

Original Research Article**Politics of School Mapping: Evaluation of Spatial Distribution of Public Secondary Schools in Rivers State, Nigeria.****Abstract**

School mapping in secondary education has witnessed a lot of distortion in Nigeria largely because the allocation of educational resources is embedded in politics of education. Consequently, the paper examined trends in the politics of school mapping and spatial distribution of secondary schools in Rivers state. Three research questions guided the study. The document analysis research method was utilized which involved extensive analysis of records and documents. Data collected were descriptively analysed. Findings revealed spatial imbalance in distribution of public secondary schools, and neglect of population factor in siting secondary schools in Rivers State. Recommendations aimed at enhancing even distribution of public secondary schools were proffered. The paper concluded that school distribution system that ignores basic school mapping process could undermine the overall educational development in Rivers State.

Key words: Politics; school mapping; evaluation; distribution; secondary schools: Public.

Introduction

The politics of school mapping has to do with the use of political power in the distribution of school facilities in various schools in a state or country (Nwakpa, 2015). Nevertheless, the overall development of education in any given society to a large extent depends on the level to which there is equitable distribution of educational resources and opportunities. School mapping is a planning tool applied by educational planners and policy makers to ensure that schools, teachers, and

28 facilities needed for the promotion of quality education are provided and
29 distributed equitably across the state or country. The application of school mapping
30 is however, embedded in the politics of education in Nigeria. The political class
31 appear to have the final say on which part of a state or country should have more
32 schools, what type of schools, at what level, and when they are to be established
33 (Boles, 1995).

34 The purpose of school mapping includes, but not limited to the following

- 35 • It assists in analyzing the existing pattern of distribution of educational
36 facilities among different geographical areas to identify locations for new
37 schools. Thus, without school mapping schools would be haphazardly
38 located without consideration for the needs of the populace (Albert, 1991).
- 39 • School mapping examines the facilities available in existing schools, and
40 determines if there are existing imbalances between school requirements and
41 planning in an area. In this regard, school mapping helps to identify areas
42 that have excess number of schools and areas not yet covered. This implies
43 that if school mapping is professionally applied, it will save the government
44 from unnecessary expenditure of investing in the construction of schools
45 where there are no real needs for them.

- 46 • School mapping is an assertive tool in the rationalization of schools and
47 educational facilities (Varghese & Bisval ,1999). To this end, it helps the
48 government and other stakeholders in the prudent allocation and use of
49 scarce educational resources.
- 50 • The purpose of school mapping is to set up a school network, that will meet
51 in the most efficient and equitable manner the present and future demands
52 of education. Thus, school mapping when properly applied eliminates
53 disparities in geographical areas, taking into consideration the school size,
54 pupil- teacher ratio, transition rates, enrolment rates and promotion rates
55 (Oyedeji, 1998)
- 56 • School mapping ensures that educational institutions are sited at their most
57 advantageous locations. That is, advantages from the point of accessibility to
58 the students and full utilization of educational resources (Uwazuruike,
59 1991).

60 Arising from the above, it is obvious that school mapping is a dynamic process of
61 planning the distribution, size, and spacing of schools and facilities needed.
62 Furthermore, it is an essential planning tool, to address possibilities of spatial
63 inequalities in the provision of educational facilities.

64

65 **Statement of the problem**

66 School mapping more than ever before has become a critical aspect of educational
67 management in Rivers State. This is because errors in school mapping could result
68 in serious imbalance in educational development of Rivers State. Rivers State is
69 the fifth most populous State in Nigeria, with a population figure of 5,185,400
70 (National Population Commission, 2006). It is also the most dynamic State in
71 Nigeria, having the advantage of the heavy presence of oil and gas related
72 industries. Accordingly, there is increase in the influx of people into the State from
73 neighbouring States and outside Nigeria. Thus, with the increase in population the
74 demand for secondary education is very high.

75 In spite of the existence of 245 public secondary schools in Rivers State there are
76 palpable concerns that the existing schools are seemingly not evenly distributed
77 across the State to accommodate the demand for secondary education. To this end,
78 it is important for educational managers, political authorities, and other
79 stakeholders to have a clear understanding of what school mapping entails
80 .Moreover, the central aim of school mapping is to ensure equitable distribution of
81 educational resources in a state or country. The study, therefore, is an attempt to
82 investigate the extent to which public secondary schools are evenly distributed
83 among Local Government Areas in Rivers state.

