

THE NEW SECONDARY SCHOOL GEOGRAPHY CURRICULUM AND ITS IMPLICATIONS FOR IMPROVEMENT IN TEACHING METHODOLOGY

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Introduction

An important hallmark of the new National Policy on Education is the introduction of a new secondary school geography curriculum. Unlike the previous curriculum which was meant to cover a five year secondary school programme, the New Secondary School Geography Curriculum (NSSGC) is designed to cover a three-year Senior Secondary School Course (from Form 3 to Form 6). Meanwhile the study of geography as a separate discipline in the Junior Classes of the Secondary School has been replaced by Social Studies — a subject which nevertheless contains more elements of geographical studies.

The NSSGC was the outcome of series of geographical workshops organised by the Nigerian Geographical Association (NGA) High School Geography Committee between 1967 and 1977. The various themes of the workshops centred on curriculum reform, innovation and renewal. It was from the papers and proceedings of the workshops which came out in four volumes that the NGA High School Geography Committee proposed a model curriculum to be used at the Senior secondary school (Abegunde: 1986). It was this original attempt by the NGA that led to the later initiatives of the Nigerian Educational Research Council (NERC) to develop a Geography Curriculum that would meet the expectations of the new educational system (Opolati: 1986). It was the draft secondary school curriculum produced in 1981 that became one of the important

background documents for the planning, design and development of the NSSGC. What is now the current and approved version of the NSSGC came into effect in 1985. It was jointly planned, designed and developed by West African Examination Council (WAEC) geography officers and examiners, Inspectors of Education from Federal and State Ministries of Education and seasoned geographers drawn from Universities, Colleges of Education and Secondary Schools. The new geography package has been developed specifically to make the teaching and learning of secondary school geography a more challenging, appealing, stimulating and relevant experience to teachers and students.

In this paper we shall not only review the essential features of the Secondary School Geography Curriculum but special emphasis shall be given to the demands of the curriculum in terms of teaching methodology. The word "methodology" has been defined generally as the sets of methods used for teaching or studying a particular subject area, (Procter: 1978). Nichols and Nichols (1972) have also defined methodology as an aspect of the curriculum which involves the relationship between teacher, material, organisation of content, its manner of presentation to students and the activities which students and the teacher carry out. The concept of geography methodology as used in this write-up refers to the sum total of all the strategies and techniques adopted by geography teachers in the organisation of content, manner of presentation of subject engage in to promote what is regarded as efficient and effective geography learning. The teaching methodology in any discipline is crucial to the success or otherwise of the learners, geography being not an exception. The interest of this paper is to take a look at the relevant strategies that can be adopted in secondary schools to improve the teaching and learning of the subject.

Against this background the objectives of this paper are to:

- (a) examine the essential features of the new secondary school geography programme;
- (b) to discuss the current status of geography methodology in some secondary schools; and
- (c) examine the implications of the new curriculum for improvement in geography methodology.

The rest of this paper is divided into four sections. The first section takes a look at the main elements of the NSSGC while the second looks at the status of geography methodology in some schools. The third part examines the implications of the NSSGC for improvement in the methodology of teaching and learning of geography while the fourth concludes the paper with some recommendations.

Main Features of NSSGC

The new curriculum has a number of outstanding features which deserve special mention. We shall look at these features within the framework of the curriculum elements of objectives, content, methods and evaluation..

- (a) Objectives of the NSSGC: Those who developed the NSSGC are of the view as indicated in the National Policy of Education (1981) that Geography at this level should help the student to:
 - (i) understand the concepts of differential character and the spatial relationships of the surface of the earth;
 - (ii) understand the concept of man-environment relations – to examine the life of man within his physical and cultural environments and to explain their interactions;
 - (iii) appreciate and develop a sense of responsibility towards one's own society and an intelligent interest in the formulation of national goals and policies,

especially as they influence the different resources and regions of the area .

- (iv) develop sympathetic understanding of the people of other lands, based on the recognition that they may have different assemblages of resources, goals and problems from those of people of their home area;
- (v) organise and formulate principles according to acquired geographic concepts which they can use to analyse and interpret spatial problems in their immediate and wider environments; and
- (vi) develop skills and techniques for accurate, orderly and objective geographical investigations to be carried out both in the classroom and in the immediate environment.

