
Student Engagement and High-Impact Practices in Students at the University of Guadalajara, Jalisco, Mexico.**B. Noemí Silva-Gutiérrez^{1*}, Ulises Osbaldo De la Cruz-Guzmán²**¹Department of Social and legal sciences, University of Guadalajara, Guadalajara, México²Department of Social and legal sciences, University of Guadalajara, Guadalajara, México

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Abstract— This research investigates the complex dynamics of student engagement and High Impact Practices (HIPs) within the context of the University of Guadalajara, Mexico. Utilizing a quantitative descriptive methodology, the study analyzed data from a sample of 1,061 students at the University Center for Economics and Administrative Sciences (CUCEA) during the 2025 A academic term. The Primary objective was to evaluate how academic activities and institutional environments contribute to student success and the development of professional competencies through the application of the National Survey of Student Engagement (NSSE) instrument.

The findings indicate moderate levels of overall student engagement characterized by a significant disparity between academic rigor and practical interaction. Institutional strengths were notably observed in the Quality of Interactions (41.19 points), Effective Teaching Practices (38.45), and Higher – Order Learning (38.07), suggesting that the faculty provides a structured and supportive classroom environment that encourages analytical thinking. However, the study identifies several critical areas that necessitate institutional intervention. Specifically, Student-Faculty Interaction outside of formal instructions (21.81), participation in High-Impact practices (24.9), Quantitative Reasoning (29.51) yielded the lowest scores. The results suggest a persistent interaction gap that limited the comprehensive development of students. While the university success in fostering positive social relationship and theoretical knowledge, there is a pronounced deficiency in collaborative research, participation in learning communities, and service-learning opportunities. The study concludes that increasing engagement requires more than just academic rigor, it necessitates a structural shift toward mentoring and the expansion of equitable access to HIPs.

Keywords— High-impact practices, students, student engagement,

INTRODUCTION

In contemporary educational research, student engagement has emerged as a critical factor directly associated with the quality of learning and success in the professional training process. It is defined as the degree cognitive, physical and emotional investment that students dedicated to their academic experiences. However, from a critical perspective, engagement is not merely a set of institutional indicators like study hours or class attendance, rather, it is a complex construct influenced by cultural and socioeconomic factors. This underscores a fundamental debate: whether engagement should be viewed as an instrumental tool for improving performance or as an emancipatory phenomenon that fosters comprehensive and critical education. Complementing this, High-Impact-Practices (HIPs) –such as research- based learning, community service, and internships-serve as a key strategy to enhance engagement and promote meaningful learning. While these experiences are known to increase student retention and the development of workplace competencies, their accessibility remains a point of controversy. In practice, HIPs are often restricted privileged groups, which can inadvertently reproduce socio-educational inequalities.

In the Latin American context, higher education institutions face dual challenge of maintaining academic quality during massification while ensuring equitable access to these meaningful learning experiences. Adapting these models to the region requires a critical analysis of unique social and economic characteristics that condition their implementation. In this setting, engagement must be viewed as a vehicle for social responsibility and educational justice, rather than just an instrumental category linked to performance. This study specifically examines the situation at the University of Guadalajara, Mexico, utilizing a quantitative methodology. The research involved a sample of, 1,061 students from de University Center for Economics and Administrative (CUCEA) during the 2025 A academic term, using the National Survey of Students Engagement (NSSE) instrument. The primary objective is to identify strengths and critical areas for improvement to foster a critical committed to regional development and social justice.

I. BACKGROUND

In contemporary educational scientific research, student engagement has become a relevant topic. In its conceptual development, Kuh, [1] indicates that it is understood as the degree of cognitive, physical, and emotional investment students put into their academic experiences. University student engagement is directly associated with the quality of learning and success in the professional training process. Trowler, [2] states that student engagement is founded on the meaningful interaction between students, faculty, and higher education institutions, where learning experiences are designed to generate active participation. Guzmán-Valenzuela, [3] warns that, from a critical perspective, university student engagement cannot be reduced merely to the measurement of institutional indicators such as study hours, participation in a tutorial system, or class attendance. Instead, it must be understood as a complex construct, influenced by cultural and socioeconomic factors. This establishes a debate on whether university student engagement should be analysed as a purely instrumental phenomenon

focused on improving performance indicators, or as an emancipatory phenomenon that fosters the comprehensive and critical education of students.

