

Self-Efficacy Beliefs and Performance of Pre-Service Economics Teachers: Implications for Teacher Training

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Abstract

Good teaching is crucial for implementing the school curriculum and is taken seriously by teacher training institutions. Pre-service teachers of various colleges of education are taken through multiple assessment strategies to obtain information for improving teacher training curricula to achieve the aim of training quality teachers for effective curriculum implementation. One of the ways of sourcing information for fine-tuning teacher training is the assessment of pre-service teachers' self-efficacy beliefs. Sourcing information on pre-service teachers' self-efficacy beliefs helps to determine their readiness to implement the school curriculum after their training. This study aimed to assess the self-efficacy beliefs of pre-service economics teachers at the University of Cape Coast using a quality teaching model as a framework. All 77 final-year pre-service economics teachers at the University of Cape Coast were included in the study. A questionnaire aimed at measuring the self-efficacy beliefs of pre-service economics teachers were used to collect data. Data were analysed using thematic analysis, descriptive and inferential statistics. The study's key findings were that pre-service economics teachers were highly self-efficacious in teaching economics; male pre-service economics teachers had a higher self-efficacy belief than their female counterparts; and there was a weak, insignificant positive relationship between self-efficacy

belief and pre-service economics teachers' performance in off-campus teaching practice. It was recommended that female pre-service economics teachers should be encouraged more by their lecturers to help them improve their self-efficacy beliefs in teaching senior high school economics.

Keywords: Self-efficacy beliefs, Self-assessment, Effective teaching, Curriculum implementation, Teacher training

1. Introduction

According to Van Wyk (2015), economics education is crucial to the health of a nation's economy. This assertion is based on the premise that when households are given the capacity to build wealth, they also develop the capacity to produce more economically stable neighbourhoods and communities. It is no surprise then that economics has been prominent in the school curricula of developed and developing nations. The Ministry of education in Ghana has ensured that economics features prominently in the school curriculum in a bid not to be left out of the immense benefits one can gain from studying the subject. The subject is thus incorporated into the school curriculum right from the senior high school level. The expectation for the subject at that level of education is that a solid foundation will be laid for students to develop economic literacy and equip them with the essential tools required for studying the subject at higher levels of education (Ministry of Education, 2010). It is thus worthy to note that challenges in studying senior high school economics could have dire consequences for the nation in the future, going by Van Wyk's (2015) assertion. It is, therefore, necessary to always ensure the provision of the requisite resources, especially quality teachers, to implement the senior high school economics curriculum. This will ensure that the nation's intent of developing the economic literacy of its citizens will not be negatively affected. This implies that teacher training institutions must constantly work around the clock to ensure they churn out quality economics teachers to teach the subject right from the senior high school level.

As Lumadi and Acquah (2014) pointed out, effective teaching is of grave concern to teacher training institutions worldwide. This stems from the notion that the whole essence of teacher training programmes is to produce teachers with all the relevant competencies for curriculum implementation at all levels of education. In this respect, teacher training programmes, especially the ones aimed at making teachers for the senior high school level in Ghana, are periodically fine-tuned to ensure that they meet the requirement of producing top-notch teachers for the nation. In Ghana, both public and private universities have been given the mandate to train teachers for senior high schools, and each of these institutions come up with their programme structure, which must be sanctioned by the Ghana Tertiary Education Commission (GTEC), which has the oversight responsibility for quality education in tertiary institutions in Ghana. Occasionally, academic programmes are restructured to respond to current needs.

One such restructuring to tweak the teacher training programme was in the University of Cape Coast case, where the Bachelor of Education programme, which used to be an eight-semester programme, was changed to a seven-semester programme. The initial

eight-semester programme allowed students to do coursework for eight semesters, while off-campus teaching practice was done only during the long vacation in the final year. Such a short period for the off-campus teaching practice was deemed inadequate to provide the pre-service teacher with the requisite experiences to build their competencies for the teaching task ahead of them after their training. Consequently, the programme duration was changed to an eight-semester programme, where trainees spend seven semesters on-campus and one semester off-campus. This new arrangement requires the pre-service teachers to spend the first semester of their final year in their preferred schools for teaching practice. This new arrangement has existed for some time and came with certain teacher training curricular implications. All courses to be taken in the first semester of the final year had to be brought to lower levels or sent to the second semester of the final year.

