

Teachers' Continuing Professional Development Initiatives as Predictor of the Quality of Teaching in E-Commerce

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Abstract:

The study is about e-commerce teachers' continuing professional development (CPD) initiatives and their quality of teaching. It determined whether the teachers' CPD initiatives predict significantly their quality of teaching. In measuring the CPD initiatives of the respondents, the study utilized the following constructs: collaborative, reflective, constructive, digital, and financial initiatives. For the quality of teaching, the International Comparative Analysis of Learning and Teaching (ICALT) scale was used. It has the following sub-variables: safe learning climate, classroom management, clear instruction, activating teaching methods, learning strategies, and differentiation. Out of the five sub-variables of the CPD initiative, only collaborative, reflective, and constructive initiatives were proven predictors of teaching quality.

Keywords: Teachers' Continuing Professional Development, Quality of Teaching

Introduction

Presently, China leads on global e-commerce market. The Chinese e-commerce successes are driven by government support, investments, fast internet connectivity, and a high number of internet users [1]. To sustain China's dominance in global e-commerce, the education sector must level up as well. It should continue developing e-commerce students that fit the needs of the industry. This task usually falls to e-commerce teachers. The comprehensive ability and quality of teachers determine the overall level of e-commerce education in vocational colleges.

Improving the quality of teaching through the continuing professional development (CPD) of teachers is growing in recognition. Zhang [2] believes that teachers' CPD is a gradual process, in which teachers reflect and understand themselves, thereby improving the overall teaching quality. For Wang [3], CPD is a process of teachers' development in three aspects: professional knowledge, professional skills, and professional sentiment, constantly overcoming difficulties in their growth with a sunny mindset, and gradually growing into expert teachers. On the other hand, Tyagi [4] believes that self-initiated professionals have a more positive impact on increasing the standards of professional learning. He also proposed that CPD initiatives be measured in terms of collaborative, reflective, constructive, digital, and financial initiatives.

The ultimate goal of CPD is the improvement of the quality of teaching. So far, there is no clear agreement on what teaching quality is in China's context, especially in e-commerce. While China's Undergraduate Teaching Evaluation (UTE) provides some criteria for what quality teaching is, there is no standard scale

for the individual approach to teaching quality assessment. Given this situation, the study adopted the International Comparative Analysis of Learning and Teaching (ICALT) scale by van der Lans et al. [5]. The use of ICALT implies that the assessment of e-commerce teaching in the study is generic with the following domains: safe learning climate, classroom management, clear instruction, activating teaching methods, learning strategies, and differentiation are generic and applicable

In China, research on the CPD initiatives of teachers mainly focuses on primary and secondary school teachers, and there is relatively little research on the professional-level development of vocational college teachers [6]. Moreover, there are no studies on the predictive role of CPD initiatives on teaching quality in e-commerce. The study, therefore, assessed the CPD initiatives and teaching quality of e-commerce teachers and determined whether CPD initiatives significantly predict teaching quality.

The study is anchored on the organizational learning theory by Senge [7]. The theory posits that an organization is a learning entity when people continually expand their capacities to attain a collective goal. A school as a learning organization, promotes CPD initiatives of teachers to expand their capabilities and attain a common aspiration which is quality teaching.

Method

This quantitative study was conducted in seven higher vocational schools in Hunan, China. It involved 119 e-commerce teachers, the minimum sample size for the e-commerce teacher population of 133. The study used the survey method to gauge the CPD initiatives and teaching quality of the e-commerce teachers. The instrument used in the study is composed of two adopted scales. For the assessment of CPD initiatives, Tyagi's [4] Professional Development Initiatives was adopted. It has the following sub-constructs: collaborative, reflective, constructive, digital, and financial initiatives. On the other hand, the ICALT scale by van der Lans et al. [5] was used in assessing the teaching quality of the respondents. It has the following domains: safe learning climate, classroom management, clear instruction, activating teaching methods, learning strategies, and differentiation. To determine the predictive role of CPD initiative on the quality of teaching, multiple linear regressions were used. All the domains of CPD initiatives were considered as independent variables while the teaching quality was a single dependent variable. The analysis was tested at the .05 level of significance.

