

Pedagogical Determinants of Variability in Course Learning Outcome Attainment in Academic Writing: A Case Study

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ABSTRACT

The current study analyzes the differences in attainment of Course Learning Outcomes (CLOs) for three sections of ENG 102: English Composition 2 at the Modern College of Business and Science. Using a case study approach, the research conducts quantitative examinations of student performance records alongside rubric-based evaluation to identify achievement trends pertaining to four specific CLOs: mastery of the argumentative structure, counterargument development, report writing, and the composition of research papers through both collaborative authorship and source integration as described in CLO 4. The results indicate that although CLO 2 showed relative consistency across sections, CLOs 1, 3, and 4 exhibited significant differences. The higher performance observed in CLO 1 for Sections D1 and D2 may be attributable to the benefits of scaffolded genre-based instruction, while stronger attainment of CLO 3 in Section D7 seems to reinforce the notion that an early, explicit teaching of report writing serves propulsive purposes. On the contrary, the consistently lower performance across all sections in CLO 4 raises concerns about insufficient instructional scaffolding in the guided practice of collaborative research writing and source integration. Though instructional approaches were not directly observed, the conclusions offer opportunities for partially evidence-based hypotheses concerning the possible impact of instructional design and rubric alignment on student performance. To improve the attainment of CLOs in the given context, it is suggested that variability be streamlined by adopting standardized rubrics, collaborating on a skeletal instructional framework across sections, and integrating research writing instruction in the early parts of the course.

Keywords: CLO Attainment, Academic Writing Assessment, Rubric-Based Analysis, Instructional Variability, Pedagogical Alignment

INTRODUCTION

Academic writing courses lie at the heart of university study, helping students build the analytical and rhetorical tools they need to write well in any discipline. Beyond improving fluency, the classroom experience trains learners to think critically, marshal evidence, form persuasive arguments, and join scholarly conversations with confidence. In this setting, Course Learning Outcomes (CLOs) act as clear guideposts for planning lessons, delivering material, and grading student work. By spelling out what learners should know and be able to do, CLOs make teaching more purposeful and ensure that progress can be tracked and reported. Though CLOs are meant to lend consistency, student success still varies from one outcome to another in these writing classes. Some goals are consistently achieved across different sections and semesters, while others reveal significant gaps in performance. Such patterns prompt key pedagogical questions: What makes certain skills more challenging for students to master? How do teaching methods, curriculum design, and the way assignments are scored shape these results?

Rather than seeing the differences as problems, this study treats them as diagnostic evidence, a starting point for probing and refining the instructional systems that influence writing development.

The significance of this study lies in its focus on enhancing academic writing classes, ensuring that these courses effectively achieve their stated learning outcomes and, in turn, prepare students for their majors, careers, and future scholarly endeavors. When sections or individual assignments show sharply varying levels of alignment with the learning outcomes, they reveal uneven support, grading standards, and timely feedback inequities that jeopardize program fairness and weaken the credibility of an outcome-centered curriculum. Identifying the reasons for that inconsistency is therefore a vital, if preliminary, task on the road to writing instruction that is both more effective and more equitable for all learners. To this end, the study at hand identifies the least successful learning outcomes, contrasts section averages with granular rubric evidence, and evaluates classroom interventions that could account for the observed score patterns. The resulting insights are intended not only to shape targeted faculty-development sessions and modest syllabus updates but also to nudge colleagues toward closer alignment among outcomes, assessment, and pedagogy, so that every student receives the same high-quality writing education.

The problem motivating this research is the persistent and puzzling differences in how students achieve course-learning outcomes in academic writing classes, despite years of instructional reform. Some learning goals are mastered steadily across all class sections, yet others display wide swings in performance from one group to another. Such unevenness suggests that particular teaching methods or grading procedures are more effective or less effective in helping learners achieve certain outcomes. Absent a careful review of these patterns, instructors and program directors cannot pinpoint the reasons behind the gaps and decide how to close them. This study, therefore, aims to map the extent of CLO variability and link specific pedagogical and assessment choices to the observed gains and shortfalls. Accordingly, this study primarily aims to identify the classroom and course-related factors that influence the uneven achievement of Course Learning Outcomes (CLOs) in academic writing classes at the Modern College of Business and Science. Taking a qualitative case-study approach, the analysis is guided by three specific objectives:

- To chart overall trends in CLO scores across some writing sections and pinpoint specific outcomes that show marked fluctuations.
- To trace sectional performance patterns through rubric-based data, revealing consistent gaps and the contextual elements that may explain them.
- To propose practical, evidence-driven changes in pedagogy, curriculum, and assessment that could narrow these gaps and lift overall student achievement.