Consequently, some of the semesters before the final year appear packed with courses. At the same time, some students in certain programme areas, especially pre-service economics teachers, miss out on courses run in the first semester. Pre-service economics teachers are forced to forfeit certain content courses like economic growth and development and mathematical economics because the pre-requisite courses to these final year second-semester courses are mounted in the first semester of the final year while they are out of campus for teaching practice. The implication is that trainee economics teachers miss out on some essential content courses equally crucial in equipping them with the requisite content knowledge to effectively teach senior high school economics. The question is, could this inability to read certain essential content courses affect how pre-service economics teachers perceive themselves in terms of their ability to teach the subject effectively? This is important because Permana et al. (2016) found a significant positive influence between prior knowledge, self-efficacy and students' skill. Although this finding was related to advanced computer course, it establishes a link among prior knowledge, self-efficacy and skill. Inference could be drawn here that if pre-service economics teachers do not get full prior knowledge of all the content they require in teaching economics, it could impact their self-efficacy belief, which could affect their skills in effectively teaching economics. This may then have a negative impact on senior high school students as they are the direct consumers of what pre-service economics teachers produce in the schools. The negative impact could rob the nation of the benefits it stands to gain in producing economically literate citizens. It was, therefore, essential to study the self-efficacy beliefs of trainee-economics teachers to inform economics teacher training.

1.1 Concept of Self-Efficacy Beliefs

“Self-efficacy” beliefs of pre-service teachers need to be accounted for in the training of Economics teachers for senior high schools because the issue of self-belief features prominently in discussions on teacher competence. Self-efficacy belief is one's ability to organise and pursue a course of action necessary to produce given attainments (Bandura, 1997). Teacher self-efficacy has been defined as a notion that refers to teachers' beliefs in their ability to achieve, which can be turned into behaviours by assessing their skills and capacities (Unlu, Ertekin, & Dilmac, 2017). The concept can be thought of as a teacher's judgement of their capability to bring about the desired outcome of student engagement and

learning. This implies that the construct has to do with how teachers see themselves in terms of their ability to do what is required of them as teachers in the teaching and learning process. Thus, teacher self-efficacy, in the context of this study, may be perceived as pre-service economics teachers' conception of their instructional effectiveness in the classroom. It is important to note that the construct, as used here, does not necessarily imply an assessment of the actual teaching skills of pre-service economics teachers but an assessment of the personal beliefs of pre-service economics teachers about their ability to teach effectively when allowed to practice as professional teachers after their training.

As affirmed by Unlu et al. (2017), teachers' beliefs about their efficacy can be developed from four main sources of influence, namely: mastery experiences, vicarious experiences, social persuasions, as well as physiological and emotional states. In the context of this study, these sources of influence could be from pre-service economics teachers' exposure to the relevant content and pedagogy and interaction with lecturers, peers, and experienced teachers during both their on-campus training experiences and off-campus teaching practice. These four sources provide the bases for teachers to gauge their capabilities; give them comparison information to judge their competence; help convince them of their ability to perform a certain task; and serve as an indicator of capability. These four principal sources provide a framework for theoretical and empirical studies on teachers' self-efficacy beliefs.

Research has revealed that teachers' self-efficacy impacts their student's academic performance and that teachers with high expectations about their teaching ability produce higher student achievement in school (Dilekli & Tezci, 2020; Unlu et al., 2017). Every teacher that steps into the classroom to teach is expected to have an appreciable level of confidence in their ability to provide appropriate experiences that would facilitate learning for their students. This stems from the notion that people who believe in themselves to succeed tend to try harder to achieve and are also likely to persist no matter the challenges they face. On the other hand, it has been found that less confident people give less effort because failure after trying harder threatens their self-esteem (Cherry, 2022). This is probably because it has been established that teachers' sense of self-efficacy tends to influence their emotional state, goal-setting and persistence (Kaleli, 2020). Conclusions drawn by Bruce, Esmonde, Ross, Dookie, and Beatty (2010) on other research on teacher self-efficacy beliefs suggest that teachers who perceived themselves to be highly effective were more likely to persevere in their attempts to reach learning objectives even when they encountered challenges. Tweed (2013) also posited that teachers' self-efficacy expectations determine the initiation and sustenance of instructional activities and the amount of effort put into instruction.

In a related development, Berry, Daughtrey, and Wieder (2010) have established the links between teachers' sense of self-efficacy and collective responsibility to their teaching effectiveness. However, some researchers believe that self-rating questionnaires tend to be biased and usually favour socially desirable responses (Dawson, Ritzhaupt, Liu, Rodriguez, & Frey, 2013; Dilekli & Tezci, 2020; Holtge, Ehm, Hartmann, & Hasselhorn, 2019). This assertion might not be out of place because teachers are likely to have a positive perception of their competencies and would not want to give any negative impressions about themselves to outsiders. According to Bandura (1991), "people's motivation, affective states, and actions

are based more on what they believe than on what is objectively the case". This suggests that people always tend to have more confidence in themselves than in what they can do. It is not surprising that quite several studies report a high self-efficacy belief among teachers (e.g., Mehdiuezhad, 2012; Bruce, Esmonde, Ross, Dookie, & Beatty, 2010).

