



## ORIGINAL ARTICLE

<https://doi.org/10.30545/academo.2026.n2.1447>

# Access and retention of Indigenous students at the National University of Asunción: Analysis of the UNA-INDI agreement 2008-2023

Acceso y permanencia de estudiantes indígenas en la Universidad Nacional de Asunción: Análisis del convenio UNA-INDI 2008-2023

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## Abstract

This study documents the implementation of the agreement between the National University of Asunción and the National Indigenous Institute to facilitate access for Indigenous students to public higher education in Paraguay. Through the analysis of institutional records from the 2008-2023 period and an exploratory survey of 62 Indigenous students, access patterns, retention, and perceived difficulties are examined. Institutional records show that out of 1,249 places historically offered, 131 were reserved and 94 were effectively used, representing a 71.8% occupation rate. Beneficiaries come mainly from Alto Paraguay (39.4%), Boquerón (28.7%), and Presidente Hayes (12.8%). The exploratory survey reveals that 82.5% of the consulted students do not perceive significant difficulties, with the main reported barriers being access to information (18.0%) and problems with teachers (17.0%). The findings suggest that the agreement constitutes an effective access mechanism, although structural challenges related to economic sustainability and ongoing academic support persist.

**Keywords:** Higher education, Indigenous peoples, educational inclusion, Paraguay, access policies.

## Resumen

Este estudio documenta la implementación del convenio entre la Universidad Nacional de Asunción y el Instituto Nacional del Indígena para facilitar el acceso de estudiantes de pueblos originarios a la educación superior pública en Paraguay. Mediante el análisis de registros institucionales del período 2008-2023 y una encuesta exploratoria aplicada a 62 estudiantes indígenas se examinaron los patrones de acceso, permanencia y las dificultades percibidas. Los registros institucionales muestran que, de 1.249 plazas ofrecidas históricamente, se reservaron 131 y se utilizaron 94, lo que representa una tasa de ocupación del 71.8%. Los beneficiarios provienen principalmente de Alto Paraguay (39.4%), Boquerón (28.7%) y Presidente Hayes (12.8%). La encuesta exploratoria revela que el 82.5% de los estudiantes consultados no percibe dificultades significativas; sin embargo, las principales barreras reportadas por el porcentaje restante corresponden al acceso a la información (18.0%) y a problemas con el estamento docente (17.0%). Los hallazgos sugieren que el convenio constituye un mecanismo efectivo de acceso, aunque persisten desafíos estructurales relacionados con la sostenibilidad económica y el acompañamiento académico continuo.

**Palabras clave:** Educación superior, pueblos indígenas, inclusión educativa, Paraguay, políticas de acceso.

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Article received: November 20, 2025. Accepted for publication: June 16, 2026. Published: August 21, 2026.

Conflict of Interest: None.

Funding Source: Campus UNA Inclusiva I Project. British Embassy.

Responsible Editor: Herib Caballero Campos , Universidad Americana. Asunción, Paraguay.



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Website: <http://revistacientifica.uamericana.edu.py/index.php/academo/>

## Introduction

Access to higher education for Indigenous peoples constitutes one of the clearest manifestations of the persistence of structural inequalities in Latin America. International evidence shows that Indigenous students face an average university dropout rate of 33.59%, a figure significantly higher than that of the general population, with economic barriers identified as the main limiting factor in 85.7% of the studies analyzed (Quincho-Apumayta et al., 2025).

In Paraguay, according to the official results of the Fourth National Population and Housing Census for Indigenous Peoples, conducted in 2022 by the National Institute of Statistics (INE), the country has a self-identified Indigenous population of 140,206 people, distributed among 19 peoples belonging to five language families (International Work Group for Indigenous Affairs [IWGIA], 2025). These updated census data indicate sustained population growth compared with the 117,150 Indigenous people recorded in the 2012 census. Furthermore, this population has a markedly young demographic profile: 38.0% of Indigenous people are under the age of 14, while an additional 28.6% are between 15 and 30 years old (IWGIA, 2025), resulting in an age structure with considerable latent potential for access to university education.

However, national education indicators reveal longstanding structural gaps that severely restrict this potential. According to INE data, 37.6% of Indigenous people aged 15 and over are illiterate. When this figure is compared directly with the illiteracy rate of the general Paraguayan population—which stood at 4.7% for the same census period—a profound exclusion gap of 32.9 percentage points to the detriment of Indigenous communities becomes evident.

