

Institutionalizing Academic Coaching: An Empirical Study of Student Retention at a Hispanic-Serving Institution

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Jianjun Wang¹ 

Abstract

Academic coaching is a viable approach to improving student retention in higher education. In this study, 257 students are tracked to evaluate the effectiveness of InsideTrack coaching, an intervention previously endorsed by randomized experimentation. The data analysis at California State University, Bakersfield (CSUB) reveals a significant association between coach services and retention outcomes. In addition, this investigation has identified a moderate impact, as evidenced by an effect size, within 7 months. The retention rate tracking also showed a 9% gap between Hispanic students and their peers across other ethnic groups. The local information is triangulated with national data from Excelencia in Education to corroborate research findings in the United States. In differentiating this study from prior work, particular emphasis is placed on the shorter intervention window at CSUB and the applicability of these findings beyond a single context. The discussion of the results is guided by a well-established context, input, process, and product model, illustrating how institutional context can shape coaching outcomes in a broad array of higher education environments.

¹Department of Advanced Educational Studies, California State University Bakersfield, Bakersfield, CA, USA

Corresponding Author:

Jianjun Wang, Department of Advanced Educational Studies, California State University Bakersfield, Bakersfield, CA 93311, USA.

Email: jwang@csub.edu

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Student retention generates tuition and fees to sustain a significant revenue stream for universities. When retention is linked to institutional effectiveness, a low dropout rate is often used as an indicator of student satisfaction, facilitating fund leverage from local communities (Esteban et al., 2024). Uninterrupted student enrollment is more cost-effective than new student recruitment, which often demands extra resources for marketing and admissions (Mitchell et al., 2024). In particular, institutions with high retention rates can help maintain their status for program accreditation (Makhoul, 2019).

Given the importance of student retention, academic coaching has been considered an important intervention in higher education (Ott et al., 2020). Since the issue of college dropouts has been more persistent in minority-serving institutions (Phillips-Berenstein et al., 2024), federal grants are dispensed to support diversity, equity, and inclusion in higher education (Mendez et al., 2023). In 2023, CSUB was awarded a 5-year grant by the U.S. Department of Education's Developing Hispanic-Serving Institutions Program to support student retention. Accordingly, this study focuses on justifying the return of federal grant funding from coaching services for dropout reduction.

Differentiation from Previous Research

Unlike Bettinger and Baker's (2014) study, which tracked InsideTrack coaching effects over 2 years, this research monitors the outcomes over a compressed 7-month window in an Hispanic-Serving Institution (HSI) setting. By capturing a more immediate look at short-term retention benefits, especially for an institution like CSUB serving large numbers of Hispanic and other underrepresented students, this study departs from prior, long-term or non-HSI-focused investigations.

Gregor and Gregor (2024) reviewed the literature and reported limited investigations on academic coaching prior to the turn of the twenty-first century. Kleen (2021) concurred that "Titles such as 'academic intervention,' 'coaching,' and 'academic assistance' have been discovered. Though there may be commonalities between these interventions, little research has been found that focuses specifically on academic coaching" (p. 2). In this context, the present investigation not only evaluates the grant-funded intervention on student retention but also enriches the current literature with new empirical findings about the impact of coaching practice in a short-term period at an HSI.

Literature Review

Academic coaching has emerged as a promising intervention for improving student retention and success, especially since 2000 (Bettinger & Baker, 2014). Robinson

(2015) defined academic coaching as a process in which coaches help students: (a) improve their awareness of educational goals, strengths, values, and interests; (b) enhance self-regulation skills; (c) build learning strategies for college-level academics; and (d) engage in the university community. Despite the proliferation of academic coaching programs, Singhani et al. (2022) noted there is still a significant need for empirical research on their effectiveness.

InsideTrack, in particular, has drawn attention for its multifaceted approach that includes people, technology, methodology, and supporting systems (Blankenship, 2017). More recent research underscores InsideTrack's one-on-one support in areas like time management, confidence building, financial aid navigation, and fostering a sense of connection with the institution (Kezar et al., 2023). Its potential effectiveness has also captured the interest of the Institute of Education Sciences, a division of the U.S. Department of Education, which reported higher likelihoods of continued enrollment among students who received InsideTrack coaching (Black, 2018).

