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Linguistic Cartography of the Complejo Regional Nororiental of the Benemérita Universidad Autónoma De Puebla (CRN-BUAP): A Sociolinguistic Study of Indigenous and Additional Languages

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ABSTRACT

Despite growing scholarship on intercultural higher education in Mexico, little is known about the sociolinguistic profile of regional university campuses located in indigenous-majority municipalities. This study addresses that gap by mapping self-reported knowledge of indigenous and additional languages among students of the Complejo Regional Nororiental (CRN-BUAP) of the Benemérita Universidad Autónoma de Puebla, extending prior university-based sociolinguistic work previously limited to BUAP's central campus. Using a self-administered questionnaire (April–May 2026), we surveyed an effective sample of 720 students unevenly distributed across three campuses: Teziutlán ($n = 602$), Libres ($n = 96$), and Zacapoaxtla ($n = 22$). Descriptively, Zacapoaxtla shows the highest proportion of Nahuatl and Totonac speakers, and English dominates as an additional language at all three campuses without an equivalent formal offer for indigenous languages. These patterns are reported descriptively rather than as causal claims about institutional language hierarchies, given the self-reported nature of the data, the cross-sectional design, and the small Zacapoaxtla subsample. The study offers CRN-BUAP a verifiable empirical baseline for intercultural planning and points to the need for differentiated, campus-specific language-support policies.

INTRODUCTION

Linguistic diversity in Mexico poses a particular challenge for higher education institutions expanding into regions with a strong presence of indigenous languages. According to the 2023 National Survey of Demographic Dynamics (ENADID) conducted by the National Institute of Statistics and Geography (INEGI), the most recent source available at the state level, the state of Puebla ranks fifth nationally in indigenous-language-speaking population, with 572,000 people aged 3 and over, representing 9.0% of the state population, above the national proportion (7.4 million people, 5.9% of the population in that age range). Nahuatl is the indigenous language with the most speakers both nationally and at the state level. This linguistic presence, however, is not evenly distributed within the state itself: the most recent municipal-level data available - ENADID does not offer municipal representativeness, so the 2020 Population and Housing Census is used here - show that while 30.7% of the population speaks an indigenous language in the municipality of Zacapoaxtla, that proportion drops to 6.27% in Teziutlán, and to a mere 1.31% in Libres.

This municipal heterogeneity is directly relevant to the Benemérita Universidad Autónoma de Puebla (BUAP), which has extended its educational offer to these three localities through the Complejo Regional Nororiental (CRN-BUAP). The question that naturally arises is whether the linguistic composition of the student body at each campus reflects the demographic heterogeneity

of its host municipality, and what implications this composition has for the institutional management of linguistic diversity.

Mexican sociolinguistic literature has already documented the linguistic situation of at least one space within BUAP itself: a recent study on the Facultad de Lenguas at the central campus (Puón Castro *et al.*, 2025) applied a sociolinguistic survey to characterize the mother tongues, second and third languages of its student body, finding a dominant trend toward English, French, and German alongside the presence of indigenous and heritage languages. However, that antecedent is limited to a faculty at the central Puebla City campus, with a student profile and a disciplinary vocation - language teaching - very different from those characterizing a regional complex located in municipalities with significant indigenous presence. To date, no equivalent study documents the sociolinguistic profile of students at BUAP's regional complexes, even though it is precisely in these spaces that the coexistence of indigenous languages, Spanish, and foreign languages acquires greater complexity and relevance for intercultural planning.

Given this gap, the following question arises: what is the sociolinguistic profile - in terms of knowledge of indigenous languages and additional languages - of the student community of BUAP's Complejo Regional Nororiental, and to what extent does this profile vary across its campuses, academic programs, and genders?

To answer this question, the present study sets out to build

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a descriptive linguistic cartography of the CRN-BUAP student body across its three campuses with sufficient sample representativeness — Teziutlán, Zacapoaxtla, and Libres — identifying students' knowledge of indigenous languages and additional languages and examining their distribution by campus, academic program, and gender. Beyond its descriptive contribution, this study is relevant for at least two reasons. First, the coexistence of indigenous languages, Spanish, and foreign languages within professional training programs — particularly in health sciences, where bilingual competence can affect patient communication and community outreach — has direct implications for curriculum design and student support services. Second, documenting this profile provides CRN-BUAP with an empirical baseline against which future interventions aimed at linguistic inclusion can be evaluated, rather than relying on assumptions about the ethnic composition of its regional campuses.