By meeting these aims, the research hopes to create fairer and more effective writing instruction in which every learner has a more straightforward pathway to the programs intended writing competencies.

To provide a clear and purposeful direction for the investigation, the study will be guided by the following research questions:

- What noticeable trends can be identified regarding CLO attainment within academic writing courses, and what outcomes demonstrate considerable variability?
- In what ways does variability in CLOs manifest through section-level performance trends and data from rubric assessments?
- Based on the research findings, what targeted strategies could be developed to enhance instructional design and minimize variability in CLO attainment?

LITERATURE REVIEW

This literature review integrates research from five pertinent domains pertaining to the study: (1) Course Learning Outcomes (CLOs) and Outcome Based Education (OBE), (2) assessment through rubrics, (3) scaffolding instruction and sequence teaching, (4) co-authorship of academic texts, and (5) alignment at the institutional and pedagogical levels. Collectively, these strands offer a theoretical and empirical basis for explaining the variability in attainment of CLOs in writing contexts at higher education levels.

CLOs play a critical role in the OBE paradigms, which focus on evaluable learning outcomes corresponding to set teaching objectives. Mustaffa et al. (2019) developed a quantitative model for measuring CLO based on the use of performance vectors and thresholds, showcasing the potential of CLO data for identifying instructional gaps across large student cohorts. Zayani et al. (2024) built upon these findings by developing an automated CLO/PLO assessment framework to provide targeted feedback for improving instructional evaluation. Lam and Tsui (2013) furthered this work by curriculum mapping to assess the degree of alignment between subject learning outcomes. They taught course content, reinforcing the significance of spiral curriculum design in achieving outcome coherence.

The use of rubrics is well-known for improving the clarity, consistency, and self-assessment regulation of students. Teaching and learning is enhanced with rubrics because expectations are made clear, as described by Reddy and Andrade (2009). Razi (2015) created a rubric for academic writing assessment which incorporates tools for detecting plagiarism, thus providing a model for ethically responsible academic writing evaluation. Budiharso et al. (2024) increased cognitive rigor by applying Bloom's taxonomy to rubric creation. Apridayani et al. (2024) and Mrangu (2022) focused on fairness and transparency provided by rubrics, while Alawad (2025) showed how feedback and assessment based on adaptive rubrics reliably improve writing skills and assessment accuracy.

Scaffolding is essential for aiding students' development for increasingly sophisticated writing tasks. As shown by Tai et al. (2021), utilizing functional MRI, writing within a scaffolded instruction framework clears cognitive load and enhances writing performance. Tabib (2022) and Ikawati (2020) highlighted the positive results of structured scaffolding in improving paragraph organization and genre consciousness. While Butarbutar (2024) examined students' views on online scaffolding tools, Murrell-Jones (2018) has applied cognitive load theory to advocate for instruction that minimizes extraneous cognitive load for learners new to writing.

Collaborative writing is an essential part of developing academic literacy, though it poses problems with respect to coordination and accountability. Noroozi et al. (2016) and Heinonen et al. (2020) demonstrated that providing peer feedback and scripting not only enhances argumentation but also engagement. Usher et al. (2024) showed that AI-enabled coordination tools facilitate peer editing within online writing courses. Thirakunkovit and Boonyaparakob (2022) demonstrated that through task-based collaborative writing, learners gain a deeper understanding of the research process. Alawad and Mujumdar (2025) included the socio-affective dimension and demonstrated that students are anxious about giving peer feedback, but appreciate how it affects their writing and engagement.

Equitable learning outcomes necessitate institutional coherence in educational frameworks. Ginting and Barella (2022) analyzed the Writing Center's pedagogical functions in relation to the academic roles of writing centers. Paying attention to cognitive load is essential, as highlighted by Murrell-Jones (2018) in discussing instructional design. Lam and Tsui (2013) showed that curriculum mapping can uncover design gaps or redundant instructional blocks, thereby serving as a means for aligning course-level learning outcomes with institutional objectives.

