

Why secondary school geography students perform poorly in external examinations

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Research Article

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Abstract

The perpetual decline of students' performance in external geography examinations necessitated this enquiry to identify causes of failure reported by examiners. This study, therefore, adopted a qualitative approach to analyze West African Examination Council (WAEC) chief examiners' reports from 2008 to 2018 to extract vital information on why Nigerian students perform poorly in geography, using the grounded theory methodology and RQDA for data analyses. Poor map work, inadequate preparation and scanty explanation of points were identified. Ideal geography teachers ought to be multiplied in schools, with the utilization of relevant instructional resources and student-centered teaching strategies for improvements.

1. Introduction

Geography as a school subject is vital in providing a solid knowledge-base about the environment, while developing positive attitudes and hands-on skills in preserving the beauty of it. In a similar thought, Akintade (2012) had previously ascribed Geography as a subject that endows students with vast knowledge for increased functionality and relevance in a fast-changing world, being a versatile, expressive and intellectually stimulating subject. Presently, career opportunities from studying geography is not limited to teaching and research (education sector) alone. In recent times, geography graduates have taken up job roles related to town planning, meteorology, journalism, climate change, surveying, consultancy, environmental advocacy, and even engineering. The contents of Geography at the senior secondary level provides foundational exposure to a broad spectrum of knowledge that connects all these fields.

The preparation of students for an active future of preserving the environment, while enjoying its resources is achievable through secondary school Geography. Also, assuming studies at higher institutions in the field of geography, environmental education, environmental sciences and other closely associated courses of study require initial exposure to secondary school Geography. The West African Examination (WAEC) syllabus for example contains topics such as principles of elementary surveying; Geographic Information System (GIS); climate: elements, classification and climate change; geo-political issues; field work, and other topics that touch on diverse professions. WAEC also itemizes certain abilities geography students must acquire prior to the West African Senior Secondary School Certificate Examination (WASSCE):

- I. Explanation of the concepts of differential character and spatial relationships;
- II. Explanation of the concepts of man-environment relations;
- III. Demonstration of a basic knowledge of the nature and functioning of physical and human environments;
- IV. Organization and formulation of principles in line with geographical concepts and the application of these principles in interpreting spatial problems at the local and wider environmental scales;
- V. Demonstration of skills and techniques for accurate, orderly and objective geographical investigations;
- VI. Communication of geographical ideas effectively through reports, graphs, charts, sketches, diagrams and maps;

VII. Explanation of the cultural, social and economic circumstances of people at both local and sub-region (West African) levels

The Nigerian teaching and learning of Geography has transcended narrow and limited contents to inclusion of current and contemporary issues in line with the dynamism of knowledge. In the view of Aderogba (2012), secondary school syllabuses, especially of the WAEC had metamorphosed from the 'ubiquitous and irrelevant stuff (content) to more focused, purposeful and relevant issues'. Furthermore, Olusegun (2006) records that following Nigeria's independence in 1960, contents of school subjects including Geography, were reviewed in consonance with the consideration the potentials, resources and immediate needs of the society and the learners themselves. In tracing the history of Geographic thoughts in Nigeria, Ofomata (2008) pegs 1948 as the base year, when Geography became an academic pursuit at the university level, while the present stage commencing from 1981, is referred to as the contemporary stage.

In the words of Aremu and Sokan (2003), 'the search for the causations of poor academic achievement is unending'. Previously, studies such as Akintade (2012), Aderogba (2012); Amosun (2016); Filgona, Sababa, and Filgona (2016); Folade, Usman, Ilobeneke, Mohammed, Godwin and Jimoh (2016); Etim, Udosen and Ema (2016), have alluded to unsatisfactory, poor and discouraging performance of Nigerian secondary school students in Geography. However, there seem to be scanty information in literature as to the factors leading to such abysmal performance, with an obvious seeming temporal discontinuity in geographical education research on the subject. This study entails an arduous work to fill this research gap.

As secondary school Geography lays the foundation of the study of Geography at higher education institutions, this research borders on why Nigerian secondary school geography students perform poorly in their final external examinations, with strong evidence from reports of the examiners, who graded the scripts for the period 2008 to 2018. The findings of this study will be practically significant to students who will take the same external examinations, along with their teachers, who guide them in preparations for the examination, thus serving as an examination-preparation guide for Geography external examinations in Nigeria. The puzzle is apparent – why do Geography students perform poorly in WASSCE every year from 2008 to 2018?