LITERATURE REVIEW

Studying the sociolinguistic profile of a regionalized university community requires articulating several theoretical levels: why an indigenous language persists or weakens, how Mexican higher education manages linguistic diversity, what produces prestige hierarchies between Spanish and indigenous languages, and what motivates foreign language learning among university students. This section integrates these levels to interpret the descriptive findings of BUAP's Complejo Regional Nororiental (CRN-BUAP) presented in the Results and Discussion section.

Ethnolinguistic Vitality

The concept of ethnolinguistic vitality (Bourhis & Barrette, 2006; Gorter, 2006) explains the likelihood that a language community will survive as a distinct collective based on three factors: status, demographic strength, and institutional support. In practical terms, institutional support is usually assessed through a language's presence in schooling, government administration, media, and public signage, while demographic strength considers both the absolute number of speakers and their geographic concentration in rural versus urban settings. Later formulations further distinguish between objective vitality (measurable, such as the number of speakers) and subjective or perceived vitality (how speakers themselves assess the strength of their language). This framework constitutes the conceptual basis for reading the results tables not as mere counts, but as indicators of the relative strength of Nahuatl and Totonac within each CRN-BUAP campus.

Application of the Theory in Latin America and Mexico

Ethnolinguistic vitality theory has been widely applied to Latin American indigenous languages — Nahuatl, Kichwa, Mapudungun, Aymara, among others — to

explain why some communities maintain the use of their language while others experience rapid displacement. Two antecedents are particularly relevant. First, de la Fuente Stevens and Pelkonen (2023), in a study published in *World Development* on Mexican indigenous groups, show that bilingualism (maintaining the minority language alongside Spanish) increases employment likelihood, and that languages associated with greater labor-market returns are more frequently transmitted from parents to children. This finding offers a complementary economic reading for the unequal distribution of indigenous language knowledge across academic programs observed in this study. Second, the research line of Viladot, Giles, Gasiorrek, and Esteban Guitart (2015) on indigenous and mestizo students at the Intercultural University of Chiapas constitutes the closest methodological antecedent to the present study: a self-reported language-vitality survey applied to a Mexican university population. Within BUAP specifically, Puón Castro *et al.* (2025) found that most students in the Facultad de Lenguas reported Spanish as their first language, with English, French, and German as their most common additional languages, alongside a smaller subset of students with indigenous or heritage-language backgrounds. This finding from the university's central campus provides a useful point of contrast for the present study: whereas the Facultad de Lenguas serves a student population self-selected for interest in language learning, CRN-BUAP's regional campuses draw from local populations whose indigenous-language repertoire is shaped by the surrounding community rather than by disciplinary choice, which may help explain the markedly different sociolinguistic profile documented here.

Models of Intergenerational Language Shift and Loss

Several models explain why a language ceases to be transmitted across generations. Fishman's classic reversing-language-shift model prioritizes restoring home transmission as the core of the problem. The three-generation model describes how the first generation transmits the language, the second becomes dominant in the majority language, and the third loses fluency. Particularly relevant here is the family language policy framework (Ndzotom Mbakop & Kamgang Ndada, 2021), which explains how household beliefs about which language is "worth" speaking shape transmission decisions. This framework offers a direct lens for one of the study's secondary findings: cases in which respondents report Spanish as an "additional language" — meaning their everyday language is actually an indigenous one — constitute empirical evidence of an ongoing family language policy process. Family language policy research further distinguishes between parental beliefs about a language's practical value and the everyday practices through which those beliefs are enacted, noting that even parents who value bilingualism may still prioritize the majority language for schooling-related reasons.

Linguistic Diversity and Interculturality in Mexican Higher Education

Mexican literature frames the management of linguistic diversity in higher education through five complementary currents: intercultural university education as an institutional model (Dietz, 2012; Lehmann, 2013); critical and decolonial theory, which interprets inclusion as a dispute over knowledge and academic authority (Despagne, 2020); the distinction between recognition and redistribution, which warns that symbolic recognition of diversity is insufficient without material redistribution of opportunity (Zotzmann & Hernández-Zamora, 2013); plurilingual pedagogy or translanguaging, which treats students' full linguistic repertoire as a resource rather than a deficit (Cervantes-Soon *et al.*, 2025); and the warning that generic "inclusion" policies may displace more specific bilingual and intercultural commitments (Mendoza-Zuany, 2020). The case of the Universidad Veracruzana Intercultural, extensively documented by Dietz and colleagues (Dietz, 2012; Dietz & Mateos Cortés, 2021), serves as a direct institutional antecedent for interpreting CRN-BUAP, given the geographic proximity and conceptual kinship between both models of university regionalization. Dietz's ethnographic work on the UVI describes this process as a "dialogue of knowledges" that requires modifying conventional curricula to incorporate community-based and intercultural forms of expertise alongside standard academic training, a tension that is also relevant for interpreting whether CRN-BUAP's own curriculum engages with the linguistic repertoires its students bring from their communities of origin.