On the other hand, High-Impact Practices (HIPs), identified by Kuh, [4], emerge as strategies to enhance student engagement and, consequently, promote meaningful learning. Among the most prominent HIPs are research-based learning, collaborative projects, community service, global learning, intensive writing programs, and internships. Kilgo et al., [5] found that these experiences increase retention and the development of competencies that are transferable to the workplace.

However, a controversy arises regarding the accessibility and equity of HIPs for students in general. While Kuh, [4] maintains that all students should have access to them, Finley and McNair, [6] point out that, in practice, they are not available to everyone; rather, they are often restricted to privileged groups, which leads to the reproduction of socio-educational inequalities. Regarding the convergence of university student engagement with high-impact practices, there is a need to design university environments that not only promote academic participation but also integrate an ethical and social vision of higher education. This approach helps in understanding that university professional training is not only the acquisition of labour competencies but also the construction of a critical citizenry committed to its environment.

II. LATIN AMERICAN CONTEXT

In Latin America, higher education institutions face a dual challenge: on the one hand, they must guarantee quality in professional training amidst massification, and at the same time, they must promote equity in access to meaningful learning experiences. In this context, university student engagement and high-impact practices consolidate as fundamental pillars in the debate on pedagogical innovation and academic success.

Nonetheless, the "tropicalization" (adaptation) of these models to the Latin American context requires critical analysis because the region presents unique social, economic, and historical characteristics that condition their implementation. Zapata et al. [7] warn that in Latin America, engagement cannot be analysed merely as an instrumental category linked to performance indicators. Instead, it should be viewed as a construct that is cross-sectioned by elements such as socioeconomic inequalities, cultural diversity, and institutional tensions.

In Latin America, some higher education institutions have begun to implement service-learning programs, applied research projects in communities, and internships linked to the productive sector. These activities align with the goal of articulating professional training and employability, which strengthens competencies such as teamwork, critical thinking, leadership, and social sensitivity (Santelices & Celis, [8]).

Finley and McNair [6] indicate that the implementation of HIPs in Latin America often sees access concentrated in elite institutions or programs that require additional economic resources, which reproduces educational inequalities. Consequently, high-impact practices, contrary to democratizing learning, could further widen existing gaps if they are not designed with equity criteria. This raises the question of whether HIPs should be oriented toward immediate job placement or toward the development of critical professionals with the capacity to transform the society in which they live. Santelices and Celis [8] affirm that, given the history of structural inequalities in Latin America, university student engagement should also be conceived as a vehicle for social responsibility and educational justice.

Zilvinskis et al. [9] propose several courses of action to enhance university student engagement and HIPs in Latin America. They mention that to ensure equity in access, it is necessary to establish programs for financial support, scholarships, and academic credits for vulnerable students to participate. Another guideline is to contextualize the experiences by adapting the practices to local realities and linking them to social and regional needs. Results should be monitored through the implementation of longitudinal evaluations that connect participation in practices with professional trajectories and social commitment. Therefore, a balance must be struck between technical and critical training, and finally, faculty must be trained in the design of high-impact experiences and authentic assessment.

In summary, university student engagement and high-impact practices constitute key analytical and pedagogical categories for understanding and improving education in Latin America. While the narrative in developed countries emphasizes the benefits in terms of learning and retention, the reality in the region presents the challenge of rethinking these concepts in light of socioeconomic inequalities, cultural diversity, and institutional challenges. HIPs, when designed in a contextualized and equitable manner, can enhance the professional training process by generating meaningful learning and strengthening the social responsibility of future professionals. However, if they are implemented uncritically and exclusively, there is a risk of reproducing educational gaps and thereby limiting the transformative capacity of higher education. The discussion on university student engagement and high-impact practices in the Latin American context should be oriented toward the construction of models that balance quality, equity, and social relevance. This will contribute to the formation of professionals who are not only competent but also committed to regional development and social justice.

