Influence of Teachers Pedagogical Self-Efficacy and Feedback Mechanisms on Reflective Teaching Practices in Economics in Ibadan Metropolis

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Abstract

This study investigated the influence of teachers' pedagogical self-efficacy and feedback mechanisms on reflective teaching practices in economics in Ibadan Metropolis. A descriptive survey design was adopted, involving sample of 75 Economics teachers in secondary school drawn using stratified random sampling technique. The data collected were analysed using correlation and multiple regression analysis. The study reveal that; teachers' reflective Teaching practices in economics as a subject had positive moderate relationship with Pedagogical self-efficacy (r= .653). Teachers' reflective Teaching practices in economics as a subject had positive moderate relationship with feedback mechanism (r= .510). The pedagogical self-efficacy and feedback mechanism had a significant contribution to the prediction of Teachers' reflective Teaching practices ($F_{(2,72)}$ =33.09, Adj.R 2 =0.47 p<0.05). Pedagogical self-efficacy (β = 0.53) and feedback mechanism (β = 0.26) relatively contributed to Teachers' reflective Teaching practices. The study concluded that both factors were critical to the development of the reflective teaching with self-efficacy having greater impact. The study recommended that the government and school authorities should incorporate evidence-based strategies, workshops, and training sessions to equip teachers with the knowledge and skills needed to engage in reflective teaching practices for result-oriented teaching and learning.

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Keywords: Economics, Pedagogical, Self-Efficacy, Reflective, Feedback Mechanism

Introduction

Effective education around the world hinges on quality teaching, but this remains a major problem in Nigeria. Despite numerous policy changes aimed at improving the education system, some teachers in Nigeria remain ineffective due to systemic issues such as inadequate training, lack of teaching materials, overcrowded classrooms, and limited professional development opportunities. The combination of these issues has led to abysmally low student performance, participation, and engagement levels, and critical thinking and problem-solving skills in learners (Adeyemi, 2018). Low literacy levels and an underdeveloped workforce were also observed (Adeyemi, 2018; Ogunyinka, Okeke, & Adedoyin, 2015)

The Nigerian society stands to gain the most from addressing these problems. From an economic perspective, poor education in the workforce severely limits a nation's growth and innovation potential, which weakens Nigeria's competitiveness in the global economy (Ogunyinka et al., 2015). From a social viewpoint, the uneducated are more prone to poverty, unemployment, and civil disorder, as the poor quality of education broadens inequality. In addition, the absence of essential skills such as critical thinking, problem solving, and digital proficiency may push many Nigerians further down the global pecking order and worsen the country's international positioning (Adeyemi, 2018; Ishokare & Gbadamosi, 2020).

The ineffective practice of teaching can be solved by addressing teaching practices reflection. Constructively refraining from the aforementioned definition, Brookfield (2017) advanced that reflective teaching, in its more rudimentary construction, is some kind of process by which the individual teacher analyzes and evaluates one's underlying beliefs about teaching towards achieving the desired outcome. Reflective teaching requires one to scrutinize their deep seated assumptions on pedagogic practices as well as on classroom engagement before, during and after the sessions are conducted (Brookfield, 2017). Reflective teaching is a pedagogical approach that centers on educators critically examining and evaluating their teaching practices to enhance professional development and student learning outcomes. It holds immense importance in the field of education, contributing significantly to teachers' development, students' learning outcomes, and the overall improvement of educational practices. It serves as a powerful tool for continuous professional development. Educators engage in a cyclical process of self-observation, self-evaluation, and self-adjustment, leading to a deeper understanding of their teaching methods. Reflective teaching, fundamentally, involves learning from experience. It is an introspective, critical, and explorative method, enabling educators to dissect their pedagogical choices in light of real world teaching scenarios (Walshe and Driver, 2019). Reflective teaching is an important component of teachers' training programmes, which has been studied by many scholars as a method that enhancing professionally qualified teachers and improving the quality of education provided. According to Awodun (2020) reflective teaching enables practitioners to revise and comprehend the impact of their instruction on students. Reflective teaching instructs teachers to systematically assess their teaching strategies using feedback from the class as well as experiences gathered during teaching (Gbadamosi, 2021a). Through self-assessment teachers enhance their pedagogical self-efficacy which leads to proactivity towards student demands resulting in better instruction (Farrell, 2017). The use of self-reflection, in combination with other tools, can enable Nigerian teachers, who exist within a system, to transcend these difficulties, advance professionally, and transform these reflections into improved results (Awodun, 2020; Kareem, 2014). The practice of teaching entails the constant evaluation of processes aimed at ensuring proper teaching and learning among different levels of students. This type of critical examination of individual's ability to teach leads to achievement of self-improvement goals.

