Advancing Diversity, Equity, and Inclusion for Engineering Educators in Ecuador: The EENTITLE Project

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Abstract

The EENTITLE project, funded by the EU, is a transformative initiative aimed at elevating the status and recognition of engineering educators across Ecuador by promoting Diversity, Equity, and Inclusion (DEI) practices that encompass faculty and support staff ensuring that all of them—regardless of their social, economic, linguistic, ethnic or geographical background—are recognized for their unique contributions to engineering education. DEI initiatives in higher education and engineering studies have historically centered on enhancing the experiences and representation of students. However, this focus has largely overlooked the vulnerabilities and contributions of academic staff, including educators, laboratory technicians, and leadership. In countries like Ecuador, where significant sociocultural and ethnic diversity exists, underrepresentation extends beyond students to academic professionals.

This paper focuses on the strategies embedded within the EENTITLE project, detailing how the project's activities promote a more equitable and inclusive ecosystem and governance model for higher education institutions (HEIs) to facilitate inclusive professional development, equitable evaluation and recognition, and public awareness campaigns that recognize the diverse contributions of faculty and support staff. Using a multidisciplinary approach, our research draws on both qualitative and quantitative methods. We are collecting data through surveys, interviews, and focus groups involving faculty, technical staff, and administrators from Ecuadorian universities. The research team, comprising experts in engineering and education from both European and Ecuadorian institutions, analyses DEI dynamics within these key groups to identify existing gaps and potential opportunities for fostering inclusivity in their professional development and recognition. Comparative case studies have been conducted, with a particular focus on HEIs with significant social, linguistic, and ethnic diversity, to examine the parallel challenges in different contexts. The project also identifies those governance models that emphasize institutional responsibility in fostering DEI by offering tailored DEI training to academic leaders and by reforming policies that affect recruitment, retention, and recognition of diverse talent within engineering schools.

As of the time of submitting this paper, our findings indicate that while DEI efforts targeting students remain vital, the lack of diversity-focused support for educators and leaders significantly impedes broader institutional progress. By shifting the focus toward the professional development of academic staff, the EENTITLE project offers a framework for empowering educators and leaders through DEI-centered governance and policy reform. This, in turn, enhances the overall quality and modernity of higher education in Ecuador, bringing it in closer alignment with European values and fostering innovation and social integration in engineering education.

Keywords:
Diversity, Equity, Inclusion, Engineering Education, EENTITLE, Professional Development, Higher Education Governance, Academic Leadership, Ecuadorian Higher Educational System, Vulnerability, Social Recognition, EU-funded Projects.

INTRODUCTION

Engineering educators are at the forefront of shaping the future by equipping diverse generations of learners to address the complexities of a rapidly changing world. In an increasingly interconnected global society, diversity, equity, and inclusion (DEI) have emerged as essential pillars for fostering innovation, collaboration, and excellence in engineering education (Cumming et al., 2023; Dwyer et al., 2023).

The engineering profession thrives on solving multifaceted challenges that demand diverse perspectives and approaches. For educators, embracing DEI principles means more than expanding representation—it involves creating inclusive learning environments where individuals from all backgrounds can excel. It also means recognizing the critical role of educators in modeling these values through equitable professional development, inclusive governance, and recognition systems.

This paper explores the potential of DEI for engineering educators through the lens of the EENTITLE (Ecuadorian ENgineering educaTors capacITy deveLopment and rEcognition) project, an EU-funded initiative aimed at fostering inclusivity within Ecuadorian engineering schools. By addressing systemic gaps in the recognition and development of educators, the project highlights the importance of empowering faculty to lead in ways that reflect the diversity of the world they serve. These efforts contribute to a more equitable academic ecosystem, ensuring that engineering education continues to innovate and adapt to the challenges of our time.

By prioritizing inclusivity, we not only elevate the quality of engineering education but also strengthen its capacity to unite individuals and communities in solving global challenges.

