

**Longitudinal Analysis of Student Cohorts of Aldersgate College
For Planning and Decision-Making**

Divina Antonia Pilar Arzadon,¹ Myrna Vidad Viernes²

ORCID ID:0009-0001-5117-4575¹

Aldersgate College, Inc., Solano, Nueva Vizcaya ^{1,2}

divina.arzadon@aldersgate.edu.ph,¹ myrna.viernes@aldersgate.edu.ph²

ABSTRACT

This study analyzed retention, attrition, progression, and graduation rates across academic programs from School Year 2018–2019 to School Year 2022–2023. It aimed to identify patterns of student persistence, pinpoint academic programs with varying levels of student success, and provide evidence-based insights for institutional planning and student support interventions. Specifically, the study examined the extent to which students remained enrolled, advanced from one academic year level to the next, completed their degree programs within the expected period, and identified programs demonstrating stronger or weaker student outcomes. The study employed a descriptive longitudinal research design utilizing cohort analysis. The study gathered data from institutional academic records covering freshman cohorts from SY 2018–2019 to SY 2022–2023 across various undergraduate programs. Retention, attrition, progression, and graduation rates were computed and analyzed by academic program to identify trends and variations in student persistence and completion. The findings revealed considerable differences in student outcomes among academic programs. Retention rates varied across cohorts, with programs such as Bachelor of Science in Nursing (BSN), Bachelor of Science in Criminology (BSCRIM), Bachelor of Science in Accountancy (BSA), and Bachelor of Science in Tourism Management (BSTM) demonstrating relatively stronger student persistence in several cohorts. In contrast, Bachelor of Science in Information Technology (BSIT) consistently showed comparatively lower retention and higher attrition rates, indicating greater student loss before program completion. Progression analysis showed that the first-year transition was generally the most critical stage of students' academic journey, as cohort size fell sharply during the move from first year to second year. However, students who advanced to later year levels generally showed higher progression rates toward completion. Graduation outcomes also varied across programs, with several programs showing improved completion rates in recent cohorts, while others still required targeted intervention. The study concludes that student retention, persistence, and completion outcomes differ significantly across academic programs and are influenced by program-specific conditions and student experiences. Continuous monitoring of cohort performance provides valuable evidence to identify critical stages of student attrition and develop appropriate interventions. The study recommends strengthening academic advising, early intervention mechanisms, mentoring programs, student support services, and program-based retention strategies to improve student persistence and graduation outcomes.

Keywords: Student retention, attrition rate, progression rate, graduation rate, cohort analysis, academic programs, student persistence

INTRODUCTION

Higher education institutions increasingly rely on evidence-based planning to improve student success, strengthen institutional effectiveness, and meet quality assurance and accountability standards. Institutional indicators such as retention, attrition, progression, and graduation rates provide valuable information to evaluate academic performance and guide strategic decision-making. Among institutional research approaches, longitudinal cohort analysis offers a comprehensive way to track students' academic progression from admission to graduation, enabling institutions to identify trends and areas requiring intervention. At Aldersgate College, enrollment and graduation records are maintained regularly; however, the institution has not systematically conducted a comprehensive longitudinal analysis of student cohorts across academic programs. This gap limits the institution's ability to fully use existing data to evaluate student persistence, identify programs that require intervention, and support evidence-based planning and continuous quality improvement. This study, entitled "**Longitudinal Analysis of Student Cohorts of Aldersgate College for Planning and Decision Making**," examined student cohorts admitted from School Year 2018–2019 to School Year 2022–2023. Specifically, it analyzed enrollment trends and determined the retention, attrition, progression, and graduation rates across academic programs. It also examined the relationships among these student success indicators using the Pearson Product-Moment Correlation Coefficient. The findings provide empirical evidence to help institutional administrators, academic leaders, and program chairpersons strengthen student retention strategies, improve academic programs, and support data-driven planning, quality assurance, and continuous institutional improvement.