Relevant Studies

Several relevant reviewed studies provide valuable insights that help understand CLO achievement in conjunction with instructional variation. Zayani et al. (2024) developed an automated CLO/PLO evaluation framework to streamline instructional feedback. Budiharso et al. (2024) and Razi (2015) developed rubrics by adding ethical and cognitive layers. Alawad (2025) demonstrated how AI-based feedback systems enhance writing skills, and Apridayani et al. (2024) conducted a study comparing assessment with teacher involvement only to the evaluation with student participation. In the area of scaffolding, Tai et al. (2021), Tabib (2022), and Ikawati (2020) demonstrated the teaching and learning value of organized help. Butarbutar (2024) discussed the role of digital instructional scaffolding in writing. The studies by Noroozi et al. (2016), Heinonen et al. (2020), and Usher et al. (2024) on collaborative writing emphasized the importance of peer feedback and structured coordination. Thirakunkovit and Boonyaparakob (2022), along with Alawad & Mujumdar (2025), discussed the affective and reflective dimensions of collaborative writing. These studies add to the growing body of knowledge on writing instruction and CLO assessment, enriching the theory and practice of these fields.

Literature Gap

Notwithstanding the increasing literature on CLO assessment, the design of rubrics, scaffolding, collaborative writing, and many other topics, a critical intersection within section-level academic writing pedagogy instruction remains unaddressed. As highlighted in Mustaffa et al. (2019), Zayani et al. (2024), and Lam and Tsui (n.d.), there has been a focus on program-level CLO integration and curriculum mapping, which appears to overlook micro-level instructional variability within course sections. This study aims to bridge this gap by exploring the extent to which instructional sequencing, scaffolding, rubric application, and three-section variations of a single course impact CLO attainment. Focusing on transparency in assessment tools, Razi (2015) and Budiharso et al. (2024), together with Mrangu (2022), have directed scholarship towards rubric construction. There is an overwhelming lack of studies that diagnose instruction gaps using aligned performance data, primarily through a quantitative lens. Addressing this gap, Alawad (2025) uses adaptive rubrics paired with AI feedback to demonstrate assessment inconsistency and reinforce reliability, thereby filling the gap through underscoring adaptive feedback and AI-augmented frameworks. Tai et al. (2021), Tabib (2022), and Ikawati (2020) have explored scaffolding and its cognitive and developmental benefits. These studies primarily focus on individual learners or specific experimental cases of learning. None of the studies examine the overarching outcomes of course (CLOs) on collective scaffolding related to course progression. The focus on peer interaction and collaboration in writing has been

studied by Noroozi et al. (2016), Heinonen et al. (2020), and Usher et al. (2024). However, the relationship between the structures of collaborative writing and the variability of CLOs is still a gap in research. Alawad and Mujumdar (2025) fill this gap by exploring how students' emotional and engagement responses affect the efficacy of peer feedback. Nguyen et al. (2024) and Butarbutar (2024) have investigated digital scaffolding and AI-assisted writing, which remains underexplored alongside traditional teaching and learning principles. This study shifts the focus back to foundational pedagogical principles, including the creation of rubrics, the timing of feedback, task sequencing, and contemporary assessment frameworks.

METHODOLOGY

Participants

This research is based on data gathered from 85 students in three sections of ENG 102: English Composition 2 at the Modern College of Business and Science during the Spring 2025 semester. These students completed advanced academic writing tasks designed to sharpen their skills in argumentation, sourcing, and collaborative research. The course builds on complete reasoning and foundational composition skills, focusing on critical thought, complex argument construction, and research writing appropriate for professional contexts.

Sampling Methods

Participants were selected using purposive sampling, focusing on students enrolled in ENG 102, to assess Course Learning Outcome (CLO) achievement in a coherent instructional context. To provide a basis for comparative evaluation, the three sections were organized into groups based on instructional variables: assessment design, task sequencing, and emphasis on collaborative research. This stratified-sectional approach enabled the study to investigate the extent to which instructional variation may influence course learning outcomes (CLO) attainment.

Research Design

To understand the phenomenon of variability in the attainment of course learning outcomes (CLOs), this study utilizes a case study design based on performance data. This approach permits a focused evaluation of instruction, learning, and teaching within the course ENG 102, which is in alignment with the intended goals of this research: First, it seeks to assess patterns of engagement with CLO attainment across the three sections of ENG 102, highlighting trends and gaps in scholarly writing achievement. Second, the design allows for the assessment of section-level instructional impact against the rubric-based assessment data. Third, it benchmarks CLO attainment against rubric-driven criteria to expose gaps and misalignment within instruction, thus illuminating areas that can enhance teaching impact. Focusing on the academic writing course ENG 102, the analysis mainly centered on four course CLOs shown in Table 1, which collectively highlight the components of pivotal argumentation, integration of diverse sources, and collaborative inquiry writing:

