

# Factors hindering Geography Teachers from Designing Meaningful Pedagogical Activities in Secondary Schools, Kenya

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**Abstract:-**The purpose of the study was to investigate difficulties facing Geography teachers from designing meaningful pedagogical activities when teaching and learning Geography in Secondary Schools. Like any other pedagogical issue, teaching and learning of Geography in Secondary Schools faces and poses a wide range of challenges. These challenges range from expertise, technical and logistical support from the school administrative arising from the instructional established system, practices and traditions. This study was set to establish from both the school Geography teachers and department administrators whether they were aware of any challenges that existed in the teaching and learning of Geography. The study was based on Shulman, 1987, a model of knowledge growth in teaching. It adopted a descriptive cross-sectional survey targeting public Secondary Schools Geography Heads of the Department, Geography teachers and form three and form four Geography students. Data were collected using questionnaires for Geography Teachers, interview schedules for Heads of Department and an observation checklist were used to investigate the types of instructional resources used in form three (3) and form four (4) Geography lessons. On the teaching and learning process, the respondents cited many deficiencies such as inadequate duration for covering the syllabus, examination-oriented programme and cheating, understaffing and lack of inadequate instructional resources. The researcher, therefore, concluded there is little or no technical and logistical support provided to the Geography Department and in particular to Geography teachers in terms of financial resources, instructional resources, and in-service programmes to facilitate proper preparation for quality instruction. It was therefore recommended, to manage emerging pedagogical technological challenges in teaching and learning of Geography in Secondary Schools, there is a need for teachers to invest adequately on computer-aided instruction. This strategy will not only promote its quality but also make it relevant to the needs of learners and teachers of Kenya and beyond.

**Keywords:** Pedagogical Activities, Designing, Geography, Technical, Logistical, Computer-aided Instruction

## I. INTRODUCTION

In recent years there has been a concern to study the influence of teachers in curriculum delivery and their instructional beliefs. Many educators claim that the beliefs held by Geography teachers shape their ability to seek and

acquire skills, knowledge, and attitude to perform their pedagogical tasks. If educational changes have to be attained, there is more to be done rather than a mere transfer of instructional resources and media to schools (Roehrig, Kruse and Kern, 2007). According to Muchiri and Bariham (n.d.), in their study on evaluation of Geography teachers preparedness in pedagogical approaches for enhanced instruction suggests that most Universities of Kenya are not doing an adequate job of preparing teachers for today's classroom pedagogical difficulties. However, teachers who engage in various collaborative activities feel better than their colleagues to meet most classroom demands. According to Wanjohi (2011), in his study on the development of education system in Kenya since independence, Geography was regarded as a compulsory subject in Secondary Schools; form one (1) to form four (4) up to 1992. The report by Kamunge (1988), of the presidential working party on education and manpower training for the next decade and beyond, noted that the school curriculum was loaded and thus its objectives were never attained and therefore, the commission recommended lessening of school subjects which lead to Geography remaining as a core subject only in form one (1) and two (2). In primary schools, Geography was familiarised in the early 1980s. Since then, it was taught as a traditional separate subject until early 2000 when it was integrated into Social Studies. Geography is examined by Kenya National Examination Council (KNEC) as an integrated subject in Primary Schools and Primary Teacher Training Colleges (PTTCS) and as a traditional separate subjects in Secondary Schools and Teachers' Training Universities and Diploma Colleges in Kenya (Dan, 2010). Emerging educational reforms, however, is one issue that is recognized as important for all education stakeholders in regards to the relationship between effective teaching and students' learning. Lee (2013), encouraged teachers to embrace change as they consider the most effective ways to prepare future leaders. He reminded his audience that "better teachers lead to better schools, better schools lead to better children, and better children lead to a better democracy."

### Statement of the Problem

General achievement in Kenyan society today is laid on the passing of Kenya Certificate of Secondary Examination (KCSE) since it opens doors for higher education and/or employment. Thus, more emphasis is laid on summative assessment. The global problem inducing learners' enactment in Geography, is that it has not been explored adequately since it is one of the elective subjects in the Secondary School curriculum in Kenya. There are three main components that quality education largely depends on, namely, relevant and wide use of educational resources, physical facilities and competent teacher. However, the inter-relationship between the three components is not easily noticeable. According to Kafu (2011) and Genvieve (2017), ninety (90%) per cent of teachers in Secondary Schools in Kenya are the University graduates. They believe that school teachers prepared in the Universities are more creative and innovate basing the argument on the fact that prospective teachers are prepared by the best brains in the land and universities are cradles of sophisticated knowledge. Besides, they argued that most Universities have physical facilities and are well equipped and besides having the required instructional resources. On the other hand, most people in other sectors think that teachers spend most of their time in teaching, besides, teachers have many responsibilities that have little to do with classroom instructions. Teachers are expected to serve as schools' managers, counselors and sometimes as psychologists and thus teaching sound like an almost unreasonable job. Based on this realization that the majority of Secondary School teachers are University graduates and besides teaching, teachers have many responsibilities, there was a need to design and conduct research possible factors hindering Geography teachers teaching in Secondary Schools from designing meaningful pedagogical activities in Kenya.