III. METHOD

This research adopts a non-experimental, quantitative design with a descriptive scope. According to Hernández Sampieri et al. [10], descriptive studies seek to specify important properties and characteristics of the phenomenon under investigation, describing trends in the addressed population. Creswell [11] indicates that this approach is appropriate when the objective is to characterize and document the current status of specific variables without intending to establish causal relationships.

The context and sample were established at the thematic Campus of Economic and Administrative Sciences (CUCEA) of the University of Guadalajara, a Mexican public institution recognized for its history and contribution to regional development. To determine the sample size, the statistical formula for finite populations was used. The student population of the campus in the 2025 A school term (which runs from January to July) was 21,468. A confidence level of 95% and a margin of error of 3%

were established, yielding a required sample size of 1,017. After collecting the questionnaires, a total of 1,061 valid responses were obtained. The fieldwork process consisted of applying the instrument following the protocols established by the National Survey of Student Engagement (NSSE) consortium to ensure the validity and comparability of the collected data. The survey was distributed electronically using the Google Forms platform during the corresponding academic period. The ethical principles of voluntary participation, confidentiality, and informed consent were respected.

The instrument used was the NSSE, adapted to the Mexican context. This instrument evaluates various dimensions of student engagement using Likert scales that measure the frequency of participation in academic and social activities, perceptions of the institutional environment, and high-impact practices (McCormick, et al., [12]). The NSSE instrument (Ewell and McCormick, [13]) is composed of four categories, which are:

1. Academic Challenge, which includes dimensions such as higher-order learning, reflective and integrative learning strategies, learning strategies, and quantitative reasoning.
2. Learning with Peers, which covers discussions with diverse perspectives, such as collaborative learning and discussions with diverse perspectives.
3. Experiences with Faculty, which includes student-faculty interaction and effective teaching practices.
4. Campus Environment, which considers the quality of interactions and institutional support.
5. A second part incorporated into the instrument corresponds to high-impact practices.

A second part incorporated into the instrument corresponds to High-Impact Practices. Pike [14] found that the validity and reliability of the NSSE instrument have been extensively documented in multiple institutional contexts. Various studies have demonstrated significant correlations between NSSE results and other indicators of student success, such as academic average, retention rate, and institutional satisfaction (Gordon et al., [15]; Carle et al., [16]).

IV. RESULTS

The engagement indicators are expressed on a scale ranging from 0 to 60 points, where the assertion "never" equals 0, "sometimes" equals 20, "often" equals 40, and "very often" equals 60. Based on this, the dimensions of the questionnaire were calculated, yielding the following scores for the dimensions within the Academic Challenge category:

- Higher-order learning: 38.07
- Reflective and integrative learning: 37
- Learning strategies: 35.21
- Quantitative reasoning: 29.51

For the Learning with Peers category, the Collaborative Learning dimension scored 32, and Discussions with Diverse Perspectives scored 30.89. For the Experiences with Faculty category, the Student-Faculty Interaction dimension scored 21.81, and Effective Teaching Practices scored 38.45. Finally, for the Campus Environment category, the Quality of Interactions dimension scored 41.19, and Institutional Support scored 30.48.

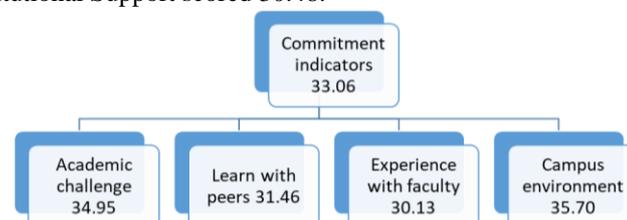


Fig. 1 NSSE Theoretical Model Scores

Engagement indicators are made up of a series of items which are the result of rigorous qualitative and quantitative tests that provide valuable, concise and practical information on a different aspect of student engagement.

