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An Exploratory Study on the Null Curriculum in the Basic Education System in Ghana

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This study explored the prevalence of the null curriculum in the Ghanaian basic school education system. It also sought to identify the main reasons behind teachers' omission of specific topics or experiences from the basic school curriculum.Three hundred seventy-five basic school teachers from kindergarten, primary, and junior high schools participated in the study. A 32-item self-designed questionnaire was used to collect data for the analysis. Descriptive and inferential statistics were used to analyze the data. The study participants identified lack of resources, the problematic nature of some topics, insufficient time, and inadequate knowledge and skills as factors contributing to the prevalence of null curriculum in Ghanaian schools. The findings show that a null curriculum is prevalent in the Ghanaian basic education system. The study found no statistically significant difference between teacher characteristics (i.e., teacher status and grade level) and the reasons behind omitting some topics or experiences. Implications of the study findings for educational theory and practice are discussed.

Keywords: basic education, basic school teachers, Ghana, null curriculum, the prevalence

INTRODUCTION

Education is vital in efforts to create better and more cohesive societies. It has the potential to address the economic, social, and environmental conditions that potentially destabilize modern societies (Priestley & Philippou, 2019). The organization for Economic Corporation and Development (OECD) (2018) identified three critical roles education plays in addressing the challenges of society: environmental, economic, and social diversity. Education serves as a means for countries to develop human resources (Mitchell, 2016). The development of human resources in today's globalization efforts has led to the development of curricula to meet economic needs and goals (Wiseman, Alromi & Alshumrani, 2014). Mitchell (2016) observes that education promotes a skilled workforce for financial

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gains and emphasizes the value of citizenship education. Quality education benefits individuals and society regarding economic (wages and employment) and social outcomes (improved health care, reduced crime, and higher well-being).

The heart of every educational practice is the curriculum according to which teaching and learning practices unfold (Priestley & Philippou, 2019). The curriculum is the foundation for pupils' learning experiences and knowledge acquired during their education (Vod & Baeck, 2020). Conceptually, the term curriculum has received various definitions from scholars. For example, Tyler (1949) defined curriculum as all the experiences that individual learners have in a program of education whose purpose is to achieve a broad goal and related specific objectives planned in terms of a framework of theory, research, or pass, and current professional practices. According to Taba (1962), the curriculum is all students' learning, planned and directed by the school to attain its educational goals. To Tanner and Tanner (1995), the curriculum is the designed and guided learning experiences and intended outcomes formulated through systematic reconstruction of knowledge and experiences under the auspices of the school for the learners' continuous and wilful growth in personal social competence. Oliva (2012) defines a curriculum as a systematic group of courses or sequences of subjects required for graduation or certification in a major field of study. A curriculum is a plan for providing learning opportunities to achieve broad goals and related specific objectives for identifiable populations served by a single school centre (Wiles & Bondi, 2019). There are many different understandings of the concept of the curriculum because scholars either do not agree with existing definitions or want to add their experiences to them (Su, 2012; Portelli, 1987). Beauchamp (1981) noted that the many descriptions of the term curriculum in the literature mean that the curriculum in the minds of some authors is objective, technical, and tangible. The differences in the conceptualizations could also indicate that curriculum is an active phenomenon that can vary depending on context and need (Wiles & Bondi 2007). As Mitchell (2016) points out, curriculum represents a profoundly unique and dynamic phenomenon, strongly influenced by environmental and personal influences that impact curriculum, especially in its design and implementation. The curriculum, in terms of concept and content, should be planned to reflect the Spatio-temporal context of the people it is designed for and society's broader goals and needs.

Curriculum matters in every country because it serves as the framework of education (Null, 2011). The curriculum is about what should be taught and combines thought, action, and purpose. What children study and learn in school makes a difference in their lives. Curriculum improvement offers an opportunity to enhance the lives of many thousands of students (Walker, 2003). Children's very identities will be shaped by what they study. The purposes shape the students we teach a subject and what we teach them (Null, 2011; Walker, 2003). It helps students develop different abilities and interests, commit to different values, pursue other careers, and live separate lives. Curriculum also shapes our identity as a people. People have a common heritage only if every generation encounters that heritage. The curriculum helps shape people's national character and political and economic values, behaviour, and institutions (Walker, 2003). The standard curriculum, for instance, is necessary to offer all young people a common foundation of essential knowledge and skills both for their well-being and the welfare of society. It also spells out what its young people should study for nation-building and to achieve a common culture. A curriculum is a form of mutual obligation that people undertake as a group, a commitment that expresses belonging to the group and sharing in its identity (Walker, 2003).