1.- The context: the EENTITLE project.

EENTITLE is a revolutionary initiative funded by the Erasmus+ Programme of the European Union (Capacity Building Higher Education, CBHE-Strand 3, Project ID: 101128879), aimed at elevating the status and recognition of engineering educators across Ecuador by promoting Diversity, equity, and inclusion (DEI) practices that encompass faculty and support staff ensuring that all of them—regardless of their social, economic, linguistic, ethnic or geographical background—are recognized for their unique contributions to engineering education.

This project falls mainly under the aegis of the EU overreaching priorities governance, peace, security and human development, in that it aims at developing and strengthening the capacity and skills of professionals in specific regions within a cooperative, inclusive and international framework.

By targeting 5 public universities that serve economically challenged populations, the project will also make a valuable contribution to promoting social and economic equality.

The scale of engineering programs at the Ecuadorian participant universities—ESPOL, ESPOCH, UNEMI, EPN, and UNL—varies significantly in terms of faculty size, administrative staff, departmental structure, and the levels of academic programs

offered. Below is a general overview based on available information from the websites. In summary, these institutions present comprehensive engineering faculties, multiple departments, and a wide range of both undergraduate and graduate programs. The scale of their engineering programs suggests a substantial academic and administrative presence.

1. Escuela Superior Politécnica del Litoral (ESPOL):
   - Faculty and Staff: ESPOL comprises 5 faculties, including multiple engineering departments. While specific numbers of engineering faculty and administrative staff are not readily available, the university offers 26 undergraduate and 10 master's degrees, indicating a substantial academic and administrative workforce.
   - Departments: multiple engineering departments, including the Faculty of Mechanical Engineering and Production Sciences (FIMCP), the Faculty of Electrical and Computer Engineering (FIEC), and the Faculty of Engineering in Earth Sciences (FICT).
   - Programs: Offers both undergraduate and graduate programs in various engineering disciplines.

2. Escuela Politécnica Nacional (EPN):
   - Faculty and Staff: EPN has 8 faculties encompassing 24 undergraduate professional schools, 18 master's programs, and 6 doctoral programs. The university serves approximately 10,000 undergraduate students and 2,500 postgraduate students, suggesting a considerable number of engineering faculty and administrative staff.
   - Departments: Includes faculties such as Electrical and Electronics Engineering, Mechanical Engineering, Civil and Environmental Engineering, and Computer Science Engineering.
   - Programs: Provides both undergraduate and graduate programs across various engineering fields.

3. Universidad Estatal de Milagro (UNEMI):
   - Faculty and Staff: Specific data on the number of engineering faculty and administrative staff at UNEMI is not readily available.
   - Departments: UNEMI offers engineering programs, but detailed information about the number of departments is limited.
   - Programs: Offers undergraduate engineering programs; information on graduate programs is limited.

4. Escuela Superior Politécnica de Chimborazo (ESPOCH):
   - Faculty and Staff: Detailed numbers regarding engineering faculty and administrative staff at ESPOCH are not specified in the available sources.
   - Departments: ESPOCH offers various engineering programs, though specific departmental information is scarce.
   - Programs: Provides undergraduate engineering programs; details on graduate offerings are limited.

5. Universidad Nacional de Loja (UNL):
   - Faculty and Staff: Information on the number of engineering faculty and administrative staff at UNL is not readily accessible.
   - Departments: UNL offers engineering programs, but specific details about the number of departments are not available.
   - Programs: Offers undergraduate engineering programs; information on graduate programs is limited.

Across these institutions, the governance model typically features a blend of centralized and decentralized elements. While departments and faculties possess autonomy in academic and research activities, significant decisions regarding budgeting, strategic planning, and policy development are often centralized within the university's executive administration. This structure aims to maintain a cohesive institutional strategy while accommodating the diverse needs of individual academic units.