Table 1. Analytical Framework for Evaluating CLO Attainment in ENG 102

CLO	Focus Area	Description
CLO 1	Knowledge	Demonstrate understanding of the structure of an argumentative essay
CLO 2	Skills	Employ cognitive and technical skills to write counterclaims and refutations.
CLO 3	Communication, Numeracy, and ICT	Analyze information from newspapers or scientific articles
CLO 4	Learning to Learn	Collaborate effectively to formulate an argumentative research paper

These learning outcomes guide the analysis of instructional differences within a given course and track progression in student achievement.

Study Approach

To achieve the goals of analysis in this investigation, the study employs a document-based methodology aligned with the conclusions of learning outcomes (CLOs) and evaluation rubrics from three sections of ENG 102. As per the design requirements of this study, no interviews, surveys or observations were conducted; instead, the analysis relies solely on quantitative scoring matrices and assessment records. This focused methodology allows for the systematic study of patterns in the attainment of CLOs and the identification of consistent trends alongside section-specific differences. Through the comparison of recorded CLO performance and rubric criterion, instructional impact is disentangled, revealing student achievement gaps. Based on these results, instructional strategies are proposed to enhance alignment and outcome variability.

Data Analysis Procedures

The analysis was structured around three components, each focusing on different aspects of variability regarding CLO attainment alongside pedagogically actionable insights. While institutional records were used to verify the percentages of CLO attainment, the study did not employ any mean score calculations or matrix-based comparisons. Evaluation in the present study was based on both descriptive interpretation and rubric alignment, which shaped the separate assessments of performance patterns across sections.

Descriptive Attainment Review

- The attainment data were derived from three ENG 102 sections, and as such, raw percentage scores were used for the examination.
- Across all four targeted CLOs, these percentages represented fixed measures of student achievement.
- Observable performance discrepancies were documented without any statistical aggregation or transformation of data.

Rubric-Informed Interpretation

- Each CLO outcome was analyzed through the lens of preset rubrics, which are aligned with instructional expectations, as standardized descriptors.
- Cross-sectional performance discrepancies have been attributed to rubric-defined domains, such as thesis clarity, source integration, structural cohesion, and others.
- The rubric-based rationale and criteria alignment on the recorded CLO scores maintained instructional delivery's coherence and scaffolding.

Comparative Sectional Analysis

- The sections' variation was descriptively evaluated to look for patterns within an instructional design and its corresponding outcome achievement.
- Performance gaps pertaining to specific Course Learning Outcomes (CLOs) were analyzed through the lens of rubric transparency and focus on the learning tasks as opposed to considering learner characteristics and outside factors.
- Instructional design aimed at addressing systematic inequities within a single course structure variation informed by persistent gaps taught by differing instructors with differing teaching philosophies.

Data Collection Tools

The data relevant for the current study were collected from institutional records of course grades as well as from standardized rubrics assessing four Course Learning Outcomes (CLOs) for ENG 102. No other data collection methods, such as surveys, interviews, or observations, were used. The rubric documents were constructed in a way that corresponded with the descriptors for the CLOs, allowing for consistent interpretation of student performances across multiple class sections. The records contained complete percentage values for each CLO, which were analyzed descriptively to detect trends and patterns in teaching and learning over time and across sections, without the need for formal statistical methods. All performance metrics were obtained from the institution's EduPortal dashboard, as illustrated in Figures 1, 2, and 3.

FINDINGS AND DISCUSSION

The current section presents the results for achieving course learning outcomes (CLOs) in three ENG 102 sections—D1, D2, and D7—using percentage data retrieved from EduPortal and assessed rubrics. Further discussion interprets these results within the context of pedagogy-focused, overarching performance patterns and outcomes driven by instructional rubrics, highlighting the impacts of teaching methodology on CLO fluctuations.

