Navigating Academic Success: The Impact of CGPA Goal Setting on Student Performance

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The European Conference on Education 2024 Official Conference Proceedings

Abstract

In academia, goal setting is crucial for success and personal growth, guiding students throughout their educational journey. It provides direction, motivation, and a sense of purpose, helping students navigate challenges and achieve their intellectual aspirations. Sunway University's American Degree Transfer Program (ADTP) facilitates credit transfer to U.S. universities, offering cost-saving and grading systems mirroring those in the U.S. Maintaining a commendable Cumulative Grade Point Average (CGPA) is emphasized, enhancing prospects for university enrolment and scholarships. A comprehensive study spanning two semesters delved into the influence of students' CGPA goal setting on student performance, particularly as a catalyst for increased effort. Among the 60 students surveyed, 30 set their CGPA goals with their academic advisor at the beginning of the semester. Students are encouraged to intensify their efforts should their coursework fall short of their target grades during the semester. The comparison of 2 semesters served as checkpoints for academic advancement. Notably, the survey findings highlight the efficacy of goal setting, with 90% of the selected students demonstrating notable strides in achieving their targeted results. Efforts are dedicated to supporting the remaining 10% in their academic pursuits, underscoring the institution's commitment to holistic student development. Furthermore, among the students who did not set desired grades, only 57% exhibited improvements in their academic performance, highlighting the transformative potential of goal setting in fostering individual growth and academic success.

Keywords: Goal-Setting, CGPA, Academic Success



The International Academic Forum www.iafor.org

Introduction

In academia, goal setting serves as a fundamental pillar for success and personal growth (Locke & Latham, 2002). Whether embarking on a scholarly journey at the high school, undergraduate, or postgraduate level, establishing clear and measurable objectives is essential for navigating the intricate landscape of education. Academic goal-setting provides a roadmap for intellectual achievement and fosters motivation, self-discipline, and a sense of purpose (Manderlink & Harackiewicz, 1984), As students pursue excellence in their studies, the deliberate identification of academic goals becomes a catalyst for focused effort, resilience in the face of challenges, and, ultimately, the attainment of intellectual aspirations. Experimental studies (John et al. 2020, Schippers et al. 2020), revealing better academic outcomes even from non-specific goal setting, suggest a deeper interplay between goal expression, self-awareness, and commitment.

Sunway University's American Degree Transfer Program (ADTP) is designed for students aspiring to seamlessly transfer their credits and continue their academic journey at universities in the United States. By participating in the ADTP program, students can capitalize on potential cost savings due to favorable currency exchange rates while accumulating the necessary credits for transfer to their preferred U.S. universities. Notably, the grading system employed in Sunway University's ADTP mirrors that of U.S. institutions, with 70% of the grade derived from coursework and the remainder 30% from final exams. Additionally, achieving an 'A' grade requires a score of 90 and above, while a 'B+' falls within the range of 85-89 and so on. Table 1 shows the grading scales practiced in Sunway University's ADTP program.

Table 1: The grading scales practice in the ADTP program.

Marks	Grade
90 and above	A
85-89	B+
80-84	В
75-79	C+
70-74	С
65-69	D+
60-64	D
59 and below	F

Concurrently, students are encouraged to maintain a commendable Cumulative Grade Point Average (CGPA), enhancing their prospects for university enrolment and potential scholarship awards.

The objective of this study is to explore the influence of goal setting on student performance, specifically examining whether it serves as a motivating factor (Locke & Latham, 2019), prompting increased effort toward attaining academic objectives. The study was conducted over two semesters and aimed to explore the impact of students' CGPA goal setting on their academic performance, particularly in motivating increased effort. Two semesters were chosen instead of one because improving CGPA is challenging when a student's foundation is weak. Furthermore, a longer duration allows more time for students to modify their study habits and attitudes toward learning (Mendezabal, 2013).

Through this study, we hope to investigate how goal setting affects student performance, particularly its role as a driver of motivation.

The next section thoroughly reviews the literature on GPA and CGPA, examining the impact of academic goal setting on CGPA. This is followed by a detailed description of the study methodology, including sample selection, procedural execution, and the underlying motivations. The subsequent sections present and analyze the study's findings. Finally, the article summarizes the key discoveries and discusses their implications for practical application and future research directions.

Literature Reviews

Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA) are essential metrics used in educational institutions worldwide to assess students' academic performance and progress. GPA represents a student's average grades in a specific semester or academic year, while CGPA reflects the cumulative average of all grades obtained throughout the student's academic career (AACRAO, 2026). These measures are crucial in determining students' eligibility for scholarships, internships, graduate programs, and employment opportunities (Pascarella & Terenzini, 2013). For instance, many institutions and employers set minimum GPA or CGPA requirements as their selection criteria. Additionally, GPA and CGPA serve as valuable tools for students to monitor their academic progress, identify areas for improvement, and set realistic goals. By understanding the significance of GPA and CGPA and actively engaging with these metrics, students can strive for continuous improvement and academic excellence.

