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## **PRACTICING EFFECTIVE INSTRUCTION: TOWARDS PERFORMANCE AGENDA**

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**ABSTRACT:** *The study investigated teachers' instructional practices in senior high schools at Bantama in the Kumasi metropolis. The objectives of the study were to identify instructional practices mostly used, established whether significant association exist between number of years taught and instructional practices, assess whether significant difference exist between gender and teachers' instructional practices. One research question and two hypotheses were formulated to direct the study. Descriptive survey design was adopted for the study. The schools and teachers were chosen using purposive sampling technique. Ninety-six teachers constituted the sample size for the study. Questionnaire was the main data gathering instrument used for the study. Pre-test conducted yielded reliability coefficient of 0.82. Data were analyzed using means and standard deviations, Pearson Chi-Square ( $\chi^2$ ) of Independence and Independent Sample T-test. Findings indicated that teachers mostly studied the performance of students. Significant and positive association was established between teachers' instructional practices and number of years taught. It was therefore, recommended among others that there is a continuous need for teachers to reinforce the practice of studying performance of students to enable them modify methods of teaching to benefit all manner of students. Ghana Education Service needs to organise workshop on effective instructional practices every academic year for teachers to update their knowledge on instructional practices they ought to apply.*

**KEYWORDS:** Instructional practices, performance agenda, pedagogy, pseudonyms, effective practice

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## **INTRODUCTION**

The educational system of today needs teachers who can alter their teaching strategies to improve students' outcome. The practices become effective when students are able to use them to complete class assignment. Several efforts have been made to implement school-based shared decision to improve effectiveness of teachers' instruction. Such efforts have empowered teachers in curriculum instruction (Louis, Mark & Kruse, 1996). However, effective instructional practice which is the core of school achievement has been challenged by most teachers who exercise the act of teaching as a profession.

Instructional practices are the broad range of processes, from which classrooms are organized and resources are used for daily activities of teachers and students to facilitate learning (OECD, 2010). Classroom teachers are established as result of their instructional practices that convey information

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to students related learning and education in general (Kaplan, Middleton, Urdan & Midgley, 2002). The implementation of instructional practices is the necessary component of improving students' performance. Teachers use instructional practices to help students become more independent and effective learners. Instructional practices stimulate and assist students to have focus and put together information for future use.

In spite of the studies conducted by educational researchers regarding which instructional practices is more effective in promoting students' achievements, persuading teachers to implement or experiment with meaningful change in instructional practices continues to be challenging (McKinney & Fraizer, 2008). The US Department of Education (2013) stated that the type of classroom instructional practice teachers ought to use has been a vital issue for discussion among educational researchers.

The issue of delivering lessons effectively to improve students' academic performance has been a major concern for some senior high school teachers. Students' performance in some of the senior high schools in the Kumasi metropolis has not been encouraging. The percentage of students who passed WASSCE examination in 2014/2015 was reported to be low (Ministry of Education, 2015). This called for reactions from all the stake holders of the schools against the type of classroom instruction given to students. This issue has placed significant attention on the kind of instructional skills teachers of senior high schools possess. The issue for investigation in this paper focused on instructional practices teacher mostly apply in senior high schools at Bantama in the Kumasi metropolis.

### **Problem Statement**

Instructional practices of teachers are generally perceived to be underutilized and this is an indication of ineffective teaching resulting to inability to attain educational goals. Teachers seem to have less knowledge and skills on some aspects of instructional practices they need to use. An observation by the researcher seems to reveal that some teachers fail to involve students adequately in lessons and also fail to offer remedial teaching to low achieving students.

Literature searched indicated that teachers' instructional practices are positively associated with students' achievement (OECD, 2018). Teachers instructional practices influence students' performance (U.S. department of Education, 2013). This raises question on what instructional practices do teachers of senior high schools mostly use? There is the need to answer this and other questions.

### **Justification**

Previous studies on instructional practices were mainly conducted in basic schools outside Ghana (Lerkkanen, Kiuru, Pakarinen, Poikkeus, Rasku-Puttonen, Siekkinen, & Nurmi (2016), OECD (2013) and McKinney & Fraizer (2008). Instructional practices study is non-existence in senior high schools at Bantama in the Kumasi metropolis. This paper sought to fill this vacuum. Previous studies (Fraizer, 2008; OECD, 2018; US Department of Education, 2013) used students' achievement as a variable to measure effective teachers' instructional practices. These studies overlooked years taught as a variable. This paper considered years taught as a variable to measure teachers' effective instructional practices.