University Regionalization and Indigenous Linguistic Identity

Evidence shows that the regionalization of higher education in indigenous areas has ambivalent effects. On one hand, it can strengthen identity and belonging when the curriculum is linked to the community of origin (Mateos Cortés, 2017). On the other hand, it does not automatically guarantee inclusion: indigenous students may face stigmatization or an "ethnic brand" that essentializes their identity rather than normalizing it (Navia *et al.*, 2020; Kovats Sánchez, 2020). These mechanisms of exclusion can take subtle forms, ranging from the informal use of Spanish as the default language of instruction and administration to more explicit experiences of mockery or discrimination associated with an accent or a home language other than Spanish, both of which have been documented among indigenous university students in other Mexican intercultural settings. This framework warns, in general terms, that the mere demographic concentration of indigenous-language speakers at a university campus does not by itself amount to favorable institutional conditions for the use, validation, and status of those languages in the classroom, since this depends on additional factors of status and institutional support that demography alone does not capture.

Language Attitudes and Prestige Hierarchies

Hierarchies between Spanish and indigenous languages do not reflect differences in linguistic merit, but rather ideologies, institutional power, and control over domains of use (Leeman, 2012). Spanish functions as symbolic capital that yields returns in the labor and educational markets, while indigenous languages are perceived as locally valuable but socially restricted (Padilla-Iglesias & Kramer, 2021). Hamel (1997), in a framework developed from research in indigenous areas of Mexico, shows how this language conflict operates concretely in bilingual education and the administration of justice — a direct parallel to the friction documented between community interaction in an indigenous language and the clinical or academic register required exclusively in Spanish. In practice, this symbolic capital translates into concrete institutional gatekeeping: proficiency in Spanish, and increasingly in English, becomes a *de facto* requirement for academic success and professional credentialing, while proficiency in an indigenous language rarely counts as a formally recognized competency, regardless of its communicative value in community settings.

Diglossia Applied to Indigenous-Spanish Bilingualism

Diglossia (Fishman, 1967, 1980) describes the functional distribution of two languages within a community: a high code for formal and public domains, and a low code for intimate and community domains. In the indigenous-Spanish context, the typical pattern places Spanish in schooling, administration, and employment, and the indigenous language in the home and the community. This concept adequately names the general pattern observed in the results. However, recent authors (Tsiplakou, 2020) warn that the classic diglossic model is too rigid for complex multilingual realities — a pertinent warning against forcing the present study's data, which show more fluid linguistic behaviors, such as the functional bilingualism reported in Table 5, into an overly simple binary scheme.

Motivation for Foreign Language Learning

Gardner's (2006) socio-educational framework distinguishes integrative motivation (learning a language to identify with its community) from instrumental motivation (learning it for practical benefits: employment, mobility, credentials). More recent formulations, such as the L2 Motivational Self System (Pamela Sari & Habók, 2026), enrich this dichotomy by proposing that motivation is also built from a future self-image as a competent speaker of the language. This framework allows the question to be raised — without resolving it with the available data — of whether the overwhelming dominance of English observed in Table 5 responds primarily to instrumental motives tied to the regional labor market or to broader identity-related processes.

Global Media Consumption and Language Motivation

Exposure to global media — films, social networks, digital content — generally increases motivation to learn a foreign language by making it culturally accessible and socially meaningful (Lee & Lee, 2021). This mechanism has been documented in particular for languages associated with transnational cultural industries, such as Korean or Japanese, linked to media entertainment consumption (K-pop, animation, series). It is worth qualifying this perspective, however, with a recent finding (Harmaini, 2026): incidental English learning through social media showed no significant association with formal proficiency, suggesting that media exposure motivates interest in a language without guaranteeing, on its own, mastery of it.

