

## **Production and Utilization of Skills Oriented Graduates: An Assessment of Newly Trained Teachers Utilization of Instructional Materials in Selected Senior Secondary Schools in Cape Coast, Ghana**

---

**Igwe, R.O., PhD and Yidana, M.B**  
*Faculty of Education,*  
*University of Cape Coast, Ghana.*

### **Abstract**

*This study examined the extent to which newly trained teachers have used the knowledge and skills acquired from the schools and colleges to improve their performances, especially in the production and utilization of instructional materials. Three hundred newly trained teachers comprising graduates from senior secondary schools (Public and Private) participated in the study. The respondents were stratified and randomly selected. A structured questionnaire (PUIM – TQ) was used to collect data from the respondents. Frequencies and percentile statistical tools were employed to analyse the data. The findings suggest that the newly trained graduate teachers have remained relatively stable in the use of instructional materials in their teaching at the time of investigation. However, they expressed some problems in producing some of the teaching/learning materials. The implications of this study are discussed.*

**Keywords:** *Instructional Materials; Trained Teachers; Graduate Teachers.*

### **Introduction**

One of the major factors in the successful implementation of curriculum innovations is whether or not the curriculum is accompanied by useful and good quality instructional materials. Thus, a crucial step in curriculum is the specification and provision of human and material resources. The consumables and communication materials including text books, audio-visual materials and computer soft-ware needed to support the curriculum should be identified, produced and utilized effectively and efficiently. Traditionally, the University has been defined as a centre for the production and communication of knowledge, much of it practice-relevant (Humberman, 1993). An examination of the chain leading from knowledge production to its utilization shows disappointing results especially in sciences. To ameliorate this situation, Barber (1985) suggests that consideration needs to be given to the lay out, décor, lighting, temperature and noise of instructional facilities to the size of instructional groups and the space outside the classroom.

The importance of instructional materials in promoting effective teaching/learning cannot be underestimated. For educators and teachers to ensure quality education and remain competitive and benefit from the current global trends in education and curriculum, they must provide a closer integration between skill development and skill utilization. This is even more important now, as we continue to move through the stages of knowledge-based economy, characterised by globalization and the production of knowledge, particularly in areas related to instructional materials, and information technology (Walters, 2004). The evolving knowledge based education requires skills that previously did not exist. According to Tamakloe et al (1996) “a teaching recourse

is the material which the teacher uses to facilitate the learning, understanding, knowledge, concepts, principles and skills by his/her students". And to Ezuka (2008), instructional are all forms of information devices that enable the teacher to enhance the quality of instruction.

It is very important, therefore, that the newly trained teachers are evaluated and motivated regularly on teaching activities and use of instructional materials. This type of evaluation is very essential in that it enables head teachers, principals and administrators to decide whether the newly trained teachers can teach with the resources available to the standard level of competence established by the schools and the ministry of education. According to Ralph (1993), newly trained graduate teachers use the instructional media more than they produce it.

Barber (1985) opines that new and beginning teachers have the opportunity to:

- show evidence of their ability to use the instructional materials,
- determine their skills in using the instructional materials/resources,
- receive instruction in effective teaching techniques and strategies.

This shows that the newly trained teachers are assumed to have been well trained or equipped in the production of use of instructional materials. The determination of the newly trained teachers in maximising the use of instructional materials is therefore dependent on a clear understanding of the holistic approach to teaching and learning.

### **Statement of the problem**

Evidence from literature revealed that the newly trained teachers from the Universities were exposed to the understanding, skills and techniques needed for the production and utilisation of various types of instructional materials during their pre-service training. However, there are conflicting arguments regarding the production and utilisation of instructional materials by the newly trained teachers. This study was to determine whether the newly trained teachers have really been using the instructional materials as expected to enhance quality education.

The purpose of the study was to:

- determine the level of awareness of the newly trained teachers on the essence and use of instructional materials
- examine their involvement in the production and improvisation of instructional materials
- investigate the extent of the use (utilization) of the teaching learning materials.
- identify some of the difficulties encountered by the newly trained teachers.

### **Research questions:**

To guide the study, the following research questions were formulated:

1. What is the level of awareness of the newly trained teachers on the essence of instructional material?
2. To what extent do newly trained teachers produce or improvise instructional materials?
3. How do the newly trained teachers use instructional materials in class room instruction?
4. What difficulties do the newly trained teachers encounter in the production and utilization of the instructional materials?

### **Method**

A total of 300 newly trained secondary school teachers were sampled from 20 secondary schools in the cape coast municipality. The respondents were selected using stratified random sampling. Sampling was

done in such a way that half of the teachers in the municipality were captured. In all, twelve public and eight private secondary schools were used for the study.