Eisner (1985) and Mitchell (2016) observed that three types of curricula are taught in every school. They are the explicit, implicit, and null curricula. The explicit curriculum implies a publicly announced program of studies or programs the school advertises that it is prepared to offer. The implicit curriculum also refers to values, habits, attitudes, and expectations generally not included in the formal curriculum, but students learn them as part of their school experiences (Flinders, Noddings

& Thornton, 1986). According to Eisner (1985), the null curriculum refers to "what schools do not teach, especially the opportunities students are not espoused to, the perspectives they may never know about, much less be able to use, the concepts and skills that are not part of their intellectual repertoire" (p 107). Eisner observed that the null curriculum consists of two primary dimensions: intellectual processes (e.g., visual, auditory, metaphoric, and synesthetic modes of thought, which are nonverbal and a logical) and subject matter (e.g., economics, law, psychology, and anthropology which may not be taught in the elementary and secondary schools). Flinders, Noddings, and Thornton (1986) added an effect that includes values, attitudes, and emotions. They indicated that Eisner considers affecting as a subset of intellectual processes. They further noted that effect might be the primary and most important single aspect of the null curriculum, as it is often values, attitudes, and emotions that people wish to remove from the classroom. It becomes a guiding factor in selecting content. The null curriculum emerges when the content in the overt curriculum is omitted from the received or what students experience in the classroom (Mitchell, 2016).

Cahapay (2021) identified three themes associated with the null curriculum in a systematic review. First, the null curriculum has multiple dimensions. The null curriculum consists of the intellectual processes and content or subject area measurements. Second, a null curriculum occurs at hierarchical levels. It suggests that a null curriculum occurs at intended, implemented, and experiential levels. Lastly, the null curriculum can be classified using different reference frames. The third theme involves identifying gaps between the rhetorical and the formal curriculum. The framework for this study is that null curriculum occurs at hierarchical levels. The first level is the intended null curriculum caused by government policies, dominant parties, and the educational system mainly to serve the interest of a particular party leading to the change of content (Assemi & Sheikhzade 2013; Adib et al. 2014; Gholami et al. 2016; Cahapay, 2021). The second level is the implemented null curriculum, where teachers and other authorities remove part of the curriculum for one reason or another to meet students' needs and interests (Cahapay, 2021). Cahapay (2021) suggests that a null curriculum occurs at a point when people in different positions of authority (politicians, textbook writers, teachers, and students) exclude something from the curriculum. The third and final level is the experiential null curriculum. Students neglect or pay little attention to the competencies or content they are supposed to learn at this level. Perhaps they feel those content or competencies are not in their areas of interest or are non-examinable.

Basic education and the new education reform in Ghana

Ghana is keen to improve its educational provisions and outcomes, emphasizing quality education for all. To achieve this, Government of Ghana, through the Ministry of Education, in 2018 reformed the basic education curriculum from an objective-based curriculum to a standards-based one.

The standard-based curriculum is a curriculum that is developed by looking at the standards, identifying the skills, knowledge, and dispositions that students should demonstrate to meet these standards, and identifying activities that will allow students to reach the goals stated in the standards (Lund & Tannehill, 2014). The standard-based system defines the prospects of Ghana's young children. The structure of basic education in Ghana consists of four key stages: early grades (kindergarten – lower primary), upper primary (B4 -B6), junior high school (B7 – B9), and senior high school (SHS1-SHS 3). Through this curriculum, the government of Ghana expects young people to be honest, creative, and responsible citizens capable of making meaningful contributions to Ghanaian society. The curriculum also aims to develop graduates who are problem solvers, can think critically and creatively, and have both confidence and competence to participate meaningfully in Ghanaian society like local and global citizens (Ministry of Education, 2018). Students need to learn and develop such core competencies as critical thinking and problem-solving, creativity and innovation, communication and collaboration, cultural identity and global citizenship, personal development and

leadership, and digital literacy from the core learning areas for early grades, upper primary, and junior high school. The key learning areas for the early grades are numeracy and literacy—the key learning areas for an upper primary focus on numeracy, literacy, and science. The core learning areas for junior high school include mathematics, English language, history, and computing.