Gender and the Maintenance of Indigenous Languages

Sociolinguistic literature rejects the existence of a universal gender pattern in the maintenance of indigenous languages; the effect is mediated by social networks, kinship roles, and community ideology, not by sex itself (Meakins, Bromham & Hua, 2024). This framework warns, in general terms, against the expectation of finding uniform gender differences in the knowledge or maintenance of indigenous languages in any given population, since such a pattern depends on the particular conditions — family transmission networks, kinship roles — of each community.

MATERIALS AND METHODS

In line with the study's objective of building a descriptive linguistic cartography of the CRN-BUAP student body, this study follows a quantitative, descriptive, cross-sectional approach aimed at mapping knowledge of indigenous and additional languages among students of the Complejo Regional Nororiental (CRN-BUAP). Data were collected through a self-administered digital questionnaire applied between April 22 and May 27, 2026.

Sample. We constructed the sample using two sequential filters. The first filter excluded participants who declined informed consent, reducing the original 747 records to 721. The second filter excluded the Cuetzalan campus due to single-participant representation ($n = 1$), which is insufficient for any frequency-based or cross-tabulated analysis, yielding the final effective sample of $N = 720$ students, distributed across three campuses: Teziutlán ($n = 602$), Libres ($n = 96$), and Zacapoaxtla ($n = 22$). This distribution is asymmetric and is stated as a limitation: results referring to Zacapoaxtla should be read as descriptive of that subsample, not as a population-level generalization.

Instrument. The questionnaire covered eight thematic blocks: sociodemographic and institutional identification; individual and family ethnolinguistic self-identification; domestic and community use of the everyday language; prior schooling trajectory and language of instruction;

experiences of discrimination or mockery related to language use; competence, motivation, and context of acquisition for additional languages, both indigenous and foreign; Likert-type attitudinal scales on linguistic prestige and hierarchy; and willingness to participate in a subsequent qualitative phase (interview or focus group). The present analysis draws specifically on the items concerning campus, academic program, gender, and language knowledge described below.

Variables. From the instrument, items concerning campus, academic program, and gender (classification variables) were retained; knowledge of indigenous languages (Nahuatl, Totonac, Maya, Mixtec, Triqui, Zapotec); and additional languages beyond the everyday language (mainly English and indigenous languages reported as a second language).

Data cleaning. Prior to analysis, a data-cleaning procedure was applied to ensure consistency across categorical fields. This included the removal of non-breaking space characters embedded in the campus-name field, which had initially caused filtering errors; the unification of inconsistent spelling variants in closed-ended responses (for example, “S?” captured inconsistently as “Si”); and the reclassification of multiple-choice items that, due to a form-design error, had recorded combined free-text answers in a field intended for a single response (for example, “French, Italian, English” in a single-answer question). This cleaning process is documented here for transparency and replicability, following good practice in the reporting of primary data in educational research.

Analysis. Absolute and relative frequencies were calculated by campus, academic program, and gender, in order to build a descriptive cartography of the student linguistic profile. Percentages were computed within each disaggregation base (campus, program, or gender), rather than over the overall sample, to enable proportional comparisons across groups of unequal size; this calculation logic is made explicit in each results table to avoid ambiguity in interpretation. Given the sample's asymmetric distribution across campuses, comparisons involving Zacapoaxtla ($n = 22$) are treated as exploratory and descriptive rather than as robust population-level estimates.

RESULT AND DISCUSSION

Composition of the Effective Sample

The analysis was carried out on the effective sample of $N = 720$ students, after excluding those who did not give informed consent ($n = 26$) and the Cuetzalan campus due to single-participant representation ($n = 1$). Table 1 shows the distribution of this sample by campus.

This distribution is strongly asymmetric: eight out of ten respondents come from Teziutlán, while Zacapoaxtla contributes only 22 cases. This condition is stated explicitly because it directly affects the interpretation of all subsequent tables, particularly those involving comparisons with the Zacapoaxtla campus.

Table 1: Distribution of the effective sample by campus

Campus	n	%
Teziutlán	602	83.6
Libres	96	13.3
Zacapoaxtla	22	3.1
Total	720	100.0

Note. Own elaboration based on data from the questionnaire applied to CRN-BUAP students (2026).