Compounding this alarming situation, approximately 4 out of every 10 Indigenous people have not completed the third grade of primary education, while individuals aged 10 and over have completed an average of only 3 years of formal schooling, compared with the national average of 7 years for the general population (Education Profiles, 2021). This problem is exacerbated by cross-cutting socioeconomic factors: according to INE reports (2020), 47.2% of Paraguayan

young people between the ages of 15 and 19 leave the education system due to structural economic hardship. This situation is considerably more severe among Indigenous peoples, where material deprivation represents the primary barrier to ensuring educational continuity.

To adequately understand the processes of educational inclusion and exclusion affecting Indigenous peoples in higher education, this study draws on three complementary theoretical frameworks that make it possible to analyze the structural, cultural, and intersectional dimensions of the phenomenon.

## Social Reproduction Theory and Cultural Capital

Pierre Bourdieu's theory of social reproduction provides a fundamental analytical framework for understanding how the education system does not operate as a neutral arena for social mobility, but rather as a mechanism that tends to reproduce and legitimize pre-existing inequalities (Bourdieu, 1984, 1996; Bourdieu & Passeron, 1990). From this perspective, education can be conceived as a "class allocation mechanism" (Bernstein, 1977) that systematically favors students belonging to social groups that possess the cultural capital validated by hegemonic academic institutions.

The concept of cultural capital takes three distinct forms: embodied (internalized knowledge, skills, and competencies), objectified (material cultural goods), and institutionalized (official credentials and qualifications). This categorization is particularly relevant when examining the educational trajectories of students belonging to Indigenous peoples (Bourdieu, 1986). These students enter university bringing with them specific community-based knowledge and cultural competencies inherited from their ancestral contexts, which are frequently neither recognized, accredited, nor valued within formalized Western curricular and assessment frameworks.

This asymmetry gives rise to what Bourdieu terms "symbolic violence," that is, the institutional imposition of systems of meaning that legitimize the dominant social order while rendering Indigenous epistemologies invisible or delegitimizing them

(Bourdieu & Passeron, 1990). Contemporary research confirms that educational inequalities are not limited to disparities in economic resources but also encompass the hierarchical valuation of specific cultural competencies within formal educational settings (Jæger & Karlson, 2018). Consequently, Indigenous students are compelled to navigate continually between their community-based knowledge systems and the rigid demands of Western academia, generating identity tensions that jeopardize their retention in higher education.

### **Decolonial Perspectives and Epistemicide**

Decolonial theory provides an indispensable critical lens for revealing how modern higher education institutions perpetuate colonial dynamics through what Boaventura de Sousa Santos terms “epistemicide,” defined as the systematic destruction and suppression of alternative forms of knowledge and non-Western epistemological systems (Santos, 2014). This concept sheds light on the experiences of Indigenous peoples, whose intellectual and linguistic traditions have historically been subordinated and marginalized by colonialism and its contemporary legacies.

Epistemicide in university classrooms operates through various concrete institutional mechanisms: the exclusive imposition of Eurocentric curricula that appropriate the very notion of rationality, the devaluation of Indigenous languages as invalid vehicles for the production of scientific knowledge, and the rejection of community-based and participatory research methodologies rooted in Indigenous traditions (Santos, 2014). This process does not constitute a passive omission but rather an active expression of the “coloniality of knowledge,” which establishes hierarchies in which Western knowledge proclaims itself universal and objective, relegating Indigenous knowledge to the status of folklore, local knowledge, or pre-scientific thought.

### **Intersectionality and Multiple Identities**

Intersectionality theory, coined by Kimberlé Crenshaw and further developed by Patricia Hill Collins, provides essential tools for examining how multiple systems of oppression—such as ethnicity, gender, social class,

and geographical origin—interact simultaneously and cumulatively to shape particular experiences of oppression or privilege (Collins, 2019; Crenshaw, 1991). This theoretical perspective prevents Indigenous students from being viewed as a homogeneous group.

For Indigenous students, intersectionality means that their university experience is shaped by the dynamic convergence of their ethnic identity, economic status, gender, and territorial origin (Crenshaw, 1991). International literature shows that these students must constantly negotiate multiple identities while confronting unique challenges arising from institutional racism, language barriers, economic hardship, and differing community expectations associated with traditionally assigned gender roles (Quincho-Apumayta et al., 2025).

