Quality education: Analysis situated from the work of higher education institutions

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Calidad educativa: análisis situado desde el quehacer de las instituciones de educación superior

Abstract

Nicaragua has been consolidating the effectiveness of education in the different educational subsystems and levels in a joint work with different institutions, aiming at a continuous improvement in the quality of its different processes. This is possible because we have a regulatory framework based on the Political Constitution and its laws, which define the guidelines that regulate, guide and accompany the development of educational processes. This essay addresses the concept of quality from the approaches of Deming, Juran, Crosby and Feigenbaum. The purpose is to reflect on the quality of higher education from the point of view of its institutional action, considering the incorporation of quality as seen from the mission declared and assumed by Higher Education Institutions (IES by its Spanish acronym). Likewise, an interrelation is made with the advances of quality assurance in Nicaragua in the current context, with emphasis on higher education. It concludes with reflections related to quality in education and the role of the protagonists in the Nicaraguan context, whose educational model is centered on the person, family and community. This work aims to collaborate with educational institutions in giving meaning to quality from their actions, emphasizing that the center of quality is people. In them lies the responsibility for change and give that human face to quality.

Resumen:

Nicaragua ha venido consolidando la eficacia de la educación en los diferentes subsistemas y niveles educativos en un trabajo conjunto con distintas instituciones, apuntando a una mejora continua de la calidad en sus distintos procesos. Esto es posible porque se dispone de un marco normativo sustentado en la Constitución Política y sus leyes, donde se definen los lineamientos que regulan, guían y acompañan el desarrollo de los procesos educativos. Este ensayo aborda el concepto de calidad a partir de los planteamientos de Deming, Juran, Crosby y Feigenbaum. El propósito es reflexionar acerca de la calidad de la educación superior situada desde su quehacer o accionar institucional, atendiendo a su incorporación desde la misión declarada y asumida por las Instituciones de Educación Superior (IES). Igualmente, se exponen los avances del aseguramiento de la calidad, en el contexto actual en Nicaragua, con énfasis en la educación superior. Se concluye con las reflexiones relacionadas a la calidad educativa y el rol de los protagonistas en el contexto nicaragüense, cuyo modelo educativo ésta centrado en la persona, la familia y la comunidad. Este trabajo se propone contribuir con las instituciones educativas para darle sentido a la calidad desde su accionar, haciendo énfasis a que el centro de la calidad son las personas, en ellas está la responsabilidad del cambio.

Palabras clave: educación, calidad, universidad, misión, protagonistsa, evaluación, acreditación.

Introduction

Nicaragua has a normative system defining the guidelines which regulate, guide and attend the development of the educational process covering all the subsystems. It is sustained in the Political Constitution of the Republic of Nicaragua. Education's objective is defined as the whole and holistic formation of all Nicaraguans with quality, free, pertinence and open access (National Assembly of Nicaragua, 2006).

Currently, the educational subsystems, Ministry of Education (MINED), Regional Autonomic Educational Subsystem (SEAR), National Technical and Technological Institute (INATEC) and the National Council of Universities (CNU) cooperate to fortify human capacities and institutional talents. The goal is to embody the educational model centered on humans, engaging the family and community, stressing the continuous progress related to the country's needs. Entirely to provide to economic, social and politic growth of the nation, boosting the evolution of scientific-technical and citizens competencies.

Undergoing the evolutionary transformation of education from each educational subsystem, it has been updated and designed regulations allowing the creation and pledge of quality direction system of educational endeavors, with a plan of interactive assembly in harmony with community claims and needs. This strategy allows to build interinstitutional partnerships with diverse entities nationally, generating auspicious spaces for the construction of quality, collective, contextualized, situated, pertinent and emergent learning, corresponding with the National Plan to Fight Poverty and for Human Development 2022-2026.

From the educational oversight, securing quality in the learning of Nicaraguans, queries arise in relation to the notion and operationality of the term "quality" between members of the university community: What is quality on the educational processes? How is quality in education perceived? From which slant is quality in education assessed?