As a theory, goal setting is fundamentally focused on achievement motivation (Locke & Latham, 2019) based on the premise that conscious goals affect action (Locke & Latham, 2002). It builds on the idea that human actions are often purposeful and based on conscious goals, and by setting differing performance goals, individuals can achieve various levels of performance, varying levels.

Nor Abidah et al. (2017) conducted a study revealing that several factors, including self-motivation, the teaching and learning process dynamics, and students' attitudes toward their courses, significantly influence their CGPA. Furthermore, Ronnel B. King's (2016) findings suggested that collectivism moderated the relationship between performance-avoidance and key outcome variables. Specifically, among students exhibiting high levels of collectivism, performance-avoidance goals correlated with increased utilization of cognitive and metacognitive learning strategies and heightened intrinsic motivation, contradicting findings in Western literature. These results underscore the importance of considering cultural nuances in motivation research. Additionally, Yeap Chun Sheng et al. (2016) emphasized the significance of students regularly monitoring their academic progress and proactively identifying areas for improvement. Such practices enable students to make informed decisions and adapt their study habits and strategies accordingly.

Methodology

Sixty students enrolled in Sunway University's ADTP program, each having completed a minimum of their second semester and pursuing diverse majors, were randomly selected to participate in this study. The students were divided into two groups of equal size: one with a structured goal-setting component and the other without. The goal-setting group received

guidance to help them set and achieve academic goals, while the other group did not receive any specific goal-setting instructions. This division allowed for a comparative analysis of the impact of goal-setting on academic performance and outcomes among the participants. The goal-setting group discussed their current subject results, GPA, and CGPA with their academic advisors and then set target CGPA goals for the next two semesters, Summer 2023 and Fall 2023. In contrast, the students' academic advisors in the group without goal setting were asked to provide the students' current standings. The selection criteria focused on students from the second semester onwards because newer students might not be as familiar with GPA and CGPA grading, which are not commonly used in Malaysia's national high school system (Tan, 2015). An example of a student's current academic performance, total credits, GPA, CGPS, and target CGPA is illustrated in Table 2.

Table 2: An example of a student's academic performance and target CGPA.

Subject	credits	Grade
Introduction to Human Communications	3	В
Introduction to Computer Applications	3	A
Programming I	4	D
Macroeconomics	3	D
Introduction to Critical and Creative Writing	3	C
Precalculus	3	С
Calculus I	3	C+
University Life - Freshman Seminar	1	B+
Appreciation of Ethics and Civilisation	3	В
Total Credits	26	
GPA	2.8	
CGPA	2.31	
Target CGPA	2.7	

The goal-setting group was required to set their desired grades for each subject at the start of the semester. The academic advisor assesses the attainability of these objectives by examining the student's previous academic records. Should a significant gap exist between the target grade and their typical performance, the advisor offers assistance unless the student presents compelling justifications. Additionally, the advisor may suggest alternative grades students must achieve to help them reach their goals, as depicted in Table 3.

Table 3: Options to achieve the target goal in the two semesters.

Summer 2023						Fall 2023				Summer 2023	Fall 2023	new credit	new CGPA
option 1	credits	Grade	GPA			option 1	credits	Grade	GPA	option 1	option 1	48	2.63
Calculus 3	4	В	12			Programming 2	4	В	12	option 1	option 2	48	2.69
Probability and Statistics	4	В	12	GPA	3	Calculus 2	4	В	12	option 1	option 3	48	2.72
				new credits	34	Public speaking	3	В	9	option 1	option 4	48	2.75
	- 8		24	new CGPA	2.47	US history	3	В	9				
							14		42	option 2	option 1	48	2.67
										option 2	option 2	48	2.73
										option 2	option 3	48	2.76
option 2	credits	Grade	GPA			option 2	credits	Grade	GPA	option 2	option 4	48	2.79
Calculus 3	4	В	12			Programming 2	4	В	12				
Probability and Statistics	4	B+	14			Calculus 2	4	В	12	option 3	option 1	48	2.71
				GPA	3.25	public speaking	3	B+	10.5	option 3	option 2	48	2.77
				new credits	34	US history	3	B+	10.5	option 3	option 3	48	2.80
	- 8		26	new CGPA	2.53		14		45	option 3	option 4	48	2.83
								Grade	GPA				
	credits	Grade	GPA			option 3	credits		12				
option 3 Calculus 3	credits 4	B+	14			programming 2 Calculus 3	4	B	12				
Probability and Statistics	4	B+	14			public speaking	3	A	12				
Probability and Statistics	4	DT	14	GPA	3.5	US history	3	B+	10.5				
				new credits	3.5	O3 History	14	UT	46.5				
	8		28	new CGPA	2.59		14		40.5				
			20	III COI A	2.55								
						option 4	credits	Grade	GPA				
						programming 2	4	В	12				
						Calculus 3	4	В	12				
						public speaking	3	Α	12				
						US history	3	A	12				
							14		48				