The main aims of the pre-tertiary education curriculum in Ghana are to lay a solid foundation for tertiary education and preparations for early entry into the workplace. To achieve this, teachers must use various pedagogical approaches to facilitate students' learning. However, teachers cannot teach each topic in the curriculum of a specific level or subject simply because they sometimes appear to lack the necessary skills, understanding, and attitude required to teach some critical content in the classroom (Chowdhury & Siddique, 2017). Therefore, some teachers may intentionally and unintentionally leave out some subjects, topics, or experiences for reasons best known to them. In Ghana, this can cause the students to have incomplete learning experiences (Chowdhury & Siddique, 2017). In light of this, the present study seeks to determine the prevalence of null curricula in the Ghanaian basic education system. The study examines the subjects, topics, or experiences teachers are likely to internationally or unintentionally omit from the basic school curriculum and the factors that influence the omission. The study is essential because when teachers fail to teach some content of a curriculum, there will be irresistible consequences that a country pays for (Assemi & Sheikhzade, 2013), which would affect the realization of the quality education for all that Ghana aspires to achieve. It will also help other stakeholders to identify the strengths and weaknesses of the main stakeholders responsible for implementing the curricula intentions in the schools and devise appropriate interventions to address them. The study intends to gather data to answer four main questions:

To what extent is null curriculum prevalent in Ghanaian basic schools?

1. What are the underlying reasons that prompt teachers to omit some topics or experiences from the implemented curriculum?
2. Do the reasons for the omission of specific topics or experiences by teachers differ due to?
    a. Teacher status (i.e., being class teacher or subject teacher)?
    b. The level they teach (early grades, upper primary, or junior high school)?

METHOD

This study used a cross-sectional study design that has been demonstrated to be suitable for identifying the prevalence of null curricula (Babbie, 2021).

The study's data consists of 450 basic school teachers who work in early grades, upper primary, and junior high schools located in the Kumasi metropolis. Stratified random sampling technique was used to select the study participants. The basis for the stratification was the levels of basic education structure. Participants signed a consent form before participating in the study and were assured that all data remained anonymous and confidential. Of the 450 teachers sampled, 375 completely filled and returned the questionnaire, giving a response rate of 83.33%.

A 32-item self-report questionnaire was developed based on Chowdhury and Siddique's (2017) study on the null secondary Curriculum in Bangladesh to collect data from the participants. The questionnaire consisted of three parts. Part one deals with bio-data which elicits the personal information of the study participants. It also consisted of open-ended questions which asked the study participants to write about topics or experiences they hardly teach. Part two consisted of 14 items on a 4-point Likert agreement scale ranging from "strongly disagree" to "strongly agree," asking the study participants to rate the reasons they do not teach certain subjects, topics, or experiences. Part three consisted of 6-items that asked participants to rate the support systems they require to teach all the topics in the enacted curriculum. Two experts validated the instrument in curriculum studies and used the feedback to modify the tool. We used the Cronbach Alpha reliability coefficient to measure the

internal consistency of the 32 items. The subscales yielded a reliability coefficient of .85 and .71 for reasons behind the omissions and the support systems teachers require to teach all the topics or subjects, respectively. The overall reliability of the scale was .78, which is considered acceptable. Descriptive and inferential statistical tools were employed to analyze the quantitative data. We used an independent sample t-test and ANOVA to determine whether or not the reasons why the study participants do not teach specific topics vary across teacher characteristics.