METHODOLOGY

This study used a quantitative approach with a descriptive-correlational longitudinal design. The quantitative approach was appropriate because the study utilized numerical data obtained from official institutional records to examine student cohort outcomes. The longitudinal design enabled the researcher to track student cohorts admitted from School

Year 2018–2019 to School Year 2022–2023 and examine patterns and changes in enrollment, retention, attrition, progression, and graduation across academic programs over time. The descriptive component examined enrollment trends and described student success indicators, while the correlational component identified significant relationships among retention rate, attrition rate, progression rate, and graduation rate. The study population consisted of all undergraduate student cohorts admitted to Aldersgate College from School Year 2018–2019 to School Year 2022–2023. The cohorts were tracked from their first-year admission until graduation or their latest recorded academic status using official institutional records maintained by the Office of the Registrar. The study used complete enumeration (total population sampling) because it included all student records that met the inclusion criteria. This approach eliminated sampling error and provided a comprehensive assessment of student cohort outcomes across academic programs. The collected data were encoded and analyzed using the Statistical Package for the Social Sciences (SPSS). Frequency counts, percentages, and year-to-year changes described enrollment trends in first-year student cohorts. Cohort-based retention, attrition, progression, and graduation rates were computed for each academic program to determine patterns of student persistence, student loss, academic advancement, and degree completion. Pearson's Product–Moment Correlation Coefficient (Pearson's r) was employed to determine the significant relationships among retention, attrition, progression, and graduation rates. The study evaluated statistical significance at the 0.05 level. The researchers obtained permission to access institutional records from the appropriate authorities at Aldersgate College. The study utilized secondary data obtained from the Office of the Registrar. To ensure confidentiality and protect student privacy, the researcher removed all personal identifiers before data analysis and used the information exclusively for academic research purposes. The researcher adhered to the ethical principles of confidentiality, anonymity, and responsible data management throughout the study.

RESULTS AND DISCUSSION

Table 1

Enrollment Trends of First-Year Student Cohorts by Academic Year and Academic Program, SY 2018–2019 to SY 2022–2023

Academic Program	2018–2019	2019–2020	2020–2021	2021–2022	2022–2023
BS Civil Engineering	16	47	44	61	66
BS Electrical Engineering	11	50	40	64	49
BSEd–English	14	36	41	78	61
BEEd	10	29	25	55	43
BA Church Management	3	3	8	9	4
BS Information Technology	25	60	46	85	88
BS Accountancy	19	45	50	55	58
BSBA–Financial Management	9	24	35	68	43
BSBA–Marketing Management	15	33	22	80	55
BS Hospitality Management	10	70	54	131	115
BS Tourism Management	3	9	12	26	27
BS Criminology	8	80	96	231	340
BS Nursing	20	42	73	109	162
Total New Freshmen	168	533	550	1,073	1,111
Increase/Decrease	—	365	17	523	38
Percentage Change (%)	—	217.26	3.19	95.09	3.54

Table 1 presents the enrollment trends of first-year student cohorts across academic programs from SY 2018–2019 to SY 2022–2023. Overall freshman enrollment increased substantially from 168 students in SY 2018–2019 to 1,111 students in SY 2022–2023, indicating sustained institutional growth despite annual variations. The largest increases were observed in SY 2019–2020 and SY 2021–2022. At the program level, enrollment growth was uneven across disciplines. BS Criminology, BS Nursing, and BS Hospitality Management recorded the highest increases in freshman enrollment, while BA Church Management consistently enrolled relatively small cohorts. These findings indicate that selected academic programs, rather than uniform expansion across the College, primarily drove institutional growth. These findings align with Ditucalan (2024), which reported that enrollment growth in Philippine higher education institutions varies across academic programs and is largely influenced by labor market demand, employment opportunities, and student preferences. Similarly, the Philippine Institute for Development Studies (PIDS) noted that higher education enrollment expansion is often concentrated in specific programs and should be accompanied by strategic planning and efficient resource allocation to ensure institutional quality and sustainability. These findings underscore the importance of continuously monitoring enrollment trends to support evidence-based planning, optimize resources, and sustain academic program quality.