Different forms of interpretation and addressing of "quality" by experts, specialists, and key actors (teachers, students, directives) exist in education, linked to the context, proficiency, opportunities level, role, outlook of estimation, growth, and evolution of the educational act.

The research aims to reflect on the quality of higher education set from institutional action and work; it takes as key reference the task of evaluation and accreditation to contribute with educational institutions aiming to clarify quality through their actions, emphasizing how people are the center. They have the duty of change and give that human face.

The study entails four moments; the first one regards the theoretic form of the elucidation of quality for diverse authors and set on education. Later, it refers to quality on the Nicaraguan context; thereafter, it institutes the relation of quality in education with the mission and evaluation, from the compromise declared by institutions, and assumed through their actions for the compliance of their functions. In the fourth one, quality education and role of protagonists in the Nicaraguan context, defining the achieved advances in the country's quality in education, highlighting the protagonists' leadership will be addressed.

What is quality?

Quality derives from *qualitas*, meaning property or assembles of properties inherent to something, enabling to judge their value. The previous statement places quality in different organizational contexts, whether in the business, social or educational sphere.

It is a vexed inquiry. Zúñiga et al. (2007) argues the notion of quality is a social construct depending on the community's needs. Academics assign value to pedagogical factors. On the labor field, they are interested on competencies of students who graduate. As per these authors, institutions must build and agree on a concept of quality, adopted and shared, crossing the work of essential functions, here: teaching, study, control, and linkage.

This assertion arises from a study defining quality by authorities, teachers, and students. Results denote each consulted group had agreed with the functions or role they play in university: Key sources were focused, aligned

with their experience and work area, in the academic management, lesson planning, oversight, teaching, formation, teacher experience with profile from the specialty. Regarding the group of students, they valued quality from amassed experience and updating of teachers, with solid technical or professional training —how they express it— "trained with quality, warmth, and humanism". (Orozco, 2016, p. 213)

Various authors dedicated themselves to the study of quality, settling from administrative and business management, wherein this definition comes from. Historically, the purpose was rooted on improving the productive process of companies to refine objects at a low cost to satisfy clients or consumers and guarantee rentability, namely, work proficiently. Inside these approaches can be found the authors: Deming, Juran, and Crosby. See table 1

Feigenbaum (1996) indicates: Quality is, essentially, a style of direction. The impact to the entire organization of total control of quality involves the management and technical execution of quality activities steered towards the client, as a responsibility, of first line, entailing full client satisfaction. (p. 901)

Derived from the meanings of quality disclosed by the earlier mentioned authors, it is inferred quality must be set up by the direction. It is a work style which must ensure the staff excels in assigned tasks to guarantee quality in all the processes. Thus, it is proved people's work is key in the processes of quality, since they are directly involved in the actions.

Table 1

Definitions of quality by differents authors

Authors	Approach around quality
Deming (1989)	Deming (1989) "Quality starts with the idea, which is established by the direction (...) and must be guided to the needs of the consumer, present and future" (p. 3-4)
Juran (1990)	Juran (1990) Refers to quality as the adequacy to the use, in two different directions: "the characteristics of the product that satisfies the clients' needs and the absence of deficiency" (p. 14)
Crosby (1998)	Crosby (1998) "Quality doesn't cost. What costs money are the things that don't have quality —all the actions result from not doing things well the first time" (p. 9) Ensure quality means: "Make people do better all the important things that they would do anyway (...) People include both to the high direction as the lower levels of the organization" (p. 11)

Own Work compiled from the approaches of Deming (1989), Juran (1990), and Crosby (1998).

The concept of quality from the educational perspective

In the early XXI century, education evolved in the care of the growing student population, demanding qualified staff in all different areas of knowledge, aiming to answer the requirements of varied educational and labor scenarios.

In this regard, the need to accentuate the pertinence and quality of the learning processes, nexus of learning with investigation, innovation, and social projection, under a transversal approach transcending learning scenarios with an educational model centered in the person, family and community gains momentum.