2. Context Of The Study

Nigeria currently operates a 9-3-4 system of formal education. The first 9 years is devoted to basic education (6 years for lower basic/primary education; and 3 years for upper basic education), which culminates in the Basic Education Certification Examination (BECE). The following 3 years is for senior secondary schooling, which is concluded with the Senior School Certificate Examination (SSCE). Generally, two categories of examinees (internal/school and external/private candidates) take the SSCE every year. While the internal students are those in their third year in the senior secondary school (SS3) who take the exam in May/June, the external candidates are not in the school system and are composed majorly of those who take the examinations around November/December to make up for their deficiencies in certain subjects. The last stage of the Nigerian education system takes at least 4 years of study to earn a Bachelor degree, with some courses taking up to 6 years of study.

There are 3 major SSCE conducting bodies in Nigeria namely (the): West African Examinations Council (WAEC); National Examinations Council (NECO); and National Business and Technical Examinations Board (NABTEB), with WAEC being the oldest examination body established in 1952, conducting the SSCE in Nigeria. WAEC Chief examiners' reports are preferred for this study, being West Africa's foremost examining board by law for the conduct of examinations and award of certificates comparable to equivalent authorities internationally.

The WAEC Geography exam tests candidates in economic, human, physical, practical and regional geography. The examination takes the form of 50 multiple choice questions; 4 essay-type questions on economic and human geography; 4 essay-type questions on regional geography; and 8 essay-type questions on practical and physical geography. Specified rubrics are clearly printed on each sections of the questions to guide the students on examiners' expectation, with the marks clearly indicated.

3. Methods

This study adopts a qualitative approach in analyzing WAEC Chief examiners' report from 2008 to 2018, anchored on the grounded theory methodology of Corbin and Strauss (2008). The methodology is considered appropriate for this study as constructs used were not derived from prior theories. Also, the goal of obtaining results and conclusions that are representative of the situation under analysis, based on the analyzed data. Hence, the data analysis adopted in this study follows the laid down procedures outlined by the methodology – thorough reading of the reports to identify themes; coding themes; and linking up specific themes grounded in the obtained data. The process therefore identified a number of recurrent weaknesses leading to poor performance and their remedies; with the inclusion of excellent students' strengths, for emulation.

The reports that form the data for this study, cover all Geography testees who took the examination within the period. These reports, written by Chief examiners annually, are considered vital resources in Geography provided by WAEC for assistance in full understanding of the required standards expected in Geography final examination, and are made freely available on the WAEC website (WAEC, 2018).

The data was analyzed using RQDA. RDQA is a free qualitative analysis software developed by Huang (2018), used as a package for Qualitative Data Analysis in R, following installation of required packages. The raw reports were saved in text format, and used as input into RQDA. The themes were identified separately for internal and external candidates, and coded accordingly, and repeated for all the years under review. Choice excerpts have been selected and captured under relevant themes in the subsequent sections. Each excerpt is identified by a bracket (showing the exam type and year (MJ=May/June; ND=November/December)); and a square bracket [containing the range of characters coded using a specific theme].

4. Results

Results of the qualitative data analyses is presented in the following sections. The subdivisions adopted by the chief examiners' reports (general comments, weaknesses, recommendations, and strengths), has been

retained.

4.1 General Comments

4.1.1 Standard, spread and presentation of the examination questions

Questions set are of required standards in all years under review. These questions are reported to have adequate spread and coverage of the syllabus, with appropriate spread to the domains of learning. In terms of presentation, all questions were reported to be captured alongside required rubrics, in simple and clear language (English) for easy comprehension by testees.

“The paper was of a high standard and was comparable with those of previous examinations.” (ND.2011) [52:139]

“All the questions were from topics that were selected from the syllabus. These questions were properly distributed among the segments of human and regional Geography and they covered the various domains of learning.” (MJ.2012) [224:440]

“The rubrics were clear and the questions were framed in comprehensible language.” (MJ.2011) [125:206]

“The questions were clearly worded and void of ambiguity. The rubrics were clear.” (ND.2018) [122:200]

4.1.2 Marks’ allocation and marking guide preparation

The examiners adopted equitable allocation of marks, and ensured to prepare comprehensive and exhaustive marking scheme/guide, for both school candidates and private candidates. Excerpts of the report are given hereunder:

“There was equitable mark distribution...” (MJ.2009) [291:365]

“The marking scheme was exhaustive and met the demands of the questions.” (ND.2017) [179:251]

4.1.3 Students’ Performance

Generally, the reports only used the key words ‘below’ or ‘better’ in describing the performance for each year in relation to previous years. A pictorial representation of the report of students’ performance using terms such as ‘below the previous year’; ‘below the previous years’; at par with the previous year’; ‘better than previous year’; and ‘better than previous years’, has been attempted and presented in Table 1 and Figure 1. The school candidates and private candidates are presented differently.