### Objectives of the Study

The following objectives were formulated to direct the study;

- i. Investigate factors hindering Geography teachers from designing some of meaningful pedagogical activities.
- ii. Establish Geography teachers' views on the utilization of instructional resources.

### Theoretical Framework

The study was steered by Shulman, 1987, a model of knowledge growth in teaching which introduced the concept of Pedagogical Content Knowledge (Shulman, 2012). He developed an idea of going beyond content or subject matter knowledge to include how to teach particular content. He also stated the knowledge that makes a subject easy or difficult to learn. In order for school teachers to teach effectively, they need to know the potential problems learners experience based on their ages and backgrounds. School teachers with inadequate and fragmented knowledge will have lesser ability than those whose knowledge is differentiated and integrated.

Therefore, school teachers can interpret and contextualize information to improve students' understanding and motivation. This theory is relevant to the study as it deals with issues related to classroom teachers designing meaningful pedagogical activities when giving instruction. Therefore, the adopted theory formed the main basis of the study since it focused on pedagogical Content Knowledge that were the focus of the conducted study. This theory provided the framework based on previous studies and therefore it assisted the investigator in planning for data collection and analysis concerning general Geography teachers' views towards the utilization of instructional resources and factors hindering them from designing meaningful pedagogical activities in Mwea East Sub- County, Kirinyaga County, Kenya.

## II. RESEARCH METHODOLOGY

This chapter the procedures used to collect and analyse data are covered. The researcher used the descriptive cross-sectional survey as it focuses on a description of the observed phenomena which involve both qualitative and quantitative methodology to obtain useful data in evaluating the representative selection of the population. Content validity was to some great measure ascertained by giving out instruments to professionals such as the researchers' supervisors and statisticians in education research in the Department of Education Communication and Technology to determine whether the instruments did measure what they were purported to measure. The investigator purposefully selected two pilot schools to test the reliability of the instruments through test-retest techniques. In the case of misunderstanding to generate consistent results toward the purpose of the study, the affected item(s) was revised.

Table 3. 2: Sample Size Grid of Teachers' Population

Respondents	Boys' school sampled size	Girls' school sampled size	Mixed schools sampled size	Population
Teachers	-	4 Male	10 Male	60 Male
		2 Female	4 Female	26 Female
Heads of department	-	2 Male	5 Male	10 Male
		2 Male	1 Female	4 Female
Total	-	10	20	100

The respondents were from 10 selected Secondary Schools that cut across the board within the Sub-County which offered Geography as an examinable subject. The table also reveals the gender-responsive in the data collection.

## III. FINDINGS AND DISCUSSION

This chapter presents the findings of the study. It includes analysis, interpretation, and discussion of the data gathered from the field study in an attempt to investigate factors hindering Geography teachers from designing meaningful pedagogical activities in Mwea East Sub- County Secondary

Schools, Kirinyaga County, Kenya. The findings were discussed according to the following objectives that guided the study:

- i. Investigate factors hindering Geography teachers from designing some of meaningful pedagogical activities.
- i. Establish Geography teachers' views on the utilization of instructional resources.

*Factors hindering Geography teachers from designing meaningful pedagogical activities*

The second objective was to identify factors that inhibit effective teaching of Geography in selected Secondary Schools. Like any other pedagogical issue, teaching and learning of Geography in Secondary Schools faces and pose a wide range of challenges. These challenges range from expertise, technical and logistical support from the school administrative arising from the instructional established system, practices and traditions. This study set to establish from both the school Geography teachers and department administrators whether they were aware of any challenges that existed in the teaching and learning of Geography.

Table 4.1: Factors hindering Teachers in Designing Meaningful Pedagogy by Category

Educational Level	Teachers' Feeling	Frequency	Valid Per cent (%)
Postgraduate diploma	Inadequate duration for covering the syllabus.	1	50
	Examination oriented programme and cheating.	1	50
	Total	2	100
Graduate	Inadequate duration for covering the syllabus.	5	25
	Examination oriented programme and cheating.	4	20
	Understaffing in the department.	5	25
	Inadequate instructional resources.	6	30
	Total	20	100
Diploma	Inadequate duration for covering the syllabus.	2	25
	Examination oriented programme and cheating.	1	13
	Inadequate instructional resources.	5	63
	Total	8	100