Findings: Section D1

Table 2. CLO Attainment – ENG 102, Section D1 (n = 29)

CLO	Description	Achievement (%)
CLO 1	Demonstrate understanding of argumentative essay structure	82
CLO 2	Write paragraphs with counterclaims and refutations	75
CLO 3	Use and analyze information from newspapers or scientific articles	70
CLO 4	Collaboratively formulate an argumentative research paper	75

As evidenced in Table 2 and Figure 1, Section D1 achieved an 82% attainment in achievement level CLO 1, indicating that learners performed well in the argumentative essay's constituent parts and structure. This likely stems from the implementation of rubrics, scaffolds, and explicit model teaching strategies. Attainment in CLOs 2 and 4 at 75% each indicates moderate success in counterargument construction and collaborative research writing, respectively. These outcomes suggest that while basic argumentative competencies and collaboration were supported in the design of the tasks, peer interaction or task design may still require some refinement. The 70% attainment in CLO 3, the lowest of all CLOs, suggests that the learners faced difficulties with APA referencing and source citation due to a lack of exposure to citation practices or a restricted range of source materials. This underscores the need to front-load referencing and citation instruction, which can be effectively taught through iterative low stakes writing assignments, early in the course.

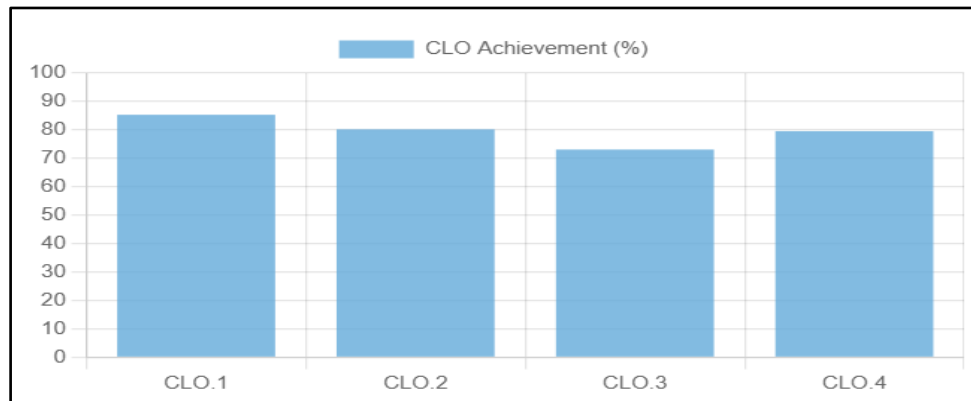


Figure 1. Course CLOs for ENG 102, Section D1 – All 29 Students

Findings: Section D2

Table 3. CLO Attainment – ENG 102, Section D2 (n = 29)

CLO	Description	Achievement (%)
CLO 1	Demonstrate understanding of argumentative essay structure	80
CLO 2	Write paragraphs with counterclaims and refutations	70
CLO 3	Use and analyze information from newspapers or scientific articles	65
CLO 4	Collaboratively formulate an argumentative research paper	70

In Section D2, as shown in Table 3 and Figure 2, students' performance was comparatively balanced across all four CLOs, with CLO 1 at 80% being the strongest. This demonstrates that students most likely received appropriate teaching on thesis statements and paragraphing techniques, enabling them to formulate well-structured argumentative essays. Proficient performance, as reflected in CLOs 2 and 4, both at 70%, show an adequate ability to develop counterarguments and participate in collaborative writing activities. The lowest attainment of 65% in CLO 3 suggests that students encountered challenges with citation or source integration using APA formatting, which may include proper source incorporation or adherence to APA style guidelines. These results illustrate the need for more targeted and earlier instruction on referencing frameworks to enhance students' academic writing and information literacy.

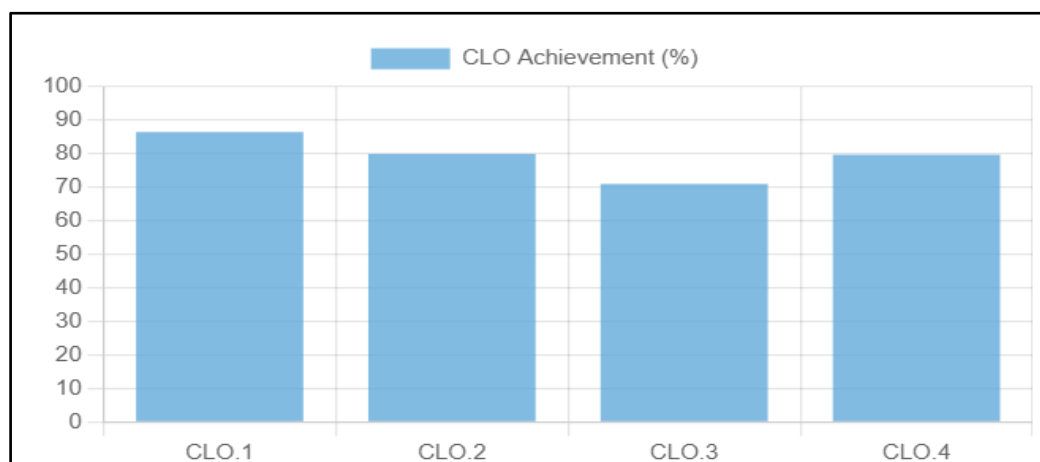


Figure 2. Course CLOs for ENG 102, Section D2 – All 29 Students

Findings: Section D7

Table 4. CLO Attainment – ENG 102, Section D7 (n = 27)