In addition to the preceding argument, one cannot also rule out the possibility that certain personal characteristics, such as gender and personality, could affect how teachers rate themselves. However, a study by Shore and Thornton III (1986) found no effect of gender on self-rating. This finding has been corroborated by more recent studies, such as the works of Karimvand (2011); and Mitchual, Donkor, and Quansah (2010). However, some studies also found relationship between teachers' sense of self-efficacy and gender (Klassen, Usher, & Bong, 2010). Whereas some studies found females to be higher on self-efficacy ratings (Dilekli & Tezci, 2020.), others found the self-efficacy beliefs of males to be higher than females (Asimaki & Vergidis, 2013; Kaleli, 2020). This indicates that research is inconclusive on the subject of gender and self-efficacy beliefs of teachers. It thus became imperative also to ascertain the differences in self-efficacy beliefs between male and female pre-service economics teachers to ascertain whether a difference existed in their case, as such differences could have implications for the training of economics teachers.

Although Pre-service teachers' teaching effectiveness, based on the assessment by their lecturers, is given due consideration as part of their certification in most teacher training institutions, especially at the University of Cape Coast, their sense of self-efficacy is not duly considered. However, such beliefs have contributed significantly to work output in other disciplines (Cetin & Askun, 2018; Machmud, 2018; Paramita et al., 2020; Permana et al., 2016). In addition, although there have been many studies on pre-service teachers' sense of self-efficacy, the emphasis has been on other subjects such as inclusive teaching (Morrell & Carroll, 2003, Tan & Amrhein, 2019, Johnson & Jones, 2021), advanced computing (Permana et al., 2016), sources of self-efficacy beliefs (Leyser, Zeiger & Romi, 2011), and the link between self-efficacy and commitment (Wasburn-Moses, 2005; Chestnut & Cullen, 2014). Little attention has been given to the self-efficacy beliefs of pre-service economics teachers. This study contributes to the literature by ascertaining the self-efficacy beliefs of pre-service economics teachers, establishing the link between the self-efficacy beliefs of pre-service economics teachers and their performance in teaching practice and establishing the difference in the self-efficacy beliefs of male and female pre-service economics teachers. It also highlights the implications of such beliefs to the training of economics teachers

1.2 Conceptualizing Self-Efficacy Belief

In this study, the competencies required of the teacher to be considered effective were restricted to process variables, specifically, what the teacher does in the classroom during the teaching and learning interaction. It was not stretched to include other things the teacher does outside the classroom. Consequently, the New South Wales Quality Teaching Model was adapted as the framework for conceptualising effective teaching and subsequently used to assess pre-service teachers' self-efficacy beliefs. According to Yeigh (2008, as cited in Lumadi & Acquah, 2014), this quality teaching model connects students' learning to the

teacher's quality of pedagogy to the teaching/learning process. Thus, student learning outcomes are primarily the product of the instruction they receive. The framework identified three pedagogical dimensions as the central pillars of effective teaching. These dimensions are Intellectual Quality (IQ), Quality Learning Environment (QLE), and Significance (SIG).

The IQ dimension relates to pedagogical elements that promote deeply cognitive, challenging, reflective, and generally more considered student learning. The emphasis is on producing a deep understanding of important, substantive concepts, skills and ideas. In this regard, the pre-service economics teachers should believe in their ability to demonstrate deep knowledge of economics concepts; deep understanding of substantive content; break down problematic areas of the subject to facilitate learning; promote higher-order thinking in learners through the use of relevant pedagogical approaches; articulate the core jargons and employ other media of communicating substantive knowledge in economics to encourage learning of key concepts.

The QLE dimension emphasises supportive classroom structures and positive expectations as a means to more productive learning outcomes, thus promoting positive classroom relationships and more equitable student outcomes. This dimension requires that pre-service economics teachers should believe in their ability to establish explicit quality criteria, such as spelling out the standards expected of students in terms of their performance and classroom conduct, engaging students in the lesson, assuring students of their ability to perform expected learning tasks, providing opportunities for a supportive learning environment, and helping students to be responsible for their learning.

The SIG dimension connects learning to ownership and the students' growing sense of identity by linking classroom learning to students' backgrounds and the larger, more diverse world outside the school. This requires pre-service teachers to believe in their ability to identify learners' background characteristics and incorporate them in lesson planning and delivery, recognise diversity among students and provide equal opportunities for all learners, including those with special needs and those from minority groups, and connect what learners learn to what they already know and to practical life. In effect, this dimension focuses on pedagogy that helps make learning meaningful and essential to the learners (Yeigh, 2008, as cited in Lumadi & Acquah, 2014).

Pre-service economics teachers who believe they possess the requisite Intellectual Quality and can create Quality Learning Environment and incorporate Significance in their lessons are likely to have a high self-efficacy belief. The adapted NSW Quality Teaching model was considered a suitable framework for the study because it identifies essential areas of pedagogy in which a teacher is expected to develop competence to function effectively. The core elements in the framework have been summarised in figure 1.