The self-efficacy of a teacher is one of the most important resources which a teacher possesses. As far as high self-efficacy of a person brings positive change in adopting self-challenging innovative teaching best practices, having holistic empowerment to perform successfully with relevant student achievement, in the Nigerian context, self-efficacy of teachers need to be facilitated as they are never women for self-commitment and professionalism. A teacher's self-evaluation, often compared to students' or peers' evaluations, serves as a feedback mechanism. Identifying and acknowledging positive aspects of teaching is equally important in reflection as concrete steps

Leading to advancement in the instructional practice. Nigerian schools ought to embrace such change to build professional development traditions and standards of teaching and learning excellence. Reflective teaching practices center around self-evaluation and self-reflective approaches done by educators in their teaching practices with the aim of improving student learning. This habit sort innovation and creativity in the classroom. In Nigeria, the development of reflective teaching is important for coping with a lot of challenges associated with teaching. Generally, Reflective teaching could be viewed from two dimensions namely, reflection-in-action and reflection-on-action.

Reflection-in-action: This type of reflection takes place during teaching. This can be done through a deep analysis of the courses and feedback given to teachers by their learners. Reflection-in-action includes inquiry and knowledge. (Kareem, 2014) defined reflection-in-action as a process that leads to better performance or action.

Reflection-on-action: This type of reflection occurs after teaching must have taken place. A teacher looks back on his or her actions and mannerisms during the course of the lesson. The reforms are usually done outside of the classroom, the teacher notes down the negative and positive events. He or she improves on the weaknesses in order to facilitate learning. (Boud and Molloy, 2013).

Reflective Teaching can be practiced using different strategies. These include Focus Group Discussion (FDG), peer observations, journal writing or diary keeping, audio recording, brainstorming with colleagues, mentoring, students' feedback and action research (Farrell, 2017; Enwuru & Gbadamosi, 2022). In accomplishing the set goals, teaching feedback and pedagogical self-efficacy influences reflective teaching practices.

To further illustrate the role of reflective teaching, Kolb's experiential learning model provides a framework for understanding how educators can integrate reflection into their practice. Kolb's reflective model which supports the notion of experiential learning, encapsulated by the transformation of information into knowledge (Kolb and Kolb, 2005). In Kolb's framework for reflection, he identified four steps involved in reflection, which are: the concrete experience, the reflection and observation stage, the abstract conceptualization stage, active experimentation (Kolb and Kolb, 2005).

Statement of the Problem

Many teachers do not possess self-efficacy which refers to a lack of self-belief in one's personal ability to take control over a classroom and deliver a lesson and this has a detrimental effect on their willingness to implement active teaching modalities. This problem worsens due to a lack of defined constructive comment systems that could elevate teachers' concepts of their performance and teaching methods, thus blocking avenues for self-enhanced professional development and instructional refinement. Nigeria is likely to suffer dire consequences to its education, socio-economics, worsen the gap of imbalance, and churn an under-skilled, under-trained workforce fit for a 21st-century global economy. In light of the success some teachers achieve using reflective teaching practices, many Economics teachers still find it hard to implement reflective strategies in class. Yet, there is no available evidence in Nigeria investigating how the crucial self-efficacy of a pedagogical instructor and feedback influence a teacher's engagement in reflective practices.