Nonetheless, existing literature features a limited number of rigorous evaluations, with only one randomized experiment by Bettinger and Baker (2014). Their work pointed to a positive impact of the coaching program but also revealed that InsideTrack did not disclose institution names, restricting contextual insights. Other studies (e.g., Blankenship, 2017) have similarly noted challenges in obtaining proprietary details. Consequently, more research is needed to confirm existing findings in specific institutional contexts and to address the retention of minority students—particularly at HSIs, where dropout rates can be higher than average (Shapiro et al., 2017; Twachtman, 2022).

By following the InsideTrack coaching model in a short-term timeframe at CSUB, this study expands the understanding of how coaching might function under more immediate intervention intervals in an HSI. Specifically, three research questions guide the investigation:

1. Are there any associations between student retention and InsideTrack's coaching service?
2. What are the methodological challenges in the result configuration for Question 1?
3. What information can be incorporated to interpret the result?

Methods

A total of 257 CSUB students received InsideTrack's coaching service. The retention outcome is indicated by whether students continued their enrollments in the Spring semester of 2024. With the support of grant funding, each coach contacts his or her students via phone calls, emails, text messages, and social networking sites.

Because of the coaching flexibility in addressing different student demands, the contact counts are gathered on a discrete scale to match the interaction needs. For instance, no student was contacted eight times. Thus, the categories in Table 1 did not have to be consecutive, particularly during the 7 months of coaching service.

Table 1. Pattern of Coach Support and Retention Outcome.

Retention outcome	Coach contact counts							
	1	2	3	4	5	6	7	9
Dropped out	20	0	1	0	1	1	1	0
Retained	194	13	14	8	2	1	0	1

Note. This contingency table compares the number of InsideTrack coach contacts each student received (columns) with whether the student dropped out or was retained (rows). A greater number of coach contacts generally corresponded with higher retention.

The rows of Table 1 represent retention outcomes. For a contingency table of two categorical variables, χ^2 test could have been an appropriate choice in data analyses (Wooditch et al., 2021). However, when 11 out of the 14 cells contained a frequency count of less than 5, it caused a violation of the expected count requirement for χ^2 test in most cells. As a solution, Nowacki (2017) indicated the need to replace χ^2 test with Fisher's exact test to examine the null hypothesis of independence between row and column variables. Fisher's method employs an exact hypergeometric distribution to identify the difference between observed frequencies and the expected frequencies of occurrence. In comparison, χ^2 tests are approximations under a large sample assumption (McDonald, 2014). According to Kim (2017), "when more than 20% of cells have expected frequencies < 5 , we need to use Fisher's exact test because applying approximation method is inadequate" (p. 3). Hence, an examination of the methodological challenge in Question 2 has supported the use of Fisher's exact test. The method choice has paved the way to address Questions 1 and 3 in the following sections of *Results* and *Discussions*.

Results

Fisher's exact test is designed to determine if there are nonrandom associations between two categorical variables in a contingency table. The results are based on the exact probability of observing the data, assuming the null hypothesis is true, which makes the results highly reliable when the expected frequencies are small (Nowacki, 2017). The statistical computing shows $p = .0002$ from Fisher's exact test and indicates a slim probability for the null hypothesis to be true. Hence, a significant association has been identified by the CSUB data between the student retention outcome and InsideTrack's coaching service at $\alpha = .0005$ (Question 1). The effect size, as configured by Cramer's V per the recommendation of Mangiafico (2022), has reached 0.265. According to IBM (2024), the practical impact is moderate when Cramer's V is between 0.2 and 0.6. Thus, this study has demonstrated a moderate effect size. The retention rate tracking also showed a 9% gap between Hispanic students and their peers across other ethnic groups.

Conclusion

The academic coaching support produced both confirmatory and exploratory findings. In corroboration with the prior research on the benefit of InsideTrack's coaching services, the new evidence reveals positive outcomes within a 7-month period at CSUB—thus filling a gap regarding short-term effects in a context with a high proportion of Hispanic students among HSIs (Lake, 2022; Turner & Gurantz, 2024).