In response to this multidimensional challenge, in 2008 the National University of Asunción (UNA) entered into a specific agreement with the National Indigenous Institute (INDI) to establish a special system of places reserved for students belonging to Indigenous peoples. The agreement provides for direct admission and exemption from academic fees as affirmative action measures aimed at mitigating the structural disadvantages described in the literature. This article aims to document the results of the implementation of this agreement during the 2008–2023 period, critically analyzing patterns of access and retention, as well as the difficulties perceived by Indigenous students at UNA.

## **Methodology**

### **Study Design**

This research follows a descriptive-exploratory design with an explanatory sequential mixed-methods approach (Creswell & Plano Clark, 2017). The study is descriptive in nature because it seeks to specify, with statistical precision, the characteristics, demographic profiles, and institutional trends associated with the agreement, providing a detailed account of place occupancy rates and academic retention status. It is also exploratory in scope, as it addresses an institutional phenomenon that has received limited examination and documentation

within the context of higher education in Paraguay, thus providing a basis for future lines of research.

A sequential mixed-methods approach was chosen because it allows for a holistic understanding of the object of study through two complementary methodological phases:

1. Quantitative phase: This consisted of the compilation and longitudinal statistical analysis of historical census and institutional records (2008–2023) to identify objective patterns of access and retention and graduation rates.

2. Qualitative phase: This was subsequently conducted through a structured survey and in-depth interviews aimed at refining, contextualizing, and explaining the statistical findings obtained in the first phase, while capturing the perceptions, experiences, and barriers reported by the social actors themselves (Ivankova et al., 2006).

### **Theoretical and Conceptual Positioning**

Conceptually, the study is situated within the frameworks of educational equity and differentiated access to public higher education, with particular attention to structural barriers that intersect the educational trajectories of Indigenous peoples within Eurocentric university settings. The study recognizes the importance of jointly analyzing key variables such as ethnicity, gender, social class, and students' geographical origin, while acknowledging the analytical limitations inherent in an exploratory study (Collins, 2019; Crenshaw, 1991).

### **Information Sources and Data Collection Techniques**

Data collection was designed to triangulate the institutional perspective with the contemporary subjective experiences of beneficiaries and graduate professionals.

**Institutional records:** The Directorate of Foreign Degrees and Credit Recognition (DTEC) of the National University of Asunción provided the complete administrative databases for the 2008–2023 period. The data collected included the historical number of places offered, broken down by faculty and year; the places effectively reserved by INDI and filled by

students; the beneficiaries' geographical origin; and basic academic progress records updated through 2022. These administrative records constitute a highly reliable longitudinal census data source (Gorard, 2003).

**Exploratory survey:** A written questionnaire was designed and methodologically adapted to ensure a culturally sensitive approach (Kovach, 2009). The instrument included variables relating to sociodemographic characteristics, place of origin, funding trajectories, and perceptions of the university environment. The survey was completed by a sample of 62 Indigenous students enrolled in various academic units at UNA. Non-probability convenience sampling with maximum variation criteria was used to capture the greatest possible heterogeneity in terms of degree program, year of study, and Indigenous community of origin (Patton, 2002).

**Supplementary interviews:** Five semi-structured interviews were conducted with Indigenous medical professionals who had completed their undergraduate studies at higher education institutions abroad and were selected through purposive sampling (Miles et al., 2014). These interviews made it possible to incorporate comparative analytical perspectives regarding international educational models, cultural adaptation strategies, and proposals for student support.

### **Data Analysis Techniques**

Institutional records and survey questionnaires were processed using descriptive statistics, including absolute frequencies, percentages, measures of central tendency, and longitudinal occupancy and retention rates (Field, 2018). Qualitative data from the interviews were analyzed using inductive thematic analysis structured into six phases (Braun & Clarke, 2006): familiarization with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and preparation of the final report.

### **Ethical Considerations**

The research was conducted with the approval of UNA's Institutional Observatory for Equity. Written informed consent protocols were strictly applied,

ensuring complete confidentiality of the data, adherence to the principle of voluntary participation, and the return of research findings to the community for the purpose of improving institutional policies (Christians, 2011).