Table 1: Reports on Geography students’ performance during 2008 to 2018 WASSCE

Report	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
May/June	Base Year	BTY	BLY	BTY	PAY	BLY	BLYs	BTY	BLYs	BLY	BLYs
November/December	Base Year	BLY	NDt	BLY	BTYs	NDt	NDt	BTY	BLY	PAY	BLYs
Key:											
BTY=Better than the previous year						NDt=No data					
BTYs=Better than the previous years						BLY=Below the previous year					
PAY=At par with the previous year						BLYs=Below the previous years					

Figure 1: Line plot and trend depicting students' performance

4.2 *Areas of students' weakness reported*

Eleven (11) key thematic areas of weakness were identified in the reports, within the period under review. Each of these themes have their frequencies within the period under observation (Table 2).

Table 2: Reports on Geography students' weaknesses during 2008 to 2018 WASSCE

Students' weaknesses	May/June reported years	Nov./Dec. reported years
Avoidance/poor calculations	2012	2015, 2017
Illegible handwriting	2010, 2012, 2016, 2018	2016, 2017
Inadequate explanation of points	2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018	2008, 2009, 2011, 2014, 2015, 2016, 2017, 2018
Inadequate preparation	2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018	2008, 2009, 2011, 2012, 2014, 2015, 2018
Non-adherence to rubrics	2010, 2012, 2013, 2014, 2015, 2016, 2017, 2018	2011, 2012, 2018
Poor comprehension of questions	2008, 2009, 2010, 2012, 2013, 2014, 2015,	2008, 2011, 2012, 2016, 2018
Poor expression	2008, 2009, 2010, 2011, 2012, 2015, 2016, 2017, 2018	2008, 2009, 2011, 2012, 2014, 2016, 2017, 2018
Poor map work	2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018	2008, 2009, 2011, 2014, 2015, 2016, 2017, 2018
Poor presentation of diagrams	2008, 2009, 2010, 2011, 2013, 2014	2008, 2011, 2012, 2015, 2016, 2017, 2018
Poor school inspection	2008	Not applicable
Poor teaching skills	2008	Not applicable

All the weaknesses (Table 2) examiners identified led to the loss of marks, and consequent poor performance in the examination of those years indicated. In the chief examiners' own words, extracts from these weaknesses are given in the subsequent subsections:

4.2.1 *Avoidance/poor calculations*

"Some candidates avoided calculation related questions." (MJ.2012) [1650:1752]

"...neither could they calculate the total annual rainfall and the annual range of temperature." (ND.2015) [643: 734]

"...some of the candidates failed to properly calculate the angles for the pie chart..." (ND.2017) [620:973]

4.2.2 *Illegible handwriting*

"Some candidates presented their answers in very bad and unreadable handwriting." (MJ.2010) [1432:1542]

"Some of the candidates wrote their answers in very poor, difficult-to-read handwritings. This made such students to score poor marks as some of the examiners were left with no option than to write 'seen' on those

illegible works.” (MJ.2012) [1278:1536]

“Some of the candidates wrote their answers in very bad handwritings that were illegible. This resulted in poor performance.” (ND.2016) [976:1119]

4.2.3 *Inadequate explanation of points*

“Many candidates have the habit of merely listing or stating the points without adequate explanation: This made them loose much marks.” (ND.2008) [1479:1648]

“Some candidates merely listed points as answer to the questions. Candidates should understand that whenever they are to describe, highlight, state or explain any concept, they should explain their points in order to score full marks.” (MJ.2011) [1030:1297]

“...candidates are in the habit of listing points that require explanations. Such candidates lose precious marks.” (ND.2011) [747:978]