For data analysis, previous studies mostly adopted descriptive statistics (Zepeda, 2013; Sergiovanni & Green, 2015). This paper adopted Chi-square as analytical tool to measure teachers' effective instructional practices.

### **Objectives of the study**

1. to identify instructional practices teachers mostly use in senior high school at Bantama in the Kumasi metropolis.
2. to establish whether significant association exist between teachers' instructional practices and number of years taught in senior high schools at Bantama in the Kumasi metropolis.
3. to assess whether significant difference exist between gender and teachers' instructional practices in senior high schools at Bantama in the Kumasi metropolis.

### **Research question**

What instructional practices do senior high school teachers mostly use at Bantama in the Kumasi metropolis?

### **Hypotheses Testing**

The following directional hypotheses were tested

1. There is a statistically significant association between teachers' instructional practices and number of years taught in senior high schools at Bantama in the Kumasi metropolis.
2. There is a statistically significant difference between male and female teachers' instructional

practices in senior high schools at Bantama in the Kumasi metropolis.

## **METHODOLOGY**

### **Research Design**

The study adopted descriptive survey design to find out teachers' opinions and attitudes about instructional practices teachers use in public Senior High Schools at Bantama in the Kumasi metropolis. Ary, Jacobs and Razavieh (2010) opined that descriptive design is suitable for investigating opinions, beliefs, circumstances and processes of an issue. The design is highly regarded by policy makers in the social sciences where large population is dealt with and widely used in educational research since data gathered by way of descriptive survey represent field conditions (Osuala, 1987). However, the design delves into private matters which respondents are not ready to respond to them. In spite of this limitation, the researcher considered descriptive survey as suitable for collecting information on teachers' instructional practices because the design generates data that facilitate finding out effective instructional practices.

### **Population of the Study**

The population was drawn from all senior high schools at Bantama in the Kumasi metropolis. Bantama was selected as the area for the study because in recent times one hears of the public complaining about low performance of students. However, the accessible population was public senior high schools and teachers at Bantama. Records from the regional education office for

2019/2020 academic year put the population of public senior high schools at five and 645 teachers at Bantama in the Kumasi metropolis.

### **Eligibility criteria**

The eligibility criteria included public senior high school teachers with at least five years teaching experience in their present schools and also possess certificate in teaching were legible to participate in the study.

### **Sampling Technique**

The sample for teachers was drawn from the available lists from each participating senior high school. The public senior high schools and teachers were purposively selected for the study. Fraenkel and Wallen (2000) postulated that purposive sampling is used because those selected are considered to have the needed information for the study. The rationale behind purposive sampling is to locate information rich cases. All the teachers in the participating schools who satisfy the eligibility criteria were selected as participants for the study because they could provide the needed information for the study. In all, a sample of 96 participants was used for the study.

### **Instrument**

Questionnaire was used to gather information from teachers because the study was conducted in educational institutions where all the respondents were literate. Sarantakos (1998) have said that if questionnaire is used, data offered by respondents are of limited interference on the part of the researcher. A weakness of questionnaire is that it is hurriedly filled. The items on the questionnaire were mostly likert-type scale ranging from 'strongly agree to strongly disagree'. Likert-type scale was used because it is easy to construct. The questionnaire contained 15 items which is a combination of bio-data and instructional practices. The structure of the questionnaire was based on four-point scale as described by Best and Khan (1995).

### **Pre-testing**

Pre-test was conducted at Ahmadiyya senior high school in Kumasi to ensure that the questionnaire and data collection procedures, among others, were appropriate to derive the best results when the actual study was conducted. In this regard, the questionnaire had to measure what is intended to measure when it is used elsewhere, given the same circumstances for which it was developed (Delpont, 2002; Welman & Kruger, 2001). Cronbach alpha was used to analyze data from the pre-test because all the questionnaire items were mostly likert-type scale. The alpha coefficient obtained from the pre-test was .82. This showed that the items were good enough to derive the best responses from participants.

### **Data Analysis Plan**

Data were analyzed using descriptive statistics such as means and standard deviation to answer the research question. Hypothesis one was tested using Pearson Chi-square of Independence to establish association between the number of years taught and teachers instructional practices. Hypothesis two was tested using Independent Sample T-test to establish significant difference between gender and instructional practices.