### Methodological Limitations

The following are acknowledged as inherent limitations of the study: its descriptive-exploratory scope, which precludes the establishment of definitive causal relationships; the use of non-probability sampling, which limits strict statistical generalizability; and limited community participation during the co-design phase of the research instruments.

## Results and Discussion

### Implementation of the UNA-INDI Agreement, 2008–2023: An Analysis from the Perspective of Cultural Capital

The examination of institutional data makes it possible to measure the scope of the agreement and its evolution over time, assessing it in light of Bourdieu's (1986) theory of social reproduction. During the 15-year period analyzed, UNA made a total of 1,249 places available across its 14 faculties. Of this overall offering, INDI arranged for 131 places to be specifically reserved for Indigenous applicants, of which 94 were actually filled by scholarship students, resulting in an occupancy rate of 71.8% of the requested places. The fact that 28.2% of the reserved places ultimately remained unfilled reveals the persistence of indirect exclusionary factors that extend beyond the mere availability of formal admission places. From the classical analytical perspective, this points to manifestations of symbolic violence, understood as invisible barriers or processes of inadequate access to information that prevent applicants from fully taking advantage of legally established opportunities (Bourdieu & Passeron, 1990).

Use of this benefit began to increase gradually in 2013, the year in which the first two beneficiaries were recorded in DTEC's administrative records, reaching a peak of 25 newly enrolled students in 2022. This upward trend suggests the progressive dissemination of information about the quota policy within Indigenous

communities, facilitated by the strengthening of community information networks and increased institutional trust. Nevertheless, it is noteworthy that no new admissions under the agreement were recorded in 2020, a fact directly attributable to the COVID-19 pandemic. This highlights the extreme vulnerability of these peoples to public health crises and broader systemic disruptions.

The monitoring of students' academic trajectories reveals critical issues regarding retention: of the 94 students who historically entered through the agreement, only 42 remained actively enrolled in the 2022 academic year (44.7%). By contrast, 34 students had withdrawn or were no longer actively enrolled (36.2%), 10 did not complete the enrollment process after being allocated a place (10.6%), and only a small cohort of 5 students had successfully completed their studies and graduated (5.3%). These data demonstrate that policies focusing on access are insufficient unless accompanied by academic support and bridging strategies capable of transforming the dynamics of cultural capital that operate in meritocratic and exclusionary ways throughout university life.

With regard to students' geographical origin, the data reveal significant patterns of geographical and institutional concentration. The department of Alto Paraguay accounts for the largest number of students, with a total of 37 (39.4%), followed by Boquerón with 27 students (28.7%) and Presidente Hayes with 12 (12.8%). This marked predominance of the Western Region, or Paraguayan Chaco, can be explained by specific demographic and sociopolitical organizational dynamics. The Chaco has a high concentration of Indigenous people living in established communities, with consolidated leadership structures and a long history of direct interaction with INDI's central offices in the capital for the processing of applications.

By contrast, departments in the Eastern Region with significant traditional Indigenous populations, such as Canindeyú (9 students; 9.6%) and Caaguazú (5 students; 5.3%), show markedly lower representation (Table 1). This asymmetry suggests the existence of specific barriers in the Eastern Region associated with greater geographical dispersion of communities, more limited reach of institutional information channels

concerning the agreement, and connectivity gaps that hinder timely applications.

**Table 1.** Geographical Distribution of Beneficiaries of the UNA-INDI Agreement (2008–2023).

| Department        | Number of students<br>(n) | Percentage (%) |
|-------------------|---------------------------|----------------|
| Alto Paraguay     | 37                        | 39.4           |
| Boquerón          | 27                        | 28.7           |
| Presidente Hayes  | 12                        | 12.8           |
| Canindeyú         | 9                         | 9.6            |
| Caaguazú          | 5                         | 5.3            |
| Other departments | 4                         | 4.2            |
| <b>Total</b>      | <b>94</b>                 | <b>100.0</b>   |

**Note:** Data obtained from the records of UNA's Directorate of Foreign Degrees and Credit Recognition (DTEC).

The allocation of places across academic units reveals a marked concentration in particular fields. For the 2023 academic year, the institutional offering was concentrated in technical and health-related areas: the Andrés Barbero Institute (Nursing and Midwifery) topped the list with 35 places offered (15 of which were effectively reserved by INDI), followed by the Faculty of Philosophy with 24 places (5 reserved), the Faculty of Exact and Natural Sciences with 17 places (2 reserved), and the Faculty of Agricultural Sciences with 16 places (4 reserved).

