

## Accounting

Over the last three decades, business programs have struggled to redesign the first accounting course to



Figure 1  
Midterm Grades

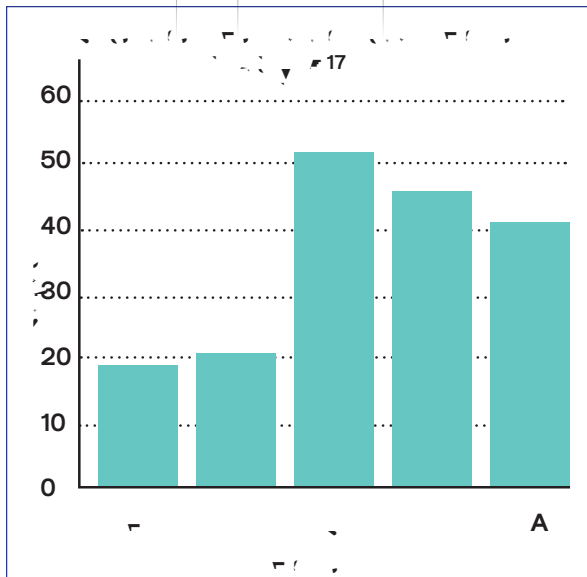
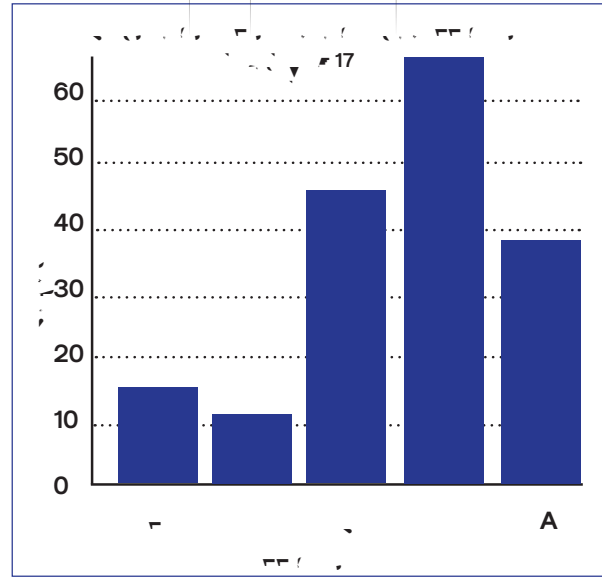
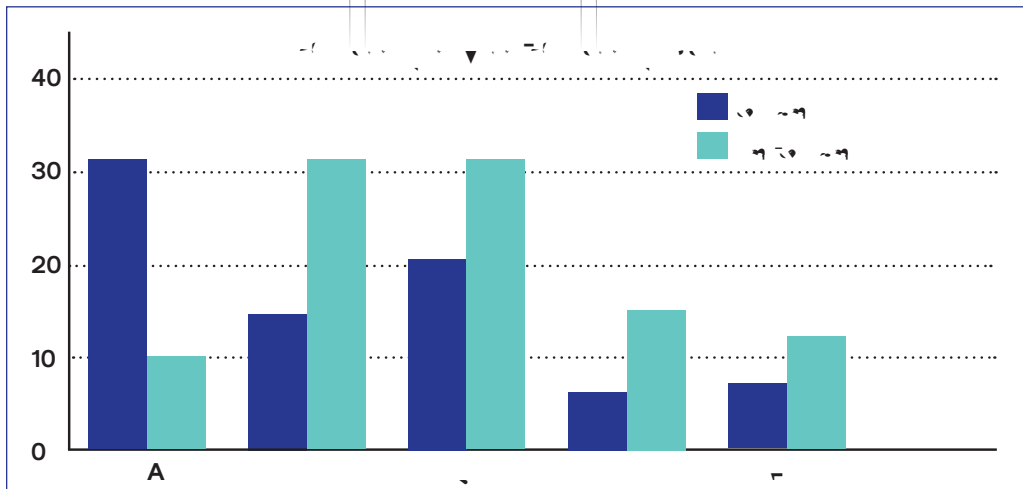


Figure 2  
Final Grades



Next, we used the Wilcoxon-Mann-Whitney Test to determine whether there was a significant difference between students' academic performance under the traditional (preparer) versus nontraditional (user) method. This test is most suited for assessing the relationship between independent samples when at least an ordinal variable is used for two independent groups. The results show that H1 is supported. Figures 3 and 4 indicate a significant difference between the grades among students who used the non-traditional method compared to students who used the traditional method with Z statistics of -3.309 and -2.322, and p values of .001 and .020 for midterm and final grades, respectively. The results in Figure 3 indicate that the midterm performance of students was better under the traditional method (mean rank of 103.85) than the nontraditional method (mean rank of 78.81). However, Figure 4 reveals opposite results since the final grade performance of students was better under the nontraditional method (mean rank of 97.74) than the traditional method (mean rank of 80.42).

Figure 3  
Midterm Grades from Spring 2019 (Traditional) and Spring 2020 (Non-Traditional)



Additonal tests using Chi-Square stat st cs also show a signif cant relat onship between the students' performance using the tradit onal versus nontradit onal methods. The Spring 2020 nontradit onal method signif cantly dif ers from the Spring 2019 tradit onal method with a p value < .001 for midterm grades, however the dif erences between the methods for the f nal grade were insignif cant with p value of .067.

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The purpose of this study was to invest gate the ef ect of redesigning the principles of f nancial account ng course by introducing debit and credit double-entry account ng at the end of the textbook versus throughout the textbook. Specif cally, the study examined students' academic performance using the nontradit onal (user) versus the tradit onal (preparer) approach to teach principles of f nancial account ng. The t ming of when debit and credit double-entry account ng is introduced is one of the major dif erences between the two approaches. Overall, inconsistent results were found between the two approaches. In part cular, the results show dif erences between the students' midterm and f nal grades. The Wilcoxon-Mann-Whitney Test indicates that the tradit onal method of teaching principles of f nancial account ng improved students' midterm grades, which was also conf rmed with Chi-Square stat st cs. However, the nontradit onal method of teaching principles of f nancial account ng improved students' overall f nal grade. These f ndings are important because they show that it does mat er when and how account ng topics are introduced in the f rst f nancial account ng course. Based on the mixed results between the tradit onal versus the nontradit onal approaches, the authors plan to extend the study next semester.

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First, the authors will increase the sample size by including students enrolled in tradit onal courses taught by other professors while adding control variables to help interpret the results. Second, the authors plan to implement an early intervent on virtual tutoring

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One of the main lessons learned from this study is that the traditional way of teaching principles of financial accounting may not yield the best academic performance for students, thus, a change may be needed. Another lesson learned is that other factors could be affecting the students' academic performance based on the mixed results found between the traditional and nontraditional approaches of teaching the course. However, the results do indicate that it does matter when and how accounting topics are introduced to students and other factors should be considered in analyzing students' academic performance. A notable limitation of this study is that the authors did not conduct an actual experiment or control for other variables such as gender, grade point average, number of credits taken (workload), student majors, teaching style, etc., which have been found significant in prior studies on students' academic performance. The limitation of the causal-comparative method is that it may be difficult to establish causality based on the collected data (Gall, Borg & Gall, 1996). Based on the above limitations, there are many opportunities for future research. An expansion of this study in the future may take researchers beyond a causal comparative study and establish stronger associations between the traditional versus nontraditional methods of teaching the principles of financial accounting course. Another avenue for future research may focus on the academic performance of various business majors since all business students are required to take principles of financial accounting.

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