4.2.4 *Inadequate preparation*

“...because some of the schools, (especially public schools) did not complete their syllabus as evidenced by the performance of their candidates in map reading and surveying.” (MJ.2008) [364: 534]

“It is evident that some aspects of the syllabus were not studied by some candidates, especially surveying and map work.” (ND.2009) [1140:1296]

“From the candidates’ responses, it could be deduced that some of the candidates did not cover the syllabus as evidenced by their inability to explain basic concepts in climatology like annual range of temperature, mean annual temperature, Greek system of climatic classification etc.” (MJ.2012) [757:1080]

“From the sketchy answers to some of the questions by some candidates, it could be inferred that such candidates did not fully cover the syllabus before the commencement of the examination.” (MJ.2018) [1264:1489]

“some candidates could not answer questions correctly showing that either they did not prepare adequately for the examination or they misunderstood the questions and wrote off point.” (ND.2018) [1093:1270]

4.2.5 *Non-adherence to rubrics*

“Some chose to answer more than the required number of questions while others answered fewer questions than required.” (MJ.2012) [1904:2020]

“Candidates were expected to answer question (1) and any three other questions. Some of them did not answer question (1). Also, where diagrams were required in an explanation, some of them did not draw the

diagrams so as to substantiate their points.” (ND.2012) [513: 790]

“Some candidates misunderstood the rubrics. Rather than answering a total of four questions choosing at least one question from Sections A, B and C, some of the candidates answered less than four questions while others answered more than four questions.” (MJ.2013) [1242:1549]

4.2.6 *Poor comprehension of questions*

“Most candidates rushed into answering questions before they fully understand the demands of the questions.” (ND.2008) [891:1032]

“Misinterpretation of questions: Some candidates misinterpreted some of the questions e.g. the question that required description of the characteristics and mode of formation of dyke and composite cones were treated generally by some candidates as if it had demanded for the processes of volcanicity, while the question requiring problems resulting from water pollution was treated as if it demanded for general environmental pollution.” (MJ.2012) [1093:1529]

“Some candidates did not read the questions to the point of understanding before attempting them.” (MJ.2015) [378: 505]

“Despite the clarity of the questions, some candidates could not answer them correctly. They misunderstood the questions and wrote off point.” (ND.2018) [1024:1194]

4.2.7 *Poor expression*

“Some of the candidates could not make correct sentences. Such candidates were unable to clearly express themselves, even when they knew the answers.” (MJ.2008) [636: 802]

“Some candidates used future tense where they should have used past tense, spelling mistakes were also noted on the candidates’ scripts.” (ND.2008) [1150:1323]

“Some candidates answered questions by using poor grammatical expressions which made their explanations difficult to understand and thus, lost some marks.” (MJ.2011) [1302:1480]

“Some of the candidates poorly expressed themselves. Such candidates have not fully grasped the skills in English language communication and therefore scored low marks, since the language of transmitting information in geography examinations is English Language.” (MJ.2018) [982:1260]

“Poor expression: Some candidates could not express themselves clearly. This made it impossible for the examiners to understand what those candidates really meant.” (2018) [487: 649]

4.2.8 *Poor map work*

“Generally speaking, Question 1 was not properly answered by majority of the candidates. Particularly, many of them could not answer the question on gradient correctly. Quite a good number could not answer the part that require them to reduce the map to one third its original size and state the new scale.” (ND.2008) [368: 685]

“Some of the candidates performed poorly in map work so much that they even did map reduction and enlargement which was not asked in the question paper.” (MJ. 2010) [1118:1270]

“Some of the candidates could not properly correlate the ratio scale to distances on the map. Consequently, they drew wrong outlines which were either too short or too long. This made them lose precious marks.” (MJ.2012) [482: 744]

“Some of the candidates could not reduce the topographical map as required by the question. Some of the candidates could not recognize that they were required to reduce the map by three times. Since some of the candidates drew poor outlines, they also failed to insert the required features into the right locations.” (ND.2015) [1131:1466]

“Some candidates could not accurately measure the required distance by road from Okpakhumi to the road junction at SABONGIDDA. Even when some were able to measure correctly, they were not able to apply the map scale to get the actual distance on ground...Some of the candidates could not accurately measure the bearing of Lawyer’s Camp from Okebe...Some of the candidates poorly described the relief of the mapped area.” (ND.2016) [452:1026]