### Ethical issues

Confidentiality was guaranteed by protecting participants responses. This was maintained by reporting the data in a manner that participants were not associated with the information provided. Names and other personal information about participants were not disclosed. This was achieved through the use of pseudonyms and password for protecting the files containing participants data (Cohen, Manion & Morrison, 2013). Participation was entirely voluntary and participants were informed of their rights to withdraw from the study at any time (Gay, Mills & Airasian, 2009).

## RESULTS

### Research Question: What instructional practices do senior high schoolteachers at Bantama in the Kumasi metropolis mostly use?

Answer to the research question was sought to find out the instructional practices teachers mostly use. The mean score of each item was calculated. The means calculated were used to determine instructional practices mostly use by teachers. Table 1 provides the results.

**Table 1: Instructional Practices mostly used**

Item	N	Mini-Mum	Maxi-Mum	Mean	Std. Deviation	Skewness Statistic
I study the performance of students	96	1	4	3.34	.927	-1.22
I have beliefs of how instructions should be delivered	96	1	4	3.25	.929	-.684
I share lesson plan with colleagues	96	1	4	3.23	.989	-.811
I use lesson that requires students to solve problems	96	1	4	3.22	.965	-.671
I use student-entered approach	96	1	4	3.22	1.048	-.901
I use classroom discussion	96	1	4	3.20	.969	-.623
I use pedagogy that focuses on higher order thinking	96	1	4	3.18	1.016	-.796
I develop lesson based on curriculum	96	1	4	3.17	.959	-.562
I pick up students' cues and alter my teaching	96	1	4	3.16	1.050	-.711
I build new lesson on previous knowledge	96	1	4	2.99	.733	-.476

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I use instructional techniques that reaches all levels of students	96	1	4	2.82	.696	-.320
I discuss teaching Techniqueswithcolleagues	96	1	4	2.76	.722	-.632
I spend additional time on remedial teaching	96	1	4	2.65	.711	-.443
I space out instruction to cater for slow learners	96	1	4	2.72	.688	1.372

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Source: Computed from Field Data, 2020.

Information in Table 1 revealed that the skewness of the instructional practices was negative and the means were also higher. This means that the left tail is longer and most of the responses were tilted to the right. This implies that instructional practices are vital to promoting good teachers performance which results in high academic achievements of students in senior high schools.

From Table 1, majority of the teachers indicated that they studied the performance of students. This item recorded the highest mean score of 3.34 with the associated standard deviation of .927; followed by “I have beliefs of how instructions should be delivered” with mean score of 3.25 and standard deviation of .929; ‘I share lesson plan with colleagues’ had 3.23 mean and standard deviation of .989; ‘I use lesson that requires students to solve problems’ had 3.22 mean and standard deviation of .965 and ‘I use student-centred approach’ had 3.22 mean and 1.048 standard deviation. ‘I use classroom discussion’ had mean score of 3.20 and standard deviation of .969 respectively. From the results, it could be concluded that teachers mostly use the practice of studying students’ performance in class.

Other aspects of instructional practice indicated ‘I use instructional technique that reaches all levels of students’ with 2.82 mean and .696 standard deviation followed by ‘I discuss teaching techniques with colleagues’ with 2.76 mean and .722 standard deviation; ‘I space out instruction to cater for slow learners’ recorded a mean score of 2.72 and standard deviation of .688. The least practice ‘I spend additional time on remedial teaching’ had a mean of 2.65 and standard deviation of .711. This means that teachers less effectively practice this strategy during teaching.

### Hypotheses Testing

The following directional hypotheses were tested:

- 1. There will be statistically significant association between years taught and teachers Instructional practices.**

Pearson Chi-square ( $\chi^2$ ) test for Independence analysis was conducted to find out whether years taught is associated with instructional practices. Tables 2 and 3 provide the results.

**Table 2: Chi-Square Test ( $\chi^2$ ) Results of Instructional Practices and Years Taught**

Instructional practices and years taught	$\chi^2$ value	DF	Asymp. Sig (2-sided)
Pearson chi-square	3.582276		.001
Likelihood Ratio	181.9902761		.000
Linear by Linear Association	2.103	1	.147
N of valid cases	96		

Source: Computed from Field Data, 2019.

a. 328 cells (99.7%) have expected count less than 5. The minimum expected count is .01.

b. Computed by a 2x2 table

The assumption of 'minimum expected cell frequency' was not violated since 99.7% of cells had expected count less than 5. The chi-square test with 2x2 table obtained a value of 3.582 with significance value of .01. The significant value of .001 was smaller than the alpha .05. It is therefore, concluded that the outcome is significant. It is evident that significant association existed between instructional practices and years taught.