FINDINGS

The study's results revealed that 40.5% of the participants were males, whiles 59.5% were females. 46.7% were between 31 and 40 years, 41.3% were between 20 and 30 years, 11.7% were between 41 and 50, and 0.3% were between 51 and 60. Most participants representing 51.5%, have taught for five years and below, 26.9% taught between 6 to 10 years, and 21.6% taught for 11 years and above. Of the participants, 43.2% had obtained a Diploma in Basic Education, 27.2% had obtained Bachelor's degree, 20.0% were SSSCE/WASSCE holders, 3.7% were teacher's Cert "A" holders, 2.4% were M. Ed/M.Sc./MA/MBA holders, 1.3% were MPhil holders, and 2.1% obtained other qualifications. The study further showed that 38.9% taught at the Early Grade level, 31.5% at the Upper Primary level, and 29.6% at the Junior High School. Notably, 58.9% were class teachers, and 41.1% were subject teachers. This revelation could be because perhaps most teachers at the early grade and upper primary levels are class teachers in Ghana.

Research Question One

To what extent is null curriculum prevalent in Ghanaian basic schools?

Table 1
Prevalence of null curriculum in Ghanaian basic schools

Variable	Yes		No		Not sure		No response	
	Freq	%	Freq	%	Freq	%	Freq	%
Are there any topics you hardly teach in your class or subject area	140	37.3	186	49.6	49	13.1		
If yes, do you do that deliberately?	47	12.5	162	43.2	48	12.8	118	31.5

Note: Freq = frequency

Table 1 shows that 37.3% indicated that there are topics they hardly teach in their class or subject areas, whiles 49.6% said no. The results showed that 13.1% were unsure whether there are any topics they hardly teach in their class or subject area. Regarding if yes, do participants deliberately refuse to teach specific topics, 257 participants responded to the questionnaire. The majority of participants indicated that; (a) they did not have any idea about the null curriculum and (b) others also did not have time to respond to the item. The researcher tried to explain the need for their participation, but they did not. Table 1 reveals that 12.5% of the study participants deliberately did not teach some topics in their class or subject area, 43.2% did not deliberately teach some topics in their class or subject area, and 12.8% were unsure whether they intentionally taught some topics in their classes, subject area or not.

Research Question Two

What underlying reasons prompt teachers to omit some topics or experiences from the implemented curriculum?

Table 2
Reasons that prompt teachers to omit some topics from the curriculum

Items	M	SD	Interpretation
1. I have inadequate resources to teach that topic or subject	3.12	.99	Agree
2. Teaching those topics or subjects is difficult and requires specific expertise	2.71	1.00	Agree
3. I have insufficient time to teach that topic or subject	2.61	1.03	Agree
4. I have less or inadequate knowledge and skills to teach that topic or subject	2.59	1.07	Agree
5. I feel uncomfortable teaching those topics or subjects	2.47	1.07	Disagree
5. because of the large class size	2.43	1.06	Disagree
7. They are unnecessary for the internal and external examinations	2.31	1.09	Disagree
8. Students may misinterpret the lesson and practice unethical physical relations in their regular lives	2.36	1.03	Disagree
9. Pupils or students are not correctly aged to learn that topic or subject	2.33	1.05	Disagree
10. Students or pupils already know about that topic from social and electronic media	2.33	1.04	Disagree
11. Classroom management may be an issue	2.27	1.08	Disagree
12. They are culturally or religiously sensitive	2.27	1.02	Disagree
13. It is their parents' responsibility to teach them those topics or subject	2.17	1.05	Disagree
14. They are against my religious or cultural beliefs	2.18	1.01	Disagree
Mean of means	2.44	1.04	

Note: M=Mean SD=Standard Deviation

Table 2 shows that the participants disagreed with the reasons outlined in the questionnaire that prompted them to omit some topics from the implemented curriculum. The mean means for the reasons that prompt teachers to omit some topics from the curriculum was 2.44, and the standard deviation was 1.04. This (M=2.44) means that participants disagreed with the reasons outlined in the questionnaire. The results of reasons participants omit some topics from the implemented curriculum are summarized into two categories (a) agree and (b) disagree, respectively.