In Ecuador, the concept of tenure for university faculty does not follow the traditional models found in countries like the United States. The 2010 Ley Orgánica de Educación Superior (LOES) introduced significant reforms to the higher education system, impacting faculty employment structures. Under this legislation, faculty members are typically employed on fixed-term contracts, which are subject to renewal based on performance evaluations and institutional needs. These contracts often span periods ranging from one to four years. While this system provides a degree of job security during the contract term, it does not equate to the lifelong tenure system. One of the key challenges in this system is the lack of long-term security for many faculty members, particularly for non-permanent professors in engineering faculties. Unlike in other fields, where research and publishing may provide additional stability, engineering faculty often face high turnover rates and contractual uncertainty, particularly at institutions reliant on public funding.

Ecuador is a diverse nation with a rich tapestry of ethnic groups. According to the 2022 census, the population is composed of approximately 77.5% Mestizo (individuals of mixed Indigenous and European descent), 7.7% Indigenous peoples, 7.7% Montubio (coastal Mestizo), 4.8% Afro-Ecuadorians, and 2.2% European Ecuadorians (Wikipedia). In the realm of higher education, some initiatives have been introduced to promote the representation and inclusion of diverse ethnic groups; however, these efforts remain insufficient and unevenly implemented across institutions.

Spanish is the primary language of instruction in Ecuadorian engineering programs, though English is used in research and international collaborations. Ecuador has 14 Indigenous languages, including Kichwa and Shuar, but their presence in higher education is minimal, with some universities offering Kichwa as an elective to support linguistic and cultural diversity.

As a result of the EENTITLE project, a transparent evidence-based international system of evaluating teaching practice and pedagogical competence of engineering educators will be implemented in each institution to serve as a pilot for the region; teachers will start to be rewarded and recognized locally, and internationally not only for scientific achievements, Ph.D. titles, and number of years of professional practice but for their

teaching skills, interpersonal, inclusive and professional competences required to ensure high quality of forward-looking engineering education.

2.- Diversity as a driver of growth in Ecuadorian Engineering schools.

Real-world problems are polyhedral, meaning they have multiple facets and edges. To tackle them, it is essential to incorporate diverse perspectives that reflect the multifaceted nature of the world. Different cultural contexts provide the foundation for tailoring global problems into localized solutions that are both practical and sustainable. Additionally, varied life experiences bring unique insights, enriching the understanding of ethical and social challenges within engineering, thereby fostering more comprehensive and impactful approaches to problem-solving.

Diversity is an absolute necessity for the industry, as it drives innovation, fosters creativity, and enhances problem-solving by bringing together a wide range of perspectives and experiences (Direito et al., 2021; Leever, 2020; Jones et al., 2020). Engineering solutions impact diverse populations and therefore must be designed by diverse teams. Diverse teams outperform homogeneous ones in innovation and financial returns.

Inclusivity Drives Innovation: diverse teams contributed to advancements in assistive technology, like wheelchair-accessible autonomous vehicles. Other example: In prosthetics design, teams with diversity in gender and social context have identified needs that homogeneous groups overlooked, such as ergonomic requirements specific to women.

In engineering, diversity is not an extra; it is essential. Homogeneous solutions may be quick, but they are not necessarily robust or applicable to a wide range of contexts. Example: In projects on sustainable infrastructure, multicultural teams and co-design with end users led initiatives that were more adaptable to local legislation and needs, outperforming less diverse proposals.

Non-standard People (e.g. neurotypicals, disabled…) offer a different perspective on the world and help create a more diverse and constructive society.

In summary, diversity is a Strategic Value and Inclusion in engineering is a strategic investment. Educators not only have the ethical responsibility to teach with equity but also the opportunity to shape teams of engineers capable of addressing the polyhedral challenges of the contemporary world and finding Good Solutions for ALL.

3.- Objectives.

