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Pandemic Response: Impact of Accelerated English Courses on Student Achievement and Withdrawal Rates

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Abstract

In response to the COVID-19 pandemic, there have been efforts to modify teaching modalities to avoid interruption in the learning process. Previous studies determined a correlation between accelerated classes and student achievement, but there is a lack of research on the efficacy of accelerated learning in response to a pandemic. This study analyzed college student academic achievement and withdrawal rates in accelerated 8-week English courses to determine whether fast-paced courses were a better modality than 16-week courses. Quantitative methods were employed with collected archival data to establish comparative statistical relationships between students' success and withdrawal rates in accelerated-term and full-term English courses. Nonrandom sampling was conducted to obtain intended data from 368 college students in a Texas public college in 2019–21. The results indicated that students in accelerated sections had higher success rates and lower withdrawal rates based on the characteristics and limitations of this study. Further research is required to focus on factors that might affect the outcomes, such as teaching styles and preparedness of professors to handle different modalities.

Keywords: accelerated learning, 8-week courses, accelerated English courses, COVID-19 pandemic, pandemic response

Introduction and Review of Literature

In light of the recent coronavirus outbreak, many colleges were forced to close and go virtual. Professors faced many challenges with this transition, as did students with limited access to suitable technology; these circumstances affected the overall learning experience during the pandemic. Decisions to lock down and switch to virtual learning have faced arguments and responses. In the United States, as states increasingly faced a rapid surge of COVID-19 cases, the Centers for Disease Control and Prevention issued a number of guidelines. The guidelines gradually fluctuated with the degree of precautions and provisions as COVID-19 cases soared. The issue was exacerbated by full hospitals, all in the absence of any vaccine or effectual treatment. Social distancing, wearing masks, and personal hygiene were among the recommended precautions before the decision was taken to close schools and shift to remote education.

Colleges in the US have taken different approaches in response to the pandemic, following different strategies to limit the number of students and staff on campus. The major change is the decision to offer more online courses along with new modalities. Some modalities offered or expanded in fall 2020 included: blended (face-to-face and online) courses; 8-week, face-to-face courses; live online (synchronous) courses, in which students attend class using live conferencing during the scheduled class time; and fully online (asynchronous) courses. Special attention has been given to social distancing in face-to-face courses and reporting procedures for possible exposures to COVID-19. The rationale behind offering 8-week courses is to offer fast-paced instructions and avoid interruption in the learning process in cases of a possible closure during the semester.

Previous research determined a correlation between accelerated class pace and student achievement. Although some studies indicated that an accelerated format did not affect student academic achievement, and it was not a primary factor in the learning process (Harwood et al., 2018; Karweit, 1984; Kucsera & Zimmaro, 2010; Martin & Culver, 2009; Scott & Conrad, 1922; Walberg, 1988), other researchers noted a positive effect of intensive format on student achievement (Arrey, 2005; Hern, 2012) and on student time-management skills and course mastery (Colclasure et al., 2018; Hern, 2012).

Despite all these efforts to respond to the pandemic with little interruption, there is a need to study the effect of 8-week courses on student achievement. To fill the gap in the current body of literature, I attempted to analyze student academic achievement and withdrawal rates in 8-week English courses offered at a community college to determine whether fast-paced courses were a better option than 16-week courses.

Traditional Learning versus Accelerated Learning

The traditional academic semester spans 16 instructional weeks (Seamon, 2004). This modality involves direct teaching and students attending class twice a week and submitting assignments. Moreover, traditional 16-week-long learning involves using well-established teaching methods

and delivering a teacher's knowledge to students in a predetermined way (Ilie & Frăsineanu, 2019). On the other hand, accelerated learning is a method of instruction that encourages deeper, more reflective, and more intensive learning, resulting in holistic student learning and allowing students to be fully engaged in the learning process in a short period of time. Because students absorb class concepts and materials at a faster pace in accelerated courses, the learned concepts can be retrieved more easily from short-term memory. In turn, students can apply the content and put it in practice involving various parts of the cerebral cortex in both the right and left hemispheres, as well as the limbic system (Deichert et al., 2016; Lee & Horsfall, 2010).

There are different variables that may impact learning in accelerated semester courses, such as student learning style, self-discipline, focus, engagement with instructor and peers, and motivation (Seamon, 2004). In addition, instructor feedback is offered at a faster pace than the feedback students usually receive in full-length courses (Lee & Horsfall, 2010). Based on research on the human brain, the accelerated learning model was introduced by Georgi Lozanov to provide a holistic, fast-paced experience to students. This model has become popular in higher education but has been criticized for not being as effective and rigorous as the traditional model (Daniel, 2000). One critical issue with the accelerated model is the adjustment of the course materials and workload into a shorter time period (Kretovics et al., 2005; Lee & Horsfall, 2010).