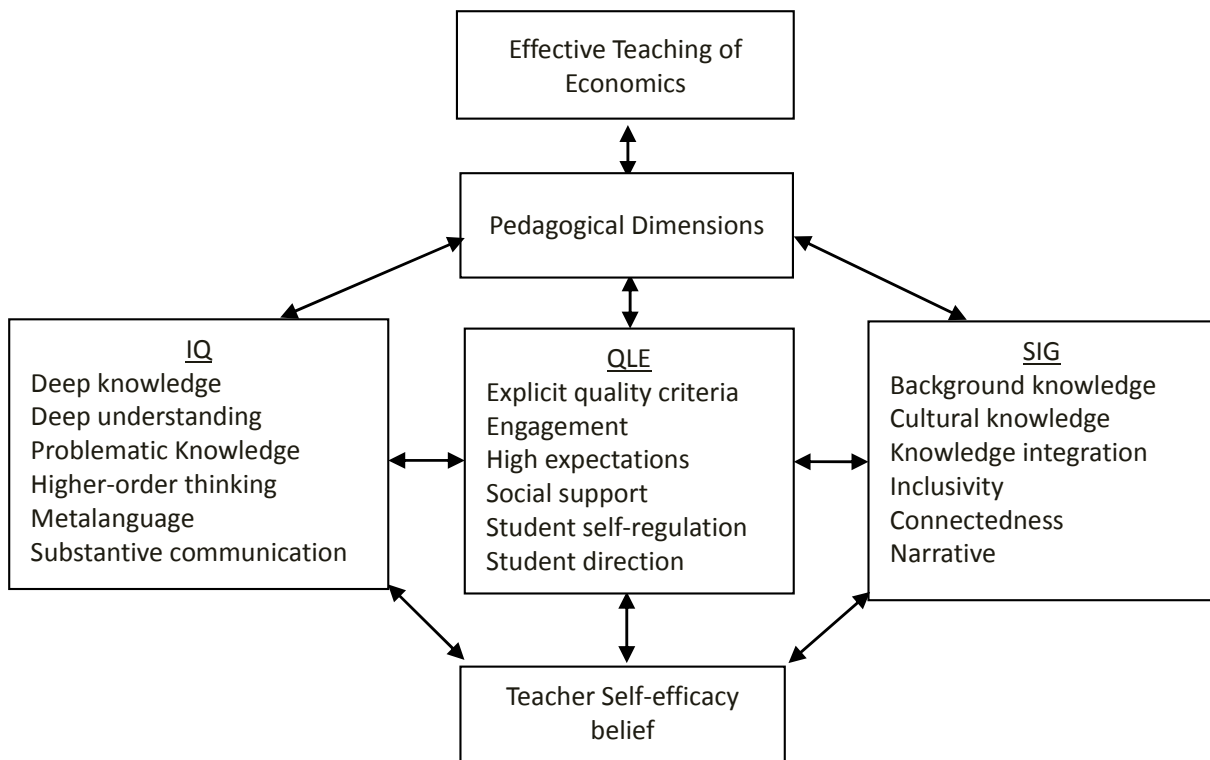


Figure 1. The NSW Quality Teaching framework

Source: Adapted from Yeigh (as cited in Lumadi & Acquah, 2014).

1.3 Research Questions

The following research questions guided the study:

- (1) What are the self-efficacy beliefs of pre-service economics teachers in teaching economics?
- (2) What measures do trainee-economics teachers perceive could be implemented to improve their teacher training programme to enhance their self-efficacy beliefs?

1.4 Hypotheses

(1) H_0 : There is no statistically significant difference between the self-efficacy beliefs of male and female pre-service economics teachers.

H_1 : There is a statistically significant difference between the self-efficacy beliefs of male and female pre-service economics teachers.

(2) H_0 : There is no statistically significant relationship between trainee-economics teachers' self-efficacy beliefs and their off-campus teaching practice scores.

H_1 : There is a statistically significant relationship between pre-service economics teachers' self-efficacy beliefs and their off-campus teaching practice scores.

2. Methodology

The descriptive research design was employed for the study because the aim was to discover pre-service economics teachers' self-efficacy beliefs and also ascertain their perspectives on measures to improve their teacher training programme. The aim was not to manipulate any variables but to describe the situation just as it was (Cohen, Manion, & Morrison, 2007).

The population for the study was 77 final-year B.Ed. (Social Sciences) economics major students from the University of Cape Coast. Final-year students were chosen because they had gone through most aspects of their teacher training curriculum that qualified them to participate in off-campus teaching practice. All 77 students, comprising 55 males and 22 females, were included because all the students' views were considered essential for the study. Pre-service economics teachers' off-campus teaching practice scores were used as a basis for assessing pre-service economics teachers' performance in teaching. A teacher self-efficacy rating questionnaire, based on the New South Wales Quality Teaching Model, used in a study by Acquah (2015), was used to assess pre-service economics teachers' self-efficacy beliefs. The established reliability of that instrument is a Cronbach alpha of 0.899, considered acceptable by Cortina (1993). The self-efficacy questionnaire was administered right after the pre-service teachers completed their off-campus teaching practice but before they saw their off-campus grades. This ensured that their self-efficacy beliefs were not influenced by their results from off-campus teaching practice. Data were analysed using means and standard deviation, Kruskal-Wallis H test, Mann Whitney's U test, and Kendall's Tau-b correlation coefficient. There was one open-ended item on the questionnaire for pre-service teachers to indicate what they expected to be done to improve their teacher training experience to enable them to develop a high sense of self-efficacy before graduation. Responses were thematically analysed and discussed.