This paper focuses on the strategies embedded within the EENTITLE project, a transformative initiative aimed at promoting a more equitable and inclusive ecosystem within Ecuadorian HEIs with Engineering studies. The project seeks to establish governance models that facilitate inclusive professional development, equitable evaluation, and recognition systems while launching public awareness campaigns to highlight the diverse contributions of faculty and support staff.

Central to the EENTITLE project is the recognition that diversity, equity, and inclusion (DEI) are not only ethical imperatives but also practical drivers of innovation and excellence in engineering education. By fostering an inclusive environment that values diverse perspectives, the project aims to empower educators and support staff to contribute meaningfully to institutional and societal progress. This involves developing evidence-based systems that recognize the professional and pedagogical competencies of educators beyond traditional metrics, such as scientific achievements or years of service.

As part of this endeavor, Ecuadorian HEIs are engaging in deep reflection on their teaching practices and the broader concept of what constitutes effective and inclusive pedagogy. This introspection includes revisiting institutional definitions of diversity, questioning whether embracing diversity strengthens their identity as institutions, and assessing whether attention to diverse student populations enhances faculty effectiveness. These reflective processes are pivotal in aligning institutional governance models and infrastructure with the objectives of fostering inclusion and continuous improvement.

The project also prioritizes capacity-building efforts, offering tailored DEI training for academic leaders and reforming policies to support the recruitment, retention, and recognition of diverse talent within engineering schools. Through these strategies, the EENTITLE project not only addresses the existing gaps in diversity-focused support for educators but also establishes a framework for systemic change that aligns Ecuadorian higher education with global standards of equity and inclusion.

By integrating these goals, the EENTITLE project underscores the importance of empowering educators as agents of change who can lead inclusive practices in their institutions. These efforts enhance the overall quality and relevance of engineering education, preparing institutions to address both local challenges and the complexities of an interconnected global society.

4.- Methodology.

Using a multidisciplinary approach, our research draws on both qualitative and quantitative methods. We are collecting data through surveys, in-depth interviews with academic leaders (rectors, presidents) and focus groups with mid-level managers (faculty, technical staff, and administrators) from 5 public Ecuadorian universities. The research team, comprising experts in engineering and education from both European and Ecuadorian institutions, is analyzing DEI dynamics within these key groups to identify existing gaps and potential opportunities for fostering inclusivity in their professional development and recognition. Comparative case studies have been conducted, with a particular focus on higher education institutions with significant social, linguistic, and ethnic diversity, to examine the parallel challenges in different contexts. The project also identifies those governance models that emphasize institutional responsibility in fostering DEI (Cumming et al., 2023; Dwyer et al., 2023) by offering tailored DEI training to academic leaders and by reforming policies that affect recruitment, retention, and recognition of diverse talent within engineering schools.

5.- Findings and discussion.

As of the time of submitting this paper, the findings from the EENTITLE project indicate the significant strides made by Ecuadorian engineering schools in fostering inclusivity and equity, while also identifying critical areas for further development. These insights provide a comprehensive understanding of the progress and challenges faced by institutions in aligning with global standards of diversity, equity, and inclusion (DEI).

5.1 Progress Toward Inclusion and Equity.

Leaders of Ecuadorian HEIs recognize that modern engineering schools must prioritize inclusivity and equity. Over the past decades, these schools have experienced substantial changes in student demographics, increased cultural diversity, and globalization. This evolution also includes greater gender diversity, acknowledgment of diverse sexual orientations, and improved inclusion of students with disabilities. The challenge now lies in achieving full inclusion—ensuring access for all students, fostering retention, and promoting academic success while creating environments rooted in respect and coexistence.