“The map reading work was poorly done as many candidates could not draw the cross profile from A – B correctly. Some of them could not also describe the influence of relief on the settlement in the mapped area.” (MJ.2018) [430: 656]

4.2.9 Poor presentation of diagrams

“Many candidates could not draw good maps of Nigeria, West Africa and Africa as required.” (MJ.2009) [556: 677]

“Quite a good number of candidates could not represent the temperature and rainfall data on a combined graph.” (MJ.2011) [1569:1694]

“Some of the candidates could not draw good diagrams to explain the formation of ox-bow lake and to give description of barchans.” (ND.2016) [1164:1315]

“Many of the candidates who attempted the question on flow chart could not Correctly draw the flow lines using the specified scale.” (MJ.2017) [659: 845]

“Some candidates drew very poor outlines of the features they wanted to represent. This impacted negatively on their performance.” (ND.2018) [653: 815]

4.2.10 Poor school inspection

“School inspection by administrators and school supervisors are inadequate, particularly in public schools.” (MJ.2008) [1617:1747]

4.2.11 Poor teaching skills

“...teachers do not teach their subjects the way they should.” (MJ.2008) [1749:1820]

4.3 Recommended remedies for identified weaknesses

Sequel to the identification of the aforementioned weaknesses, the examiners provided suggestions to remedy the situation and achieve improvement in students' performance (Table 3).

4.4 Areas of strength of excelling students

In spite of the unstable and dwindling performance, a few candidates usually distinguish themselves in the examination. Their areas of strength, which led to high scores are hereunder presented.

4.4.1 Adequate preparation

“candidates who prepared adequately for the examination performed well.” (ND.2008) [1830:1899]

“Some of the candidates prepared adequately for the examination.” (MJ.2018) [2908:2972]

4.4.2 Citing of local examples

“Others were able to cite local examples from their local environment which earned them good marks.” (MJ.2010) [2443:2542]

4.4.3 Clear & logical expressions

“Some candidates were painstaking in their presentation of facts and this paid off well for them as they earned good marks.” (ND.2009) [1724:1846]

“...explained the points raised in good English which made them score good marks.” (MJ.2015) [2033:2110]

“...Such candidates wrote their points coherently and intelligently which led to high scores.” (MJ.2017) [1371:1460]

4.4.4 Clear illustration of/with diagrams

“Good, well labeled diagrams were drawn by some of candidates and this made them score high marks.” (MJ.2010) [2345:2441]

“...illustrated the explanations with appropriate diagrams where required to score good marks.” (MJ.2012) [3432:3521]

4.4.5 Comprehension of questions

“...candidates who took time to read the questions well, understood the questions, presented their answers systematically...” (MJ.2011) [1844:1963]

“Some candidates answered those questions which they fully understood their demands.” (ND.2012) [2306:2388]

Table 3: Chief examiners' recommendations to improve students' performance

Students' weaknesses	Recommendation	Excerpts
Avoidance/poor calculations	Early preparation	<p>"Candidates should practice measurement of distances, calculation of areas and other questions involving calculations so that they will get used to solving mathematics base questions." (MJ.2012) [2841:3069]</p> <p>"The candidates are encouraged to practice with exercises on statistical calculations and construction of charts. This will make them master the act and grant them confidence..." (ND.2017) [1957:2590]</p>
Illegible handwriting	Legible writing	<p>"Good handwriting: Good handwriting could be developed through deliberate practice aimed at improving the handwriting. Teachers should encourage those with poor handwriting to embark on constant practice to improve their handwritings." (MJ.2016) [1769:2003]</p> <p>"It is required of candidates to write their points in legible handwritings in order for their examiners to decode what have been written down for appropriate scoring." (ND.2016) [1683:1881]</p>
Inadequate explanation of points	Elaborate explanations	<p>"Candidates should not be satisfied with mere listing as this will lead to loss of valuable marks." (ND.2008) [805: 902]</p> <p>"Candidates are required to properly explain their points rather than to merely list them. Explanation of points will enable candidates to obtain full marks thus leading to high performance... Also, where it is required that points be substantiated with appropriate diagrammatic representation, candidates should go ahead and use such illustrations to obtain full marks." (MJ.2014) [2108:2329]</p> <p>"Candidates will be required to explain their point in order to secure full marks in most of the questions. Candidates should practice how to answer questions correctly by using past question papers and past model answers." (ND.2018) [2084:2337]</p>
Inadequate preparation	Early preparation	<p>"The candidates could perform better if they imbibe a good reading culture as there is no substitute to good study life. The syllabus should be covered before the commencement of the examination and this can be achieved if the candidates will devote extra time to personal study to complement the classroom teaching efforts." (MJ.2009) [1301:1624]</p> <p>"Candidates are advised to start preparing for the examination early enough so that they could be adequately ready for the examination...practice the drawing of maps as they read along so that they could adequately represent features on the map when required." (ND.2014) [1500:1846]</p>
Non-adherence to rubrics	Strictly observe rubrics	<p>"It is advisable that candidates pay full attention to rubrics and answer the questions as specified by the rubrics." (MJ.2012) [2020:2135]</p> <p>"Candidates must observe rubrics when answering questions. They were required to answer four questions in all choosing at</p>