Table 2
Retention of the SY 2019–2020 Freshman Cohort by Academic Program

Academic Program	2018–2019	2019–2020	2020–2021	2021–2022	2022–2023	Mean Retention (%)
BSCE	50.00%	72.34%	56.82%	50.82%	30.30%	52.06%
BSEE	27.27%	48.00%	70.00%	39.06%	67.35%	50.34%
BSED English	42.86%	55.56%	43.90%	51.28%	39.34%	46.59%
BEED	40.00%	62.07%	52.00%	49.09%	60.47%	52.73%
ABCM	33.33%	66.67%	0.00%	22.22%	75.00%	39.44%
BSIT	8.00%	23.33%	34.78%	23.53%	42.05%	26.34%
BSA	21.05%	66.67%	60.00%	60.00%	65.52%	54.65%
BSBA FM	44.44%	62.50%	57.14%	47.06%	60.47%	54.32%
BSBA MM	26.67%	51.52%	50.00%	46.25%	56.36%	46.16%
BSHM	20.00%	57.14%	61.11%	51.15%	50.43%	47.97%
BSTM	33.33%	66.67%	25.00%	73.08%	51.85%	49.99%
BSCRIM	62.50%	75.00%	62.50%	53.68%	64.71%	63.68%
BSN	50.00%	64.29%	47.95%	76.15%	55.56%	58.79%
Mean	35.34%	59.37%	47.78%	49.49%	55.34%	49.46%

Table 2 presents the student retention rates across academic programs for five freshman cohorts from SY 2018–2019 to 2022–2023. The institutional mean retention rate was 49.46%, indicating that approximately half of the original freshmen remained enrolled through the fourth year. Overall retention improved from 35.34% in the 2018–2019 cohort to 55.34% in 2022–2023, despite fluctuations across cohorts. Among the programs, BS Criminology recorded the highest mean retention rate (63.68%), followed by BS Nursing (58.79%), BS Accountancy (54.65%), BSBA–Financial Management (54.32%), and BEEd (52.73%). In contrast, BS Information Technology had the lowest mean retention rate (26.34%), followed by BA Church Management (39.44%), BSBA–Marketing Management (46.16%), and BSED–English (46.59%). These differences may reflect variations in student preparedness, program demands, enrollment patterns, and institutional support. The increasing retention trend is consistent with Tinto (2017), who emphasized the importance of supportive academic environments and meaningful learning experiences in promoting student persistence. The findings also support Bowles and Brindle (2017) and Manyanga, Sithole, and Hanson (2017), who highlighted the influence of institutional, personal, and situational factors and the need for comprehensive, data-informed retention strategies..

Table 3
Attrition Rate of the SY 2018–2019 Freshman Cohort by Academic Program

PROGRAM	2018–2019	2019–2020	2020–2021	2021–2022	2022–2023	Mean Attrition (%)
BSCE	50.00%	27.66%	43.18%	49.18%	69.70%	47.43%
BSEE	72.73%	52.00%	30.00%	60.94%	32.65%	43.90%
BSED English	57.14%	44.44%	56.10%	48.72%	60.66%	52.48%
BEED	60.00%	37.93%	48.00%	50.91%	39.53%	44.09%
ABCM	66.67%	33.33%	100.00%	77.78%	25.00%	59.03%

BSIT	92.00%	76.67%	65.22%	76.47%	57.95%	69.08%
BSA	78.95%	33.33%	40.00%	40.00%	34.48%	36.95%
BSBA FM	55.56%	37.50%	42.86%	52.94%	39.53%	43.21%
BSBA MM	73.33%	48.48%	50.00%	53.75%	43.64%	48.97%
BSHM	80.00%	42.86%	38.89%	48.85%	49.57%	45.04%
BSTM	66.67%	33.33%	75.00%	26.92%	48.15%	45.85%
BSCRIM	37.50%	25.00%	37.50%	46.32%	35.29%	36.03%
BSN	50.00%	35.71%	52.05%	23.85%	44.44%	39.01%
Mean	64.66%	40.63%	52.22%	50.51%	44.66%	47.01%