With this new model, the expression "educational community" awakens and holds true since exists an engagement of: State, leaders of educational institutions, parents, students, teachers and diverse key actors of society, who see the need of collaborating for quality in education.

For the academic field, challenges are greater each time, given academic circles demand a quality in education. Educational institutions strive to have high quality teachers and state they give an education of quality. Briefly, we all want and demand benefits of quality in education for all key actors of the education system.

The transition from a concept of quality comes from the business field to the education field creates disputes for the different interpretations and meanings, analyzed considering the existent theory and context. Education is considered as a complex system, where various interrelations between the subsystems, components, processes, and actors exist.

The above shows it exists some hurdles to clarify quality in education among these contexts:

→ Complexity of education, since it has to function and be studied systematically and integrally on different subsystems and levels.

→ Pertinence of different educational programs answering social needs, technological and productive development.

→ Disagreements generated between the coherence of achieved results with the purposes and goals proposed.

→ Complexity of applying an educational model assumed and declared by educational institutions.

→ Role of teacher and student as architect of the educational act.

→ Broad vision of education exceeds the learning act, incorporating functions as investigation, innovation, and social projection or extension.

→ Organizational culture transcends its structure, organization and functioning.

As observed, there is not a definition integrating all these education's attributes. Yet, varied authors have bared their ideas and meanings of quality in education, seen as a mission corresponding to them and the practice of their work: Quality in education is resolved on the capacity of priming the individual so they can adapt and assist to the growth, economic and social

development through their addition to the labor market, so quality is valued in terms of progress and modernity of the country. (Marqués, 2008, as cited in Cardoso Espinoza & Cerezo Mercado, p. 71)

Gago (2002) states quality in education must be grasped as the synthesis of attributes possesses process/art/science/ technique we call education. While Vidal & Morales (2010) imply it is understood as the positively assessed effects for society regarding the process of formation carried out by people in the culture.

Per these definitions, quality in education is related with the duty assumed by institutions to form people, considering the area of knowledge and general culture. Thus far, it is the same society that values the quality of their protagonists' formation and their contribution to the development in the social field they are immersed in.

In higher learning, Lemaitre et al. (2012) unveil the following approaches denoting quality: [...] quality on higher education as the degree of adjustments between the actions of an institution, academic program or degree is launched to comply with orientations from their institutional mission and purposes, and the results are obtained from these actions [...] Thus, quality can be grasped as the coherence between institutional purposes, strategic objectives, and activities done to meet these objectives, considering also the means used for it (p. 27).

The definition above draws us nearer to notice quality in education related with the display of institutions and achieved results, since it shatters educational processes as teaching, investigation, innovation, and extension, guided by institutional references as the mission, principles and values to apply through strategic and operative planning coherently with the needs of the surrounding.

Quality of education in the Nicaraguan context

Nicaragua is a country which has had valuable progress on education since the triumph of the Sandinista Popular Revolution in 1979. From the Political Constitution of Nicaragua, on articles 58, 65, 76, 93, 101, 105 and articles of the title VII about Education and Culture, the State assumes the duty of securing education to all Nicaraguans and in all levels. It accepts training and updating of public servants, which must be pertinent and focused to the progress of production and good performance on the elaboration, execution, and follow-up of different plans, programs or projects, social, politic and social security.

Thus, the General Law of Education (2006, chapter III, art. 6) defines quality in education as: Transversal criteria of Nicaraguan education challenging the educational processes related to academic results and the relevance of learnings for students' life. Includes the conception, plan design and study programs conforming an important part of the curriculum; as well as the performance or yield of learners, the educational system or performance of students, the own educational system itself and education in its relation with human capital required for the nation's development. Quality in education aims to build and develop relevant learnings, enabling learners to face successful life

challenges and each one becomes a positive subject-actor for the community and country.

The National Council of Evaluation and Accreditation (Consejo Nacional de Evaluación y Acreditación, CNEA) outlines quality in higher education as: Set of characteristics or aspects to be possessed by institutions of higher education, aligned to priorities of their mission and institutional identity, to satisfy needs and expectations of the Nicaraguan society, for their own transformation and surroundings, supported in a culture of continuous improvement. Hence, the processes and resources must be guided to these purposes (CNEA, 2019, p. 41).