least one question from each of Sections A, B, and C.” (MJ.2013) [2385:2582]

“Candidates are advised to always read the instruction guiding each examination and make sure they obey such instructions.” (MJ.2016) [2468:2610]

“All rubrics in examinations are to be obeyed if the candidate is to score high mark in the examination.” (ND.2018) [1309:1434]

Poor comprehension of questions

Comprehend questions before attempting answer

“Candidates are counseled to spend a few minutes studying the questions before they attempt to answer them.” (ND.2008) [1035:1142]

“...candidates should familiarize themselves with the pattern of asking questions by practicing past questions...” (MJ.2015) [1239:1580]

“It is expected that candidates would read the questions to the point of understanding and see if they have adequate facts to answer the question before attempting them. This will enable them to secure better marks.” (ND.2018) [567: 855]

Poor expression

Improve expression through wide reading; Early preparation

“Candidates should improve their power of expression through the reading of the novels, books and journals to broaden their vocabulary. (MJ.2008) [803: 937]

“Candidates should spend good time in the use of English, since it is the medium of communication. They can do this through constant reading of novels, textbooks, journals and magazines.” (ND.2011) [1973:2158]

“English language which is the language of communication could be mastered through reading of good textbooks, novels, journals, newspapers and through language drills in debates and drama. This will make the candidates to be adequately equipped to answer any question in any topic if they adequately read such topics ahead of the examination.” (ND.2017) [2838:3232]

“English Language is the tool of expression in our educational system. It is expected that candidates should properly master this tool of communication in order to properly express their lines of thoughts.” (MJ.2018) [2207:2428]

“...reading will help students to familiarize themselves with geographical terms well ahead of the examination. This will keep them from making spelling mistakes in key geographical terms.” (MJ.2012) [2615:2827]

Poor map work

Geography labs; Early preparation

“Geography laboratories should be constructed where non exist and where they exist, it should be furnished to meet the demands of the syllabus.” (MJ.2008) [1473:1615]

“Schools should purchase topographical maps for their students so that the students should do some practical work with such maps so that they familiarize themselves with the human and physical features on such topographical maps before the examination begins.” (MJ.2012) [1937:2230]

“Map reading and interpretation is a compulsory aspect of geography examination Candidates are advised to practice map reduction and enlargement, drawing of cross profiles, learning of

interpretation of relief and land uses ahead of the examination date.” (ND.2015) [2066:2350]

“Candidates are advised to practice map drawing and the insertion of geographical features on maps across the various topics in the curriculum to achieve mastery. Such maps should have keys for ease of reading and interpretation.” (MJ.2018) [1761:2015]

Poor presentation of diagrams	Early preparation	<p>“Candidates should practice the art of plotting graphs well ahead of their final examination. Practice enhances perfection.” (ND.2011) [2159:2368]</p> <p>“Since diagrams are required to explain some geographical features and phenomena, it is expected that candidates practice the drawing of diagrams while reading any topic so that whenever required, they will be able to properly illustrate such in examinations.” (MJ.2013) [2247:2540]</p>
Poor school inspection	Thorough supervision	<p>“It is strongly recommended that school administrators and other appropriate authorities carry out a thorough supervision of the teaching and learning process to ensure maximum output.” (MJ.2008) [1820:2004]</p>
Poor teaching skills	Effective & Efficient teaching	<p>“Diagrammatic illustrations should be used by teachers in schools to prepare candidates ahead of the examinations. Assignments could be given to candidates to enable them practice drawing and insertion of geographical features on maps.” (MJ.2008) [219: 453]</p> <p>“More time should be allotted to these practical aspects of the work...” (MJ.2008) [1375:1471]</p> <p>“...some of the schools, (especially public schools) did not complete their syllabus.” (MJ.2009) [373: 453]</p> <p>“Teachers should emphasis the use of maps and diagrams in their teachings and encourage candidates to use diagrams in answering questions when necessary.” (MJ.2010) [1977:2129]</p>

