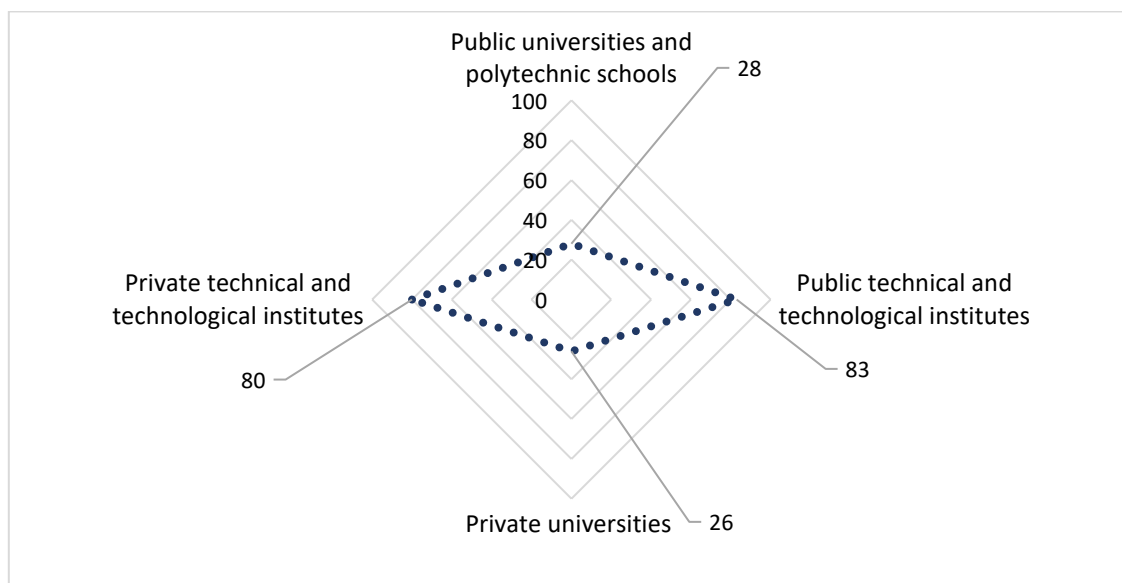


Figure 1. Higher Education Institutions in Ecuador

Source: Secretary of Higher Education, Science, Technology and Innovation-SENESCYT [5]

The most representative HEIs are Public technical and technological institutes with 38,25%. In second place are Private technical and technological institutes, which represent 36,98%. The mentioned institutions represent the 75,12% of the total. On the other hand, Public and Private Universities have 12,90% and 11,98% respectively. They represent 24,88% of HEIs, nevertheless, in 2021 the number of the places offered in the all the Higher Education belonged to the public sector, reaching 91%. Moreover, there are 343 careers offered in 6 sorts of modalities: face-to-face, blended, online, dual, hybrid and distance.

Considering the mentioned data, it is clear that Public HEIs possess a relevant impact in Ecuador. Therefore, Ecuador pretends to highlight quality in its Higher Education System because it will provide better conditions for development and progress [6]. The management and administrations field must contribute to the mentioned circumstances due to transforming the public Higher Education System into a mean for materializing them.

2 WHAT ADMINISTRATION AND MANAGEMENT STYLES EXIST IN THE PUBLIC HIGHER EDUCATION INSTITUTIONS IN ECUADOR?

2.1 Management models

The relevance in management has promoted the investigation in distinct models, which have dissimilar approaches, in the public Higher Education Institutions-HEIs. Part of researchers consider the governance approach to analyse the Ecuadorian context; taking as a starting point that law (norms) regulates governance and they it is based on the Constitution of the Republic, the Law of Higher

Education and its General Regulations, the Academic Regime Regulations and the Professor and Researcher's Scale Regulations [7]. Thus, the competences which norms delegate to the Higher Education System are the Academic, Research and Linkage with Society. All the changes caused by the legal reforms since 2010 have generated a higher cooperation amid HEIs. Conversely, some challenges to confront are the various number of supervisory bodies of control, the academic supply is not alienated with the student demand and it is necessary more investment in Research and development.

Whilst, process management is considered the current innovation for public and private Universities in Ecuador [8]. However, it has implemented in Latin America and Europe as well, obtaining excellent results. The main management tool for implementing quality in the Higher Education System are ISO 9000 and the EFQM Model because they demand to focus on the external client, in this case the students. Therefore, there is an institutionalization of quality management at all levels, for management purposes the results of assessment become a significant input for planning. On the other hand, the control bodies provide their own rules without the focus on customer satisfaction (students). Thus, Universities and control bodies need to maintain a constant dialogue to optimize the resources.