This disciplinary segmentation lends itself to critical interpretation. Although this strong concentration largely reflects genuine vocational aspirations to serve within Indigenous communities, the absence or limited participation of fields such as Economics or the Faculty of Law and Social Sciences restricts the training of Indigenous professionals in disciplines that are crucial to legal representation, territorial advocacy, and the autonomous management of community resources. Rather than constituting deliberate exclusion, this rigidity in the range of programs available reflects a lack of diversification in the terms of the original agreement, highlighting the need to restructure the quota system to encompass all fields of university study.

### Exploratory Survey Results: Navigating Multiple Identities

The data collected through the questionnaire administered to 62 Indigenous students provide

insight into the socioeducational circumstances of those studying at UNA. In terms of gender, the sample comprised 40.3% women (25 students) and 59.7% men (37 students), revealing a higher rate of male participation. This distribution departs from the broader trend toward the feminization of university enrollment that characterizes contemporary higher education in Latin America, suggesting the influence of intersectional factors that restrict Indigenous women's access, such as differentiated domestic responsibilities, traditional caregiving roles, and lower levels of family support for educational migration (Crenshaw, 1991).

With regard to academic progression, a pyramidal structure can be observed, with a strong concentration in the early stages of degree programs: 24.0% of respondents were in their first year, 30.0% in their second year, 14.0% in their third year, 5.0% in their fourth year, 19.0% in their fifth year, and 5.0% had completed their coursework and were awaiting graduation. This pattern is consistent with the literature on early dropout, confirming that barriers related to cultural and linguistic capital are most pronounced during the first semesters of adjustment to the academic demands of university education (Quincho-Apumayta et al., 2025).

The degree-program preferences reported by the students surveyed show the same polarization observed in the overall institutional records: the Faculty of Veterinary Sciences accounts for 50.0% (31 students), followed by Nursing with 29.0% (18 students), Education Sciences with 8.0% (5 students), and various other disciplines with 13.0% (8 students) (Table 2).

**Table 2.** Distribution of Surveyed Students by Academic Field.

| Academic field/degree program | Number of students<br>(n) | Percentage (%) |
|-------------------------------|---------------------------|----------------|
| Veterinary Sciences           | 31                        | 50.0           |
| Nursing                       | 18                        | 29.0           |
| Education Sciences            | 5                         | 8.0            |
| Other degree programs         | 8                         | 13.0           |
| <b>Total</b>                  | <b>62</b>                 | <b>100.0</b>   |

**Note:** Data derived from the exploratory survey administered to the sample (N=62).

When students were asked about the sources of financial support used to sustain their studies, their responses highlight the decisive role of informal support networks compared with government assistance: financial support from family or friends constitutes the main source for 45.0% of respondents; institutional or organizational assistance—mainly from INDI or government scholarships—covers the expenses of 25.0%; students' own income from employment accounts for 22.5%; and other sources make up the remaining 7.5% (Table 3). This pattern underscores the importance of community social capital in helping to offset indirect living and study-related expenses (accommodation, transportation, and materials), given that the benefit provided under the agreement is limited exclusively to exemption from institutional enrollment fees.

**Table 3.** Sources of Funding Reported by Students.

| Source of funding                                              | Percentage (%) |
|----------------------------------------------------------------|----------------|
| Financial support from family or friends                       | 45.0           |
| Institutional or organizational assistance (INDI/scholarships) | 25.0           |
| Students' own income (employment)                              | 22.5           |
| Other sources                                                  | 7.5            |
| <b>Total</b>                                                   | <b>100.0</b>   |

**Note:** Totals based on responses from the students surveyed (N=62).

Regarding the mechanism through which students gained admission to the university, 57.5% of respondents reported entering through the direct admission procedure established under the UNA-INDI agreement, while a significant 42.5% voluntarily chose to take the standard entrance examination administered by their respective faculties. The latter trend suggests complex subjective dynamics: a considerable proportion of Indigenous students prefer to demonstrate their academic competencies according to the same general standards applied by the institution, seeking to mitigate social stigmatization or questions regarding academic merit that are frequently associated with affirmative action admission pathways.