4.4.6 Full explanations

“...Such candidates now take time to explain their points and so earned more marks.” (MJ.2010) [2202:2345]

“quite a good number of them explained the points raised in good English which made them score good marks.” (MJ.2015) [2005:2110]

4.4.7 Observation of rubrics

“...Such candidates observed the rubrics of the question paper.” (MJ.2012) [3190:3248]

“...These candidates also adhered to the rubrics on the number of questions to be answered.” (ND.2014) [2452:2538]

4.4.8 *Performed calculations using correct formula*

“...calculated the annual range of temperature and the mean annual temperature properly using the required formulae.” (MJ.2012) [3316:3427]

4.4.9 *Proper map drawing*

“...drew good maps with keys for interpretation.” (MJ.2011) [1990:2034]

“...Such candidates carefully marked the required features at the correct places on the map given to them, calculated the distance between the points correctly...” (ND.2011) [2482:2639]

“...Such candidates drew the maps as required and inserted the features where they should be.” (ND.2012) [2391:2480]

5. Discussion

Inadequate preparation, scanty explanation of points and poor map work occurred as students' weakness in all the years under review in the Geography WASSCE for Nigerian students, followed by poor expression of answers either due to poor grammar structure, misspelt words, or illogical presentation of ideas. Notably, this verdict applies largely to school candidates, who are likely inexperienced and exposed to such an examination for the very first time. This is because private/external candidates are mostly school leavers, who have deficiencies to address in their SSCE. Hence, they must have had their first experience in the school-based/internal SSCE, and become somewhat familiar to the pattern of examination questions and rubrics.

Suffice it also to say that teachers may have also failed in their mentorship of students in preparing to answer examination questions. Robust findings of Anlimachie (2019), blame weak performance in Geography at WASSCE on low level of practical and field work, while linking same to shortage of ideal teachers, poorly-stocked Geography resources rooms, instructional materials, and other school resources. The impact of these on students' learning, is the creation of a missing link between classroom learning experiences and the real-world situations. Thus, inadequate preparation can be explained partly by inadequate ideal teacher supply, and shortage of an array of Geography teaching and learning resources. Harping on these same points, Rilwani, Akahomen and Gbakeji (2014) identify inadequate teachers and lack of requisite teaching facilities/aids as major factors that translate to poor teaching of Geography and students' increasing unwillingness to offer the subject. Teachers ought to conduct constant evaluation and continuous assessment of students' learning progress, with corrective comments and redirection when they go amiss, while they teach these students from the first year of senior secondary schools. If this is done, students become familiar with the explanatory approach of answering geography questions long before the

final external examination (WASSCE). Also, repetitive correction of wrong expressions, illogical presentation of their ideas and spelling errors, if implemented by teachers during grading of tests, assignments, projects, terminal and mock examinations will leave students no choice than to make frantic efforts at self-improvements in these regard.

Map work takes the highest mark in the practical geography examination, and failure to secure a good score in the question, may lead to overall poor performance in the WASSCE Geography. Filgona, Sababa and Filgona (2016) advocate the use of hands-on strategy in teaching map studies. They suppose poor performance in map work could emanate from the use of conventional/lecture, rather than hands-on strategy. Hence, the use of hands-on strategy to stimulate reflection, concretizing abstract phenomena as it regards maps, and induce critical thinking. Basically, students must possess a least a copy of a topographical map to actively practice, and engage in all sorts of map work to improve the likelihood of achieving higher scores in map work and Geography at large, during external examinations. Similarly, for effectiveness of other contents aside map work, Eze (2020) had earlier recommended activity-based learning in classrooms in order to induce interesting questions by learners towards the environment. Hence, the trio of teaching/learning resource (topo maps and past question papers') availability, effective learner-centered teaching strategies; and sufficient individual practice becomes the only solution to poor map work and low grades in WASSCE Geography for any Nigerian student.