Table 3 presents the student attrition rates across academic programs for five freshman cohorts from SY 2018–2019 to 2022–2023. The institutional mean attrition rate was 47.01%, indicating that nearly half of the original freshmen did not remain enrolled through the fourth year. Attrition generally declined from 64.66% in the 2018–2019 cohort to 44.66% in 2022–2023, suggesting improved student persistence. BS Information Technology recorded the highest mean attrition rate (69.08%), followed by BA Church Management (59.03%) and BSEd–English (52.48%), while BS Criminology had the lowest (36.03%), followed by BS Accountancy (36.95%) and BS Nursing (39.01%). These differences may reflect variations in academic demands, student preparedness, financial circumstances, and institutional support. The declining trend supports Bäumle, Grunschel, and Dresel (2022), who emphasized that attrition results from interacting academic, personal, and institutional factors. Similarly, Bernardino et al. (2024) and Nieuwoudt and Pedler (2021) identified academic, financial, family, workload, and time-related challenges as common contributors to student departure. The findings highlight the need for targeted interventions, including academic advising, early identification of at-risk students, mentoring, financial assistance, and strengthened support services. Continuous monitoring of attrition data can further guide institutional planning and improve student persistence and graduation outcomes.

Table 4
Progression of the SY 2018–2019 Freshman Cohort by Academic Program

PROGRAM	2018–2019	2019–2020	2020–2021	2021–2022	2022–2023	Mean Progression (%)
BSCE	88.89%	91.89%	92.59%	93.94%	44.44%	82.35%
BSEE	50.00%	66.67%	93.33%	100.00%	86.84%	79.37%
BSED English	100.00%	83.33%	90.00%	100.00%	82.76%	91.22%
BEED	80.00%	100.00%	81.25%	77.14%	81.25%	83.93%
ABCM	100.00%	100.00%	0.00%	100.00%	75.00%	75.00%
BSIT	25.00%	40.00%	88.89%	76.92%	82.22%	62.61%
BSA	66.67%	88.24%	90.91%	76.74%	100.00%	84.51%
BSBA FM	100.00%	75.00%	95.24%	80.00%	86.67%	87.38%
BSBA MM	100.00%	85.00%	84.62%	90.24%	88.57%	89.69%
BSHM	100.00%	72.73%	100.00%	95.71%	92.06%	92.10%
BSTM	100.00%	100.00%	100.00%	90.48%	100.00%	98.10%
BSCRIM	100.00%	95.24%	90.91%	95.38%	91.67%	94.64%
BSN	100.00%	84.38%	100.00%	100.00%	81.08%	93.09%
Mean	85.43%	83.27%	85.21%	90.50%	84.04%	85.69%

Table 4 presents the student progression rates across academic programs for five freshman cohorts from SY 2018–2019 to 2022–2023. The institutional mean progression rate was 85.69%, with cohort rates ranging from 83.27% to 90.50%, indicating consistently high and stable year-to-year progression. BS Tourism Management recorded the highest mean progression rate (98.10%), followed by BS Criminology (94.64%), BS Nursing (93.09%), and BS Hospitality Management (92.10%). In contrast, BS Information Technology had the lowest mean progression rate (62.61%), followed by BA Church Management (75.00%) and BS Electrical Engineering (79.37%). These variations may

reflect differences in academic preparedness, curriculum demands, and access to academic support. These findings align with Emekako and van der Westhuizen (2021), who emphasized the role of academic advising and structured student support in promoting progression. They also support Westrick et al. (2021), who identified first-year academic performance as a strong predictor of persistence and continued progression. Atif et al. (2021) likewise highlighted the influence of academic pathways, advising, and institutional support on progression, particularly in Information Technology-related programs. Overall, the findings indicate strong institutional progression but highlight the need for targeted interventions, particularly in programs with lower rates, through academic advising, early intervention, mentoring, and continuous monitoring.

Table 5
Graduation Rates of Student Cohorts by Academic Program from SY 2018–2019 To SY 2022–2023