Students who have established target grades are required to meet with their academic advisor at least twice per semester to evaluate their progress. Should their academic performance fall

significantly below their anticipated grades, they are encouraged to intensify their efforts to improve their chances of reaching their goals. This support involves offering constructive feedback and assistance, providing specific guidance on areas needing improvement, and suggesting strategies to overcome challenges. These feedback sessions, organized by the academic advisor in coordination with the respective subject lecturer, typically occur following major assignments and quizzes. During these sessions, the academic advisor can offer personalized guidance to students, highlighting their strengths and areas for growth.

Additionally, providing support through study groups or access to resources demonstrates a commitment to student's success and equips them with the tools they need to excel. Highlighting the advantages of reaching their goals, like opening up more opportunities for future pursuits, is a strong incentive to keep students concentrated and committed.

Result Analysis

Table 4: Comparison of academic performance between goal-setting and non-goal-setting groups.

	With Goal	Setting	Non-Goal Setting			
Student no (percentage)	Summer 2023	Fall 2023	Summer 2023	Fall 2023		
improvement in result	20 (66.7%)	27 (90%)	11 (36.7%)	17 (56.7%)		
remain or decline in result	10 (33.3%)	3 (10%)	19 (63.3%)	13 (43.3%)		

Table 4 provides a detailed comparison of academic performance trends between students equipped with structured goal-setting mechanisms and those lacking such provisions, spanning two successive semesters: the summer and fall of 2023. Notably, during the summer semester, 66.7% of students with goal setting experienced marked improvement in their academic results. This percentage substantially rose to 90% in the subsequent fall semester, indicating a significant positive correlation between goal setting and academic progression. Conversely, the improvement rates were comparatively lower among students without structured goal-setting components. In the summer semester, only 36.7% of students witnessed an enhancement in their academic performance, with a slight increase to 56.7% observed in the fall semester. This stark contrast in improvement rates underscores the instrumental role of goal setting in fostering academic advancement and underscores its potential as a proactive strategy for enhancing student outcomes.

Furthermore, the data highlights the impact of goal setting on the stability of academic performance. A smaller proportion of students in the goal-setting group either remained at the same level or experienced a decline in their results compared to their counterparts without structured goal-setting mechanisms. Specifically, during the summer semester, 33.3% of students with goal setting maintained their academic status quo or faced a decline, a percentage that dropped even further to 10% in the fall semester. Conversely, a larger percentage of students without goal setting, 63.3% during the summer semester and 43.3% during the fall semester, either remained stagnant or experienced a decline in their academic performance. These findings underscore the resilience and consistency fostered by goal-setting strategies, indicating their potential to mitigate academic stagnation and decline.

The disparity in academic outcomes between students with and without structured goalsetting mechanisms underscores the imperative of integrating proactive strategies into educational frameworks to optimize student success and performance. The substantial improvement rates observed among students equipped with goal setting during both summer and fall semesters attest to the efficacy of structured goal-setting interventions in fostering academic advancement. Moreover, the stability exhibited in academic performance among goal-setting students underscores the resilience engendered by such strategies, highlighting their capacity to mitigate academic stagnation and decline. Thus, the findings underscore the critical role of goal setting as a proactive tool for enhancing student outcomes and advocate for its integration into educational practices to empower students and foster academic success.

Conclusion

Through the study's structured approach, involving 60 students enrolled in Sunway University's ADTP program, key insights were gleaned regarding the efficacy of goal-setting interventions in fostering academic advancement. The findings underscored the instrumental role of structured goal-setting in facilitating academic progression, as evidenced by marked improvements in academic outcomes among students equipped with goal-setting mechanisms. Moreover, the stability exhibited in academic performance among goal-setting students highlights the resilience fostered by such strategies, mitigating academic stagnation and decline.

In conclusion, the study's findings underscore the critical importance of goal setting as a proactive tool for enhancing student outcomes within educational contexts. By integrating structured goal-setting interventions into educational frameworks, institutions can empower students, foster academic success, and cultivate a continuous improvement and achievement culture. As such, the study advocates for the widespread adoption of goal-setting practices to optimize student success and elevate educational outcomes.

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