CLO	Description	Achievement (%)
CLO 1	Demonstrate understanding of argumentative essay structure	60
CLO 2	Write paragraphs with counterclaims and refutations	70
CLO 3	Use and analyze information from newspapers or scientific articles	80
CLO 4	Collaboratively formulate an argumentative research paper	60

With respect to Table 4 and Figure 3, Section D7 displayed a profile that was distinct from others, with a high performance of 80% in CLO 3 and 60% in CLOs 1 and 4. The high score attained in CLO 3 indicates that the students were likely taught how to reference and analyze sources early on and that these skills were built upon throughout the course. On the contrary, the low score in CLO 1 suggests that students received little modeling or feedback on the essay's structure. This also applies to the low score received in CLO 4, which indicates difficulties with group coordination or participation in writing tasks within a group setting.

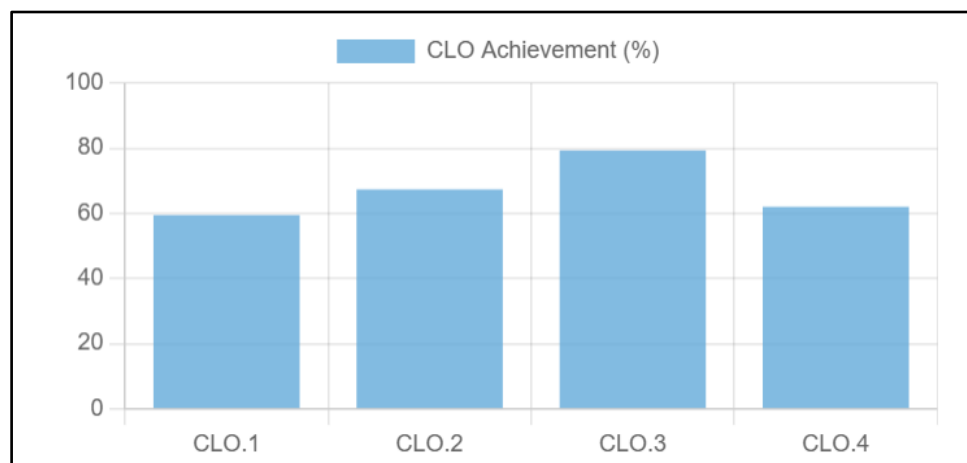


Figure 3. Course CLOs for ENG 102, Section D7 – All 27 Students

Comparative Findings Across Sections

Table 5. CLO Attainment Comparison – Sections D1, D2, and D7

CLO	Description	D1 (%)	D2 (%)	D7 (%)
CLO 1	Argumentative essay structure	82	80	60
CLO 2	Counterclaims and refutations	75	70	70
CLO 3	Source use and APA referencing	70	65	80
CLO 4	Collaborative argumentative research paper	75	70	60

As Figure 4 and Table 5 demonstrate, a comparison of CLO attainment in Sections D1, D2, and D7 reveals some specific teaching trends. With regard to students' understanding of the argumentative essay's structural components, CLO 1 yielded the highest scores in both D1 and D2 but a markedly lower result in D7. This inconsistency points to a contingent structural teaching inconsistency: D1 and D2 appeared to receive explicit modeling and scaffolded instruction, whereas D7 did not. Conversely, CLO 2, which assessed the learners' abilities to counterclaim and refute, showed consistent performance across the three sections, with stable results. This suggests a balanced baseline instructional floor on argumentative skill teaching across all three sections. Notably, D7 performed highest on CLO 3, which assesses students' skills in utilizing and analyzing information from external sources. This could indicate that prior instruction in that section, which focused on referencing and citations, was stronger, or that segment received more thorough teaching. Lastly, for CLO 4, which assesses collaborative research writing, D1 had the strongest performance, while D7 had the weakest. This suggests differences in the design, implementation, and guidance provided to the observed group. Altogether, these patterns highlight the pedagogical focus and the CLO-specific outcomes that are shaped by the sequencing and instructional design of the teaching.