84 **Purpose of the Study**

85 This study evaluated the spatial distribution of public secondary schools in Rivers
86 State, Nigeria. However, the study was aimed at the following specific objectives:

- 87 1. Determine the distribution pattern of public secondary schools in Rivers
88 State.
- 89 2. Determine the distribution of public secondary schools in upland and
90 riverine geographical areas in Rivers State.
- 91 3. Determine the role of population size in siting public secondary schools in
92 Rivers State.

93

94 **Research Questions**

95 The following research questions guided the study

- 96 1. What is the distribution pattern of public secondary schools in Rivers State?
- 97 2. How are public secondary schools distributed in upland and riverine
98 geographical areas of Rivers State?
- 99 3. What is the role of population size in siting public secondary schools in
100 Rivers State?

101

102 **Review of Related Literature**

103 This aspect of the paper presents review of related literature as follows :

104 Theoretical Framework

105 The theoretical framework of the study is anchored on the social demand approach
106 to educational planning. The social demand approach is the aggregate popular
107 demand for education, meaning the sum total of individual demands for education
108 at a given place and time under prevailing cultural, political and economic
109 circumstances (Coombs, 1970). The social demand approach is the most popular
110 approach among educational planners (Adesina , 1981) . Politicians resort to this
111 approach as they find other models of education planning politically difficult to
112 defend. Nwankwo (1981) affirms that social demand approach favours those who
113 recommend free and compulsory education as a means for egalitarian and
114 permissive society. According to him, politicians who respect public opinions or
115 regard satisfaction of public demand as a key to political advancement prefer this
116 approach. The social demand approach provides that access to all levels of
117 education should be available to all those wishing to gain admission. Thus, it is
118 based on the principle that everyone who qualifies by ability and attainment should
119 pursue full time course in education (Akubue, 1991).

120 According to Uwazuruike (1991) social demand approach has two dimensions, one
121 is determined by government policy, for instance in Nigeria, the Universal Primary
122 Education (UPE) programmes of the 1950s and 1976 represented public demand.
123 To this end, demand for education was high and determined along demographic
124 and social considerations. The educational policy of compulsory school attendance
125 for pupils of a given age cohort does not represent private or voluntary demand for
126 education, which is the other dimension. Factors that affect private demand for
127 education relates to the cost of education to students and parents, not merely the
128 cost implications, but the opportunity costs of income forgone (Coombs, 1970).

129 Relating social demand approach to the study. Politicians utilizing the social
130 demand approach, which holds that access to all levels or types of education
131 should be available to all those who are qualified for it and express willingness to
132 acquire it, establish some schools on political grounds to meet the expectations of
133 the people. Thus, rather than site schools based on school mapping criteria, schools
134 are often sited based on political sentiments. The result is that schools could be
135 over concentrated in certain localities to the detriment of others. What is more,
136 there could be more schools in operation than the real need of the people.
137 Corroborating this view, Arinze (1991) noted that many primary and secondary
138 schools arbitrarily established in Nigeria proved to be unviable in the long run, and
139 had to be phased out or reorganized by successive governments.

140 **The Concept of School Mapping**

141 School mapping is an essential tool to the micro-planning of school locations, and
142 originated from France (Caillods & Heyman, 1982). School mapping is often
143 confused or interchanged with school map. It is pertinent to note that school
144 mapping is not the same as a school map. More, than simply being a tabular,
145 graphical, or cartographical representation of a place, school mapping is used to
146 investigate and ensure the equitable distribution of educational resources within
147 and between school systems (Ibara, 2011, Caillods, 1983). School mapping has
148 also been described as the process of setting a school network, that will meet the
149 present and future educational demands of the society in a most efficient manner
150 (Oyebade, 2009). Hallack (1977) described school mapping as part and parcel of
151 the educational planning process for determining where schools should be sited in
152 order to provide the greatest benefit to the society . It is a process of planning the
153 location and spacing of educational institutions taking into consideration the
154 demographical , pedagogical, geographical, and economic and manpower factors
155 (Igwe, 1998; Vargnese, 1997). The main objective of school mapping is to
156 identify the most appropriate locations of schools, and to ensure the efficient and
157 equal distribution of resources within and between school systems, especially in
158 times of large scale reforms or a major expansion of an educational system
159 (caillods, 1983). Thus, school mapping is an essential planning tool to overcome

160 possibilities of lopsided distribution of educational resources across regions. Also,
161 it aims at the identification of locations for the construction of school facilities and
162 optimization of the use of human and material resources in education.