3. Results

3.1 Research Question One

What are the self-efficacy beliefs of pre-service economics teachers in teaching economics?

The results of pre-service economics teachers' self-efficacy beliefs have been presented in Table 1.

Table 1. Self-efficacy beliefs of pre-service economics teachers

S/N	Self-Efficacy Beliefs	Mean	St. Dev.
	Mean for Intellectual Quality	4.18	.72
	Mean for Quality Learning Environment	4.10	.58
	Mean for Significance	4.22	.58
	Grand Mean	4.16	.63

Note. Mean ranges: 0.0-1.5 (Strongly Disagree); 1.6-2.5 (Disagree); 2.6-3.5 (Not Sure); 3.6-4.5 (Agree); 4.6-5.0 (Strongly Agree).

Source: Fieldwork (2018).

The results from Table 1 suggest that pre-service economics teachers considered themselves to be effective in teaching senior high school economics, as indicated by the grand mean and standard deviation ($M = 4.16$, $SD = .63$). This is very refreshing because pre-service economics teachers considered themselves effective in all the three dimensions {IQ ($M = 4.18$, QLE ($M = 4.10$, SIG, $SD = .58$)). They agreed they would be able to do what is expected of them in the teaching and learning process. The interesting development, however, is that it appeared the pre-service teachers were more varied in their responses to the statements on IQ ($SD = .72$), as it had a relatively larger standard deviation as compared to the consensus amongst them on the responses to the statements on QLE ($SD = .58$) and SIG ($SD = .58$). Again, the pre-service economics teachers appeared to rate themselves relatively higher for SIG ($M = 4.22$) as compared to IQ ($M = 4.18$) and QLE ($M = 4.18$). This suggests that pre-service economics teachers considered themselves more effective regarding the SIG dimension than IQ and QLE. To establish whether the differences in self-efficacy beliefs among the three dimensions of the quality teaching model were significant, a Kruskal-Wallis H test was conducted to test the null hypothesis, H_0 : *There is no statistically significant difference in self-efficacy beliefs among the three dimensions of effective teaching.* The Kruskal-Wallis H test was used because the distribution was non-normal. A test of homogeneity of variances was first conducted, which indicated that the variances of the self-efficacy beliefs on IQ, QLE and SIG were equal ($F(2,228) = 2.998$, $p = .052$) (see appendix A). Therefore, the test was considered suitable for the analysis, and the results obtained are presented in Table 2.

Table 2. Kruskal-Wallis H test

	Dimensions of Self-efficacy beliefs	N	Mean Rank	Chi-Square	df	p-value
Self-efficacy beliefs	Intellectual Quality	77	122.43	5.95	2	.051
	Quality Learning Environment	77	100.94			
	Significance	77	124.64			
	Total	231				

Source: Fieldwork (2018).

From Table 2, the Kruskal-Wallis H test showed that there was no statistically significant difference in self-efficacy beliefs among the three dimensions of effective teaching [$\chi^2(2) = 5.95, p = 0.051$], with a mean rank score of 122.43 for IQ, 100.94 for QLE and 124.64 for SIG. Thus, despite differences in the mean rank scores among the three dimensions, with SIG recording the highest, the difference was not statistically significant. We fail to reject the null hypothesis. Therefore, none of the three dimensions of effective teaching contributed significantly higher to self-efficacy beliefs than the others.

3.2 Hypothesis One

H₀: There is no statistically significant difference between the self-efficacy beliefs of male and female pre-service economics teachers.

H₁: There is a statistically significant difference between the self-efficacy beliefs of male and female pre-service economics teachers.

Research Hypothesis one sought to determine whether male and female pre-service economics teachers differed in self-efficacy beliefs in teaching senior high school economics. This became necessary as earlier studies remained inconclusive on whether there was a difference in the self-efficacy beliefs of male and female teachers. The Mann-Whitney U test was conducted to test the hypothesis, and the results are presented in Table 3.

Table 3. Difference in self-efficacy beliefs between male and female pre-service economics teachers

	Gender	N	Mean Rank	Z	ρ
Self-Efficacy Beliefs	Male	55	46.86	-4.941	.000*
	Female	22	19.34		

Note. * Significance level .05.