Unique Contributions and Broader Applicability

This study offers a snapshot of short-term retention gains using InsideTrack coaching, distinguishing itself from research that either focused on long-term outcomes or lacked an HSI context. The results inform other universities—particularly those serving large minority populations—about the potential of a condensed coaching intervention as part of a strategic approach to increase student retention. Non-HSIs sharing concerns about minority student success may also adapt this short timeline as a preliminary pilot before broader deployment.

Discussion

While this study confirms the benefit of academic coaching in student retention, its broader significance extends beyond methodological specifics to support replication. As Sloane (2008) suggested, it is vital to explore not just what works but what works for whom and in which contexts. Consequently, contextual factors are pivotal.

Past research on InsideTrack's coaching has often been hindered by limited institutional disclosure, proprietary restraints, or insufficient contextual data (Bettinger & Baker, 2014; Blankenship, 2017). Therefore, applying a context-aware framework such as the context, input, process, and product model helps highlight how local variables—in this case, the designation as an HSI—may amplify or shape the effects of coaching.

Excelencia in Education (2024) data show that national Hispanic full-time equivalent ratios often drop considerably from undergraduate to graduate levels, mirroring this study's detection of a 9% gap across ethnic groups locally. However, InsideTrack was not the only federal grant program offered to improve outcomes for Latino students at CSUB. Additional support through the Promoting Postbaccalaureate Opportunities for Hispanic Americans (PPOHA) program and the broader Graduation Initiative 2025 (California State University, 2024) may also have influenced student retention. Future research can disentangle these confounding factors and explore the potential synergy between multiple support programs (Figure 1).

In terms of product outcomes, Bettinger and Baker (2014) observed retention gains over 2 years, while this study's moderate effect size emerged within a shorter time-frame. It remains an open question how coaching dynamics develop over longer periods in a predominantly Hispanic context. Nonetheless, broadening this analysis

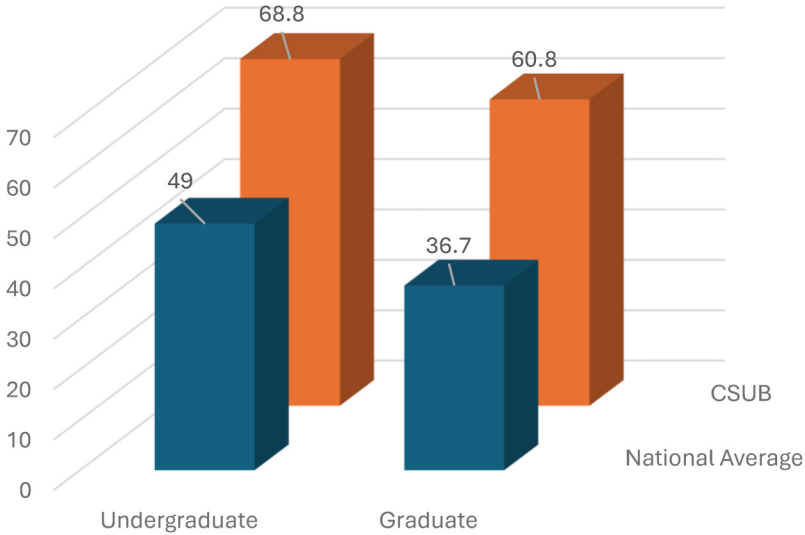


Figure 1. Comparison of Hispanic FTE ratios in higher education. Note. This figure tracks the proportion of Hispanic full-time equivalent (FTE) enrollment at the undergraduate and graduate levels for both CSUB and national averages. The narrower drop at CSUB between the two levels suggests a supportive environment for Hispanic student progress compared to national trends.

to diverse institutional types—those with different student demographics or resource levels—could extend the applicability and nuance of academic coaching research in higher education. By presenting these short-term gains for CSUB in a broader national discussion about underrepresented student retention, the study demonstrates that a proactive, data-driven coaching approach can enhance institutional support for both minority and majority populations alike.