PROGRAM	Graduation Rate	Graduation Rate	Graduation Rate	Graduation Rate	Graduation Rate	Mean Graduation Rate
BSCE	31.25%	29.79%	40.91%	40.98%	22.73%	33.13%
BSEE	36.36%	22.00%	37.50%	20.31%	36.73%	30.58%
BSCE English	14.29%	36.11%	41.46%	52.56%	36.07%	36.10%
BEED	30.00%	62.07%	52.00%	40.00%	39.53%	44.72%
ABCM	66.67%	0.00%	0.00%	22.22%	50.00%	27.78%
BSIT	0.00%	10.00%	19.57%	14.12%	26.14%	13.97%
BSA	0.00%	53.33%	30.00%	40.00%	65.52%	37.77%
BSBA FM	22.22%	33.33%	48.57%	41.18%	53.49%	39.76%
BSBA MM	20.00%	30.30%	36.36%	43.75%	41.82%	34.45%
BSHM	40.00%	35.71%	18.52%	38.17%	40.00%	34.48%
BSTM	0.00%	44.44%	41.67%	69.23%	51.85%	41.44%
BSCRIM	37.50%	43.75%	46.88%	34.20%	55.88%	43.64%
BSN	15.00%	38.10%	45.21%	43.12%	48.77%	38.04%
Mean	24.10%	33.76%	35.28%	38.45%	43.73%	35.07%

Table 5 presents the graduation rates across academic programs for five freshman cohorts from SY 2018–2019 to 2022–2023. The institutional mean graduation rate was 35.07%, increasing from 24.10% in the 2018–2019 cohort to 43.73% in 2022–2023, indicating improved completion outcomes over time. BEED recorded the highest mean graduation rate (44.72%), followed by BS Criminology (43.64%), BS Tourism Management (41.44%), BSBA–Financial Management (39.76%), and BS Nursing (38.04%). In contrast, BS Information Technology had the lowest mean graduation rate (13.97%), followed by BA Church Management (27.78%), BS Electrical Engineering (30.58%), and BS Civil Engineering (33.13%). These variations may reflect differences in academic preparation, program demands, financial circumstances, student motivation, and institutional support. The increasing graduation trend is consistent with OECD (2022), which emphasized the role of supportive learning environments and institutional policies in improving completion. Hernández-Torrano, Somerton, and Helmer (2020) likewise identified academic, financial, motivational, and institutional factors as important influences on graduation outcomes, while Lim, Lee, and Kim (2023) highlighted the value of academic advising, mentoring, early intervention, and progress monitoring. Overall, the findings indicate improving graduation outcomes but underscore the need for targeted support in programs with lower completion rates and continued longitudinal monitoring to strengthen student success and institutional planning.

Table 6
Correlation Analysis of Retention, Attrition, Progression, and Graduation Rates of Student Cohorts at Aldersgate College

Variables	Pearson Correlation (r)	p-value	Interpretation	Decision
Retention ↔ Attrition	-1	0	Perfect Negative Correlation	Significant
Retention ↔ Progression	0.505	0	Moderate Positive Correlation	Significant
Retention ↔ Graduation	0.559	0	Moderate Positive Correlation	Significant
Attrition ↔ Progression	-0.505	0	Moderate Negative Correlation	Significant
Attrition ↔ Graduation	-0.56	0	Moderate Negative Correlation	Significant
Progression ↔ Graduation	0.405	0.001	Moderate Positive Correlation	Significant

Table 6 presents the Pearson correlation analysis of retention, attrition, progression, and graduation rates at Aldersgate College. The results showed statistically significant relationships among the four indicators ($p < .05$). Retention and attrition had a perfect negative correlation ($r = -1.000$), reflecting their complementary nature. Retention was moderately and positively correlated with progression ($r = .505$) and graduation ($r = .559$), while attrition was negatively correlated with progression ($r = -.505$) and graduation ($r = -.560$). Progression also showed a moderate positive correlation with graduation ($r = .405$), indicating that students who progress consistently are more likely to complete their programs. Thus, we rejected the null hypothesis. These findings support Tinto (2017), who emphasized the interconnectedness of retention, persistence, and graduation, and NSSE (2023), Samoila and Vrabie (2023), and Mosia et al. (2026), who highlighted the importance of student engagement, academic advising, and institutional support in promoting persistence and completion. Overall, the findings demonstrate that these student success indicators are closely interconnected and that longitudinal cohort analysis can support evidence-based quality improvement, institutional planning, and data-informed decision-making to enhance student persistence and academic success.