Evidence suggests that some teachers have low pedagogical self-efficacy while others are not exposed to well established feedback systems which assists them to reflect and improve their teaching. There is a gap that needs to be filled regarding the relationship that pedagogical self-efficacy and feedback mechanisms have on teachers reflective teaching practices. Knowing the magnitude of these relationships is very important in trying to design professional development courses aimed at creating reflective educators. Therefore, this study tries to fill this gap by examining the relative and combined effects of pedagogical self-efficacy and feedback mechanisms on the reflective teaching practices of Economics teachers.

Methodology

This study adopted a descriptive and utilized a survey method, this is due to its effectiveness in determining the attributes of large population from a sample group. The target population was made up of secondary school teachers of Economics. A stratified random sampling technique was used to obtain a sample of 75 participants from different schools. Three validated four-point rating scale instruments were used to gather data: the Pedagogical Self-Efficacy Scale ($\dot{\alpha}=.747$), Feedback Mechanism Questionnaire ($\dot{\alpha}=.867$), and Reflective Teaching Practices Inventory ($\dot{\alpha}=0.763$) using Cronbach Alpha. The instruments were aimed at measuring teachers' self-efficacy, feedback participation, and reflective teaching practices. Correlation analysis was done to assess the interplay between pedagogical self-efficacy, feedback mechanisms, and the reflective teaching practices. To determine the composite and relative impacts of the independent variables on the outcome variable, multi regression analysis was done. The set level of significance was p<0.05.

Hypotheses

The following Hypotheses were tested at 0.05 significance.

- 1. There is no significant relationship between pedagogical self-efficacy and reflective teaching practices.
- 2. There is no significant relationship between feedback mechanisms and reflective teaching practices.
- 3. There is no significant composite contribution of pedagogical self-efficacy and feedback mechanisms to reflective teaching practices?
- 4. There is no significant relative contribution of pedagogical self-efficacy and feedback mechanisms to reflective teaching practices.

Results

H_o1: There is no significant relationship between pedagogical self-efficacy and reflective teaching practices.

Table 1: Correlation Matrix of the Relationship between the Independent Variables and the Dependent Variable

	PEDAGOGICAL	FEEDBACK	REFLECTIVE
	SELF EFFICACY	MECHANISM	TEACHING PRACTICE
PEDAGOGICAL SELF	1	.472**	.653**
EFFICACY		(.000)	(.000)
FEEDBACK MECHANISM	.472** (.000)	1	.510** (.000)
REFLECTIVE TEACHING PRACTICE	.653** (.000)	.510** (.000)	1

Correlation Significant at 0.05 level

Table 1 shows the relationship that exists between the Pedagogical self-efficacy and Teachers' reflective Teaching practices. The table indicates that Teachers' reflective Teaching practices in economics as a subject had strong positive relationship with Pedagogical self-efficacy (r= .653; p=.000). The pattern of relationship shows that pedagogical self-efficacy was directly related to Teachers' reflective Teaching practices in economics. This means that teachers who exhibit higher pedagogical self-efficacy are more likely to engage in reflective teaching practices.

 H_02 : There is no significant relationship between feedback mechanisms and reflective teaching practices.

Table 1 shows the relationship that exists between the feedback mechanism and Teachers' reflective Teaching practices. The table indicates that Teachers' reflective Teaching practices in economics as a subject had moderate positive relationship with feedback mechanism (r= .510; p= .000). The pattern of relationship shows that feedback mechanism was directly related to Teachers' reflective Teaching practices in economics. This implies that effective feedback mechanisms contribute to the development of reflective teaching practices.

Ho3: There is no significant composite contribution of pedagogical self-efficacy and feedback mechanisms to reflective teaching practices?