Finally, the assessment of perceived difficulties shows that a substantial majority (82.5%) reported

experiencing no significant obstacles during their time at the university, while 17.5% reported encountering specific barriers. This low rate of reported difficulties should be interpreted with methodological caution, taking into account factors such as the normalization of subtle exclusionary practices, individual strategies of passive assimilation to avoid conflict, or limitations arising from the use of closed-ended questions (Bourdieu & Passeron, 1990). Among the students who provided details of the barriers they encountered (n=11), the difficulties were distributed as follows: problems accessing institutional information (18.0%), difficulties or conflicts with teaching staff (17.0%), perceived discrimination (9.0%), difficulties accessing healthcare services (4.0%), and excessive workload resulting from demanding schedules (4.0%) (Table 4).

**Table 4.** Reported Barriers and Difficulties at University.

| Type of difficulty/barrier                   | Percentage (%) |
|----------------------------------------------|----------------|
| Reports no significant difficulties          | 82.5           |
| Reports specific difficulties                | 17.5           |
| Problems accessing institutional information | 18.0           |
| Problems or tensions with teaching staff     | 17.0           |
| Subtle experiences of discrimination         | 9.0            |
| Limited access to healthcare services        | 4.0            |
| Excessive academic workloads and schedules   | 4.0            |

**Note:** The breakdown of specific difficulties is calculated exclusively for the subgroup of students who reported experiencing barriers in the survey.

The tensions reported in interactions with teaching staff (17.0%) point to the need to adapt classroom teaching practices. In educational contexts characterized by a rigid monocultural orientation, conventional teaching methodologies often fail to take into account the linguistic competencies and learning styles of Indigenous students. International research concurs that the absence of intercultural teacher-training programs fosters forms of indirect exclusion that hinder optimal academic performance (Quincho-Apumayta et al., 2025).

#### **Comparative International Experiences: Alternative Models of Professional Education**

The in-depth interviews conducted with five Indigenous medical professionals who graduated abroad provide a useful comparative framework for examining the local policy. The institutions from which they graduated—the Rómulo Gallegos National Experimental University in Venezuela and the Latin American School of Medicine (ELAM) in Cuba—are educational institutions with an explicit mandate for social inclusion and curricula oriented toward community medicine.

The main recommendations put forward by these professionals for improving the policy in Paraguay can be summarized as follows: raising academic standards and strengthening pre-university academic preparation, increasing funding for maintenance scholarships, providing university student housing, and designing early vocational guidance programs. These observations indicate that internationally educated graduates identify critical shortcomings in the student welfare and support mechanisms currently provided within Paraguay's university system.

In summary, the integrated analysis reveals that the UNA-INDI agreement functions as an effective platform for facilitating formal access to university education, but has significant limitations in ensuring long-term retention and mitigating the dynamics of symbolic exclusion embedded in traditional academic culture. When assessed through critical theoretical frameworks, the program provides undeniable individual opportunities but operates within a model of "limited inclusion" that does not alter the foundations of institutionalized epistemic power. As assessment structures remain unchanged and Indigenous worldviews are not incorporated into existing curricula, the university continues to operate according to a monocultural model in which success depends on Indigenous students' capacity to assimilate.

The findings of this study make it possible to assess the scope and achievements of the UNA-INDI partnership after fifteen years of implementation, shedding light on both significant accomplishments and structural challenges that call for institutional redesign. The data demonstrate that the affirmative action policy succeeded in opening the doors of the country's leading public university to 94 Indigenous

students. The 71.8% occupancy rate for the reserved places confirms the practical effectiveness of this admission pathway, although the existence of unfilled places highlights the urgent need to streamline application and information-dissemination mechanisms. Furthermore, the sustained increase in enrollment toward the end of the period—reaching 25 new admissions in 2022—confirms growing demand for higher education among Indigenous peoples and the progressive consolidation of the program.

The geographical origin of beneficiaries reveals a marked territorial imbalance, with 80.9% concentrated in the Chaco departments of Alto Paraguay, Boquerón, and Presidente Hayes. Although this trend is consistent with the high concentration of Indigenous populations in the Chaco, it highlights the pressing need to decentralize dissemination of information about the agreement and extend outreach to departments in the Eastern Region, such as Canindeyú and Caaguazú, where numerous communities belonging to minority language families have only marginal participation in the program.