V. DISCUSSIONS

For a descriptive interpretation based on a scale ranging from 0 to 60, the level of engagement can be established as follows: a value of 0 is very poor, a value of 20 corresponds to poor, 40 to good, and 60 to very good. Consequently, average values, meaning scores above 30, indicate a moderate level of perceived frequency or quality for each practice. Therefore, scores above 40 reflect high participation or a positive perception, values between 30 and 39 show moderate participation or perception, and scores below 30 suggest low involvement, indicating areas of opportunity.

As can be seen in the descriptive analysis, strengths are identified in reflective learning and solid academic relationships. For example, in the Reflective and Integrative Learning dimension, which evaluates students' capacity to link knowledge across courses, apply ideas to real-world problems, and examine different perspectives, the obtained score of 35.3 indicates a moderate level of cognitive engagement, while interaction with faculty and university staff shows a medium level of 33.5.

Opportunities for improvement are also evident. For instance, in the Institutional Support dimension, low scores (29.4) were recorded, which evidences an institutional weakness in comprehensive support. Students perceive little assistance in areas of emotional well-being and managing non-academic responsibilities, which may affect their retention and academic success. Furthermore, participation in university activities and life (28.1) indicates limitations due to a lack of institutional incentives to get involved in activities beyond the classroom. In terms of engagement, this means that students do not feel fully integrated into the university community. The campus should foster a culture of student participation through recognition policies or extracurricular credits, with the goal of strengthening comprehensive education and institutional identity.

Regarding High-Impact Practices (HIPs), the surveyed student population obtained a score of 24.9 points, which indicates moderate-to-low participation. The practice with the highest score was Professional / Corporate Internships, which is a strength for students in economic and administrative sciences, as linkage with the business sector implies exposure to the real world, connecting theory and practice.

The second highest practice was Capstone Experience, with 32.12 points, indicating that final projects, comprehensive exams, or theses have a significant presence among students. However, it is important to verify whether these experiences genuinely integrate deep learning or are merely formal graduation requirements.

The third highest-scoring practice was Study Abroad, with 31.14 points, which is moderate but relatively significant considering the economic and logistical barriers faced by the campus student body. The fourth practice is Learning Community, with 27.43 points, which is interpreted as low participation because students rarely take classes in cohesive groups. This is an important area to address, as this type of practice fosters a sense of belonging and deep collaborative learning.

The Research with Faculty practice scored 22.41, leading to a critical interpretation that it is low. This shows a significant weakness, given that students have limited participation in research projects with the faculty, which consequently results in less development of critical thinking and research skills, and limited deep mentorship. Finally, the Service-Learning practice is practically null, scoring only 2.41 points. This indicates that students are not connecting their learning with real social needs, lacking the development of social and civic responsibility, and missing opportunities for meaningful learning in community contexts.

VI. CONCLUSIONS

Addressing student engagement through validated instruments like the NSSE provides valuable information for the continuous improvement of educational quality. Higher education institutions that systematically evaluate and act upon student engagement data are better positioned to create environments that promote the learning, development, and success of all their students. The descriptive evaluation of engagement indicators and high-impact practices is the essential first step to understanding the student experience in specific contexts. With the findings from this type of study, decision-makers have information for resource allocation, curriculum design, and student support programs. For the Mexican context, where research on student engagement using standardized instruments is still incipient, studies such as the present one contribute to the development of an empirical base that can guide institutional policies and practices based on scientific evidence. The adaptation and validation of instruments like the NSSE in non-Anglophone contexts represent an opportunity to participate in global conversations about educational quality while addressing local specificities. Furthermore, the literature suggests that high-impact practices and their cumulative effects are particularly beneficial for first-generation students and historically marginalized groups. Hence the importance of addressing their development in this case, since, while strengths such as linkage with the productive sector through professional internships, structured capstone experiences, and moderate international mobility are identified, there are marked deficiencies in service-learning, research with faculty, and learning communities.

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