Examples of progress include:

- Legislation and Rights: Educational policies now emphasize equitable access to education for all, including students with disabilities but not only.
- Increased Awareness: Families and engineering schools increasingly recognize the importance of providing equal opportunities.
- Participation in Diversity Training: Faculty and staff engage in or lead programs designed to enhance inclusivity.
- Inclusive Teaching Practices: Schools have adopted Universal Design for Learning (UDL) principles, which encourage multiple ways of presenting information (e.g., visual, textual, verbal), engaging students (e.g., group projects, real-world problems), and assessing their learning beyond traditional exams. Additional practices include designing accessible learning materials, facilitating diverse participation in classroom activities, and incorporating diverse authors and case studies into syllabi.
- Technological Advances: Assistive technologies such as screen readers and communication devices enable students to overcome barriers and participate fully in educational programs.

5.2 Inclusion as a Driver of Innovation.

Inclusion benefits not only individual students but also the broader engineering field by fostering the development of future engineers equipped to address the complexities of a diverse world. Ecuadorian HEIs are addressing key questions to advance inclusivity:

- Are facilities and materials accessible to all?
- Are adequate scholarships and financial support available for underrepresented groups?
- Does the curriculum reflect global and diverse engineering challenges?

5.3 Gaps in Institutional Inclusivity.

Despite progress, several significant gaps continue to hinder the realization of fully inclusive engineering education. One critical shortcoming is the lack of comprehensive mapping of vulnerable groups within institutions. Detailed data on vulnerabilities extending beyond disabilities, such as staff and students from low-income households, rural areas, minority ethnic groups, migrant backgrounds, or underrepresented identities, including LGBTIQ+ communities, remains absent. Such mapping is essential for developing targeted interventions that address these specific needs.

Another gap is the absence of thorough campus accessibility audits. Comprehensive assessments of campus infrastructure and equipment are necessary to ensure they meet the requirements for accessibility, yet such evaluations have yet to be conducted in many institutions. This oversight restricts the ability of these institutions to provide an equitable learning and working environment for all members of the academic community.

Faculty advocacy, which plays a crucial role in driving institutional change, also lacks formal recognition and support. The contributions of faculty members who champion inclusivity efforts are often undervalued, leaving a significant opportunity for institutional advancement unaddressed.

A notable deficiency in diversity-focused support for educators and leaders further compounds these challenges. While DEI initiatives have historically concentrated on improving the experiences of students, the vulnerabilities and contributions of academic staff—including educators, laboratory technicians, and administrators—have been largely overlooked (Jacobs, 2023; ASEE-SEFI, 2020; SEFI, 2018). This oversight is particularly significant in Ecuador, where the sociocultural and ethnic diversity of the academic community presents unique opportunities and challenges (Clavijo Castillo & Bautista-Cerro, 2020; Gutiérrez et al., 2015; Saeteros et al., 2021). Addressing these gaps is critical to fostering a more inclusive and equitable engineering education system that reflects the diverse realities of the institutions and communities it serves.

Most Ecuadorian universities have no formal strategies for ensuring diverse and inclusive hiring practices for faculty or administrative personnel. There are no clear affirmative action policies to encourage the recruitment of professionals from historically marginalised groups, nor are there dedicated DEI offices to oversee equity initiatives for staff. In contrast, international best practices suggest that structured mentorship programmes, inclusive leadership training, and bias-free evaluation criteria significantly improve faculty diversity and retention. Several universities in Ecuador have initiated inclusive policies, yet these remain largely student-focused:

- Universidad Nacional de Educación (UNAE) has developed an Equality Plan aimed at mainstreaming gender and social inclusion in its academic framework. However, the plan primarily targets students, with little reference to faculty or administrative staff (unae.edu.ec).
- Escuela Superior Politécnica del Litoral (ESPOL) has incorporated diversity into its institutional policies, including gender-focused initiatives. However, the primary beneficiaries remain students, with no structured approach to fostering DEI among faculty and technical staff (espol.edu.ec).