As previously defined, the CNU adopts the definition of quality established by the CNEA; also, explains "this adoption, establishes the compromise of the CNU to work in the constant improvement of Nicaraguan higher education" (CNU, 2023, p. 33). The above exhibits the compromise of this high body of higher education to focus their actions on continuous improvement of the academic and administrative processes of universities.

The premise of this definition of quality clearly evidences the compromise of boosting the articulated work between the CNU and CNEA to regulate higher education. This constitutes a fundamental factor for universities, having the same referent and metamorphic approach focused on the continuous improvement of the institutional and academic area.

Considering the concept of quality raised by the CNEA and CNU, both are focused on a strategic vision of the country, giving life to the quality from the perspective of the continuous improvement on the processes and good use of resources for the purpose's achievement. Ergo, it is assumed the quality in higher education is measured by institutions accomplishing their mission and objectives they were created.

Relation of quality in education with the mission and evaluation

The different approaches shown in this paper about quality place it from the actions and activities of the educational institutions to the mission with a mainstay guiding the operating of the institution and a key indicator for the assessment and accreditation, aiming to guarantee the continuous improvement. The prior approach is sustained by the concept of quality declared by the CNEA and assumed by the CNU. This organism claims quality through the dimensions, evaluation criteria, guidelines and evidence incorporated on the guides and manual created and provided to universities for the development of the evaluation and accreditation processes.

The broad concept of mission refers to the power or faculty given to someone to perform a role. Ergo, the mission is the presentation letter of the organization. In this light, the CNEA, on the Glossary of Higher Education of Nicaragua, assumes the mission as: The general and lasting statement of the institution's purpose which discerns it from other institutions of their core nature, it identifies them by defining the spectrum of their operations in terms of their area of influence and added value it contributes (p. 43).

The concept of mission awakens on the Nicaraguan Higher Education Institutions,

considering it manifests what is expected of them and their attributions as higher education institutions, as established on the General Law of Education (2006, chapter VI, art. 48): The Subsystem of Higher Education constitutes the second stage of the education system that consolidates people's vital training, cultivates knowledge, develops investigation and innovation, and trains professionals to the highest level of specialization and improvement in all fields of knowledge, art, culture, science and technology aiming to cover the demand of society, ethnic community and assist to the development and sustainability of the country.

From the prior approach, the CNU (2023) declares the subsystem of higher education's mission as follows: We are the governing body of the Nicaraguan subsystem of higher education conceived as a public and social good, assuming the promotion and oversight of learning, centered in the wellness of people, families, communities and guarantees a quality education, integral, inclusive, pertinent and intercultural, boosting the use and generation of knowledge, to contribute with good living and progress of the country, based on the principles and values founded in the Political Constitution and national plans, promoting the participation of all society (p. 4).

The above is a key referent for universities in the approach of their missions, allowing them to place academic actions aligned to the country's regulatory framework and the established by the governing body of the subsystem of education, considering different strategic axes in the declaration.

Within the content of the mission declared by the CNU, it is observed the following strategic axes: promotion of learning, management of learning centered on people, families and communities' wellbeing, enhance the use and generation of knowledge, guarantees an quality education, holistic, inclusive, pertinent and intercultural, assist with holistic well-being and progress of the country, principles and values stated on the Political Constitution and the national plans and participation of all society.

The clearest expression of the mission's operativity on higher education institutions is visualized on the institutional project, development plans or strategic plans, operational plans and plans for each instance, incorporated on the different academic and administrative processes with their respective actions, indicators, goals and results comply to.

As previously stated, the mission is tightly related to quality, to the extent the action of the institution is pertinent and aligns with the mission. Thus, it has been a key referent or major factor in the process of assessment and accreditation.