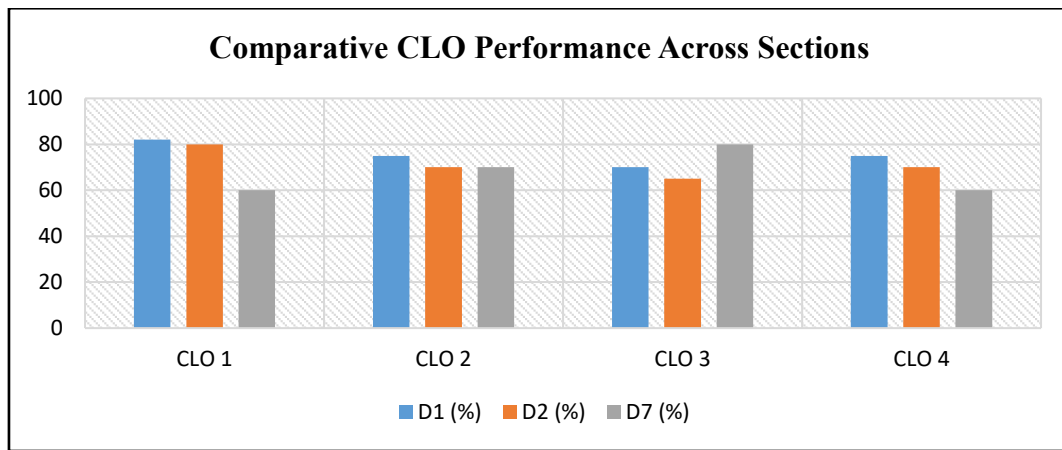


Figure 4. Comparative CLO Performance Across Sections

DISCUSSION

This section investigates the teaching practices that impact the variability in Course Learning Outcome (CLO) achievement across ENG 102 Sections D1, D2, and D7. Utilizing performance metrics and assessments aligned with rubrics, the discussion is structured into two parts: findings pertaining to specific CLOs and interpretation based on rubric assessments.

CLO-Specific Findings Across Sections

The examination showcases both trends and gaps that align with the defined research goals. Regarding CLO 2, which focuses on counterclaim construction and refutations, there was reasonably stable performance across all three sections, indicating some foundational instructional coherence. In contrast, CLOs 1, 3, and 4 showed considerable inconsistency, revealing disparate instructional focuses, order in which skills were taught, and levels of instructional support provided. As for CLO 1, which focuses on the structure of an argumentative essay, it was best developed in Sections D1 and D2, indicating successful genre-based teaching and structural modeling. Section D7's lower attainment, however, suggests a lack of adequate scaffolding and feedback in this particular area. Regarding CLO 3 (use of sources, APA style referencing), it reached its peak in Section D7, indicating a need for more focused instruction on source citation and analysis. This shows that consistent early instruction on referencing could enhance information literacy skills. Finally, CLO 4 (collaborative academic writing) achieved the highest scores in Section D1, likely due to the group planning and peer accountability structures. The lower score from D7 highlights a gap related to purposeful design that aims to foster collaboration.

Rubric-Informed Interpretation

To interrogate the trends observed with the CLOs, the study employed a rubric-informed approach utilizing three ENG 102 rubrics: argumentative essay, research-based essay, and report writing. Each rubric defined CLOs as instructional goals that could be assessed through specific, observable components.

Rubric-CLO Alignment: CLOs 1 and 2 are directly linked to evaluation criteria such as "Thesis Statement," "Support for Position," and "Essay Structure." "In-Text Citations" and "Reference List" of APA citation precision align with CLO 3. "Coherence and Cohesion" as they pertain to collaboration are yet another gap rubrics demonstrate; thus, these are indirectly aligned with CLO 4.

Sectional Achievement Trends: The strong attainment of CLO 1 in D1/D2 is aligned with comprehensive structural rubric domain achievement. D7's strong performance on CLO 3 demonstrates strength with APA components. D1 contributions likely supported the rubric area under focus (transitions, cohesion) in group cohesion that was not present in D7, leading to a lack of emphasis in D7 but was bolstered in D1.

Assessment Transparency: Classes where rubric application was consistent and formative feedback was provided exhibited higher instructional alignment. Consistency within the provided criteria and feedback, where the Description of performance was clear, appeared to enhance learner efficacy and achievement, bringing understanding to all learners. However, this was not the case with variability due to a lack of consistent application, which was attributed to the rubric.