**Table 3: Symmetric Measures**

Nominal	by Phi	1.932	.001
Nominal	Cramer's V	.789	.001
N of Valid Cases		96	

Source: Computed from Field Data, 2019.

The Phi coefficient value (1.932) which is a correlation coefficient indicated a high association between instructional practices and years taught using Cohen's (1988) criteria. However, the chi-square test for independence showed significant association between instructional practices and years taught  $\chi^2$  (276, n=96) = 3.582, .001, Phi = 1.932. Therefore, the alternate hypothesis was accepted.

## Hypothesis 2

**There is a statistically significant difference between male and female teachers' instructional practices.**

An Independent Sample T-test was conducted between gender of teachers and their instructional practices. The analyzed information was to find out whether significance difference **exists** between these two variables. Table 4 presents the results.

**Table 4: T-test Analysis of Gender and Instructional Practices**

Gender	N	Mean	Standard Deviation	T value	D f	P
Instructional practices	59	61.7895		1.539	94	.127
Male	37		11.77615			
		57.7233				
Female			13.82203			

Source: Field data, 2019.

\* $p \geq .05$  level

An Independent-Sample T-test was conducted to compare instructional practices scores for male and female teachers. This test whether the variances of the scores for the two groups are the same. The assumption of equal variance was not violated since the significance level (.127) was more than .05 alpha level ( $p > .05$ ). In the output presented above, the significance level (2-tailed) of Levene's test obtained was .127. This value was above the required cut-off of .05. This shows that the variances for the two groups are the same, male ( $M = 61.7895$ ,  $SD = 11.77615$ ) female ( $M = 57.7233$ ,  $SD = 13.82203$ ):  $t(94) = 1.539$ ,  $p = .127$ , (two-tailed). The mean difference at 95% confidence interval was the same for instructional practices of male and female teachers. Therefore, the alternate hypothesis postulated earlier is rejected.

## DISCUSSION OF FINDINGS

The views of teachers call for deliberation. On instructional practices mostly use, findings showed that teachers mostly used the practice of studying students' performance in class. This implies that teachers frequently monitor students progress to enable them identify their strengths and weaknesses and also modify teaching methods to help them improve on their performance. This ensures effective instructional delivery which promotes good performance of students. The finding is in consonance with Hallinger's (2005) finding that monitoring is a significant factor that ensures students success.

Findings indicated that teachers failed to spend additional time on remedial teaching. This implies that teachers fail to reteach lessons for students to fully comprehend the lesson. Students will not participate fully in class activities and this will affect their academic performance. The intended purpose of educating students may not be achieved.

Findings again revealed that teachers failed to space out instruction to cater for slow learners. This means that teachers less effectively use this practice. Teachers are likely not to involve slow learners in the lessons. This results in students lagging behind academic activities since they are unable to understand the lessons as expected. This will retard students' academic progress. The finding is in agreement with Duke and Tucker's (2003) statement that spacing instruction enables teachers to cater for slow learners in class.



The non-parametric test, Chi-square ( $\chi^2$ ) test for independence on years taught and instructional practices, revealed an association between the two variables. This means that the proportions of years teachers had taught is significantly associated with their instructional practices in senior high schools. The phi coefficient value of 1.932 which is a correlation coefficient showed high association between years taught and instructional practices using Cohen's (1988) criteria of .10 for small effect, .30 for medium effect and .50 for large effect. This means that basically, the two variables are interchangeable. It could be said that the number of years teachers had taught is significantly associated with their instructional practices. Therefore, the alternate hypothesis postulated earlier was accepted because there was enough evidence to support the claim that years taught is significantly associated with teachers' instructional practices in senior high schools at Bantama. This finding is consistent with Stronge's (2002) assertion that years of teaching affect teacher effectiveness in classroom.