Results

The e-commerce teachers considered their overall CPD initiative at a good level with a mean of 3.40. Their CPD initiative in terms of its five domains is as follows: collaborative ($\bar{x} = 3.52$, $SD = 0.46$), reflective ($\bar{x} = 3.59$, $SD = 0.44$), constructive ($\bar{x} = 3.25$, $SD = 0.63$), digital ($\bar{x} = 3.31$, $SD = 0.56$), financial ($\bar{x} = 3.35$, $SD = 0.55$). It shows that the e-commerce teachers have excellent CPD in terms of collaborative and reflective initiatives. On the other hand, their CPD initiatives in terms of constructive, digital, and financial are at a good level only.

In terms of teaching quality, the e-commerce teachers considered their overall teaching as excellent with a mean of 3.63. Their teaching quality in terms of its six domains are as follows: safe learning climate ($\bar{x} = 3.78$, $SD = 0.41$), classroom management ($\bar{x} = 3.63$, $SD = 0.55$), clear instruction ($\bar{x} = 3.65$, $SD = 0.46$), activating teaching ($\bar{x} = 3.63$, $SD = 0.48$), learning strategies ($\bar{x} = 3.62$, $SD = 0.48$), differentiation ($\bar{x} = 3.46$, $SD = 0.53$). The result shows that e-commerce teachers have excellent teaching quality in all domains except in differentiation.

The predictive role of the CPD initiative on e-commerce teaching quality was tested using multiple linear regression analysis. The result is shown in table 1.

Table 1: Multiple Linear Regression Analysis Result

CPD Initiatives	Beta	Sig
Collaborative Initiatives	0.301	.002
Reflective Initiatives	0.338	.001
Constructive Initiatives	0.256	.001

Out of the five domains of CPD initiatives, only three were considered predictors of teaching quality. These are collaborative initiative ($B = 0.301$, $Sig = .002$), reflective initiative (0.338 , $Sig = .001$), and constructive initiatives ($B = 0.256$, $Sig = .001$). The combination of these CPD sub-variables accounts for 0.593 variance in teaching quality.

Discussion

The e-commerce teachers consider their CPD initiatives to be at a good status. The finding is similar to what was revealed in the study of Mengmeng [8] who investigated the CPD of teachers in a normal university in China. He reported a good level of CPD engagement among the teachers. The e-commerce teachers' eagerness to continue their professional development through collaboration is very evident. This finding is similar to what was reported by de Jong et al. [9]. They reported that collaborative initiatives are evident among Chinese teachers. The e-commerce teachers also engage in reflective practices such as observing classes. They construct academic outputs like instructional materials as a way of professional development. Improving digital competencies is also considered by the e-commerce teachers. It is similar to what Meng and Li [10] reported as informal learning among Chinese teachers through digital and online materials. Furthermore, the e-commerce teachers are willing to finance things that will help them grow professionally.

The overall teaching quality of the e-commerce teachers was excellent. The teachers provide a safe learning climate to their students by ensuring mutual respect, creating a relaxed atmosphere, and supporting self-confidence. They are also excellent in classroom management. They conduct their lesson orderly and smoothly. They also provide very clear instruction, and activate students to engage in learning. Furthermore, they are excellent in the use of learning strategies. What seemed to be challenging for them was differentiation. They are not very good at recognizing individual student needs, and in nurturing under-achieving students.

The finding about the e-commerce teachers teaching quality is similar to what Ying [11] found in her study which also used the ICALT scale. She reported that both students and teachers in selected Chinese universities consider the teaching quality as excellent with differentiation as the low point. The finding of Bear et al. [12] about good student-teacher relations in Chinese schools supports the finding about a safe learning climate. The excellent classroom management reported in the study is similar to what Chicherina et al. [13] observed as a smooth conduct of classes by Chinese teachers.

With excellent CPD initiatives, e-commerce teachers are expected to be learning and growing professionally. Such should manifest in their teaching, which happened to be excellent as well. As it turned out, CPD initiatives (collaborative, reflective, and constructive) predict significantly the e-commerce teachers' teaching quality. The result is partly similar to the finding of Osei-Owusu [14]. His study showed

that professional development is significantly associated with teachers' knowledge. It should be noted that teachers' knowledge is an important element in achieving quality teaching. Good teaching quality can also manifest in the academic achievement of students which according to Nyaaba et al.[15] is predicted by continuing professional development.

Conclusion

The study has established the predictive role of CPD initiatives on the teaching quality of e-commerce teachers. The finding has implication on designing continuing professional development initiatives for teachers to improve teaching quality. Some combinations of continuing professional development will lead directly to improved teaching quality while others may not. As shown in this study, only the combination of collaborative, reflective, and constructive initiatives predicted teaching quality in e-commerce.

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