Source: Field Data (2018)

From Table 3, the Mann-Whitney U test showed that male pre-service economics teachers had a significantly higher self-efficacy belief in teaching senior high school economics than female pre-service economics teachers, $z = -4.94$, $p < .05$. Male pre-service economics teachers had an average rank of 46.86, while female pre-service economics teachers had an average rank of 19.34. We, therefore, fail to accept the null hypothesis that there is no statistically significant difference in self-efficacy beliefs of male and female pre-service economics teachers.

3.3 Hypothesis Two

H₀: There is no statistically significant relationship between pre-service economics teachers' self-efficacy beliefs and their off-campus teaching practice scores.

H₁: There is a statistically significant relationship between pre-service economics teachers' self-efficacy beliefs and their off-campus teaching practice scores.

The relationship between pre-service economics teachers' self-efficacy belief and their off-campus teaching practice score was tested using the Kendalls Tau-b correlation coefficient. This coefficient was used because both variables, self-efficacy belief and off-campus teaching practice score, had non-normal distribution. Thus, a nonparametric test had to be used, and according to Newson (2002), it is considered more robust than the other nonparametric correlation coefficients. The result obtained is presented in Table 4.

Table 4. Kendall's Tau-b Correlation

			Off-campus score	Self-efficacy beliefs
Kendall's tau_b	Off-campus score	Correlation Coefficient	1.000	.109
		Sig. (2-tailed)	.	.212
		N	77	77
	Self-efficacy beliefs	Correlation Coefficient	.109	1.000
		Sig. (2-tailed)	.212	.
		N	77	77

Source: Field Data (2018).

From Table 4, Kendall's tau_b correlation coefficient indicated a weak positive relationship between pre-service economics teachers' self-efficacy beliefs and their off-campus score ($\tau_b = .109$, $p = .212$). Overall, there was a weak, insignificant, positive correlation between self-efficacy beliefs and off-campus teaching practice scores. Increases in self-efficacy belief among pre-service economics teachers were not correlated with increased off-campus teaching practice scores.

3.4 Research Question Two

What measures do trainee-economics teachers perceive could be implemented to improve their teacher training programme to enhance their self-efficacy beliefs?

After rating themselves on the self-efficacy beliefs questionnaire, pre-service economics teachers were allowed to suggest measures they perceived could be put in place to improve their teacher training programme to enhance their self-efficacy belief. After thematically analysing their responses, two key changes run through their responses as measures for improving their teacher training experience. These changes have been presented as follows:

3.4.1 Making Changes to Off-Campus Teaching Practice

Pre-service economics teachers believed that off-campus teaching practice should be taken from the first semester of the final year to the second semester so that they could complete all the relevant courses, such as ‘guidance and counselling and other final year content courses in economics. They believed that would make them more confident and prepared for off-campus teaching practice and ensure they did not miss out on crucial final-year content courses required for further economics studies, especially at the master’s level. Some pre-service teachers even wished that off-campus teaching practice would be done for two continuous semesters or at least twice during their four-year programme instead of just one semester. This is because they believed the off-campus experience gave them more hands-on experience and allowed them to practice theories of pedagogy they had studied during coursework.

3.4.2 Making Changes to Content Courses

Trainee-trainee economics teachers proposed that a new content course in economics, based on the senior high school economics syllabus, should be mounted and taught by the methodology department and not the economics department so that pre-service teachers would get the opportunity to learn relevant content they would be teaching at the senior high school level. They also indicated that they missed required content courses in the final year during the period they spent off-campus, so they should be brought to the lower levels to enable them to take those courses before off-campus teaching practice.

4. Discussion of Findings: Implications for Teacher Training

4.1 Self-Efficacy Beliefs of Pre-Service Economics Teachers

The study revealed high self-efficacy in teaching senior high school economics among pre-service economics teachers. This is a refreshing outcome because such positive self-efficacy belief among prospective teachers gives a good impression about the B.Ed. (Social Sciences) programme and also gives a promising future outlook on the kind of teachers being produced to teach economics at the senior high school level. Even though self-efficacy belief is not a direct measure of a teacher’s effectiveness on the job, a heightened sense of self-efficacy belief is a good outcome because a high sense of self-efficacy belief is linked to teachers’ collective responsibility to their teaching effectiveness (Berry, Daughtrey, & Wieder, 2010). This connotes that such a high sense of

self-efficacy could be transferred to the job and make them effective in implementing the senior high school economics curriculum to produce high student performance in senior high school economics. This assertion is supported by the fact that other empirical studies have established that teachers with high expectations about their teaching ability produce higher student achievement in school (Dilekli & Tezci, 2020; Unlu et al., 2017). Again, this finding is further supported by Permana et al. (2016), who found a significant positive influence between prior knowledge, self-efficacy and students' skill. However, it is essential to note that a high self-efficacy rating is highly expected from this kind of study and conforms to the general assertion that people are more likely to perceive themselves to be competent and sometimes even more capable than they actually may be. It also conforms to research findings that people mostly rate themselves more highly (Mehdinezhad, 2012; Bruce, Esmonde, Ross, Dookie, & Beatty, 2010). This means that a follow-up study needs to be conducted to ascertain whether a high self-efficacy rating among pre-service economics teachers reflects their performance after school.