Both the administrative census data and the field survey reveal a concentration of enrollment in the health sciences (Veterinary Sciences and Nursing) and education sciences. This pattern may be explained by several concurrent factors: applicants' genuine commitment to serving their communities, expectations of rapid entry into the labor market in their regions of origin, and the health and social welfare needs of their communities. Nevertheless, university authorities must proactively diversify the range of reserved places available in legal, social, and economic disciplines, thereby guaranteeing the right of Indigenous peoples to participate fully in all areas of scientific and professional activity.

The socioeconomic dimension is confirmed as the most influential variable in explaining students' educational trajectories. The fact that 67.5% of respondents depend on external funding (45.0% from family networks and 25.0% from government assistance) highlights the material vulnerability of Indigenous students. Exemption from academic fees is an essential first step, but it is clearly insufficient unless it is coordinated with student welfare policies

that ensure access to food, transportation, and housing for students from other parts of the country.

Finally, the study's most concerning indicator is the retention rate: the fact that only 44.7% of all beneficiaries remained actively enrolled in 2022 underscores the need to shift the focus from policies concerned exclusively with "access" toward comprehensive "retention" policies. Academic failure or early withdrawal should not be interpreted as an individual shortcoming on the part of the student, but rather as a direct consequence of the institution's inability to recognize and value the cultural capital of Indigenous peoples within a traditionally structured university environment.

## Conclusions

The main findings confirm that the affirmative action policy enabled 94 Indigenous students to enter public higher education in Paraguay, achieving a utilization rate of 71.8% of the places reserved by INDI.

Despite this quantitative achievement, serious structural limitations persist: a marked geographical concentration of beneficiaries in the Western Region; a concentration of enrollment in health and education-related disciplines; persistent economic vulnerability resulting from the lack of comprehensive maintenance scholarships; and a major challenge in terms of academic retention, reflected in the fact that fewer than half of all students historically admitted remain actively enrolled. In addition, the intersectional gender analysis revealed an imbalance in favor of male participation (60.0%), contrary to the broader trend toward the feminization of university enrollment.

It is concluded that the agreement represents a valuable affirmative action measure and an undeniable democratic advance, but that it has reached an institutional ceiling in its current form. Progress toward a genuinely intercultural university requires moving beyond the mere exemption from academic fees and toward more fundamental changes: diversification of reserved places across all faculties, reform of classroom teaching practices through faculty training in diversity, the design of personalized tutoring systems, and the funding of comprehensive maintenance scholarships. Only

through these structural reforms will the National University of Asunción be able to become a pluralistic educational environment in which Western academic knowledge and the worldviews of Indigenous peoples coexist and mutually enrich one another.

## Author contributions

Rossana Alvarenga initiated the research and carried out the initial data collection. Patricia Cristaldo was responsible for making the revisions requested by the journal and for adding the bibliographic references. Co-author Vanessa Báez assisted with data collection and the corresponding analyses. Co-author Ángel Benítez participated specifically in the data analysis.

## Research data availability

The data supporting the findings of this study were provided by the Directorate of Foreign Degrees and Credit Recognition (DTEC) of the National University of Asunción (UNA). Due to institutional and confidentiality restrictions, the data are not publicly available but may be made available by the corresponding author upon reasonable request and subject to authorization from the originating institution.

## Peer review comments

This article underwent an anonymous peer-review process in accordance with the journal's editorial transparency policy. The reviewers, who participated anonymously in this process, consented to the publication of the comments they provided during the review.

**Reviewer Comments 1:** The manuscript is attached with comments in the margins. In order for the manuscript to proceed toward possible publication, the following issues must be addressed: strict compliance with APA Style (7th ed.) in citations and references; thorough revision of typography, punctuation, and spacing throughout the document; definition of the concept of inclusive education, which is included among the keywords, and incorporation of background studies from national and international research; and a description of the UNA-INDI Agreement and its scope in order to provide adequate support and coherence for the analysis of the results.

**Reviewer Comments 2:** It is recommended that the title, objective, and conclusions be reformulated so that they accurately reflect the actual subject analyzed, and that the results (evidence) be separated more rigorously from the discussion (interpretation). Final recommendation: Publish once the author has made the revisions outlined in the attached recommendations.

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