Theoretical Perspective

There are different theories that may shape current research about the effectiveness of accelerated courses. Accelerated learning is a format in which students complete a course's requirements in a shorter, or condensed, period of time with specific principles and techniques to guide the learning process. The accelerated model allows students to learn and retain class lessons while overcoming learning barriers (McKeon, 1995).

One theory that guides this learning model is the suggestopedia theory introduced by the psychiatrist Georgi Lozanov. Lozanov argues for the role of the subconscious in learning and acquiring knowledge to enhance retention by creating a relaxed, positive, and focused environment (Zemke, 1995). Applying this theory, instructors minimize psychological barriers, such as fatigue, anxiety, worry, stress, and boredom, that impede student learning. Dismantling (or de-suggesting) these barriers activates the unconscious mental process, so the brain becomes able to retain materials (Arulselvi, 2017; Rustipa, 2011). When applied to the accelerated classroom, students control their learning processes in less time and enjoy the learning experience in a collaborative environment (Arulselvi, 2017; Lorayne, 1990; Rustipa, 2011).

This model allows for less distraction because it enables the instructor to fill the time gaps with activities and connect concepts together instead of teaching one concept at a time, thus allowing students to establish a connection between all class concepts and previous knowledge (Lorayne, 1990; Rose, 1985). In addition, Lozanov emphasizes learning as a matter of attitude, so establishing

an anxiety-free, supportive environment allows learners to connect with their instructor and peers at a higher emotional level (Arulselvi, 2017; Lorayne, 1990; Rustipa, 2011).

Using accelerated instruction in light of the suggestopedia theory, the right (emotional/creative) side and left (logical) side of the brain are being engaged, so students connect emotionally and logically with their peers, the instructor, and the class materials (Arulselvi, 2017; Lorayne, 1990; Rustipa, 2011). Therefore, engaging the whole brain in the learning process creates an active, comfortable learning environment using the accelerated model in the classroom.

The purpose of this research study was to examine student achievement and withdrawal in accelerated/8-week English courses and full-term/16-week English courses in light of the suggestopedia theory. The accelerated and full-term courses in this study were taught by the same instructor, and students in 16-week courses met twice a week while students in 8-week courses met four times a week. The same learning objectives, lessons, concepts, quizzes, and final exam were used in both modalities with the same contact hours.

Research Questions

The study addressed the following research questions and hypotheses. H_0 indicates a null hypothesis and Ha represents an alternative hypothesis.

RQ1: To what extent, if any, is there a significant difference between students' final grades in accelerated and full-term English classes?

$H1_0$: There is no significant difference between students' final grades in accelerated and full-term English classes.

$H1_a$: There is a significant difference between students' final grades in accelerated and full-term English classes.

RQ2. To what extent, if any, is there a significant difference between the proportion of withdrawn students in accelerated and full-term English classes?

$H2_0$: There is no significant difference between the proportion of withdrawn students in accelerated and full-term English classes.

$H2_a$: There is a significant difference between the proportion of withdrawn students in accelerated and full-term English classes.

Method

To establish a statistical relationship between the variables, this research study applied quantitative methods to compare students' success and withdrawal rates in full-term and accelerated English courses. All courses were taught in person on campus at a specific time and location. The sections in the control group were 16 weeks long, and the sections in the experimental groups were 8 weeks long. Before the COVID-19 pandemic, traditional courses were 16 weeks long, but to avoid unforeseen interruption of learning, 8-week courses were offered to provide students with flexibility and allow the college to stabilize course offerings.

Final grades were used to measure students' success rates. Students' discussion and writing assignment submissions, quizzes, peer-review activities, and final exam grades, which addressed and captured the course learning objectives, were included in the final grade calculation. This is a valid and an accurate assessment of student academic achievement based on only achievement criteria (Allen, 2005). Moreover, for the purpose of increasing validity of the study, comparative statistics were employed. Measurement through conducting comparisons is a straightforward method through which values of variables are compared and related side by side (Termos, 2013).