Likewise, in other universities consider a Quality Management System-QMS allows value creation in products and services, implementing continuous improvement. For that reason, a model was proposed to measure Organizational Climate, Engagement and Organizational Performance [9]. Ergo, the quality has a supreme incidence in the public university in Ecuador. The mentioned models consider law and quality standards as the parameters for management; hence, it possesses a tantalizing relevance for HEIs, and the next sub-section explains the governance into them.

2.2 What is governance in the public HEI in Ecuador?

According to Legarda and Folleco "Governance is the instrument that prohibits and commands to do things in organizations, based on laws, rules, policies and procedures that must be previously structured and defined" [7]. Considering the mentioned definition, some investigators have illustrated an approximation of a governance model taking into consideration four models proposed by Capano. Implementing interviews and documentary research the investigation concluded that the Ecuadorian Higher Education System-HES has shifted from a self-governance governance model to a hierarchical one because the government possess incidence in the goals definition and means for obtaining them for the Universities [10].

Additionally, Jara and Cedeño [11] examine the governance and co-governance. Bearing in mind that they promote equal exercise of its actors and shared responsibility; it is identified several laws such as the Constitution of the Republic of Ecuador and the Organic Law on Higher Education where the co-governance is considered part of university autonomy. Thus, vital actors for promoting participation are professors, students, graduates and workers. It is essential a normative support for their participatory actions because they can vote and elect their authorities. As a result, governance can promote innovation when the university-society-State interactions plan and work for university management in diverse areas such as education, links with society and scientific research.

Considering the above, governance has a remarkable significance at all the levels of decision-making in the public HES of Ecuador. Thereby, the next section addresses a model which explains five dimensions of governance, examining the strengths and vulnerabilities in two public HEIs in the zone six.

3 HOW GOVERNANCE IS ASSESSED IN THE PUBLIC HIGHER EDUCATION INSTITUTIONS IN ECUADOR?

3.1 Governance Assessment dimensions

Despite the fact that there are theoretical and qualitative governance models, which are approximations within reality, for diagnosing the accomplishment of governance variables in Ecuador, it is necessary a model that measures its assessment. Hence, the governance model proposed by Peralta, Morquecho and Briozzo [12] not only identified the most relevant stakeholders (Public regulatory administration, Students, Teaching and research staff, and Private companies) considering a preponderance index, but also, five dimensions that acquire the good governance principles: Participation, Rule of Law, Transparency, Responsiveness, Consensus orientation, Equity, Effectiveness and Efficiency, Accountability, and, Strategic Vision. Table 1 shows a description of each

dimension and the number of indicators implemented to assess governance in two public HEIs in the zone six of Ecuador.

Table 1. Governance dimensions in public university

Dimension	Description	Number of indicators
Management and Administration	Management of resources to achieve the mission and objectives.	9
Participation	Level of stakeholder participation in the governance structure and decision-making process.	27
Accountability	Level of accountability with stakeholders.	15
Autonomy	In the levels of Academy, Human Talent Management, in addition, financial and organizational autonomy.	22
Transparency	Level at which an institution makes its operations visible and understandable to its stakeholders and the public.	13

Source: Quyen and own research

These indicators were validated by a Delphi method. The model was implemented and obtained fascinating results. Each indicator was classified under two criteria; the first one is the result itself; it goes from 0% to 25%, 25% to 50%, 50% to 75% and 75% to 100%, which is ordered from 1 to 4 respectively. Then, an external assessor validates the information by multiplying the result by 1, otherwise, if the information is not correct the indicator is multiplied by 0.

The mentioned process finds two inputs, the Total Points and the Number of Questions Answered. Hence, it is possible to analyse the indicators themselves, as well as, the total dimension. Thereby, this investigation focusses the analysis in two particular dimensions: Participation (27 indicators) and Accountability (15 indicators), exploring their components to see how they impact on the total assessment.

4 METHODOLOGY

For the present investigation is necessary qualitative and quantitative approaches because it studies the influence of critical dimensions of governance considering the findings of mentioned model. Therefore, a case study is selected on account of allowing the exploration of complex matters.

4.1 Category of case study

An explanatory case studies the data meticulously both at a superficial and profound level with the aim of explaining the phenomena in the data [13].

4.2 Data collection

The data was collected in previous research through literature review, interviews and information requests in two public universities (zone six-Ecuador) on account of providing information for the model indicators. Moreover, an exterior assessor authenticated the information for the five dimensions.

4.3 Data Analysis

The obtained results are analysed in two points. First, it is compared university stakeholders, where it is essential to comprehend the deviations and what they represent for prioritizing the order. Meanwhile, the indicators for the critical dimensions consider the squared deviations which contribute to the Coefficient of Variation. The mentioned examination provides a guide to select the most crucial indicators which are affecting the final assessment of each dimension.