Indigenous Languages by Campus

Each percentage was calculated over the total number of respondents at the corresponding campus, rather than

over the overall sample, in order to allow a proportional comparison between campuses of very different sizes. The Zacapoaxtla campus shows the highest relative

Table 2: Indigenous languages reported, by campus

Campus	Campus total N	Nahuatl	Totonac	Maya	O t h e r indigenous languages*
Teziutlán	602	84 of 602 (14.0%)	14 of 602 (2.3%)	1 of 602 (0.2%)	4 of 602 (0.7%)
Libres	96	9 of 96 (9.4%)	0 of 96 (0.0%)	1 of 96 (1.0%)	0 of 96 (0.0%)
Zacapoaxtla	22	8 of 22 (36.4%)	4 of 22 (18.2%)	0 of 22 (0.0%)	0 of 22 (0.0%)

Note. *Other indigenous languages groups Mixtec, Triqui, and Zapotec (1 case each, all in Teziutlán). Own elaboration based on data from the questionnaire applied to CRN-BUAP students (2026).

proportions of Nahuatl (36.4%) and Totonac (18.2%) speakers among the three campuses analyzed, although this result rests on a small subsample ($n = 22$) and should be read as a descriptive trend specific to that group, not as a generalizable estimate.

The most notable finding of the study is that Zacapoaxtla has proportionally more Nahuatl and Totonac speakers than the other two campuses. At first glance, this might suggest that this campus has “greater linguistic vitality,” but that conclusion would be premature. According to Bourhis and Barrette (2006), the vitality of a language depends on three factors: its status, the number of speakers it has, and the institutional support it receives. The data in Table 2 account for only one of these three factors — the number of speakers — and, moreover, within a small subsample ($n = 22$). The questionnaire never asked whether CRN-BUAP offers these students any space in the classroom, in administrative procedures, or in university life where their indigenous language receives real recognition. Therefore, the only claim these data support is that Zacapoaxtla has proportionally more speakers, not that this language enjoys greater vitality in the full sense of the concept, since two of the three factors that define it were simply not measured. This distinction matters practically: a policy response aimed only at increasing the number of indigenous-language speakers on a given campus would address demographic strength, but would leave the other two components of vitality — status and institutional support — entirely unaddressed, potentially producing a larger population of speakers without any corresponding change in how those languages are treated within the university.

Indigenous Languages by Academic Program

The base of each proportion corresponds to the number of students in that program who actually answered the questionnaire, not to the program’s official enrollment. The pattern observed by academic program in Table 3, where Contaduría Pública and Administración de Empresas in Zacapoaxtla show the highest percentages, reflects the effect of the campus to which these two programs belong, rather than an effect of the discipline itself. This phenomenon can be analyzed through the lens of the recognition-versus-redistribution framework (Zotzmann & Hernández-Zamora, 2013): if a university authority interpreted Table 3 without this clarification and decided to allocate intercultural-strengthening resources preferentially to Contaduría and Administración because they appear to be the programs with the greatest presence of indigenous languages, the result would be a public-policy decision based on a spurious correlation, since the resource would reach a discipline when the phenomenon actually belongs to the territory. This connects with Mendoza-Zuany’s (2020) warning about how “inclusion” policies can displace genuine intercultural commitments when based on poorly specified diagnoses: the methodological precision applied in this subsection is not merely an exercise in academic rigor, but a finding with direct practical consequences for institutional decision-making. Comparisons between programs offered at more than one campus (Nursing, Law, Psychology, among others) provide a cleaner basis for interpretation against this bias, although the general limitation remains that respondents are concentrated mainly in Teziutlán. This

Table 3: Indigenous languages reported, by academic program

Academic program	Students reporting knowledge of an indigenous language (n)	Students from that program who answered the questionnaire (n)	Proportion among respondents of the program (%)
Public Accounting (Zacapoaxtla)	7	11	63.6%
Business Administration (Zacapoaxtla)	5	9	55.6%
Nursing	20	72	27.8%
Dentistry	7	27	25.9%
General and Community Medicine	23	115	20.0%
Psychology	19	113	16.8%
Clinical Nutrition	12	80	15.0%
Physiotherapy	12	86	14.0%
Business Administration (Libres)	2	17	11.8%
Pharmaceutical Chemist-Biologist	7	62	11.3%
Law	5	46	10.9%
Public Accounting (Libres)	3	35	8.6%
Medical Imaging	2	47	4.3%

Note. Own elaboration based on data from the questionnaire applied to CRN-BUAP students (2026).

distinction is particularly relevant for health-related programs such as Nursing, Medicine, and Dentistry, where bilingual competence in an indigenous language can affect clinical communication and community outreach in rural service settings; even though the highest proportions in Table 3 belong to Zacapoaxtla's business-oriented programs for reasons of campus composition, health-sciences programs still show consistently higher proportions of indigenous-language knowledge than most other disciplines, a pattern that may be worth examining in future curriculum-design discussions.