Participants and Data Analysis

Archival data were collected from four semesters: fall 2019, spring 2020, fall 2020, and spring 2021. There were eight control sections and eight experimental sections. The eight sections in fall 2019 and spring 2020 were 16 weeks long and were considered a control group in this study. The eight sections in fall 2020 and spring 2021 were 8 weeks long and were considered an experimental group. Both the control sections and experimental sections were traditional, face-to-face classes. The control and experimental courses were taught by the same instructor using the same syllabi, textbooks, grading rubrics, and class materials, including lessons, assessments, and assignments. This uniformity minimized confounding variables and increased internal validity in this study (Black, 1999; Vogt, 2007). The courses in this study were writing courses that focused on the study and practice of academic writing with emphasis on rhetorical and critical analyses.

The sample was selected nonrandomly, depending on the student selection of course modality at the beginning of the semester. The total number of students registered in all sections was 368, and the total number of students who completed the courses was 288. The student body of the college in this study is 58% white and 42% minority students, 47% male and 53% female, with an average age of 18–21. In addition, 69% of students utilize financial aid. It is an open-access institution and one of the largest public college districts in Texas with a high transfer rate. Thus, the sample selected for this study is representative of other college student populations in the region, and the results can be generalized to other institutions with a similar student body. The final grade variable was a continuous variable based on five values corresponding with the letter grade: F = 1, D = 2, C = 3, B = 4, and A = 5. The withdrawal variable was a nominal variable with two values: yes and no.

The data were summarized and analyzed using the SPSS software to determine the central tendency measure and derive conclusions that would help accept or reject the null hypotheses. A quantitative method was used. An independent *t* test was conducted to answer RQ1, by assessing the difference in student final grades between the two types of courses. A chi-square test was performed to answer RQ2, to determine whether there was a significant difference between the proportion of withdrawn students in accelerated and full-term English classes.

Results

Descriptive Statistics

Table 1 displays descriptive statistics for the two types of class. Traditional classes were used as the control group, whereas the accelerated sections were used as the experimental group. A comparison was conducted among the data collected from these two groups.

Table 1: Descriptive Statistics for Class Type

Class type	*n*	%
Traditional	204	55.4
Accelerated	164	44.6
Total	**368**	**100.0**

Inferential Statistics

Two tests were used to test two sets of hypotheses and answer two research questions.

Student Grades in Accelerated versus Full-Term Classes

An independent sample *t* test was performed with alpha level of .05 to test the null hypothesis for RQ1 that there is no significant difference between the students' final grades in accelerated and full-term English classes. In this study, the dependent variable (final grades) was measured independently between two groups (traditional and accelerated classes). In other words, if the significance level was greater than .05, the results would be considered insignificant for a pair in a two-tailed *t* test.

Table 2 displays the statistics and paired differences for the two groups. The mean (*M*) of final grades of students in traditional classes (control group) was 2.51, suggesting final letter grades between D and C. The mean of final grades of students in accelerated classes (experimental group) was 3.93, suggesting final letter grades between C and B.

Table 2: Descriptive Paired Samples Statistics of Student Final Grades of Two Class Types (N = 368)

Class type	*n*	*M*	*SD*	Std. error mean
Traditional	204	2.51	2.03	.14
Accelerated	164	3.93	1.55	.12

The equality of variances of final grades between the two groups was tested. The assumption of equality of variances was violated ($F = 63.99$, $p < .001$). Therefore, the t value for equal variances not assumed was used to test the difference in the mean scores between two groups.

In Table 3, using the t value for equal variances not assumed, there was a significant difference in final grades between the two groups, traditional ($M = 2.51$, $SD = 2.03$) and accelerated ($M = 3.93$, $SD = 1.55$; $t[365] = -7.57$, $p < .005$, two-tailed). The mean difference was −1.42. The average final grades of accelerated classes (3.93) was significantly higher than the average final grades of traditional classes (2.51).

Table 3: The Test for Equality of Means

Assumption	*t*	df	*p*	Mean difference	Std. error difference
Equal variances assumed	−7.46	366	.000	−1.42	.19
Equal variances not assumed	−7.57	365	.000	−1.42	.19

The effect size was also determined by calculating eta-squared. The eta-squared in this study was .13, suggesting a moderate effect (Pallant, 2020). This test showed that 13% of the variance in final grades was explained by class type.

Student withdrawal in accelerated versus full-term classes

A chi-square test was performed to test if there is a significant difference between the proportion of withdrawn students in accelerated and full-term English classes. As Table 4 shows, 32.8% of the students in traditional classes withdrew, and 9.1% of the students in accelerated classes withdrew.