There is also a lack of Institutional Policies and Normative Gaps: Ecuador's Ley Orgánica de Educación Superior (LOES) (Consejo de Educación Superior, CES, 2018) establishes general principles on inclusion and equity, yet it predominantly addresses student-related concerns. There is minimal reference to specific measures for faculty and administrative staff, leaving them without clear policies on recruitment, promotion, training, or workplace inclusion. Unlike other countries where DEI frameworks extend comprehensively to academic personnel, Ecuadorian institutions largely overlook the systemic challenges faced by women, ethnic minorities, and persons with disabilities in higher education employment. This omission is particularly visible in engineering faculties, where representation disparities are stark. Despite national efforts to encourage women's participation in STEM disciplines, Ecuadorian universities have not implemented robust mechanisms to ensure diversity within their academic staff. According to SENESCYT data, only 24% of engineering faculty members in Ecuador are women, a figure that sharply contrasts with the increasing number of female engineering students, who now constitute approximately 35% of total enrolment in STEM programmes (educacionsuperior.gob.ec).

5.4 Addressing Neurodiversity and Professional Development in Ecuadorian Engineering Schools.

An often-overlooked challenge in fostering DEI within Ecuadorian engineering schools is the need to address neurodiversity among educators and staff. While neurodivergent students are beginning to receive recognition and support in certain engineering and STEM disciplines, the unique needs and contributions of neurodivergent academic and administrative staff remain largely unaddressed. This gap is significant, as approximately one in six individuals is neurodivergent, meaning many teachers and staff within these institutions process information and engage with their environment in ways that differ from the norm.

The inclusion of neurodivergent educators and staff presents unique challenges. Work environments in Ecuadorian engineering schools often do not account for sensory or communication sensitivities, which can hinder productivity and well-being. Furthermore, heavy administrative workloads and stigmatization of neurodivergent staff—particularly those with conditions such as ADHD or autism—exacerbate these challenges. Leadership teams often lack adequate training on how to support neurodivergent colleagues, limiting their ability to foster inclusive workplaces.

Despite these challenges, neurodivergent individuals bring invaluable perspectives to educational institutions. Their cognitive strengths, such as pattern recognition, logical analysis, and visual memory, are assets that enhance problem-solving and innovation in engineering education. Recognizing and supporting these strengths is not merely an act of justice; it is an investment in academic excellence and institutional growth.

The EENTITLE project provides a framework for addressing these issues through its broader focus on professional development and inclusion. This framework emphasizes the importance of creating flexible and supportive environments for neurodivergent staff. Key strategies under consideration include the evaluation of workload flexibility, the incorporation of adaptive communication resources in meetings, and the promotion

of an open institutional culture that allows staff to identify and articulate their needs without fear of discrimination.

The project also advocates for targeted training for academic leaders. Workshops and programs tailored to deans, department heads, and other university leaders equip them with the skills to recognize, support, and promote inclusion for neurodivergent staff. These efforts align with the broader institutional objective of fostering inclusive policies and protocols that normalize diversity within the university community.

Additionally, the concept of "reasonable adjustments" is pivotal to ensuring inclusivity for both academic and administrative staff. These adjustments involve tailored modifications to work environments, schedules, and practices to ensure equitable participation in professional and academic life. Such adjustments must be individualized, proportional, and non-discriminatory, reflecting both the specific needs of neurodivergent staff and the institutional capacity to implement them. Evaluating these adjustments on a case-by-case basis ensures that they are both effective and sustainable.

By addressing neurodiversity within the professional development framework, Ecuadorian engineering schools can enhance their institutional capacity to support diverse populations. This focus not only improves workplace inclusivity but also aligns with the EENTITLE project's overarching goal of bringing Ecuadorian higher education closer to European standards of diversity, equity, and inclusion. Ultimately, empowering neurodivergent educators and staff contributes to a more innovative and equitable academic ecosystem, ensuring that the challenges of the world are addressed through diverse and collaborative solutions.

5.5 Implications and the Path Forward.

The findings emphasize that while DEI efforts targeting students remain essential, the lack of diversity-focused support for educators and leaders represents a critical barrier to achieving broader institutional progress. To address this gap, it is necessary to develop comprehensive frameworks for professional development that are tailored to the diverse needs of faculty. These frameworks should aim to enhance the skills, competencies, and inclusivity practices of educators while recognizing the unique challenges they face.