CONCLUSION

This research examined differences in Course Learning Outcome (CLO) achievement in three sections of ENG 102 at The Modern College of Business and Science. The analysis was carried out using a performance-based approach relative to class scores marked against rubrics, as well as assessment data. The study aimed to determine the achievement patterns and infer pedagogical factors contributing to the gaps in attainment by focusing on four CLOs: argumentation structure, counterargument formulation, integrated sourcing, and writing in teams.

The results exhibited considerable convergence in achievement for CLO 2 (counterclaims and refutations), which is suggestive of some instructional convergence across sections. However, for CLOs 1, 3, and 4, pronounced divergence was evident. CLO 1 achievement in Sections D1 and D2 was above average due to the benefits arising from genre-based instruction along with systematic modeling. Section D7's higher attainment in CLO 3 illustrates the effectiveness of explicit referential citation instruction, along with APA style, early in the curriculum. The lower across-section attainment for CLO 4 indicated difficulties with collaborative writing, especially in the absence of accountabilities in the instructional design.

Rubric-informed interpretation illuminated and analyzed these trends. It was determined that students experienced optimal clarity, cohesion, and performance outcomes when rubrics describing formative rubrics were closely aligned with CLO expectations. The benefits were gained only if those rubrics were applied consistently within formative contexts. Attainment variability was often linked to differences in rubric application, instructional sequence, or transparency in assessment.

The study, in its entirety, corroborates that CLO variability not only stems from differing instructional approaches but also from the degree to which structured pedagogical frameworks and scaffolded assessments support intended learning outcomes. The absence of interviews, surveys, and observational tools, as well as the integration of quantitative trend analysis and rubric interpretation, provided this research with a framework to evaluate instructional coherence, which can be replicated within writing-intensive academic contexts.

LIMITATIONS OF THE STUDY

Although this research makes a significant contribution to understanding the patterns of CLO variability and the effects of instruction, several limitations should be considered. First, the scope was limited to three sections of a single course offered at a single institution. This scope restriction may hinder the cross-context academic applicability of the findings. Second, using solely quantitative measures of performance as data interpretation through rubric analysis defense, relying on quantitative metrics, excludes the qualitative voice of instructors or students. Their insights could have illuminated the educator's intentions, classroom interactions, and learner engagement more deeply. Third, the analysis disregarded holistic perspectives, including students' pre-existing strengths in writing, their language background, or motivational levels, which stand to impact the realization of CLOs in varying degrees. These constraints illustrate the need for a broader approach and context framework, which a multi-methods strategy could provide, while confirming the robust findings within their boundaries.

RECOMMENDATIONS

Based on the findings, it is necessary to enhance instructional consistency and improve the achievement of Course Learning Outcomes (CLO) within the context of the case study as well as in the broader context of developing academic writing programs. While this study focused on a particular institution, the variability of CLOs and their instructional implications reveals complexity in many higher education contexts. Thus, the following recommendations are intended to foster local implementation while also informing wider pedagogical practice:

Ensure Consistency and Transparency of Assessment Rubrics at Institutional Levels. All sections of a particular course must share the same rubric to ensure learning goals are communicated and assessed equitably across all sections. Sharing rubrics with learners at the beginning of the assignment enables them to manage their strategies and motivates alignment towards identified learning outcomes.

Embed Instruction for Referencing Skills Throughout the Course. Academic writing programs must teach citation and source integration skills earlier in the course sequence. Formatively assessing these skills enables students to appreciate the internalization of the practitioner role in relation to scholarly integrity and information literacy.

Use Genre Modeling to Enhance Structural Mastery. Providing annotated exemplars, as well as guided outlines, to students can clarify the components of an argumentative text and is particularly useful in multilingual or emerging academic contexts where students may not be familiar with the expectations of a specific genre.

Design Collaborative Writing with Built-In Accountability. Effective group writing extends beyond simply assigning students to groups. Institutions should support faculty in the use of defined collaborative frameworks that incorporate peer review, role assignment, and milestone-based participation tracking to facilitate balanced contributions and cohesive group output.

Foster Instructor Inter-collaboration and Pedagogical Cohesion. Differentiation in the attainment of course learning outcomes (CLOs) by students often results from differences in instructional delivery. Fostering vertical collaboration among instructors through design teamwork, cross-instructional peer reviews, or collective grading has the potential to improve coherence and address outcome inequities among students.

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