The study also revealed that the three dimensions of IQ, QLE and SIG contributed equally towards the self-efficacy beliefs of trainee economics teachers. This is a good development because it gives the impression that the training of economics teachers is fairly balanced. Pre-service economics teachers may have developed competencies in all three dimensions in equal measure, probably due to the varied experiences their training gives them. This finding contradicts the findings of Lumadi and Acquah (2014), which found that high school students found the dimension of IQ as the most influencing dimension on their perception of their teachers' effectiveness. This is very much expected because, in the case of the Lumadi and Acquah study, it was students' perspectives, not self-efficacy beliefs. However, it is essential to note that self-efficacy ratings are sometimes biased (Mehdinezhad, 2012; Bruce, Esmonde, Ross, Dookie, & Beatty, 2010).

4.1.1 Implication for Teacher Training

The implication of this finding to the training of teachers is that, based on the testimonies of pre-service economics teachers, the training they are receiving appears to be achieving its objective of making them competent teachers as it gives prospective teachers a high self-efficacy belief in their ability to teach senior high school economics effectively. Again, the findings suggest that the teacher training provides balanced experiences for pre-service economics teachers to develop self-belief in their ability to demonstrate IQ, QLE and SIG in implementing the senior high school economics curriculum.

4.2 Gender and Self-Efficacy Beliefs of Pre-Service Economics Teachers

The study revealed that male pre-service economics teachers had a statistically significant higher self-efficacy belief than female pre-service economics teachers. This finding confirms the findings of other studies that found that the self-efficacy belief of males was higher than females (Shaukat, Abiodullah, & Rashid, 2011, Asimaki & Vergidis, 2013; Kaleli, 2020). Such differences in self-efficacy beliefs between male and female pre-service teachers may be attributed to the differences in the levels of confidence male and female pre-service teachers reposed themselves. It may not mean that females were necessarily less competent

teachers because, in another study, females were found to have higher self-efficacy beliefs than males (Dilekli & Tezci, 2020). The differences in the research findings may be due to the differences in the subject areas under consideration in each study. However, it is noteworthy from the outset that there were fewer female pre-service economics teachers than males. This could be because undergraduate economics appears to be male-dominated at the University of Cape Coast. This is evident in the gender distribution of the cohort of economics major students used for the study. There were 55 male and 22 female pre-service economics teachers, clearly showing that the females were in the minority. This buttresses the observation made by Goldin (2013) that there are generally fewer female bachelor economics majors than males across universities in the United States of America. Why female pre-service economics teachers perceived themselves to be less effective compared to their male counterparts is a matter that requires further scientific investigation because whatever the case, these female pre-service economics teachers had opted to train as economics teachers, and it is worrying that they considered themselves less efficacious as compared to their male counterparts.

4.2.1 Implication for Teacher Training

The implication of the finding on the disparity in self-efficacy belief between male and female pre-service economics teachers is that special attention would have to be given to female pre-service economics teachers in the curriculum enactment process and measures put in place to ensure that female pre-service economics teachers develop a higher sense of self-efficacy in their ability to teach the subject. Such measures may include assigning more teaching tasks and engaging female pre-service teachers more during class interactions. Again, investigations would have to be carried out to ascertain the peculiar challenges female economics major students face in studying the subject at the undergraduate level to help develop a more targeted solution to this problem.

4.3 Relationship between Self-Efficacy Beliefs and Off-Campus Teaching Practice Score

The study revealed a weak positive relationship between pre-service economics teachers' self-efficacy beliefs and their off-campus teaching practice scores. Besides, the relationship between the two variables was found to be insignificant. This connotes that the self-efficacy belief of pre-service economics teachers in teaching senior high school economics was not associated with pre-service economics teachers' performance in off-campus teaching practice. This finding contradicts the assertions of Bruce, Esmonde, Ross, Dookie, and Beatty (2010) and Tweed (2013) that self-efficacy beliefs contributed to work output. The finding implies that there may be a lot of factors that influence pre-service economics teachers' effectiveness, other than the beliefs pre-service economics teachers had about their effectiveness. It could be that the opportunity to practice teaching during off-campus teaching practice may have helped pre-service teachers to reflect on their teaching practice and improve upon it to obtain good scores. It may also be that the method used for assessing pre-service teachers did not reflect what they could do, or probably the use of a self-report measure in ascertaining the self-efficacy belief could be fraught with biases. It would be in the best interest of

stakeholders in teacher training to unearth these factors to eliminate the negative ones among the influencing factors.