In addition to professional development, promoting inclusive governance models that prioritize diversity in leadership is fundamental. Such models should integrate policies and practices that not only acknowledge but also celebrate the varying perspectives and contributions of diverse leaders within higher education institutions. This approach ensures that decision-making processes reflect the multiplicity of experiences present within the academic community.

Equally important is the implementation of policies that account for the vulnerabilities and strengths of diverse staff members. These policies should aim to ensure equitable recruitment, retention, and recognition processes that address systemic barriers faced by underrepresented groups. By adopting such measures, institutions can foster an environment where all staff members, regardless of their background, are empowered to contribute meaningfully to the academic mission.

By prioritizing these actions, Ecuadorian higher education institutions can establish inclusive ecosystems that benefit both educators and students. These efforts position engineering education as a dynamic force for societal progress and innovation, aligning institutional goals with the broader imperative of creating equitable and inclusive academic environments.

6.- Conclusion: Towards a Holistic Inclusion in Ecuadorian Engineering Schools.

Inclusion has emerged as a fundamental value for engineering education in the 21st century, particularly within Ecuadorian higher education institutions. The EENTITLE project demonstrates how embracing DEI not only fosters social justice but also enhances innovation and problem-solving by integrating a wide range of perspectives. These principles are essential in addressing the multifaceted challenges faced by engineering schools and preparing future engineers to navigate complex global issues.

The project underscores the high potential of a holistic approach to inclusion—one that considers both students and academic staff. By focusing on faculty and support staff, EENTITLE expands the scope of DEI efforts, emphasizing their contributions as educators, leaders, and advocates for systemic change. This recognition is pivotal for creating equitable governance models, facilitating professional development, and implementing transparent evaluation and recognition systems.

Despite the progress documented, significant gaps remain. The lack of comprehensive data on the diversity of faculty and support staff and incomplete assessments of campus accessibility highlights the need for continued institutional commitment. Furthermore, addressing the vulnerabilities of educators and fostering their inclusion in DEI initiatives are critical to sustaining broader institutional progress. The project's findings highlight the role of educators not just as beneficiaries but as drivers of inclusivity and innovation within HEIs.

EENTITLE also calls attention to the broader implications for policymakers. Equitable access to resources, inclusive teaching practices, and adaptive institutional policies are necessary to align engineering education with global standards. By integrating these strategies, Ecuadorian HEIs can enhance their capacity to support diverse populations while contributing to a globally interconnected academic ecosystem. It can also be interesting to investigate whether Ecuador's rural or Amazonian campuses—often less well-equipped than central campuses—are actually enrolling more women in engineering programs. If this is the case, these campuses might be fostering more effective inclusive environments, despite having fewer material resources. Such findings would challenge common assumptions that better infrastructure automatically leads to greater inclusion. Exploring the underlying causes—such as local outreach initiatives, regional labor needs, or community-based motivations—could provide valuable insights for national policies on gender equity in STEM education.

In conclusion, building inclusive and accessible universities is both a moral imperative and a strategic necessity. By prioritizing DEI, engineering schools can create environments that empower all individuals, foster creativity, and prepare students and educators alike to meet the demands of a complex and interconnected world. This comprehensive vision of inclusion aligns Ecuadorian engineering education with

European values and sets a precedent for global innovation and equity in higher education.

Concerns about DEI are present in multiple disciplines, including the social sciences, education, and health sciences. However, it is the engineering field that has taken a significant step forward with the EENTITLE Project**.** Rather than lagging behind, engineering has positioned itself as a leader in advancing DEI within faculty and staff structures. The EENTITLE project provides a model for how other disciplines could approach systemic change, ensuring that diversity efforts extend beyond student-focused initiatives and encompass the entire academic community.

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