Indigenous Languages by Gender

A slightly higher proportion of women reported knowledge of Nahuatl (15.0%) and Totonac (3.0%) compared to men (12.1% and 1.4%, respectively), although the difference between both groups is moderate. With varying degrees of nuance, much of the sociolinguistic literature holds that women tend to be the primary agents of minority-language maintenance in the home (Holmes, 1993). The data from the present study — showing similar proportions of Nahuatl and Totonac knowledge between men and women — do not confirm

Table 4: Indigenous languages reported, by gender

Language	Men reporting it (n of 207)	Women reporting it (n of 507)	Other gender (n of 5)*
Nahuatl	25 of 207 (12.1%)	76 of 507 (15.0%)	0 of 5 (0.0%)
Totonac	3 of 207 (1.4%)	15 of 507 (3.0%)	0 of 5 (0.0%)
Maya	1 of 207 (0.5%)	0 of 507 (0.0%)	1 of 5 (20.0%)
Mixtec	0 of 207 (0.0%)	1 of 507 (0.2%)	0 of 5 (0.0%)
Triqui	0 of 207 (0.0%)	1 of 507 (0.2%)	0 of 5 (0.0%)
Zapotec	0 of 207 (0.0%)	0 of 507 (0.0%)	1 of 5 (20.0%)

Note. *The “non-binary” category ($n = 1$ in the whole sample) was excluded for representing a single case, insufficient to calculate an interpretable proportion. Own elaboration based on data from the questionnaire applied to CRN-BUAP students (2026).

this assumption in the population studied. Rather than being read as an irrelevant result, this absence of difference is informative in itself: recent work (Meakins, Bromham & Hua, 2024) already questions the universality of that pattern and conditions it on the specific social-network structure and kinship roles of each community. The CRN-BUAP case adds to that body of evidence: in this university context, gender does not appear to be the axis organizing knowledge of indigenous languages, which points toward other factors — perhaps prior educational trajectory or place of origin (rural versus municipal seat) — as potentially more relevant explanations, a hypothesis that the available data would allow exploring in future research. This finding also has a practical implication: intercultural support programs designed with an implicit assumption that female students are the primary bearers of indigenous-language knowledge would, on this evidence, misallocate attention and resources within the CRN-BUAP student population.

Additional Languages by Campus

Unlike the previous tables, this question asked whether, in addition to the language students use daily, they speak or understand another one. English is, by a wide margin, the most frequently reported additional language, particularly in Teziutlán (35.4%), above Libres (27.1%) and Zacapoaxtla (9.1%). A relevant secondary finding is the small group of 22 students across the entire sample who reported Spanish itself as an additional language, suggesting that their main everyday language is an indigenous one and that Spanish was acquired at a later point in their life trajectory.

One of the findings with the greatest theoretical relevance, though easy to overlook, concerns these 22 students who report Spanish as an “additional language” (Table 5), indicating that their main everyday language is actually an indigenous one. From the perspective of family language policy (Ndzotom Mbakop & Kamgang Ndada, 2021), this constitutes direct evidence of households where Spanish

Table 5: Additional languages (beyond the everyday language) reported, by campus

Additional language reported	Libres (n of 96)	Teziutlán (n of 602)	Zacapoaxtla (n of 22)
English	26 of 96 (27.1%)	213 of 602 (35.4%)	2 of 22 (9.1%)
An indigenous language (unspecified)	1 of 96 (1.0%)	35 of 602 (5.8%)	2 of 22 (9.1%)
Spanish*	3 of 96 (3.1%)	17 of 602 (2.8%)	2 of 22 (9.1%)
Other or a combination of several (French, Italian, German, etc.)	0 of 96 (0.0%)	7 of 602 (1.2%)	0 of 22 (0.0%)
Portuguese	0 of 96 (0.0%)	1 of 602 (0.2%)	0 of 22 (0.0%)

Note. *Cases reporting Spanish as an additional language likely correspond to students whose main everyday language is not Spanish, but an indigenous language. Own elaboration based on data from the questionnaire applied to CRN-BUAP students (2026).

use was prioritized at some point, rather than a residual case. However, the study’s cross-sectional design does not allow determining whether this process is ongoing or already concluded in the rest of the sample: the three-generation model predicts precisely that language loss occurs gradually and invisibly across cohorts, and a single-moment snapshot cannot distinguish between a stable community and one undergoing active language shift. It is therefore worth acknowledging this limitation clearly: the data are compatible with both a diglossic-stability hypothesis and an accelerated-shift hypothesis, without the current design allowing a determination between the two.