The mission of universities: a key referent for the evaluation and accreditation

Commonly, each higher education institution in their strategic framework declares the mission with the essential elements of the institution's identity, defines their actions, integrates the challenges, engages the staff and a referent to evaluate the scope or outcomes. This is assumed as the institution's presentation letter.

In the models of quality control, the mission is the important referent guiding the quality verification. Its declaration must be pertinent, coherent and precise. As Özdem (2011), the mission must be clear about the institutional purpose, indicating the target market, activity field and needs the institution procures to satisfy.

The relation between the mission declared by Nicaragua's Higher Education Institutions is presented with key areas linked to their actions and their compromise declaration with quality in education.

According to the identified key areas in the universities' mission, observed as follows:

→ Declare their actions and functions as an educational institution.

→ Justify their reason for existing, stressing on students' learning which address the labor market's demands, knowledge evolution, science and technology, and their contribution to the diverse segments of society.

→ Emphasize the core functions' management namely investigation, innovation, extension or social linkage, in their compromise with society.

→ State tenets and moral values to guide institutional actions and academic programs.

→ Visualize the definition of success in the identified key areas.

The compromise with quality declared on the mission must be highlighted. Therefore:

→ It expresses the interest in the quality aimed at learning.

→ It emphasizes institutional quality focused on the substantive functions.

→ Institutions visualize quality through institutional evaluation and accreditation.

→ Compromise with quality is projected into the future, with more than 50 % of IES applying it.

Aspire to national and international accreditation to achieve quality.

In the mission's key areas, what is to be worked internally and externally at the institution must collaborate with the various sectors of society to achieve goals and purposes. It shows its internal and external consistency, restating the key referent's value for the evaluation and accreditation processes, aiming for university processes continuous improvement.

The alignment with strategic axes above is part of the CNU proclaimed mission, which is a strength for higher education as they work along the same axes that must be addressed to results in favor of the country's goals compliance.

However, institutions must review their mission to ensure it holds the institutional activities' key elements to evidence the attribute it characterizes. A more detailed study would be valuable to reveal the alignment between the mission and quality, based on self and external evaluation.

Quality education and the protagonist's role on the Nicaraguan context

Quality education cannot be discussed without considering the protagonists in

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Table 2

Key areas declared on the mission of universities

Interested parts	Key areas of the mission
Students	• Formation of professionals, leaders, men and women or people • Holistic, competent, entrepreneur, and innovative training • Formation centered on the person, family and community
Teachers	• Facilitate the learning centered on the person, family and community • Development of professional, citizens, and scientific competences • Propitiate the collective construction of knowledge • Promote humanistic, citizens, environmental, and ethical value principles • Generation of knowledge, science and technology through the investigation, innovation, and extension in equilibrium and harmony with Mother Earth • Management of scientific knowledge, innovation, technology and its diffusion
Society	• Pertinent formation of professionals that answer to the needs of society • Contribution to the economic, politic, social, environmental, and human development of the country and region • Compromised to the challenges of sustainable human development, the sociocultural, economic and environmental reality of the country • Articulation with the different social sectors for the development of the joint work • Application of the knowledge, science, technology and innovation on the different productive, environmental and social sectors of the countr
Quality	Mission • Provides integral, pertinent and quality education • Guarantees the securing of quality on the functions: teaching, investigation and social projection • Consolidation of the institution of reference for quality Vision • Accredited institution for the compliance of standards of quality on national and international level • University community compromised with quality on the development of different academic and administrative processes • Leader by their national and international academic excellence • Recognized for the quality and warmth on a national and international level

Own Work

the educational community. The different models of quality refer to participation, communication, processes and leadership. It is essential to prepare staff to meet the challenges and obstacles met by the institution or country, assuming to work with quality and human warmth.

In their contribution to quality, Deming (1989) stresses fourteen points to be considered for the company's path, which can be picked up for by higher education institutions.

Of the fourteen points, the following are exclusively dedicated to work with people:

→ Teach and train the best workers to improve work performance.

→ Adapt and establish leadership.

→ Eradicate fear for people to work confidently and give their best.