Out of the 14 reasons outlined, the participants agreed to only four of them. The items are as follows:

1. I have inadequate resources to teach that topic or subject
2. Teaching those topics or subjects is difficult and requires specific expertise
3. I have insufficient time to teach that topic or subject
4. I have less or inadequate knowledge and skills to teach that topic or subject

Also, the results of the study showed that participants disagreed with 10 of the reasons. Some of these items are:

1. I feel uncomfortable teaching those topics or subjects
2. because of the large class size
3. They are unnecessary for the internal and external examinations
4. Students may misinterpret the lesson and practice unethical physical relations in their regular lives
5. Pupils or students are not correctly aged to learn that topic or subject
6. Students or pupils already know about that topic from social and electronic media

Research Question Three

Do the reasons for the omission of specific topics or experiences by teachers differ due to the:

c. teacher status (class teacher or subject teacher)
d. the level at which they teach (early grades, upper primary or junior high school)

Teacher status (class teacher or subject teacher)

Table 3
Independent samples t-test for teacher status in terms of reasons for the omission of topics

	Your status as a teacher	N	M	SD	t	df	Sig.
Reasons	Class Teachers	219	34.66	8.56	1.218	371	.224
	Subject Teachers	154	33.57	8.44			

Note: Significant at $p<0.05$

The result showed that class teachers (M= 34.66, SD= 8.56) were not different from subject teachers (M= 33.57, SD=8.44), *t*(371) = 1.218, p= .224 (2-tailed) in terms of reasons for the omission of specific topics or experiences in the implementation of the curriculum.

The grade levels at which teachers teach (early grades, upper primary, or junior high school)

The purpose was to determine whether a significant difference existed among grade levels at which teachers teach in terms of reasons for the omission of specific topics or experiences in implementing the curriculum. The test of normality results showed that for the "early grade" and "junior high school" categories, the dependent variable "reasons" were normally distributed. However, for the "upper primary" category, the dependent variable "reasons" were not normally distributed. Test of homogeneity of variance results showed that variances are assumed equal, p=.067. Table 4 presents the ANOVA results.

Table 4
ANOVA of the level at which teachers teach in terms of reasons for the omission of topics

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	65.670	2	32.835		
Within Groups	26940.598	370	72.812	.451	.637
Total	27006.268	372			

Note: Significant at p<0.05

From the one-way ANOVA, *F* (2, 372) = .451, p = .637. The result shows that there is no significant difference within the three levels at which teachers teach in terms of reasons for the omission of topics.

DISCUSSION, CONCLUSION, AND SUGGESTIONS

The study aimed to determine the null curriculum's prevalence in the Ghanaian basic education system. It specifically examined the subjects, topics, or experiences teachers internationally or unintentionally omitted from the basic school curriculum and the factors influencing the omission. Findings from the study revealed that the null curriculum is prevalent in the Ghanaian basic school system. About 37.3% of the study participants admitted that there are some subjects, topics, or experiences in their subject area that they rarely teach. Another 13.1% of the participants were not sure whether they rarely teach some subjects, topics, or experiences from the enacted curriculum or not. This finding supports that teachers' values and priorities often lead them to omit parts of the intended curriculum from their lessons (Hildebrand, 2007). Chowdhury and Siddique (2017) acknowledged that teachers' competence and confidence influence the topics they choose to teach or omit.

The study's findings revealed why basic school teachers omit specific topics, experiences, or subjects from the implemented curriculum. They rated inadequate resources (M=3.12, SD=.99) higher than the problematic nature of particular topics (M= 2.71, SD=1.00), insufficient time (M=2.61, SD=1.03), and inadequate knowledge and skills (M=2.59, SD=1.07). The findings indicate that teachers do not have the resources to deliver the curriculum. This finding suggests that insufficient resources highly cause Ghanaian basic school teachers to omit specific topics, experiences, or subjects from the enacted or implemented curriculum. However, no meaningful teaching can take place without resources and facilities. Susilo and Yuningsih (2022) observed that learning goals will not be achieved properly without the right and adequate learning resources. Hall, Chamblee, and Slough (2013) identified resources as one key factor that affects teachers' use of innovation. Ertmer et al. (2012) distinguished between first and second-order barriers that affect teachers' adoption of technology integration. They identified resources as one of the first-order barriers that affect teachers' adoption of technology. From this discussion, it is instructive to note that the role of resources in adopting innovation is critical. Goe, Bell, and Little (2008) argued that effective teachers use diverse resources to plan and structure engaging learning opportunities, monitor students' progress, and adapt instruction.