Findings from Independent Sample T-test on the difference between male and female teachers' instructional practices revealed that no statistically significant difference existed between the mean scores of teachers' instructional practices and gender. The magnitude of the difference in the means was insignificant. It could therefore, be deduced from the findings that the variances for the two variables are not different. That is, the two variables do not differ in their groups. This implies that effective instructional practices do not depend on the ratings of male and female teachers for performance to be achieved. Male teachers' instructional practices are the same as their female counterparts. Therefore, the alternate hypothesis stated earlier is rejected since there is inadequate information to support the claim that male and female teachers differ in their use of instructional practices.

## CONCLUSIONS

On instructional practices, the findings revealed that teachers mostly used the practice of studying students' performance. Other aspects found to be practiced included having beliefs of how instructions should be delivered, sharing lesson plan with colleagues, using lessons that require students to solve problems, using student-entered approach and using classroom discussion respectively. It could be concluded that teachers are knowledgeable in using this practice which is likely to result in effective performance in lesson delivery.

Findings again revealed that teachers failed to spend additional time on remedial teaching. Teachers failed to space out instruction to cater for the slow learners.

The study again found that teachers fail to provide remedial teaching to weak students to enable them catch up with brilliant students. It could be concluded that teachers less effectively use these instructional practices which may render their classroom teaching ineffective.

On association between instructional practices and number of years taught, the study established statistically significant association between the two variables. It could be concluded that instructional practice is related to number of years taught

Finding indicated no statistically significant difference between gender and teachers instructional practices. Thus, males as well as their female counterparts use instructional practices in similar ways.

### **Implications**

One obvious conclusion drawn was that teachers in senior high schools at Bantama apply the basic instructional practice of studying the performance of students during teaching. The implication is that teachers will identify areas students need to improve and provide the necessary assistance. However, spending time to offer remedial teaching was not practised by teachers. The implication is that a lot of teaching activities will not be effectively carried out and students may not benefit from lessons presented in classroom and this will affect their academic life in school and the overall goal of education may not be achieved

The significant association between teachers' instructional practices and years taught implies that these variables may be important in explaining effective instructional practices of teachers. Teachers in senior high schools who wish to improve students' performance may focus on considering the number of years of taught as a variable that influences instructional practices. Applying effective instructional practices would greatly results in quality teaching service which is also likely to induce demand for high achievement in senior high schools in Ghana. This would again reduce pressure on headmasters and mistresses and lead to greater efficiency in instructional hours.

There is evidence from the findings that male teachers use instructional practices the same as their female counterparts. This implies that gender is not an issue in applying instructional practices and it cannot be used to determine teachers' effective instruction delivery in senior high schools.

### **Recommendations for Practice**

1. On instructional practices mostly used, it was found that teachers mostly studied the performance of students. It is recommended that there is a continuous need for teachers to reinforce the use of this practice to improve students' performance.
2. It was again revealed that teachers sometimes failed to space out instruction to cater for the slow learners. It is again, recommended that teachers should space out instruction by laying emphasis on points at each step on the methodology for all manner of students to grasp the concept before moving to the next step. Teachers need to employ the use of discussion method during instruction to ensure active participation of slow learners in the lesson.
3. The study revealed that teachers did not spend time on remedial teaching. It is therefore, recommended that heads sensitize teachers on the need to provide remedial teaching to students. Heads should also institute at least two-hour remedial teaching every week aside the normal timetable in the school to compel teachers to practice remedial teaching.
4. It was found that teachers instructional practices were significantly and positively associated with the number of years taught. The paper supported the need for Ghana Education Service to organise workshop on effective instructional practices every academic year for teachers with few years of teaching to update their knowledge and deliver lessons effectively.

5. It was indicated by the study that male and female teachers did not differ in their use of instructional practices. It is also recommended that heads should not consider gender as an issue when supervising and evaluating teachers' instructional practices. Both male and female teachers should be given equal instructional assistance in the schools.

### Contributions of the Paper

The paper considered effective instructional practices which called for an in-depth examination of their usefulness for improving students' performance. The results of the study presented were examined from different viewpoints of teachers. Limitation of the paper identified was that the use of the likert-type scale items was likely to limit teachers from providing some vital information on instructional practices as they were only limited to items provided on the questionnaire.

Regarding implications, it was noted that teachers should not consider effective instruction practices as individual task rather a collective task that should be performed by both heads and teacher. It is important to identify instructional practice that improves performance of students. The paper indicated that studying students' performance promotes students achievement. This portrays the need to monitor students' progress in senior high schools.

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