5 RESULTS

5.1 Comparing University stakeholders

Table 2 presents the preponderance indexes for HEI 1 and HEI 2. The most noticeable variance is - 42.41% considering the teaching and research stuff. The second big difference is in the Administration

and services staff with -34,30%. Considering the Local Community, it exists a percentage of variation of 27.27%. The main reason for these differences is the number of years for each university. University A has a formal structure at the higher and intermediate level because it operates more than 100 years. While, University B exists less than 20 years. These perspectives of relevance for stakeholders reveal that each HEI works in distinct contexts.

Table 2. Stakeholders' preponderance Index

Stakeholders	Preponderance Index		Deviation	Percentage
	HEI 1	HEI 2		
Administration and services staff	0.68	0.91	-0.23	-34.30%
Teaching and research staff	0.91	1.29	-0.38	-42.41%
Students (Clients)	1.12	1.29	-0.17	-15.01%
Private companies	1.03	0.89	0.14	13.94%
Local community (Society)	0.59	0.43	0.16	27.27%
Public regulatory administration	1.78	1.33	0.45	25.05%
Suppliers	0.89	0.86	0.03	3.54%

Source: Own research

Nonetheless, for both HEIs the most relevant stakeholder is the Public and regulatory administration in view of the fact that they are part of the public sector, hence, their budget depends directly from the state. In addition, the legal requirements and guidelines come from the government as well, creating a control that HEIs need to follow. Another important fact is that Students are considered as the second most significant stakeholder. It indicates a clear vision for both Public HEIs because they are the reason why HEIs exist.

The next comparison is particular for the reason that HEI 1 considers Private companies the third most relevant stakeholder but HEI 2 Teaching and research staff. The reason for this is that HEI 1 is bigger in infrastructure, supply of professional careers, number of students and workers. Therefore, the participation of the private sector in projects is higher, also strategic relations with different academic fields are possible in a higher frequency than HEI 2, which also possess relevant projects but the scope of academic fields is lesser.

The remaining stakeholders have a regular incidence in both public HEIs. Nevertheless, Local Community (Society) is the lowest one. This result shows that for the studied HEI's is extremely relevant to accomplish legal requirements and develop a great knowledge (Intellectual Capital) but they also need to increase even more the projects, links and events with more actors of society.

5.2 Critical dimensions retro perspective

Table 3 indicates the results obtained for the two public HEIs. The minimum value is 1, the mean is 2 and the maximum is 4. The results are clear, Participation and Accountability did not achieve the average. Therefore, they become critical dimensions because are related with stakeholder involvement and how they influence and take part into HEIs processes.

Table 3. Governance assessment in public university

Dimension	HEI 1	HEI 2
I. Management and Administration	2.07	2.87
II. Participation	1.96	1.71
III. Accountability	1.93	1.54
IV. Autonomy	2.31	2.41
V. Transparency	2.71	2.21
Average	2.20	2.15

Source: Own research

Initially, it is presented the reasons for the low score in Participation (Figure 2). HEI 1 does not meet the minimum in the 55.56% of the indicators, similarly, HEI 2 attains 59.26% of not satisfactory accomplishment. To begin with the similar indicators where both HEIs are not scoring at least 1, the results show that key stakeholders are not involved in the decision-making for projects because the decision is centralized in the relevant HEIs departments (middle management) and the universities council (executive level). Other crucial finding is that the means of participation for stakeholders exist informally, thus, there is no normative support. It constitutes a challenge in the view of creating an appropriate situation where all the relevant stakeholders take part into the definition of the norms for their participation, relationship, problems identification, consensus process and management decisions.

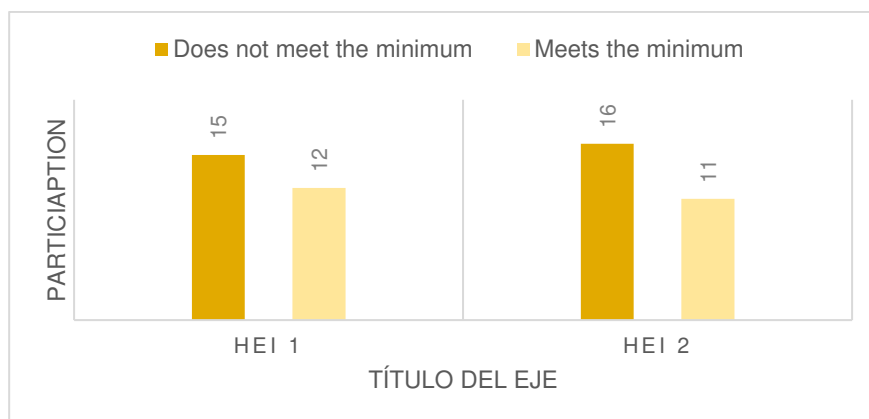


Figure 2. Dimensions achievement comparison
Source: Own research

Whilst the gender equality and social inclusion are considered in both IES budgets, nevertheless, the amount of money needs an incrementation where the relevant stakeholders participate and decide about the funding, projects scope, projects impact and how to control the successful use of the money. On the other hand, the equity for vulnerable groups considers the number of formal norms. Although public HEIs have normative intended for these social actors, they need to be reviewed with all the relevant stakeholders.