Table 2 Summary of Regression Analysis of the Combined Independent Variables on Teachers' reflective Teaching practices

R= 0.692 R Square= 0.48 R Square (Adjusted)= 0.47 Standard Error of Estimate= 2.59								
Analysis of Variance								
Model		Sum of Squares	Df	Mean Square	F	Sig.		
1	Regression	446.638	2	223.319	33.095	.000 ^b		
	Residual	485.842	72	6.748				
	Total	932.480	74					

Table 2.0 shows the joint contribution of the two independent variables (Pedagogical self efficacy and feedback mechanism) to the dependent variable (Teachers' reflective Teaching practices). The two independent variables, when pulled together, had a significant contribution to the prediction of Teachers' reflective Teaching practices ($F_{(2,72)}$ =33.09, Adj.R 2 =0.47 p<0.05). The result also shows a coefficient multiple regression (R) of 0.692, a multiple R. Square of 0.48 and adjusted R square of 0.47. This means that 47% of the variance in the teachers reflective teaching practice is accounted for by the combination of the two independent variables used in the study and that other variables and residuals not included in this model may have accounted for the remaining variance of 53%.

Ho4: There is no significant relative contribution of pedagogical self-efficacy and feedback mechanisms to reflective teaching practices.

Table 3.0 Summary of Relative Contribution of the Independent Variables to Teachers' reflective Teaching practices

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
(Constant) PEDAGOGICAL SELF EFFICACY FEEDBACK MECHANISM	1.675 .595 .235	1.019 .108 .087	.531 .260	1.645 5.501 2.690	.104 .000 .009

Table 3.0 points to the relative contribution of the two independent variables (Pedagogical self-efficacy and feedback mechanism) to the dependent variable (Teachers' reflective Teaching practices), expressed as standard coefficient of beta weights. The result indicates that Pedagogical self-efficacy (β = 0.53) and feedback mechanism (β = 0.26) relatively contributed to Teachers' reflective Teaching practices. The p. value of each independent variable that is less than .05; (p<0.05)

implies that each independent variables individually contributed to Teachers' reflective Teaching practices.

Discussion of Results

Relationship between Pedagogical Self-Efficacy and Reflective Teaching Practices

The analysis indicated a positive and moderate correlation between pedagogical self-efficacy and reflective teaching practices of Economics teachers (r=0.653, p<0.05). This is consistent with Bandura's (1997) social cognitive theory which explains that people with high self-efficacy are more likely to engage in self-reflective actions geared towards enhancing performance. Those who have self-efficacy believe that they can control the behavioral processes of teaching a lesson and are willing to reflect on how best they can teach the lesson. Ige and Olayode (2012)) has confirmed this fact as they show that teachers with a high sense of self-efficacy are more willing to explore the use of new techniques and strive to transform and reflect upon their teaching activities. In the Nigerian situation, there is a need to enhance pedagogical self-efficacy considering the overcrowded nature of classrooms, scarce resources, and heterogenous students groups (Aina & Olanipekun, 2015). Helping teachers acquire confidence in their teaching may motivate them to adopt reflective practices which improves teaching processes and outcomes.

Relationship between Feedback Mechanisms and Reflective Teaching Practices

The correlation analysis revealed a positive moderate relationship between feedback mechanisms and reflective teaching practices (r = 0.510, p < 0.05). Teacher evaluation and reflection, regardless of the self-evaluation or peer evaluation, is greatly shaped by the feedback they receive from students and peers. Feedback, according to Gbadamosi (2021b) is one of the strongest influences on student and teacher learning because it helps them identify what needs to be acted upon. In this research, participating teachers reported that they were more likely to reflect on their practice when they received feedback. This indicates that there is need to promote and receive feedback culture in Nigerian schools as it enhances growth. A lot of Nigerian teachers, according to Okoli and Anyanwu (2021), do not receive sufficient structured feedback and therefore actionable feedback stunts their reflective improvement. Thus, instilling adequate and timely feedback can improve their reflective teaching practices (Ishokare & Gbadamosi, 2020)