When collected data was analysed in Table 4.1 above, the investigator noted 50% of postgraduate diploma, 25% of

graduate and 25% of diploma teachers cited inadequate duration for covering Geography syllabus as per the school calendar as one of the major noted deficiencies. Besides, 25% of graduate and 63% of diploma teachers cited inadequately and poor and/or inappropriate educational technology as a second major deficiency in Mwea East Sub- County Secondary Schools. Fifty (50%) per cent of postgraduate diploma, 20% of graduate and 13% of diploma teachers cited examination-oriented programme where learners put all their effort on 'read and pass examination and cheating as another major deficiency in Mwea East Sub-County schools. However, only 25% of graduate respondents indicated understaffing as the main deficiency. From the findings, a majority (63% of diploma and 30% of graduate) of Geography teachers appreciated inadequate use of educational technology as a source of acquiring knowledge and skills. This can be interpreted to mean that teachers (both graduate and diploma) know too well the importance of teaching materials that they should not hesitate to use at any given time. The unthinkable part of it all is that Geography teachers in the selected school in Mwea East Sub- County uses field study more theoretical than practical. This mode of transmission adopted advocates for minimal learning by doing which reflect badly on the performance of the students as indicated in Table 1.1. From the analysis, it can be interpreted that the deficiencies in Mwea East Sub- County Secondary Schools are interrelated to those experienced in Kenyan teachers training institutions and especially Universities of Kenya and therefore must be addressed if they have to prepare and produce competent learners. Most serious deficiencies are the duration in terms of a number of lessons per week, examination-oriented learning and cheating. When the respondents asked to suggest solutions to the hindering factors and how they should be managed, an item was designed in the questionnaire and the respondents made several proposals. Among the proposed strategies of doing this was to increase the present duration of lessons in the timetable from four (4) to six (6) lessons in a week, modernization of the teaching and adaptation of new trends in education especially new educational technology in the use of information communication technology (ICT), improving the development and supply of educational resources and facilities for efficient administration to manage to teach and learning at secondary schools.

*Establish Geography Teachers' views towards Utilization of Instructional Resources*

The first objective of the study was to establish Geography teachers' views towards utilization of teaching and learning materials when giving instructions. This section was considered essential to examine the extent to which respondents utilized instructional resources to meet the most compelling classroom demands. An item was designed to establish whether Geography teachers effectively used educational technology while teaching.

Table 4.2: Geography Teachers' views towards Utilization of Instructional Resources

Education level	Teachers' views	Frequency	Valid Per cent (%)
Postgraduate diploma	Not True	2	100
Graduate	True	4	20
	Not True	11	55
	Sometimes	5	25
	Total	20	100
Diploma	True	2	25
	Not True	3	38
	Sometimes	3	38
	Total	8	100

Table 4.2 above, shows that 100% of postgraduate diploma, 55% of graduates and 38% of diploma trained teachers admitted that it was true they did not make use of educational technology during instructions. Further, 20% of graduate and 25% of diploma respondents reported it was true that they did use instructional resources while 25% of graduate and 38% of diploma respondents indicated that they used teaching and learning resources sometimes. From the findings, it can be interpreted to mean that either group knows too well the importance of teaching resources but there is no sustainable attempt by them to utilize the available resources. This goes a long way to reaffirm what Bariham, Ondigi, Kiio and Muchiri (n.d.) said that teaching resources advance empirical knowledge and theoretical insight. They observed the fieldwork approach as a problem-solving strategy that produces knowledge and transfers it to new situations.

Table 4.3: Reasons for Inadequate use of Resources by Geography Teachers

Statement	SA	A	NAD	D	SD
The school is not surrounded by community resources.	15 (50%)	10 (33%)	0 (0)	3 (10%)	2 (7%)
There is a lack of enough time to use educational resources.	12 (40%)	10 (33%)	1 (7%)	4 (13%)	2 (7%)
Learners' lack of interest when educational technology is used.	0 (0)	2 (7%)	1 (3%)	12 (40%)	15 (50%)
There is a lack of support from school authorities in funding field trips.	17 (57%)	11 (37%)	2 (7%)	0 (0)	0 (0)
It is risky to take learners out or bring strangers in school.	2 (7%)	3 (10%)	0 (0)	15 (50%)	10 (33%)
Disrupts the timetables and other schools' functions	14 (47%)	9 (30%)	1 (3%)	6 (20%)	0 (0)
In my opinion, teachers were not adequately trained to select and utilize instructional resources.	18 (60%)	11 (37%)	0 (0)	1 (3%)	0 (0)