163 **Factors to consider in school mapping**

164 School mapping is an educational planning tool aims at setting up a school network
165 that meets in the most efficient and equitable manner the future demand of
166 education. In determining the future school map, It will be necessary to consider
167 some factors as follows:

168 Demographic factors

169 These are factors that pertain to characteristics of population dynamics such as
170 birth rate, mortality rate, social structure, migration and immigration rate, school
171 drop outs and retention rates. School mapping makes use of demographical data to
172 redefine the school network.

173 **Pedagogic factors**

174 These factors relate to consideration of the normal period of utilization of school
175 buildings or sites, weekly time table, class sizes, the possibility of double shifts,
176 consideration for availability or suitability of the area for special teaching
177 facilities. For instance , it may be relevant to establish a department of fisheries in

178 a riverine location. In this manner , facilities for practical teaching can be easily
179 available .

180 **Manpower factors**

181 These factor involves the consideration for teaching force or skills in a particular
182 area. This implies that the type of occupation or skills predominant within an area
183 can influence the type of school that may be located in that area.

184 **Social factors**

185 These relate to the use of school mapping to satisfy the social demand of
186 education. This means that the socio-cultural outlook of a community should be
187 considered. For instance, rapid migration of people from rural to urban areas. In
188 this regard, government could use its policy on school mapping to discourage
189 rural-urban migration. This can be achieved by establishing social amenities
190 especially schools in rural areas.

191 **Geographical factors**

192 These factors consider the possibilities of students having access to school,
193 transportation system, road network, topography of the area. Government may also
194 use its policy on school mapping to attract high population density into an area. For
195 instance, the siting of Federal College of Education (Technical) in Omoku , Rivers
196 State , has attracted a large number of people from within and outside Rivers state.

197 **Economic factors**

198 These factors have to do with the cost of establishing or maintaining a school.

199 These factors require cost-effectiveness in running's schools and economic
200 benefits that will accrue to such areas .

201 **Catchment Area factor**

202 This factor relates to the geographical area from which the school gets learner or
203 the geographical area it serves. The essence for the siting of schools with respect to
204 catchment area is that there will be a school close to every learner's home and that
205 the learner will by choice attend that school. Thus, if the catchment area is properly
206 captured in school mapping the distance between home and school in each case
207 will be short and could save time and expenses for learners and parents.

208 **Population factor**

209 Population distribution is a factor for school mapping. This factor relates to spatial
210 pattern of population distribution. Applying school mapping principles schools
211 should be located in areas with high population density in order to have enough
212 school children (Nwakpa, 2015). If this factor is neglected in siting of schools, it
213 may result into a situation where many schools exist but with few students. The
214 implication is that school building and facilities are under-utilized.

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216

217 Politics of school mapping

218 A good school mapping concept ensures even distribution of schools. The even
219 distribution of schools across regions, communities and states cannot be
220 overemphasized as access to school and regular school attendance is improved
221 upon (Adaja & Osagie, 2015). Nevertheless, this distribution is hampered when
222 politics is taken into consideration in siting new secondary schools. The result of
223 politics in school mapping is over concentration of institutions in some localities
224 while in others schools are sparsely distributed. The over concentration of schools
225 in some places, may not be unconnected with political considerations , given rise to
226 the location of schools close to the abode of politicians in control of power. In
227 Nigeria like most other developing countries political parties and candidates use
228 education and provision of school facilities as tools to woo prospective voters, but
229 after winning election most schools are sited arbitrarily to suit their whims and
230 caprices. Politics has had a great influence in the siting of schools in Nigeria. This
231 is because educational policies are made and supervised by politicians. It is
232 commonly observed that only areas or localities loyal to political parties are
233 provided with meaningful educational facilities, or have existing facilities
234 adequately maintained. The teaching workforce is not spared of politics, for
235 example, the distribution of secondary school teachers in Rivers State is not devoid
236 of political interference (Ibara, 2006).