(b) Content: The new geography curriculum content has the following special features:

- (i) the provision of a geography programme that is based on the choice of suitable and relevant themes, teaching units and students' activities.
- (ii) the reduction of the scope and content coverage of the subject matter without losing the essential geographical skills, knowledge, concepts and values that are required for sound learning at this level. For instance, the wide scope and vagueness usually associated with the previous syllabus have been removed as much as it is considered desirable in both physical, human and Regional Geography;
- (iii) Regional Geography is now limited to the study of Nigeria and Africa with special reference to West Africa; and

(iv) the provision of a wide range of experience for students in the use of concept centred approach to learning, problem-solving and activity based techniques for the acquisition of basic geographic knowledge and skills.

(c) Methods — Highlights of the methods aspect of the new curriculum are:

(i) the inclusion of innovative elements into the syllabus, the emphasis placed on practical geography throughout the 3-year course and the introduction of geographic principles, concepts and skills that are relevant to current trends in the discipline and useful for solving environmental problems;

(ii) strong emphasis is given to field work which includes in essence field excursion, field study and teaching and field research. Infact unlike in the past, field work is an integral part of the entire programme and is to begin with local geography in class four;

(iii) the organisation of the programme around a carefully selected sequence of key ideas and concepts makes it possible to integrate the knowledge and experiences gained in the physical, human, regional and practical aspects of geography;

(iv) the pattern of learning in the new curriculum is spiral and outwards spatially in ever increasing levels of sophistication; the starting point is the locality and the exploration of geographical knowledge is to the distant, the remote and the exotic.

(d) Evaluation: According to Kopolati (1986) the following proposals have been made for the evaluation of the NSSGC:

- (i) the need to evaluate the whole spectrum of abilities and competencies both at convenient intervals and at the end of the programme;
- (ii) the need for continuous assessment and public examinations.
- (iii) the continuous assessment should cover the geography course work in Forms 4, 5 and 6 and such assessment should constitute 30% of the overall terminal assessment while the course work for each year should have appropriate inputs to the thirty percent.
- (iv) assessment of field work report may be made on the basis of originality, observation carried out (identification and description), logical recording and other methods of presentation of materials, conclusions and relevance to other works;
- (v) in all cases, the results of field work should be presented by maps, sketches models and other methods of data presentation. A summary of findings will be presented in written form;
- (vi) terminal public examination of the NSSGC is as follows: (i) it should account for 70% of the overall assessment. There should be two papers as shown below:

Paper One: This consists of sections A, B and C. Section A has 60 objective questions with 60 marks, section B is map work with 20 marks while section C is physical Geography with 20 marks.

Paper Two: This consists of human and regional geography. Section A is human geography with 25 marks, Regional Geography of Nigeria with 50 marks is in section B while West Africa and Africa in section C attracts 25 marks.

The Status of Geography Teaching Methodology in Secondary Schools.

In the preceding section we have highlighted some of the teaching methods which are expected to be used in the implementation of the new geography. One can only appreciate the magnitude of the task facing geography teachers after a thorough review of the status of geography teaching resources in schools. In order to have a modest view of what the position of geography methodology is like, we shall look at two sets of research data provided by Yalokwu (1986) and Adeyemo (1986) in their study of teaching and learning resources in Bendel State and Oyo State respectively.

In a survey of the various methods which teachers in 13 secondary schools in Benin City, Bendel State, adopt in their geography teaching, Yalokwu found that of the 40 teachers interviewed only 27, 20 and 23 used observation, field study and field excursion respectively. None of the teachers ever used laboratory experiments as none of the 13 schools had a laboratory (See Table I). A look at Table 2 will also reveal that not many of the schools have the necessary teaching resources. For instance 69.2% of the schools have world globe and wall maps, 38.5% have thermometer, 7.7% have survey tapes and chains while none of the schools have sunshine recorder, Radio and TV laboratory equipment and aerial photographs.