Again, teachers identified the problematic nature of the topics as one of the critical reasons they do not teach specific topics or experiences from the implemented curriculum. This finding is consistent with Rogers' (2003) assertion that people find it challenging to adopt innovation when it is considered easy or difficult. Fullan (2007) also identified the complexity of the innovation as one of the internal factors that affected curriculum implementation and called for clarification of the curriculum through capacity building of teachers and other stakeholders to promote effective implementation.

Additionally, the study revealed that teachers do not teach certain subjects, experiences, or topics due to inadequate knowledge and skills. This finding is consistent with a survey by Chowdhury and Siddique (2017) to explore the null science curriculum in Iran. They maintained that teachers, as the primary stakeholders responsible for implementing the curricular intentions, often lack the necessary knowledge, skills, and attitudes to teach some critical content in the classroom. However, for training to be practical, teachers' understanding of the subject matter and the importance of this knowledge for successful teaching is critical. Degorio (2022) observed that teachers' knowledge of the curriculum content and their professional beliefs contribute essentially to the success of the curriculum implementation. Shulman (1992) and McComas (2014) intimated those teachers should master two types of knowledge: knowledge of the subject matter and curricular development. According to Shulman, knowledge of the subject compasses a particular discipline's theories, principles, and concepts. On the other hand, knowledge of curricular development deals with the teaching process, including the most valuable forms of representing and communicating content and how students best learn a subject's specific concepts and topics. In effect, the blending of content knowledge and pedagogical knowledge into specialized knowledge for teaching a particular subject will enable teachers to make ideas accessible to others (McComas, 2014; Shulman, 1987).

The study found no statistically significant differences between the reasons teachers omit specific topics or experiences from the curriculum and teacher characteristics (teacher status and grade level at which they teach). The result showed that class teachers (M= 34.66, SD= 8.56) were not different from subject teachers (M= 33.57, SD=8.44), t (371) = 1.218, p= .224 (2-tailed) in terms of reasons for the omission of specific topics or experiences in the implementation of the curriculum. The study shows no significant difference within the three levels at which teachers teach (early grades, upper primary, and Junior high school) in terms of the omission of topics, experiences, or subjects from the implemented curriculum. The difference between the three levels in the deletion may be because all the teachers lack the resources, time, and expertise to deliver the curriculum and produce the expected outcomes.

Finally, the study's findings revealed that teachers disagree with ten other reasons they do not teach the subjects, topics, or experiences. The reasons include I feel uncomfortable teaching those topics or subjects, large class size; they are unnecessary for the internal and external examinations, students may misinterpret the lesson and practice unethical physical relations in their regular lives, pupils or students not correctly aged to learn that topic or subject, and students or pupils already know about that topic from social and electronic media. This finding is inconsistent with a similar study in Bangladesh by Chowdhury and Siddique (2017), where the teachers identified the above factors as reasons for not teaching specific topics in the science curriculum. The differences may be due to the nature of the subject matter and differences in Ghana and Bangladesh's religious beliefs, cultural ideologies, values, norms, and belief systems.

CONCLUSION

The study explored the prevalence of the null Curriculum in Ghanaian basic schools. The findings show that Ghanaian basic school teachers omit specific topics and experiences from the school curriculum. They attributed their inability to teach all the topics and experiences to a lack of resources, inadequate knowledge and skills, the problematic nature of some topics, and insufficient time.

Therefore, the study's findings imply that the educational system managers ought to address the issues identified in the study as early as practicable to avert narrow attainment of the curriculum goals and improve the learning experiences Ghanaian basic school children receive. The managers of the educational systems should provide teachers with adequate and appropriate resources and relevant professional development opportunities to help boost teachers' confidence and well-being to deliver quality teaching and learning in Ghanaian basic schools. Failure on the part of the managers to resolve the factors contributing to the prevalence of the null curriculum in Ghanaian basic schools can cause teachers to deliver poor-quality teaching and learning. It would also cause students to receive bad learning experiences and exposure, affecting their abilities to cope effectively with life in Ghanaian society and the globalized economy.

SUGGESTION

A significant limitation of this study is that the participants are from one administrative region out of the sixteen regions in Ghana. Therefore, a more extensive sample size study drawn from all the sixteen administrative regions in Ghana would be beneficial in ascertaining the extent to which the null curriculum is prevalent in the Ghanaian basic school system. Such a study should also identify school subjects that teachers hardly teach.

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