237 Thus, the problems in education in recent times could be associated with politics,
238 ethnicity, and god fatherism factors in Nigeria. To this end , political
239 considerations among others, determines who gets what, when and how (Olaniyan
240 & Anthony, 2013), This ugly development in education affects fair distribution of
241 educational resources in Nigeria. According to Nwadiani (2010) the location of
242 schools is an important aspect of education activity and not a mere political game
243 as is presently the situation in Nigeria. According to him, when the basic factors to
244 be considered in location of schools are ignored it could generate undesirable
245 consequences such as :

246 **Wastage of educational resources**

247 When the topography of a learning institution is not considered, like the case of
248 areas prone to flood or marshy terrains it may lead to the abandonment of such
249 schools, with resultant wastage of educational resources.

250 **Unequal access**

251 Accessibility is usually hampered by time. This is because with time, human
252 settlements develops and grows. Thus, in the event educational institutions are not
253 sited to meet the need of population increase, the institutions that were not
254 accessible before become accessible for some people, creating inequality in access.

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257 Increase in cost of education

258 When the siting of educational institutions are well planned it tends to increase the
259 cost of education on the part of the learner. For example , if the catchment area is
260 not considered in siting schools , the learner will spend more getting to the
261 school.

262 Challenges of school mapping in Nigeria

263 School mapping in Nigeria has several challenges that include :

264 • Political consideration

265 Some schools both at primary and secondary levels are sited on the basis of
266 political sentiments. For instance, some secondary schools are located in
267 remote inaccessible areas merely to score cheap political points with the
268 facilities in such schools grossly under utilized (Ibara, 2008). In a related
269 development, Manga and Nakazalle (2015) observed that some state
270 governments such as Kebbi State , sited a University of Science and
271 Technology at the Governors village at Aliero, despite contrary advice.

272 Also, his successor moved the Kebbi State Polytechnic from the State capital
273 to his village in Dakin Gari, probably for re-election bid. The same arbitrary
274 school mapping procedure appears to be the norm in other states in Nigeria.

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277 • **Inadequate database**

278 The use of data that is reliable and accessible is the bedrock of school
279 mapping. However, for political reasons educational statistics are prone to
280 manipulation (Uwazuruike , 1991)

281 • **Lack of consultative forum.**

282 Political office holders in most states of Nigeria hardly engage in wide
283 consultations with relevant stakeholders, whose input is supposed to
284 contribute to effective school mapping. According to Castaldi (1997) wide
285 consultations in school mapping activities minimize the tendency for errors
286 and wrong decisions.

287 • **Lack of principle of equity**

288 A major aim of school mapping is to ensure even distribution of educational
289 resources across the states. This principle seems to be ignored or thrown into
290 winds, resulting in lopsided distribution of educational facilities across and
291 within regions (Ibara, 2006). The implication is that some communities have
292 more schools to the detriment of others.

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294 • **Statistical constraint**

295 Nigeria has not completely resolved the problem of a national census figure,
296 despite efforts in the past ranging from 1963 to present. The issue of

297 accurate census figure is still contentious. School mapping requires reliable
298 statistical data bank, in which planning must be based. False population
299 figures could affect projections, and thus a major constraint to school
300 mapping in Nigeria

301 **The constraint of manual operations**

302 School mapping activities in Nigeria is dominated by the use of manual
303 methods of operation. The use of modern management information system
304 (MIS) and integration of geographical information system (GIS) are yet to
305 gain grounds. Computerized information facilitates the work of planners in
306 data processing, storage and retrieval. Yako (2001) in Manga & Nakazalle
307 (2015) noted that school mapping in Bangkok emphasize the applications of
308 geographical information system (GIS). This means that school mapping in
309 Nigeria should go beyond chalk and pencil programming.

310 **The planning process constraint**

311 There is tendency for school mapping plan to be inverted or adjusted to suit
312 the implementers, when this happens the original intent of the planners may
313 be affected to the detriment of effective realization of school mapping
314 objectives (Akabue, 1991) . Politicians often deliver manifestoes promising
315 laudable projects and services to the people even when not sure of sources of
316 fundings such projects. These politicians on winning election try to

317 implement some of their electioneering promises, and in the process, they
318 interfere with the original objectives of educational plans. Poor plan
319 implementation often leads to the failure of education plans (Adesina, 1981).

320 **Manpower constraint**

321 Nigeria like most third world countries lack qualified educational planners.
322 Often times untrained planners carry out the functions of professionally
323 trained educational planners in government establishments. (Uwazurike,
324 1991). This development distorts the focus of the school mapping process.
325 Thus, a well-conceived school mapping task may fail, if the right type and
326 quantity of manpower are not available to implement the plan.