Table I

Geography Methods used by Teachers in Secondary Schools in Benin City, Question: Do you use the following Methods to generate information on Local Geography "YES" "NO" and "DON'T KNOW" were alternative responses

S/NO	METHODS USED	YES	NO	DON'T KNOW	TOTAL
1	By observation	27	3	10	40
2	Collection of samples (e.g. Rocks)	25	5	10	40
3	Measuring and Recording	20	10	10	40
4.	Field experiments	20	10	10	40
5.	Laboratory experiments	0	29	11	40
6	Practical work	26	6	9	40
7	Map Reading	27	3	10	40
8	Group Discussion	29	1	10	40
9	Maps of Local Regions	27	8	9	40
10	Geographic Excursionr	23	8	9	40

Source: Field Survey, 1986.

Table II

Geography Teaching Resources (TR) in 13 Secondary Schools in Benin City

TEACHING RESOURCES		SCHOOLS													SCHOOLS WITH T.R	% OF TOTAL SCHOOLS	
		A	B	C	D	E	F	G	H	I	J	K	L	M			
1	Thermometer	1	-	-	-	1	-	-	-	1	-	-	1	-	-	5	38.5
2	Raingauge	1	1	-	-	1	-	-	-	1	-	-	-	-	-	4	30.8
3	Anemometer	1	-	-	-	1	-	-	-	-	-	1	-	-	2	15.4	
4	Wind Vane	1	1	-	-	1	-	-	-	-	-	-	1	-	4	30.8	
5	Sunshine Recorder	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
6	Survey Chains	-	-	-	-	-	-	-	-	-	-	-	-	1	1	7.7	
7	Tapes	-	-	-	1	-	-	-	-	-	-	-	-	-	2	15.4	
8	Ranging Poles	-	-	1	1	-	-	-	-	-	-	-	-	-	9	69.2	
9	World Globe	1	1	-	1	1	1	1	-	-	1	1	1	1	8	61.5	
10	Topo Maps	1	1	-	1	1	-	1	-	1	1	-	1	1	9	69.2	
11	Wall Maps	1	1	-	1	1	1	1	-	1	1	-	1	1	1	7.7	
12	Film strips	-	-	-	1	1	-	-	-	1	-	-	-	-	3	23.1	
13	Bulletin Board	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	
14	Radio and T.V.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	Geography Lab. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	Aerial Photo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17	Models of Land Forms	1	-	-	-	1	1	-	-	-	-	-	-	-	3	23.1	
Total Aids in Each School		8	6	2	8	8	2	3	-	5	3	2	5	-			

Source: Field Survey, 1986

Table III

Variation in the availability of Teaching/Learning Resources among 48 Sampled Secondary Schools in 8 Local Government Areas of Oyo State 1986.

S/ NO	RESPONSE TO QUESTIONS OF RESOURCES AVAILABILITY	EDE	IBARAPA	EJIGBO	IFFLODUN	IREWOLE	ORANMIYAN	OSUGBO	OYO	TOTAL NO OF SCHOOLS	OF TOTAL SCHOOLS
		NO OF SCHOOL	NO OF SCHOOL	NO OF SCHOOL	NO OF SCHOOL	NO OF SCHOOL	NO OF SCHOOL	NO OF SCHOOL	NO OF SCHOOL		
1	No separate geography room	1	2	4	6	6	9	4	7	42	87.50
2	Separate geography teaching room available	1	1	1	—	—	1	1	1	6	12.50
3	Teaching aids are adequate	—	—	—	—	—	—	—	1	12	2.08
4	Teaching aids are inadequate	3	2	5	6	6	8	5	7	42	87.50
6	Teaching aids are unavailable	2	1	—	—	—	2	—	—	5	10.42
6	No record of field trip for the past 10 years	5	3	5	6	6	9	5	6	45	93.75
7	There was field trip within the last 10 years	—	—	—	—	—	1	—	2	3	6.25
8	No school library	2	1	2	4	4	3	3	5	24	50.00
9	School library available but no relevant geography texts	3	2	3	2	2	7	2	3	24	50.00
TOTAL		5	3	5	6	6	10	5	8	48	100

Source: Adapted from A.M. Adgyemo: Instructional aids and the dilemma of effective teaching of Geography in Secondary Schools 1986 p. 12.