Implications for Institutional Planning and Decision-Making

The longitudinal analysis of student cohorts from SY 2018–2019 to SY 2022–2023 provides a comprehensive picture of student movement from entry to graduation at Aldersgate College. The results show sustained growth in first-year enrollment, indicating rising institutional demand, although enrollment expansion was accompanied by variation in student persistence across academic programs. Across the five cohorts, retention, attrition, progression, and graduation rates exhibited distinct patterns. The transition from the first to the second year consistently emerged as the most critical stage of the academic journey, where student losses were greatest. In contrast, students who successfully advanced beyond the first year generally demonstrated higher progression and retention rates, increasing their likelihood of completing their academic programs. Graduation outcomes also improved in several academic programs over time, although differences among programs suggest that program-specific academic and institutional factors influence student success. Taken together, these findings demonstrate that evaluating retention, attrition, progression, and graduation simultaneously provide a more comprehensive assessment of institutional effectiveness than relying on graduation rates alone. Longitudinal cohort analysis enables the identification of critical transition points, high-performing programs, and programs requiring targeted interventions. Consequently, the findings offer empirical evidence to support strategic enrollment management, academic advising, student support services, resource allocation, quality assurance, and evidence-based institutional planning aimed at improving student success and educational quality. The findings have important implications for higher education institutions, particularly in strengthening student success initiatives. Because retention and progression are positively associated with graduation, institutions should focus on improving students' experiences in the early years of their academic programs, when student loss is most likely. Early identification of at-risk students, enhanced academic advising, mentoring, financial assistance, and student support services may increase persistence and improve graduation outcomes. The study also demonstrates the value of longitudinal cohort analysis as a strategic institutional monitoring tool. Regular analysis of cohort indicators enables administrators, deans, and program chairpersons to identify academic programs with consistently high or low performance, evaluate the effectiveness of intervention programs, and allocate institutional resources more efficiently. Moreover, the findings support integrating cohort-based performance indicators into institutional quality assurance, accreditation, strategic planning, and continuous program improvement initiatives.

Three-Year Action Plan for Improving Student Success Outcomes

Strategic Objective	Activities/Strategies	Responsible Office	Timeline	Success Indicator
Improve Student Retention	Strengthen first-year orientation, academic advising, mentoring, and early intervention programs for at-risk students.	Student Affairs Office, Guidance Office, Academic Deans, Program Chairs	Year 1	Increased first-year retention rate; reduced number of at-risk students
Reduce Student Attrition	Conduct regular monitoring of student withdrawals, implement exit interviews, and provide academic, financial, and counseling interventions.	Registrar's Office, Guidance Office, Student Affairs Office	Year 1–2	Reduced attrition rate across academic programs
Enhance Student Progression	Monitor cohort progression each semester, improve course scheduling, strengthen academic advising, and provide tutorial support.	Academic Affairs Office, Registrar's Office, Colleges	Year 2	Increased progression rate and timely promotion to the next year level

Increase Graduation Rate	Implement graduation readiness monitoring, degree audit, and completion support for graduating students.	Registrar's Office, Academic Deans, Program Chairs	Year 2–3	Increased graduation rate and on-time program completion
Institutionalize Cohort Monitoring	Develop an annual cohort monitoring and reporting system for retention, progression, attrition, and graduation indicators to support institutional planning and quality assurance.	Registrar's Office, Institutional Research Office, Quality Assurance Office	Year 1–3	Annual cohort reports produced and utilized for planning and decision-making

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that retention, attrition, progression, and graduation rates are significantly associated and collectively describe the academic persistence of student cohorts at Aldersgate College. Higher retention rates were linked with better progression and graduation outcomes, whereas higher attrition rates were associated with lower levels of student progression and degree completion. These findings confirm that student success depends on students' ability to remain enrolled and progress through successive year levels until graduation. Rejecting the null hypothesis indicates that the relationships among the four student success indicators are statistically significant. The results validate the usefulness of longitudinal cohort analysis as a comprehensive approach to monitoring student movement from admission to graduation. Consequently, retention, attrition, progression, and graduation rates serve as reliable institutional performance indicators for evaluating academic programs and supporting evidence-based planning and decision-making.