327 **Methodology**

328 The study utilized document analysis research method. The study employed
329 document analysis because it was a systematic, carefully planned and objective
330 examination of current records or documents as sources of data. (Okeke, 1995).
331 Also, content or document analysis is a research method applied to written or
332 visual materials for the purpose of identifying specified characteristics of the
333 materials (Ary, Jacobs & Razavieh, 2012). To this end, the researcher collected
334 data from the Rivers State Ministry of Education, National Population
335 Commission and library resources. Based on the data collected and analyzed
336 inferences and conclusion were drawn. The study was carried out in Rivers

337 State , a State located in the Niger Delta Region of Nigeria . The State covers a
338 land area of 11,077km² and has its capital in Port Harcourt. It has upland and
339 riverine geographical areas with 45% of the State riverine. Rivers State has a
340 population figure of 5,185,400 , 23 Local Government Areas , 4442 poll units ,
341 319 wards , 3 Senatorial Districts , 13 Federal Constituencies and 32 State
342 Constituencies (National Population Commission , 2006) . The state has about
343 245 public secondary schools (Rivers State Ministry of Education, 2010) .

344 **Results**

345 Research question one

346 What is the distribution patter of public secondary school in Rivers State.

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353 Table 1: Distribution of public secondary schools in Rivers State by Local
354 Government Areas

s/no	LGA NAMES	N=245. NO OF SCHOOLS	RANKS ORDER	%
1	Abua/Odual	11	7 th	4.49
2	Ahoada East	12	6 th	4.88
3	Ahoada West	13	5 th	5.31
4	Andoni	10	8 th	4.08
5	Asari-Toru	11	7 th	4.49
6	Bonny	4	10 th	1.63
7	Degema	12	6 th	4.88
8	Eleme	6	9 th	2.45
9	Emohua	19	2 nd	7.76
10	Etche	19	2 nd	7.76
11	Gokana	12	6 th	4.88
12	Ikwerre	13	5 th	5.31
13	Khana	22	1 st	8.98
14	Obio/Akpor	16	3 rd	6.53
15	Ogu/Bolo	3	11 th	1.22
16	Okrika	6	9 th	2.45
17	Omuma	3	11 th	1.22
18	Ogba/Egema/Ndoni	15	4 th	6.12
19	Opobo/Nkoro	3	11 th	1.22
20	Oyigbo	4	10 th	1.63
21	Port Harcourt	15	4 th	6.12
22	Tai	10	8 th	4.08
23	Akuku-Toru	6	9 th	2.45
	Total	245		

355
356 Analysis shows that Emohua and Etche local Government Areas (LGAs) have
357 19 public secondary schools each , representing 7.76% respectively of the total
358 number of public secondary schools in Rivers State. Also, Oyigbo and Bonny

359 Local Government Areas have 4 public secondary schools each, representing
360 1.63% respectively of the total number of public secondary schools in Rivers
361 state. The analysis equally indicates that the total number of public secondary
362 schools in five Local Government Areas, namely, Ogu/Bolo (3-schools,
363 1.22%), Bonny (4 schools, 1.63%), Omuma (3 schools, 1.22%), Opobo/Nkoro
364 (3 schools, 1.22%) and Oyigbo (4 schools, 1.63%) are less than the number of
365 secondary schools in one LGA , namely , Khana Local Government Area (22
366 schools, 8.98%). Thus, a wide disparity exists among the Local Government
367 Areas in the distribution of public secondary schools in Rivers State

368 Research Question Two

369 How are public secondary schools distributed in upland and riverine areas of
370 Rivers State ?

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376 Table 2: Distribution of Public Secondary Schools by Upland and Riverine
 377 local Government Areas.