Geography Staff strength in 13 Sampled Secondary Schools in Benin City, 1986.

S/N	SECONDARY SCHOOLS	CATEGORIES OF GEOGRAPHY TEACHERS				TOTAL NO. OF TEACHERS	% OF TEACHERS
		GEO/EDU GRADUATES e.g. B.Ed GEOG.	NON-EDU GRADUATES e.g. B.Sc GEOG.	NCE	BELOW NCE e.g. TC. I		
A	Adolo	1	1	4	2	8	8
B	Asoro	—	1	4	—	5	5
C	Edo	2	2	4	2	10	10
D	Edokpolor	1	1	3	2	7	7
E	Baptist	2	1	3	1	7	7
F	Ihogbe	1	—	4	1	6	6
G	Niger	1	2	5	2	10	10
H	Akenzua	1	—	3	2	6	6
I	Eghosa	1	1	6	4	12	12
J	Emotan	1	—	1	4	6	6
K	Idia	2	2	4	2	10	10
L	Maria Gorreti	2	—	3	2	7	7
M	Federal Girls	1	3	2	—	6	6
		16	14	46	24	100	100

Source F. C. Okafor and P. O. Yalokwu (1985: p. 55).

In a separate study of instructional resources conducted by Adeyemo (1986) and shown in Table 3, we find that of the 48 secondary schools sampled, only 6 had separate geography room while only 1 school had adequate teaching aids. A total of 3 schools kept record of field trips conducted within the last 10 years while only half of the schools sampled had school libraries but without current and relevant geography textbooks. With the above picture in mind it is clear that the schools sampled in Oyo State and in Benin City Bendel state are poor in the provision of needed teaching/learning resources.

Our discussion on the status of geography methodology will not be complete until we have examined the categories of teachers available in some of the sampled schools in Benin City. A look at Table 4 shows that of the 100 Geography teachers available in 13 schools, 16 were university graduates with education qualification while 14 were university graduates without training in any aspect of teaching. The NCE graduates constitute 46% (46) while those having qualifications below NCE (e.g. TC I, ACE) constitute 24% (24 in number). What this means is that going by the new policy on education regulation only 16% of the teachers are professionally qualified to teach geography at the senior secondary school. In a situation where 80% of the teachers lack the professional training necessary for them to teach geography efficiently and effectively a lot needs to be done to train up more Geography teachers at least up to the university level.

Implications of the NSSGC for the Improvement of Geography Methodology.

In this section we shall examine the implications of the NSSGC for improvement of Geography methodology against the background of the present status of geography teaching resources in secondary schools. Although, the data available for this analysis were gathered from sampled schools in two states (Oyo and Bendel) it is not unlikely

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be difficult to achieve.

(2) **Feedback on Curriculum Implementation:** The NSSGC demands that teachers should be able to get feedback from students on curriculum implementation. Such feedbacks can be got from the evaluation of students achievement and also from interviews with students on teachers performance during the years work. Further feedback could come from colleagues, examination bodies or agencies (e.g. WAEC), Inspectors of schools from Ministry of Education as well as from parents. The implication of this on teaching methodology is that the teacher should reflect in his teaching strategies the development in changes and trends observed earlier on.

(3) **Participation in Workshops/Conferences:** One of the teachers roles emphasised in the new geography is the up-dating of his academic and professional competencies through his regular participation in organised workshops, conferences and seminars where current trends affecting geography is discussed. Majority of our secondary school teachers do not attend geographical conferences and seminars due to lack of zeal, interest and finance. Except something is done by school authorities to encourage these teachers, many of them will lose the opportunity of grasping the methodological issues that are needed for attracting students to their geography lessons.

(4) **Provision of Funds:** The NSSGC is an expensive one in that a lot of teaching equipments are needed to conduct classroom teaching laboratory experiment, and field work. It is equally important that the full assortment of weather recording instruments are procured and a weather garden maintained. Majority of the schools surveyed in this paper do not have weather equipments and the implication of this is that the method of teaching weather and climate is poor. In order to facilitate the implementation of the new geography, government should provide funds for providing needed equipments in schools.