The instrument used for the study was a 24-item teachers' questionnaire on production and utilization of instructional materials (PUIM- TQ). The ( PUIM – TQ) instrument consisted of five sections namely A,B,C, D and E. Section A sought information such as qualification, years of experience, age, type of school etc. Sections B, C, D and E had items on the subject under study. The items were structured on a three point scale of highly aware, moderately aware and poorly aware; and Agree, Disagree and Undecided.

The instruments were validated by subjecting them to scrutiny by experienced lecturers from the University of Cape Coast and two principals from the secondary schools in Cape Coast Municipality. Their suggestions were incorporated in the final drafts of the questionnaire. The reliability of the instrument was determined by using test-retest method and a reliability co-efficient of 0.90 was obtained.

**Results and Discussion**

The findings of the research questions are presented on tables 1 – 4.

**Research Question 1:** What is the level of awareness of the newly trained teachers on the essence of instructional materials?

**Table 1: Awareness of the Essence of instructional Materials by Newly Trained Teachers.**  
N = 300

	Variables	Highly Aware		Moderately Aware		Poorly Aware	
		Freq.	%	Freq.	%	Freq.	%
1	Essence of instructional materials	97	32	169	56.3	34	11.7
2	Less Emphasis	80	26.7	125	41.6	85	31.7
3	Very Essential aspect of curriculum.	252	84.0	44	14.7	4	1.3
4	Effective use of instructional materials	266	88.7	28	9.3	6	2
5	Reduces Verbalisation	223	74.3	66	22.0	11	3.7
6	Promotes retention	268	84	27	9.0	5	.7

Thirty-two percent (32%) of the newly trained teachers acknowledged that they were exposed to various instructional materials in school. As shown on Table 1, 80 (26.7%) claimed to be highly aware, that their lecturers laid less emphasis on the use of teaching aids. With respect to the notion that instructional materials are a very essential aspect of the curriculum, majority of the respondents (84%) acceded to be highly aware of this notion. Where 88.7% of the respondents claimed to be highly aware of the need for the effective use of instructional materials in teaching and learning on the proposition that the use of instructional materials reduces verbalisation in teaching, 74.3% respondents indicated that they are highly aware of this fact while a negligible number of 3.7% are poorly aware of it. Concerning the idea that instructional materials enhance students' learning and retention, only 0.7% of the teachers appeared to be poorly aware of this proposition, while an overwhelming majority (89.3%) indicated "highly aware".

**Research Question 2:** To what extent do newly trained teachers produce or improvise instructional materials?

**Table 2: Production and improvisation instructional materials** N = 300

	Variables	Agree		Disagree		Uncertain	
		Freq.	%	Freq.	%	Freq.	%
1	I purchase my instructional materials always	99	33.0	169	56.3	32	10.7
2	Because instructional materials are expensive I improvise them for teaching	258	86.0	22	7.3	20	6.7
3	I solicit the help of artists to produce instructional materials	158	52.7	96	32.00	46	15.3
4	Students help me in some of my drawings	141	47.0	116	38.7	43	14.3
5	The school aids teacher in the production of instructional materials	142	47.3	126	42.7	32	10.0
6	Every teacher produces his/her own instructional materials	161	58.7	85	28.3	54	13
7	I always use instructional materials in my teaching	128	41.0	152	50.7	20	8.3

As shown on table 2, the result indicated that because of the expensive nature of instructional materials, majority (86%) of the teachers improvise them for teaching, whereas 33% claim they always purchase their instructional materials. Fifty –two point seven percent (52.7%) of the respondents indicated that they solicit the help of artists to produce instructional materials, while 47% claimed that students help them in some of their drawings. The data also revealed that 42.7% of the respondents did not agree to the assertion that the school aids teachers in the production of instructional materials, while 58.7% respondents agreed that they produce their own instructional materials.

**Research Question 3:**

How do newly trained teachers use instructional materials in classroom instruction

**Table 3: Usage of instructional materials** N = 300

	Variables	Agree		Disagree		Uncertain	
		Freq.	%	Freq.	%	Freq.	%
1	My students are more interested in their class work because of the use of the instructional materials	237	79.0	14	4.7	49	16.3
2	I display my instructional materials on the chalkboard before teaching	51	17.1	214	71.3	35	11.6
3	I use instructional materials always whether needed or not.	19	6.3	243	81.0	38	12.7
4	I use my instructional materials when necessary	271	90.3	14	4.7	15	5.0

From table 3, majority (90.3%) of the respondents agreed that they only use the instructional materials when necessary. This is in contrast with those (17.0%) who place the instructional materials on the board before they start to teach.

From the data presented on table 3, (79.0%) of the respondents claimed that their students are more interested in class work because of the use of instructional materials. Almost all the respondents (90.3%) indicated that they use instructional materials when necessary while few of the respondents (17.1%) and (6.3%) indicated that they do not use instructional materials as required.