Exploring Alternative Explanations

Although the data suggest a significant positive association between InsideTrack coaching and student retention, it is possible that additional factors contributed to these outcomes:

1. **Self-Selection Bias.** Students who chose to engage actively with coaches may already have been more motivated or academically inclined. If so, higher retention might reflect stronger preexisting motivation rather than the coaching itself.
2. **Parallel Interventions.** Some students may have accessed concurrent academic advising, mentoring, or financial assistance programs. These parallel interventions could have reinforced persistence, making it difficult to isolate the direct effect of coaching.

3. Institutional Culture and Resources. As an HSI with additional grant supports (e.g., PPOHA, Graduation Initiative 2025), CSUB may offer a broader supportive environment that enhances engagement with any form of academic assistance. Other institutions without such resources might see different results.

Future research can mitigate these alternative explanations by conducting randomized trials, tracking usage of parallel interventions, and comparing institutions with varying levels of supportive funding. Incorporating robust qualitative methods (e.g., focus groups or interviews) could also help clarify the relative weight of each factor, thereby deepening our understanding of the mechanisms behind successful retention efforts.

Limitations and Future Research Directions

Although measuring retention within 7 months helps clarify whether student persistence is sensitive to short-term coaching, it may limit insights into cumulative benefits such as sustained academic performance. Furthermore, this research took place at a single HSI, raising questions about generalizability. Variables like initial academic preparedness or availability of external support might also have shaped the observed coaching effects.

Subsequent studies should track these coaching dynamics over longer intervals and at multiple institutions with varied demographic compositions. Conducting interviews or focus groups with students and coaches could illuminate the qualitative dimensions of the coaching experience and pinpoint which aspects matter most. Ultimately, broadening the scope to examine subpopulations—first-generation college students, students from low-income backgrounds, or nontraditional students—will further validate whether short-term coaching support consistently fosters retention gains. Together, these advancements will enrich higher education policy discussions by clarifying how academic coaching can yield substantial benefits across diverse institutional contexts.

Implications for Policy and Practice

Based on the findings, the following recommendations can guide policymakers and institutional leaders aiming to enhance student retention:

1. Pilot Short-Term Interventions.

Policymakers can encourage higher education institutions to adopt pilot coaching initiatives—similar to this study's 7-month model—before committing to multi-year programs. By assessing early retention outcomes in culturally diverse environments, decision-makers can evaluate cost-effectiveness and refine strategies quickly.

2. Target Underserved Populations.

Granting agencies and institutional policymakers should allocate resources specifically to bolster coaching for minority and low-income students, who may be at a higher risk of dropping out. As indicated by the 9% retention gap observed here, targeted coaching programs can serve as a tool to address persistent equity challenges.

3. Integrate Coaching With Other Campus Services.

Institutions can collaborate with advising, tutoring, and mentoring offices to develop integrated support models. Streamlining these services may yield a compounding effect on student retention rates, thus maximizing the returns on federal or state-funded programs.

4. Data-Driven Evaluation.

Collecting detailed, longitudinal data on coaching engagement, student demographics, and retention outcomes can inform iterative improvements. A data-centric approach also allows policymakers to justify budget allocations, demonstrating the measurable impact of academic coaching on student success.

5. Scalability and Long-Term Monitoring.

Although short-term gains can be significant, policymakers should plan for sustained monitoring and possible expansion. Building flexible funding mechanisms that adapt successful pilot interventions into broader institutional policies ensures that student support remains continuous.

By implementing these measures, stakeholders at multiple levels—from institutional leaders to state and federal policymakers—can strategically enhance the capacity of academic coaching programs to improve student retention. Over time, such integrated efforts may reduce achievement gaps, strengthen institutional accreditation profiles, and foster equitable educational outcomes in both HSIs and other higher education contexts.

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ORCID iD

Jianjun Wang  <https://orcid.org/0000-0003-1795-5498>

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Author Biography

Jianjun Wang is Professor and Faculty Ombudsman of California State University, Bakersfield. While teaching courses in statistics and research design, he conducts research on student retention.