4.4 Pre-Service Economics Teachers' Perspectives on Measures to Improve Their Teacher Training Programme to Enhance Their Self-Efficacy Belief

Economics teachers perceived two main measures to improve their teacher training experience. These were changes related to off-campus teaching practice and economics content courses. The changes proposed by pre-service teachers have serious implications for teacher training. For instance, the proposition that off-campus teaching practice should be made a whole year exercise implies that pre-service teachers would forfeit another semester of coursework. This would mean that all required courses would have to be taken by students before they reached the final year, and that would mean loaded coursework from level 100 to 300. This would seriously increase students' required number of credit hours per semester. This might not be favourable to students as they would be loaded with too much coursework, which might not allow them to engage in other equally critical co-curricular activities which contribute to their total development as prospective teachers. However, what can be done for students to get more teaching experience could be to send them out on attachment in the long semester break from levels 200 to 300 to understudy the more experienced economics teachers in the high schools before off-campus teaching practice starts. This would give them more exposure before the exercise, help them adjust to their schools of practice, and prepare them adequately for off-campus teaching practice. Again, the call for off-campus teaching practice to be sent to the final semester in the final year is worth giving a thought to, provided it is feasible, because this would ensure that pre-service teachers participate in all relevant content and pedagogy courses which contribute to their professional development before they are sent out for teaching practice. This would ensure that pre-service teachers would not miss out on prerequisite courses for further growth in their subject area.

Again, the pre-service teacher's call for introducing content courses based on the senior high school economics syllabus is good since those courses would help expose students to the essential content areas they would be required to teach after school. The challenge with university economics is that usually, the emphasis is on preparing students for the world of work and further studies in the discipline; hence the content may not necessarily prepare pre-service economics teachers for senior high school economics classrooms. Usually, pre-service teachers appear to rely on the knowledge they acquired in the subject during their senior high school days to teach. Most of them rely on pamphlets that may not point them to the right content on the subject. Therefore, to fully equip pre-service economics teachers to implement the senior high school economics curriculum effectively, they would have to be taught the right content suited for that level of education as part of their teacher training programme.

5. Conclusions

Based on the findings of the study, it can be concluded that:

- i. Pre-service economics teachers are very confident in their ability to teach senior high school economics, which means that their teacher training programme adequately prepares them.
- ii. Gender is a key variable that needs to be taken cognisance of in the training of economics teachers because male pre-service economics teachers consider themselves better prepared to teach senior high school economics than their female counterparts.
- iii. Self-efficacy belief is not related to teacher effectiveness. This means that the fact that pre-service teachers perceive themselves to be efficacious does not mean this will automatically translate into effective teaching in the classroom.
- iv. Giving pre-service economics teachers access to more tailored content courses, and more opportunities to engage in teaching practice as part of their teacher training curriculum could help them develop more confidence in themselves as potential economics teachers.

6. Recommendations

Based on the findings of the study, it is recommended that:

- i. The teacher education departments of the universities, mainly the University of Cape Coast, should introduce an initial field experience programme where pre-service economics teachers would be made to understudy experienced economics teachers on the field to enable them to enrich their teaching experiences before going for off-campus teaching practice.
- ii. The Department of Business and Social Sciences Education and other faculties responsible for training economics teachers should introduce content courses tailored to pre-service economics teachers' needs to adequately prepare them and enhance their self-efficacy in teaching senior high school economics.
- iii. The Department of Business and Social Sciences Education and other teacher training faculties should embark on research aimed at unearthing the contributing factors to students' performance during off-campus teaching practice to ensure that pre-service teachers' performance is a true reflection of their teaching competencies.
- iv. Lecturers in economics education should pay special attention to female pre-service economics teachers in transacting the curriculum to ensure they also develop a higher sense of self-efficacy in teaching the subject. This will help eliminate the differences in self-efficacy belief between male and female pre-service economics teachers teaching senior high school economics.

7. Limitations

This study employed a questionnaire, which is a self-report measure to collect data from participants. Although participants were assured of confidentiality and anonymity and were encouraged to be as truthful as possible, some may have given socially acceptable responses, which may not reflect their true self-efficacy belief. Also, self-efficacy, as used in this study, does not imply an assessment of the actual teaching skills of pre-service economics teachers but an assessment of the personal beliefs of pre-service economics teachers about their ability

to teach effectively when allowed to practice as professional teachers after their training. Therefore, as measured in this study, the beliefs should not be taken to mean actual effectiveness. Again, data on students' off-campus scores was secondary data. It is essential to note that the secondary data was obtained using a standard instrument to assess students on teaching practice. Secondary data may have weaknesses as they were not collected with this research work in mind. Any errors in measuring scores could affect the outcome of this study. Again, intra-rater and inter-rater variability could have affected students' scores. Irrespective of these drawbacks, data editing and cleaning ensured that extreme scores were taken out to mitigate their overall impact on the study. Again, the study still provides valuable information for improving teacher training.

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