Composite Contribution of the Pedagogical Self-Efficacy and Feedback Systems

As illustrated in the regression analysis, the combination of pedagogical self-efficacy and feedback mechanisms significantly predicted reflective teaching practices (F(2,72) = 33.09, Adj. $R^2 = 0.47$, p < 0.05). Collectively these variables explained 47% variability in reflective teaching practices underscoring their influence. This finding reiterates other studies that have pointed out the importance of self-efficacy and feedback in promoting reflective practices (Gbadamosi, 2021a; Farrell, 2017). The finding indicates that although all variables contribute to reflective teaching independently, their combined effect is considerable. In the context of Nigeria, with its institutional problems including low levels of teacher education and scarce professional development opportunities (Kola & Sunday, 2015; Gbadamosi, 2021b), highlights the need for deliberate strategies aimed at both enhancing self-efficacy and feedback mechanisms for fostering reflective teaching.

The Relative Contribution of Feedback Systems and Pedagogical Self-Efficacy

Additional examination revealed that self-efficacy in instruction had a stronger contribution towards resolving reflective teaching practices than feedback mechanisms of self-efficacy (β = 0.53, p < 0.05) (β = 0.26, p < 0.05). This means that the self-reported instructional skill of a teacher is likely to be more dominant in relation to reflective behaviors than feedback processes. This supports findings from Tschannen-Moran & Hoy (2001) and Klassen & Chiu (2010), which contend that self-efficacy is a key predictor regarding a teacher's inclination to engage with reflective practices, sustain efforts to overcome obstacles, and enhance performance in continual developments. Feedback, while

still important, may be as effective as the willingness and self-confidence of the teachers to use the feedback provided to enact change.

In Nigerian schools, this means that teachers' pedagogical self-efficacy must be improved before deploying feedback-based systems or reflective teaching frameworks because they need to be mentally ready to respond to feedback in a proactive manner (Aina & Olanipekun, 2015; Gbadamosi, 2021b).

Implications of the Findings for Teaching in Nigeria

This study's findings bear consequences for teaching in Nigeria. Firstly, self-efficacy of teachers must be improved as part of professional development programmes. Those with high self-efficacy are more likely to engage in thoughtful reflection of their practices and consider ways to achieve better student results. Secondly, there is a need to base structured feedback frameworks on peer review, student evaluation, and self-assessment as these encourage reflection.

Recommendations

The government thorough The State Ministry of Education and school authorities should develop and implement targeted professional development programmes focusing on enhancing teachers' pedagogical self-efficacy and their ability to utilize effective feedback mechanisms. These programs should incorporate evidence-based strategies, workshops, and training sessions to equip teachers with the knowledge and skills needed to engage in reflective teaching practices. Incorporate self-efficacy and reflective teaching training into the teaching and professional development programmes of educator elated workshops.

School administrators should promote a culture of reflective practice within educational institutions by encouraging teachers to regularly engage in self-reflection, peer observation, and collaborative reflection sessions and provide opportunities for teachers to discuss their teaching experiences, challenges, and successes to foster a community of reflective practitioners.

The government should disseminate resources, such as guidelines, templates, and tools, to assist teachers in integrating pedagogical self-efficacy and feedback mechanisms into their reflective teaching practices. Provide access to online platforms, workshops, and seminars where teachers can access these resources and share their experiences with others.

School management should encourage the formation of informal professional learning communities where teachers give and receive feedback and reflect together on their practices. They should create formal feedback mechanisms that promote peer review, student input, and self-assessment to aid teachers' reflective practice.

Conclusion

This study assessed the influence of feedback, in combination with self-efficacy regarding teaching, on reflective practices of teaching in Economics classrooms. The findings confirmed that both factors were critical to the development of the reflective teaching with self-efficacy having greater impact. To enhance reflective teaching practices in Nigeria, policymakers should establish structured feedback mechanisms and implement targeted training programs focused on pedagogical self-efficacy. Future research could explore the impact of these strategies on student learning across various subjects. Recognizing and addressing these determinants can contribute significantly to enhancing teaching quality, promoting professional growth, and ultimately improving student learning outcomes.

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