→ Remove slogans and chants for operators, substituting them for improvement actions.

→ Clear barriers depriving people of being proud of their work.

→ Stimulate people for personal improvement.

→ Make everyone work for the transformation, applying the method of planning, doing, checking, and acting.

These place people in the middle of quality and begin with the training for the competent operation of their functions. Moreover, it is vital to stimulate people for their own improvement. With leadership, a fundamental role is played for people to be the center of change and continuous improvement processes. Regarding this, philosopher Ishikawa proposed that quality should be conducted further of the own work, to life.

Leadership is key to accentuating the compromise in working and promoting quality control of the organization by the management. Deming (1994, p. 68) states the leader's work is to achieve the organization transformation.

The leadership of the Government of Reconciliation and National Unity in driving the national educational system towards pertinence and quality is notorious. It is present in the Political Constitution and laws of education. As well as in the educational institutions of the country, owning the National Plan to Fight Poverty and for Human Development 2022-2026 as a foundation. Moreover, leadership is assumed by people at the front of these institutions and through the strategic planification to guarantee pertinence and quality.

Education has experienced major changes and transformation on the various levels of the national education system. It was manifested with the Great National Literacy Crusade in 1980; the development of strategies for free, inclusive, intercultural, creative and innovative education; as well as strengthening the teaching and leader training in all levels; the model of education centered around the person, family and community; pertinent education and development of the investigation, innovation and availability of education resources.

Precisely, in the higher education subsystem of Nicaragua leadership is assumed by the CNU and CNEA, which, from the country' legal and normative

framework, promote actions for continuous improvement. Their work is on the Strategic Framework of Higher Education 2022-2023, leading the guidelines followed by Nicaraguan universities; likewise, with the establishment of the system of quality control and system of quality guarantee.

Teachers' pedagogical leadership begins from the act of education, on the role as mediators of learning centered on the person, family and community. In this process, quality and pertinence emerges as it is where interactions between the teacher and student, protagonist of their own learning, happen. Thus, leadership is key to lead staff towards strategic purposes and goals for the development and evolution of education for continuous improvement.

Consequently, it reiterates quality must be centered on people, implying for them to own and compromise with the mission, to comply with principles, values, objectives and strategies. Thus, they will consciously take the responsibility to carry out the work it corresponds to achieve quality.

Rodríguez (2017) indicates: We will achieve a positive attitude and mindset of all university community members, merging the gaze with critical, creative, purposeful, promoting dialogue and listening to ourselves of various outlooks to a situation or process we must change or modify (p. 4).

For this, the value of working according to the staff's quality regarding attitude and aptitude, of a quality culture in unity with the organizational culture is stressed. This is aimed to empower the institutional referent and focus on the processes' progress of institutional actions. As such,

it seeks conscious participation in the changing processes.

Most would believe it is utopia or romanticism, but quality in our institutions must be viewed with a new thought, given that, if we want quality in what we do, we must start with human quality. As Berman (1999) expresses, we must be capable of transforming our reality from a new thought, a new organization full of human hearts. This must be quality, with human faces and open hearts to change.

Conclusions

Quality in education entails a strategic gaze which requires the joint work of these institutions' actors and protagonists. Thus, engagement and communication as key axes to facilitate appropriation, pertinence, and compromise of all; from it comes the need of establishing a culture of quality in institutions.

Quality in universities takes the declared in their mission, as it is their reason of being and contains various axes of work, principles, and values, letting open the vision's guidelines, strategic objectives and actions to begin from the strategic planification. From the mission, it is clear the compromise of the institution's actions with quality and pertinence.

The people who form the institution or organization invigorate quality. This pedagogical element begins with the quality of people, compromise to the work they have to do excellently. As people who internalize institutional referents, engage and communicate, contributing to the steady improvement of institutional actions.

Leadership on the driving processes has been fundamental and aimed to the collaboration to merge efforts and resources for the educational subsystems, MINED, INATEC, CNU and SEAR. This articulated effort has significantly influenced the education achievements, which has as reference the educational model centered on the person, family and community.

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