Table 4.3 above, required respondents to give specific reasons from the given list for inadequate use of educational technology in teaching Geography. From the findings, 83% of the respondents felt that their schools were not fully surrounded by community resources for teaching Geography while 17% felt the school's environment had enough educational technology for the discipline. Besides, 73% of the selected respondents, when asked whether there was enough time for utilizing teaching resources revealed that there was no of enough time to use educational technology while 27% felt that there was enough time to make use of instructional resources. If learners lack interest when educational technology is used 90% of the respondents felt that learners showed interest in instructional resources while 10% said their students were not interested. The respondents were asked whether the schools' authorities provided financial support for Geographical field trips, 93% of the respondents said they did not receive support from the administration while 7% had support from administration. It was observed that 83% of the respondents felt it was risky to take learners out or bring strangers in school as most of the teachers were undecided about the reaction of the parents and the school administration towards their action while 17% thought it would be wise to

expose learners to resource persons or environment. Consequently, 77% of the respondents felt that they were disrupting the timetables and other schools' functions putting into consideration Geography has a broad scope and a lot to be covered in a period of four lessons per week against 23% who thought otherwise. Finally, 97% of the respondents felt that teachers were not adequately trained to select and utilize instructional resources for classroom instruction with only 3% thought otherwise. Kennedy (2015), argued that schools with limited educational technology may utilize what they have efficiently and this may boost learning and learners performance despite the deficiency in teaching and learning material provision. Notwithstanding, he lamented that the use of appropriate local examples by teachers to foster an understanding and arose learners interest in the discipline as being limited. It's clear from the findings that classroom learning has taken precedence over out of class learning because of failure for teachers to be trained the importance of field study that covers at least 40% of the Geography syllabus. It is observed teachers in the selected schools, fails to create time from the four lessons allocated to Geography per week for field study. This is considered a high degree of

irresponsibility and lack of planning on the part of the Geography teachers.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

Results of data obtained from respondents indicated that there were factors which hindered Geography teachers from designing meaningful pedagogical activities in Mwea East Sub- County Secondary Schools. From the findings, 40% of the respondents indicated the inadequate duration for covering syllabus with only four (4) lessons per week, despite the broad scope of the subject. Also, Examination pressure and cheating were indicated by 23% of the respondents, understaffing with 17% of the respondents and inadequate educational technology indicated by 20% of the respondents. This data was obtained from both Graduates and Diploma teachers. From the analysis, it can be interpreted that factors hindering Geography teachers from designing meaningful pedagogical activities in Mwea East Sub- County Secondary Schools were interrelated to those experienced in Teacher Training Institutions in Kenya and more so in Universities of Kenya and therefore must be addressed if they have to prepare and produce competent learners. These findings established one important fact that the main stakeholders in Secondary Schools in Kenya are well aware of the probable challenges and have solutions to these challenges. These challenges were categorized as professional in nature, technical, logistical and administrative. Under administrative- related challenges were workload need and cheating of students during the assessment. However, on technical- related challenges were the timing of conducting an assessment and the institutions operating examination guidelines that govern the administration of the assessment. Also, logistical challenges included established systems and practices of conducting an assessment in the schools' departments and information management concerning assessment. In the case of professional- related challenges were the quality of the teacher education programme and the designed and conducted in-service programmes for Geography teachers in practice. From Table 4.1, it is demonstrated by both diploma and graduates respondents that they were very much aware of the existing challenges that affect efficient teaching as all aspects of pedagogical preparation for a learner in Mwea East Sub-County Secondary Schools. This revelation should serve as a useful guideline for the learner- education practitioners in Secondary Schools in Kenya. Besides, unless these challenges are well managed, they may negatively affect the teaching in Kenyan Secondary Schools and by extension the quality of preparation of learners in Kenyan Secondary Schools. Hence, it is recommended, to manage emerging possible challenges in hindering Geography teachers from designing meaningful pedagogical activities, use of computer- aided instruction in teaching and learning of Geography in Secondary Schools should be adopted. This strategy will not only promote its quality but also make it relevant to the needs of learners and teachers of Kenya and beyond. Also, the Ministry of education (MOE) should develop and supply relevant educational resources and in particular for Geography subject

for administering efficient classroom instruction and particularly learner-centered teaching practice. This will ensure the preparation of competent learners in the Secondary School level. It further recommends, the adopted four lessons in Geography in a week should be extended by one or two lessons in a week. This is necessary to enable teachers to cover the Geography syllabus effectively and on time.

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#### CONFLICT OF INTEREST

The authors declared no conflict of interest. No funding was received purposely for this particular study. As a result, there was no possibility of the sponsor/donor to have influenced the design of the study; data collection; analysis; interpretation of the data, and in the determination to publish the results.

#### DATA MANAGEMENT

All data collected were cleaned, categorized and stored in a central project database at the Department of Educational Communication and Technology, Kenyatta University. The data were stored in a cabinet where only the researcher and his Supervisors had access. Data were analyzed without the personal identification codes of the respondents. Pseudonymization and anonymization were used to protect the identity of the participants who took part in the study.

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