Table 5 also shows English dominating overwhelmingly as an additional language (35.4% in Teziutlán), far above indigenous languages reported in the same category (5.8% in the same campus). Read solely through the lens of classic diglossia (Fishman, 1967), this would confirm the expected pattern: Spanish and English occupying prestige domains, and the indigenous language confined to the intimate domain. The linguistic-market framework (Padilla-Iglesias & Kramer, 2021), however, invites a

different reading: the fact that CRN-BUAP already formally offers English instruction in its curriculum, without providing an equivalent space for validating Nahuatl or Totonac, is not simply a passive reflection of society, but an institutional decision that actively reinforces this prestige hierarchy rather than counteracting it. The central argument of this discussion can be stated as follows: the university is not a neutral observer of the diglossia described in Table 5, but, so far, one of the mechanisms that reproduce it, insofar as its formal foreign-language offer has no equivalent counterpart in indigenous languages. This gives concrete theoretical grounding to the recommendation for differentiated language-accreditation programs — not as a generic gesture of intercultural goodwill, but as a targeted correction to a mechanism of hierarchy reproduction that the data themselves document.

It is also important to acknowledge the limits that the study’s own design exposes. Gardner (2006) distinguishes integrative motivation from instrumental motivation in foreign language learning, but the instrument applied only asked whether students learn English, not why.

This makes it impossible to determine whether the 35.4% of Teziutlán respondents who report English as an additional language do so out of career projection or cultural identification — both hypotheses remain equally consistent with the available data. A similar issue arises with the finding of Asian languages (Korean, Japanese) in programs such as Psychology, apparently linked to the consumption of series, music, and social media. Lee and Lee's (2021) theory supports the idea that such media consumption can generate motivation to learn a language. However, a more recent study (Harmaini, 2026) found that watching content in another language does not necessarily lead to mastering it. Accordingly, this finding should only be read as evidence of interest in these languages, not as proof that students actually master them.

Section Summary

Taken together, this linguistic cartography, built from the effective sample ($N = 720$), shows that Zacapoaxtla concentrates the highest proportions of Nahuatl and Totonac knowledge among the three campuses, although this pattern should be read with caution given the small size of that subsample ($n = 22$). English consistently dominates as an additional language across all three campuses, with greater relative intensity in Teziutlán. The pattern observed by academic program should be interpreted with the caveat noted above, since it is confounded with the campus effect in Zacapoaxtla's exclusive programs. Read together, these five tables point to a consistent institutional picture rather than five isolated facts: indigenous languages are demographically present, and in Zacapoaxtla notably so, yet the university's only clearly formalized language offer is foreign-language instruction, chiefly English. Any future intercultural strategy for CRN-BUAP would therefore need to address this asymmetry directly, rather than treating the presence of indigenous-language speakers as a self-evidently sufficient basis for linguistic inclusion.

CONCLUSION

This study mapped the sociolinguistic profile of 720 students across BUAP's Complejo Regional Nororiental, unevenly distributed across Teziutlán (83.6%), Libres (13.3%), and Zacapoaxtla (3.1%). Knowledge of indigenous languages, chiefly Nahuatl and Totonac, is notably higher in Zacapoaxtla, though this reflects demographic presence rather than institutional recognition, since the study did not measure whether these languages hold any formal status within the university. English, by contrast, is formally taught at all three campuses, while no equivalent offer exists for indigenous languages, suggesting that the institution itself helps sustain this asymmetry rather than merely reflecting it.

No meaningful difference was found between men and women in indigenous-language knowledge, consistent with recent literature questioning a universal gender

pattern in indigenous-language maintenance. These findings should be read with caution: the design is cross-sectional and self-reported, the Zacapoaxtla sample is small, and program and campus effects are confounded in Zacapoaxtla's exclusive programs. Future work should expand the Zacapoaxtla sample, probe the motivations behind English learning, and add a qualitative phase exploring family language decisions, particularly among health-sciences students given the practical relevance of indigenous-language competence in clinical settings.

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