Table 4: Crosstabulation for Withdrawal and Class Type (N = 368)

			Withdraw		
			No	Yes	Total
Group	Traditional	Count	137	67	204
		% within traditional group	67.2	32.8	100
	Accelerated	Count	149	15	164
		% within accelerated group	90.9	9.1	100
Total		Count	286	82	368
		% within group	77.7	22.3	100

Table 5 shows that zero cells (0%) have expected count less than five. The assumption of chi-square concerning the minimum expected cell frequency was not violated. The continuity correction value suggested that there was a significant difference between the percentage of withdrawn students in traditional and accelerated classes, $\chi^2(1, N = 368) = 28.13$, $p < .005$. The phi coefficient value was −.28, suggesting a medium effect (Pallant, 2020). The null hypothesis was rejected. There may be a relationship between withdrawal and class type.

Table 5: Chi-Square Test for Student Withdrawal and Class Type (N = 368)

Statistic	Value	*df*	*p* (2-sided)
Pearson chi-square	29.48[a]	1	.000
Continuity correction	28.13[b]	1	.000
Phi	– 0.28		.000

[a] Zero cells (0%) have expected count less than 5. The minimum expected count is 36.54.
[b] Computed only for a 2 x 2 table.

Discussion and Conclusions

This study was conducted to examine the effectiveness of accelerated, 8-week English courses compared to traditional, 16-week English courses in response to the COVID-19 pandemic. The study was conducted in a two-year college in Texas. Data were analyzed to determine if there were statistically significant differences in students' grades and withdrawal rates in the control and experimental groups. For the first research question, there was a significant difference in final grades between the two groups, traditional and accelerated. Students in the experimental group (accelerated classes) had higher final grades than students in the control group (full-term classes). The average final grade of students in traditional classes was between D and C, while the average final grade of students in accelerated classes was between C and B. A possible explanation is that students in accelerated courses are able to sustain their self-efficacy and motivation to learn the

class concepts as a result of the positive and relaxed learning environment that minimizes learning barriers, thus putting more effort toward achieving higher grades (Liaw, 2008). This is turn could allow them to complete more courses at a faster pace to earn their degrees. Because of the change in the classroom environment to create an intensive structure in accelerated courses, students are able to become invested in the learning process, retain information, and focus on class materials.

For the second research question, the statistical analysis revealed that there was a significant difference between the percentage of withdrawn students in traditional and accelerated classes. More students withdrew in the control group (traditional classes) than students in the experimental group (accelerated classes). An important point to note here is that students in 8-week courses receive prompt, fast feedback from the instructor, so they are able to understand their progress toward course completion earlier in the course, which may increase their retention (Bowen et al., 2009). Because students spend more time with their peers and instructor in accelerated courses, they interact closely with their peers and may have a higher sense of enjoyment and sense of community (Anastasi, 2007).

Limitations

Student selection of course modality may be a factor that influenced student success and retention, but this was not examined in this study. Previous research indicated that ideal students for accelerated, high-paced courses are self-directed, disciplined, and confident in their study skills (Seamon, 2004). Students' preferences and prior experiences with specific course modalities influence their registration decisions, and some students may not be well suited to specific modalities based on personal preferences and expectations, work and family responsibilities, and academic preparedness (O'Neill et al., 2021). Final grades were used in this study to measure students' success rates although some scholars argue that final grades may not be an accurate measure of student academic achievement and progress. However, this study did not attempt to assess non-academic factors when assigning grades, such as attendance, punctuality, and behavior.

Recommendations for Future Research

The purpose of this study was to examine the effectiveness of accelerated English courses during the COVID-19 pandemic to avoid interruption in the learning process. There was statistical evidence that accelerated, 8-week courses improved student performance and increased student retention. This study adds to the current literature about the possible ways to respond to a pandemic with minimum interruption in the learning and teaching processes. However, further research is required to focus on other factors that might affect the outcomes. This includes the professors' teaching styles and level of preparedness to handle both modalities equally efficiently. A professor plays a key role in steering and shaping the structure and deliverability of the course, which in turn might affect outcomes. Furthermore, investigations of teaching techniques and curriculum designs used in accelerated English classes are needed to check on potential effects on

student engagement levels and the possibility of eliminating stress and fear. Another factor that merits further research is student selection of course modality. There is a need to examine the complexity, implications, and results of students' course modality decisions. With online programs increasing, there is also a need to examine and compare student success and retention rates in traditional 16-week online courses and 8-week online courses.

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Biography

Hazar Shehadeh is an English professor. She has taught face-to-face, hybrid, and online classes, including writing skills, ESL, composition, rhetoric, film criticism, and American literature. Her research has focused on ways to accelerate underprepared and at-risk students' learning at the college level, and on teaching strategies and technology in the classroom to enhance performance of students from minority groups.