**Research Question 4**

What difficulties do the newly trained teachers encounter in the production and utilisation of teaching instructional materials?

**Table 4: Difficulties encountered in the use of instructional materials** **N = 300**

	Variables	Agree		Disagree		Uncertain	
		Freq.	%	Freq.	%	Freq.	%
1	Not easy to use the instructional materials	79	26.3	195	65.0	26	8.7
2	Instructional materials not in school's store	254	84.7	26	8.7	20	6.6
3	Expensive to procure instructional materials	201	67.0	65	21.7	34	11.3
4	School does not cater for instructional materials	203	67.7	72	24.0	25	8.3
5	Some instructional materials cannot be improvised	253	84.3	31	10.3	16	5.4
6	Teachers feel lazy to prepare instructional materials	122	40.7	138	46.0	40	13.3

From Table 4, 84.3% of the teachers agreed that some instructional materials cannot easily be improvised; 26.3% maintained that instructional materials are not easy to use while 84.7% insisted that the schools do not make any allowance for teachers to access suitable and appropriate instructional materials. Sixty-seven percent (67%) are of the view that instructional materials are expensive. Sixty-seven point seven (67.7%) claimed that the schools do not cater for instructional materials while 40.7% stated that teachers find it difficult to prepare or improvise instructional materials.

**Discussion of Findings**

The respondents demonstrated a high awareness of the importance of instructional materials in promoting effective learning. This result confirms Ezuka's (2008) assertion that, to ensure quality education the use of instructional materials is vital to teaching and learning because they increase learning possibilities and also complement the efforts of the teacher.

On the issue of production of instructional materials it showed that majority of the teachers improvised the instructional materials used in class instruction because most of the real objects are very expensive. However, it is interesting to note that about 52.7% solicit the help of artists and 47%, rely on the help from students in

the production of instructional materials. This view is in line with Ralph (1993) that newly trained teachers use instructional materials more than they produce.

Another finding is that the newly trained teachers use instructional materials effectively to enhance their teaching. This finding is also in line with Tamakole et al (1996) that instructional materials help to facilitate learning, understanding, knowledge, concepts, principles and skills acquisition in his/her student.

On the issue of the difficulties faced by newly trained teachers in the use of instructional materials 254 (84.7%) of the respondents revealed that the most difficult problem that they faced is unavailability of the instructional materials in the schools store followed by the fact that 253 (84,3%) respondents claimed that some of the materials cannot be improvised due to their nature.

The data collected from 203 (67.7%) as shown on Table 4 also revealed that the schools show indifference to the provision of instructional materials for teachers. The reason given for this as claimed by 201 (67.0%) respondents is that most of these materials are expensive.

### **Summary of Findings**

This study has been able to establish that the newly trained teachers are quite abreast and informed about the importance of instructional materials.

It also revealed that most of the newly trained teachers improvise the instructional material due to the expensive nature of the real objects.

The study has also shown that due to the demanding nature of improvisation that most of the teachers seek the assistance of artists and students in the production of the needed instructional materials.

It also revealed that the most difficult problem faced by the newly trained teachers is the unavailability of instructional materials in the stores of the various schools coupled with the fact that some of these materials cannot be easily improvised due to their nature.

### **Recommendations**

1. The study recommends that regular in-service training be organised for teachers so as to sustain their awareness concerning the importance of instructional materials in the instructional process.
2. It is also recommends that the Ministry of Education (MOE) should provide all public schools with the requisite instructional materials needed. This will go a long way to minimize the improvisation of such materials.
3. The Ministry's intervention will also help to discontinue the practice where teachers seek the assistance of artists and students in the production of the instructional materials.

### **References**

- Barber, L. W. (1985). *Improving Teacher Education Performance: Formative Evaluation* Blomginton, Indiana. Phi Delta Kappa's Centre on Evaluation, Development and Research. P. 23 – 28.
- Ezuka, T.C. (2008). *Effects of Enriched Concept Mapping Strategy in the Teaching and Learning of Upper Basic School Social Studies*. (Unpublished Ph.D Thesis, University of Lagos).

- Huberman, A. M. (1993). Improving Social Practice through Utilization of University Based Knowledge. *Journal of Higher Education Springer Netherlands*. 12 (3).
- Ralph, E. G. (1993). Beginning Teachers Utilization of Instructional Media: A Canadian Case Study. *Journal of Innovations in Education and Teaching International* 30(40).
- Tamakloe, E. K., ATTA, E. T., Amadahe, F. K. (1996). *Principles and Methods of Teaching*. Ghana, Frank Publishing Ltd. P. 68 – 88.
- Walters, D. (2004). A Comparison of the Labour Market Outcomes of Post Secondary Graduates of Various Levels Over A Four-cohort period. *Canadian Journal of Sociology*. 29(1), P. 1- 27.