s/n	Upland LGAs	N=2.45 No. of Schools	%	Rank Order	Riverine LGAs	No of Schools	%	Rank order
1	Abua/Odual	11	4.49	7 th	Andoni	10	4.08	3 rd
2	Ahoada East	12	4.88	6 th	Asari-Toru	11	4.49	2 nd
3	Ahoada West	13	5.31	5 th	Bonny	4	1.63	5 th
4	Ogba/Egbema/Ndoni	15	6.12	4 th	Degema	12	4.88	1 st
5	Eleme	6	2.45	9 th	Ogu/Bolo	3	1.22	6 th
6	Emohua	19	7.76	9 th	Okrika	6	2.45	4 th
7	Etche	19	7.76	2 nd	Opobo/Nkoro	3	1.22	6 th
8	Gokana	12	4.88	6 th	Akuku-Toru	6	2.45	4 th
9	Ikwerre	13	5.31	5 th				
10	Khana	22	8.98	1 st				
11	Obio/Akpor	16	6.53	3 rd				
12	Omuma	3	1.22	11 th				
13	Oyibo	4	1.63	10 th				
14	Port Harcourt	15	6.12	4 th				
15	Tai	10	4.08	8 th				
	Total	190	77.55			55	22.45	

378

379 Table 2, reveals that are 15 local Government Areas in upland, and 8 local
 380 Government Areas in the riverine areas of Rivers State. From the data presented
 381 in table 2, there are 190 public secondary schools in upland areas, and 55 public
 382 secondary schools in riverine Local Government Areas in Rivers State. Further

383 analysis indicates that 77.55% of public secondary schools are sited in upland
384 local Government Areas of Rivers state , while 22.45% are sited in riverine
385 Local Government Areas of the State. Thus, 190 public secondary schools
386 corresponding to 77.55% are located in upland local government Areas of the
387 State, while 55 public secondary schools representing 22.45% are sited in the
388 riverine LGAs of the State.

389 Research question Three

390 What is the role of population size in siting public secondary schools in Rivers
391 State.

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399 Table 3: Population of Rivers State by local Government Areas and number of
 400 schools.

s/n	Name of LGA	No of Schools	Population	Rank Order	Area (KM)	Administrative Capital
1	Port Harcourt	15	541,115	1 st	109	Port Harcourt
2	Obio/Akpor	16	464,789	2 nd	260	Rumuodumanya
3	Okrika	6	222,026	9 th	222	Okrika
4	Ogu/Bolo	3	74,683	22 nd	89	Ogu
5	Eleme	6	190,884	14 th	138	Ogale
6	Tai	10	117,797	20 th	159	Sakpenwa
7	Gokana	12	228,828	8 th	126	Kpor
8	Khana	22	294,217	3 rd	560	Bori
9	Oyigbo	4	122,687	19 th	248	Afam
10	Opobo/Nkoro	3	151,511	18 th	130	Opobo
11	Andoni	10	211,009	12 th	233	Ngo
12	Bonny	4	215,358	11 th	642	Bonny
13	Degema	12	249,425	77 th	1,011	Degema
14	Asari-Toru	11	220,100	10 th	113	Buguma
15	Akuku-Toru	6	156,006	5 th	1,443	Abonema
16	Abua/Odual	11	282,988	5 th	704	Abua
17	Ahoada West	13	249,425	7 th	403	Akinima
18	Ahoada East	12	166,747	16 th	341	Ahoada
19	Ogba/Egbema/Ndoni	15	284,010	4 th	969	Omoku
20	Emohua	19	201,901	13 th	831	Emohua
21	Ikwerre	13	189,726	15 th	655	Isiokpo
22	Etche	19	249,454	6 th	805	Okehi
23	Omuma	3	100,366	21 st	170	Eberi.
	Total	245	5,185,400			

402 **Table 3** Shows that Port Harcourt LGA ranks first as the most populous Local
403 Government in Rivers State with a population of 541,115 and 15 schools, while
404 Khana Local Government Area has a comparatively smaller population of
405 294,217, but with more schools(22) . Tai Local Government Area has a
406 population of 117, 797 with 10 schools, while Andoni has a higher population
407 of 211,009 with the same number of schools (10). Akuku-Toru Local
408 Government Area has a population of 56,006 and 6 schools, while Okrika Local
409 Government Area has a larger population of 222,026 with also the same number
410 of schools (6). Abua/Odual local Government Area has a population of 282,
411 988, and 11 schools , while Etche Local Government Area has a comparatively
412 smaller population of 249, 454 but with more schools (19) . Ahoada East has a
413 population of 166,747 and 12 schools, while Gokana Local Government Area
414 has a larger population of 228,828 but with the same number of schools (12) .
415 Ogu/Bolo Local Government Area has a population of 74,683 and 3 schools,
416 while Opobo/Nkoro Local Government Area has the same number of schools
417 (3), but with a larger population of 151,511.