RECOMMENDATIONS

Based on the findings, the College should strengthen student success initiatives by enhancing first-year orientation, academic advising, mentoring, counseling, and early intervention programs to improve student retention. Academic programs should implement targeted strategies to reduce attrition by addressing academic, financial, and personal factors affecting student persistence. To improve student progression, departments should regularly monitor cohort performance, ensure timely course offerings, and strengthen academic advising to support on-time advancement. Programs with low graduation rates should develop evidence-based improvement plans, including graduation readiness monitoring and enhanced academic support, to increase completion rates. Furthermore, the institution should institutionalize the regular monitoring of cohort indicators—retention, progression, attrition, and graduation—to support evidence-based planning, quality assurance, and continuous improvement. Future research may investigate additional factors influencing student success, such as academic performance, socioeconomic status, student engagement, and institutional support, to provide a more comprehensive basis for policy and program development.

AI DECLARATION STATEMENT

AI-supported tools helped with grammar and structure in creating this article. No AI tools were used to collect, analyze, or interpret data; all authors are credited for their academic contributions.

REFERENCES

- Bayudan-Dacuy, C. G., Cabuay, C. J., & Luzon, P. E. (2024). *Expansions, quality, and affirmative action in public higher education institutions*. Philippine Institute for Development Studies (PIDS).
- Bowles, T. V., & Brindle, K. A. (2017). *Identifying facilitating factors and barriers to improving student retention rates in tertiary teaching courses: A systematic review*. *Higher Education Research & Development*, 36(5), 903–919. <https://doi.org/10.1080/07294360.2016.1264927>
- Braxton, J. M. (Ed.). (2000). *Reworking the student departure puzzle*. Vanderbilt University Press.
- Commission on Higher Education. (2012). *CHED Memorandum Order No. 46, s. 2012: Policy-standard to enhance quality assurance (QA) in Philippine higher education through an outcomes-based and typology-based QA*. Government of the Philippines.
- Commission on Higher Education. (2023). *Higher education indicators*. Government of the Philippines.
- de la Cruz-Campos, J.-C., Victoria-Maldonado, J.-J., Martínez-Domingo, J.-A., & Campos-Soto, M.-N. (2023). *Causes of academic dropout in higher education in Andalusia and proposals for its prevention at university: A systematic review*. *Frontiers in Education*, 8, Article 1130952.
- Ditucalan, T. (2024). *A decadal analysis of trends and patterns in student enrollment across academic programs of San Sebastian College-Recoletos de Cavite*. *JPAIR Multidisciplinary Research*.
- Lorenzo-Quiles, O., Galdón-López, S., & Lendínez-Turón, A. (2023). *Factors contributing to university dropout: A review*. *Frontiers in Education*, 8, Article 1159864.
- Mosia, M., Sekonyela, L., Egara, F. O., Nimy, E., Mabokgole, I. M., & Nannim, F. A. (2026). *Bayesian hierarchical modelling of academic orientation and advising effects on student retention and progression: Multi-cohort evidence*. *PLOS ONE*.

- National Survey of Student Engagement. (2023). *Engagement insights: Survey findings on the quality of undergraduate education*.
- Nieuwoudt, J. E., & Pedler, M. L. (2023). Student retention in higher education: Why students choose to remain at university. *Journal of College Student Retention: Research, Theory & Practice*, 25(2), 365–386. <https://doi.org/10.1177/1521025120985228>
- Organization for Economic Co-operation and Development. (2023). *Education at a glance 2023: OECD indicators*.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research* (Vol. 2). Jossey-Bass.
- Philippine News Agency. (2024). *CHED launches admission, retention research amid high attrition rate*.
- Samoila, M. E., & Vrabie, T. (2023). First-year seminars through the lens of Vincent Tinto's theories of student departure: A systematic review. *Frontiers in Education*, 8, Article 1205667.
- Seidman, A. (Ed.). (2012). *College student retention: Formula for student success* (2nd ed.). Rowman & Littlefield.
- Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. *The Journal of Higher Education*, 59(4), 438–455.
- Tinto, V. (2012a). *Completing college: Rethinking institutional action*. University of Chicago Press.
- Tinto, V. (2012b). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). University of Chicago Press.
- Tinto, V. (2017). Through the eyes of students. *Journal of College Student Retention: Research, Theory & Practice*, 19(3), 254–269. <https://doi.org/10.1177/1521025115621917>
- UNESCO Institute for Statistics. (2023). *Global education monitoring indicators*.
- World Bank. (2022). *Higher education for economic transformation*.