According with the dissimilar low indicators, HEI 1 requires to formalize participative means and disseminate them among all the stakeholders through adequate communication campaigns. It will promote the active involvement in the decision-making, normative definition, and management feedback for each stakeholder perspective creating a better context where all the needs are considered and being relevant for the middle management, as well as, executive levels. Furthermore, HEI 1 possesses a normative where gender equity is a relevant issue but requests a deeper consensus amid the relevant stakeholders and focus on the roots of the problems. The mentioned outcome relates directly with the mentioned situation about informal means and lack of direct participation.

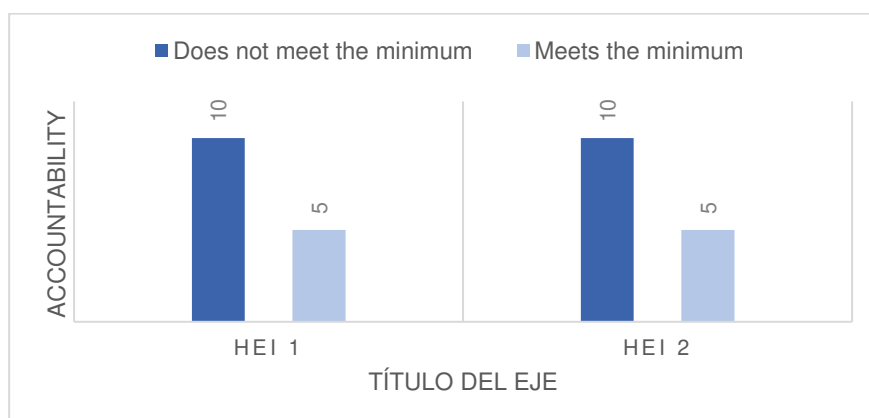


Figure 3. Dimensions achievement comparison
Source: Own research

Afterwards, the low score for Accountability also owns several explanations. Taking into consideration the indicators that do not meet the minimum score, HEI 1 and HEI 2 attain 66.67% (Figure 3). Considering the same indicators, in both cases there are no recommendation means (points of view) for the stakeholders, it illustrates how there is no feedback for middle management and executive levels because the results only come from the HEIs to the stakeholders but not in the opposite direction. Moreover, it is necessary to define a normative which regulates the stakeholders' relationship; this is one of the most remarkable findings, this action itself allows to reorientate the management under a good governance approach. All the conflicts, decisions and continual feedback would be supported by the HEIs normative. In addition, anticorruption normative is present in both HEIs, nevertheless, the control from the stakeholders is required for increasing its effectiveness. Although the Humans rights are recognized in both normative, it is indispensable that stakeholders aid into monitoring their accomplishment.

Conversely, the modest indicators which are different HEI 1 still struggles to formally communicate the results for the stakeholders, in other words, there is an informal socialization and it is not measured adequately. The discrimination normative is not measured neither, thus, even when they exist, they are not controlled. Likewise, antimoral normative also exist but it has to be reviewed with all the relevant stakeholders, albeit the real challenge is to aim a consensus about this and other indicated matters. HEI 2 communicates its results correctly, nonetheless, the means for this purpose are not formal. Besides, the anticorruption also needs to be measured following the stakeholder consideration for conflict resolution and also the management perspective due to generating fair participative instruments.

6 CONCLUSIONS

To conclude, the most important discovery for the stakeholders comparison is that both public HEIs have a clear understanding about the importance to follow the regulatory administration and recognize the students as the main reason for their existence. Additionally, both public HEIs possess the right to decide how to manage the public resources but the need to accomplish the government guidelines and goals. Thus, the control for the regulatory administration is based on the public budget. For that reason, the public HEIs have to develop a commitment for obtaining their own income using their assets such as infrastructure, technology, network and the most relevant, intellectual capital. Moreover, it is adequate to mention that the preponderance index reflects an order of prioritization, not an exclusive criterion, in other words, all the specified stakeholders have incidence and must have part of the governance for the public HEIs.

Whilst the two critical dimensions show the challenges for each public HEI. In both cases there is a high level of informal participative means for the stakeholders. It signifies the core discovery because the conflict resolution, communication means, monitoring, feedback and relationship among the stakeholders, do not have the normative support. It represents a threat for good governance by virtue of not building an appropriate organigram, internal normative and culture into all the levels. As a result, it is necessary to alienate the operative, middle management and executive under a good governance approach; considering the participation in the decision-making of the relevant stakeholders, using apt means, intellectual capital usage and strategic management as a way of generating continual improvement in the governance processes.

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