



# **Comparison of the Effect of Flipped Classroom and Ouantum Teaching Methods with the Traditional Method** on the Performance of Accounting Principles Students $(1)^1$

Hossein Esmailkhani<sup>2</sup>, Mahmoud Moenaddin<sup>3</sup>, Forough Heyrani<sup>4</sup>

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### **INTRODUCTION**

The introductory accounting course is mandatory for accounting students all over the world. Depending on the teaching method adopted by the instructor, this course can act as a gateway to or exit from accounting, it has been observed that this course is not popular with most students around the world (McDowall and Beverly Jackling, 2010). A study conducted by Marriott and Marriott (2003) revealed that there is a problem with the teaching of introductory accounting course in universities, which sends negative signals about the course to most students. Teaching and learning introductory accounting courses are of great importance as a foundation for teaching other accounting topics. Also, the increasing development of digital technologies and their application in education has required universities to make changes in traditional education methods. Therefore, the present study tries to investigate the effect of using flipped classroom and quantum teaching methods compared to the traditional teaching method from the perspective of accounting students' performance.

# **MATERIALS AND METHODS**

In this quasi-experimental research, 78 students of accounting principles course (1), from Islamic Azad University units in Rafsanjan city, were placed in experimental and control groups in the first semester of 1400-1401. Analysis of covariance was used to analyze the results.

### **RESULTS AND DISCUSSION**

The findings of the present study show that the average scores obtained in the control group did not change significantly in the pre-test and post-

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<sup>2.</sup> Ph.D. Student, Department of Accounting, Yazd Branch, Islamic Azad University, Yazd, Iran.

<sup>(</sup>hosseinesmailkhani@gmail.com).3. Associate Professor, Department of Accounting, Yazd Branch, Islamic Azad University, Yazd, Iran. (Corresponding Author). (mahmoudmoein@iauyazd.ac.ir).

<sup>4.</sup> Assistant Professor, Department of Accounting, Yazd Branch, Islamic Azad University, Yazd, Iran. (heiranyforough@gmail.com). https://jera.alzahra.ac.ir

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test stages. However, the level of scores of students in the two experimental groups has increased in the post-test stage compared to the pre-test, so the performance of the students in the experimental groups has improved the performance of the students compared to the traditional teaching method.

### CONCLUSION

Using the results of this research, professors can improve the teaching of accounting principles (1) by applying practical methods. In general, in using the reverse teaching method compared to the traditional teaching method, it was found that the use of the reverse teaching method has improved the level of students' acquired grades. Also, by managing and increasing the training time through sending teaching videos, the training time for teaching and practicing all topics has been improved and one of the challenges of the traditional teaching method in the course of accounting principles (1), which is the lack of time and the limitation of training sessions, has been solved.

# **TABLES AND FIGURES**

The results of descriptive statistics (mean, standard deviation, minimum, and maximum) of three groups of traditional teaching, reverse teaching, and quantum teaching in two stages of pre-test and post-test are listed in Table (3). According to the results, the average scores of accounting principles (1) for the control group did not change significantly in the pre-test and post-test stages. However, for two test groups, it has increased in the post-test phase compared to the pre-test phase. The significance of the difference between the groups was checked by considering the initial differences in the pre-test using the analysis of the covariance test.

Tuble If Descriptive characterist	pie usii	ne test und post test suges in un te groups			
group	Time	mean	standard deviation	min	max
Traditional teaching	pre-test	11.83	0.89	10	13
(control)	Post-exam	11.91	0.79	11	13
Flipped classroom teaching	pre-test	11.94	1.29	9	14
method (test 1)	Post-exam	17.91	0.93	16	20
Quantum teaching method (test 2)	pre-test	12.26	2.09	9	15
	Post-exam	16.09	1.20	14	18

 Table 1. Descriptive characteristics of scores in pre-test and post-test stages in three groups

**Keywords:** Flipped Classroom Teaching Method, Quantum Teaching Method, Accounting Principles Lesson (1), Student Performance.

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