(5) The role of the learner: The new geography demands that the learner actively participates not only in classroom work, field excursions, laboratory work, teacher evaluation but also in curriculum review and renewal. The learner has to be responsive to the interacting forces which determine what and how he is expected to learn. The teacher has to watch those interacting forces which constitute the channels by which the learners educational goals are to be achieved (Adegunde: 1986). It is these channels that will provide the resourceful and competent teacher with the means of enriching the learner through the planned sequence of learning experiences and processes contained in the curriculum. As things are now in schools, not many teachers are capable of enriching their teaching strategy through this channel. The implication of this is that more guidance should be given to classroom teachers through organised meetings and school organisation development sessions.

(6) Local Geography — The importance of local geography as a vehicle for appreciating the immediate environmental factors shaping the social, cultural and economic life of the people has been emphasised in the NSSGC. It is given that field work should begin on a local scale and then progress to the wider environment. However, a look at Table 1 shows that not many of our sampled teachers attempt to teach local phenomena of geographical importance. There should be a re-orientation on the part of our teachers to ensure that Geographical issues which form the very roots of our students are properly studied. After all, charity begins at home.

(4) Conclusion and Recommendation

There is no doubt that the NSSGC constitutes a worthy educational package which if implemented by all and sundry, will open up new vistas for turning out competent and practically-minded geographers at the secondary school level. At the moment many of our secondary schools

lack the essential factors and materials needed to enhance the methods of teaching and learning of geography. Based on the findings of some surveyed secondary schools, the following suggestions are offered in the hope that, if implemented may improve the quality of Geography teaching and learning in secondary schools.

(a) **Provision of Teaching Equipments:** A major problem facing majority of our schools is lack of essential teaching aids e.g. weather recording instruments, wall maps, topographical maps and textbooks to mention a few. While simple teaching aids can be improvised, a lot more have to be bought. Government should ensure that our plastic industries live up to expectation by making available teaching aids at moderate cost.

(b) **Training of more Geographers:** There is an inadequate supply of qualified geographers in all the secondary schools investigated in this paper. Departments of Geography in the Universities and Colleges of Education should step up their enrolment of students in Geography. Besides, government and all geography lovers should provide scholarship facilities to students with proven ability and interest in Geography.

(c) **Financial incentives:** Geography is a pure applied and an environmental science. It should attract the usual science allowance paid to similar subjects teachers as physics, Biology and Chemistry. If teachers of geography are paid allowances majority of them will show more dedication to the job they have chosen to do.

(d) **Conferences/Seminars/Workshops:** The secondary school authorities, Ministry of Education and Geographical Association (such as NGA & NGTA) should work hand in hand to ensure that all secondary school teachers attend refresher courses on the teaching of geography at least once in a year. This could take the form of week-long workshops and/or seminars during the annual long vacation period.

e) Provision of more Fund: It is no longer a debate that Geography departments are not well funded in our secondary schools. By nature, geography is an expensive subject in that it involves fieldwork, laboratory work and other practical work, needing expensive gadgets. According to Ibunjo; (1987) lack of funds to hire buses to convey students to and from field excursion sites is a serious constraint to regular field work. Sufficient funds should be provided to geography teachers to attend conferences and seminars where the experience of new methods of teaching geography can be shared.

(f) Local Geography: One of the approaches to the teaching/learning of geography which is emphasised by the NSSGC is local geography. In an earlier write up Majasan, (1969) had indicated that a potent vehicle through which Nigeria can get more facts about her untapped resources is local geography. Through cartographic records of fieldwork and local development projects the frontiers of geographic education will inevitably be broadened.

(g) Mutual Feedback Between Teachers and Students: In the overall interest of geography teaching and learning, teachers should not only interact with colleagues but with students. Teachers should share current information from journals, magazines, and other publications with their students. They should constantly monitor students learning pace through the continuous assessment system. In addition teachers should interview students periodically on the worthwhileness or otherwise of the various methods they use in imparting geographical skills, concepts, knowledge and values. A well planned review of teaching units coupled with a proper evaluation of student achievement and a personal interview with students will help the resourceful and efficient teacher to discover, if any, the weak links in his geography methodology and take appropriate steps to remedy them.

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