6. Conclusions

WAEC Geography questions are of international standard, widely spread through the syllabus and covers all the educational domains – cognitive, affective and psychomotor. While questions and rubrics guiding the examinations are presented in simple and clear language (English), the marking scheme outlines expected responses of students with equitable distribution of marks. Candidates are required to start early in their preparations for the exams to cover the entire topics contained in the syllabus; comprehend questions and accompanying rubrics prior to attempting answers; employ a logical pattern and clear terms in providing their answers, with legible writing and elaborate explanations and illustration with diagrams. Candidates who fall short of these are less likely to achieve high grades in the examinations.

Further studies are required to unravel the underlying factors that have led to recurring weakness in school candidates' examination scripts. Could it be teacher-related or student-related? This must be identified to tackle the dwindling trend observed in school candidates' (internal) performance in Geography in the period under review. Also, it is required to investigate teachers' awareness of these commonly reported weakness of previous WASSCE candidates, as ignorance on their part will perpetuate the downward trend in Nigerian Geography students' performance in WASSCE.

7. Declarations

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Figures

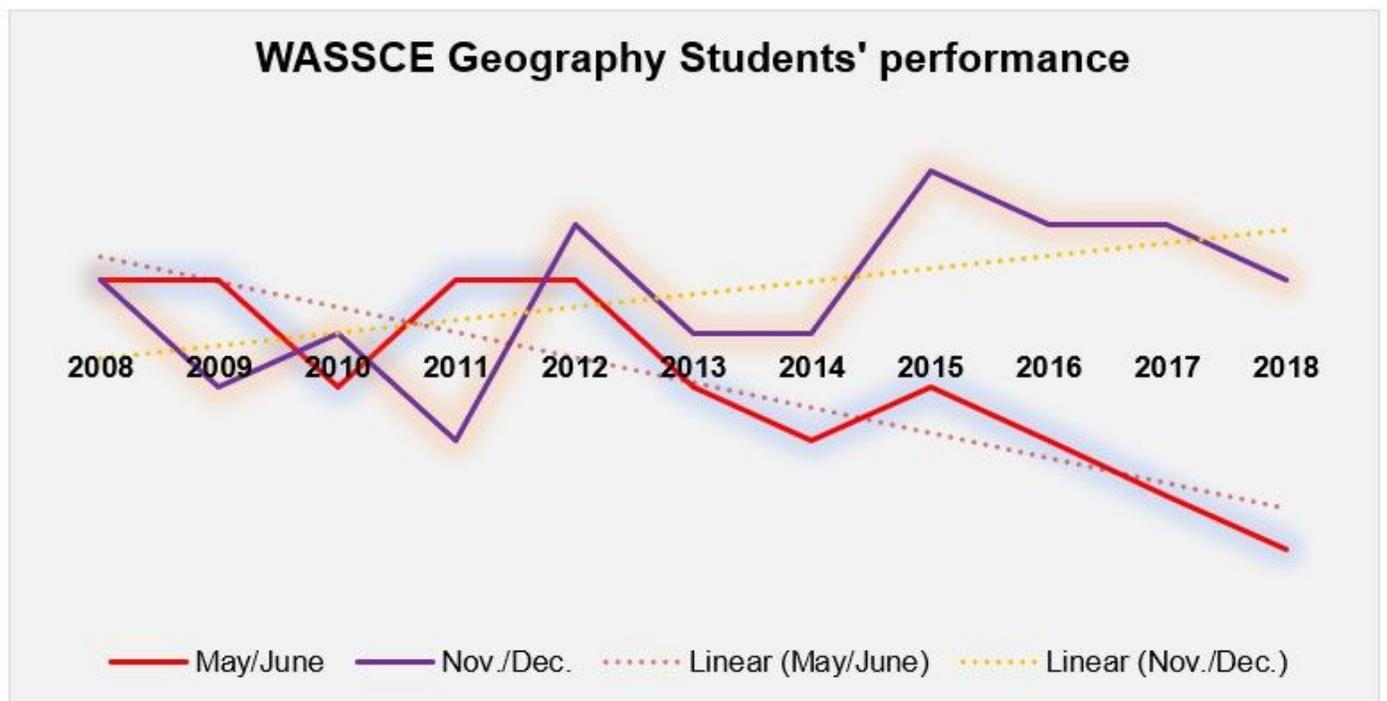


Figure 1

Line plot and trend depicting students' performance