418 From the preceding analysis it is obvious that population factor was not
419 considered in siting public secondary schools in Rivers State.

420

421 **Summary of findings**

422 It was found that:

- 423 1. A wide disparity exists among Local Government Areas in the distribution
424 of public secondary schools in Rivers State.
- 425 2. The upland local government areas (LGAs) have a total of 190 public
426 secondary schools representing 77.55% of the total number of public
427 secondary schools in Rivers State, while the riverine Local Government
428 Areas have 55 public secondary schools representing 22.45% of the total
429 number of secondary schools in the state. This implies that the upland Local
430 Government Areas have more than twice the number of public secondary
431 schools in riverine areas of Rivers state.
- 432 3. The population size of local Government Areas was not taken into
433 consideration in siting public secondary schools in Rivers State.

434 **Discussion**

435 The study revealed wide disparity in the distribution pattern of public secondary
436 schools among the 23 local Government Areas in Rivers State. For instance,
437 Khana local government Area (LGA) alone has 22 secondary schools, while a
438 combination of five Local Government Areas namely, Ogu/Bolo (3 schools),
439 Omuma (3 schools), Oyigbo (4 schools), Bonny (4 schools) and Opobo/Nkoro (3

440 schools) have a total of 17 schools, a number less than the number of schools sited
441 in Khana local Government Area.\

442 Also, Emohua local Government Area has 19 schools while Akuku-Toru Local
443 Government Area has 6 schools. Furthermore, Obio/Akpor Local Government
444 Area has 16 schools, while Eleme Local Government Area has 6 schools. These
445 findings indicate lopsided distribution of public secondary schools Rivers State,
446 some local Government Areas have twice as much schools than others. This
447 finding contradicts the principles of equity in school mapping which is to ensure
448 even distribution of resources across regions, state and country (Oyedeji, 1998).
449 Thus, ignoring the equity principles in siting schools means that some communities
450 will have more schools, while others will have barely enough to meet their needs.
451 In this regard, Castaldi (1997) observed that wide consultations with relevant
452 stakeholders in school mapping activities minimize the tendency for errors or
453 wrong decisions in school mapping.

454 The study also revealed that upland local Government Areas (LGAs) in Rivers
455 State, have a total of 190 public secondary schools, while riverine Local
456 Government Area have a total of 55 public secondary schools. The implication is
457 that the upland local Government Areas and communities have more than twice
458 the number of public secondary schools in riverine Local Government Areas and
459 communities in Rivers State. This finding equally indicates imbalance in siting

460 schools across Rivers State. This disparity in the number of schools between the
461 upland and riverine Local Government Areas and communities in Rivers State,
462 could be attributed to geographical factors and political considerations. A major
463 consideration in school mapping is the possibilities of students having access to
464 school, transportation system, and road network. (Igwe, 1998 & Varghese, 1997).
465 In this wise, the riverine areas appear not very advantageous for the siting of
466 schools. Corroborating this view, Uwazuruike (1991) noted that school mapping
467 ensures that educational institutions are sited at their most advantageous locations.
468 This means advantageous from the point of accessibility to the students and full
469 utilization of educational resources. Nevertheless, political considerations could
470 step in relation to the use of school mapping to satisfy the social demand of
471 education. This implies that the socio-cultural configuration of a community
472 should be considered. For instance, rapid rural to urban migration. According to
473 Varghese and Bisval (1999) the government or the political authority could use its
474 policy on school mapping to discourage rural-urban migration, through the
475 establishment of social amenities especially school in rural areas. Based on this
476 premise, educational resources including siting of schools could be evenly
477 distributed across regions, state, and country.

478 Furthermore, the study revealed that population size of local government areas
479 (LGAs) was not considered in siting public secondary schools in Rivers State. For

480 instance, Port Harcourt Local Government Area is the most populated Local
481 Government in Rivers State with a population figure of 541,115 and 15 schools,
482 while Khana Local Government Area with comparatively lower population figure
483 of 294,217 has as much as 22 schools. Also, Okrika Local Government Area has a
484 population figure of 222,026 and 6 schools, while Akuku-Toru Local Government
485 Area with a lower population of 156, 0006 has the same number of schools (6) as
486 Okrika Local Government Area. Further findings indicate that Gokana Local
487 Government Area has a population figure of 228,829 and 12 schools, while
488 Ahoada East Local Government Area with a comparatively lower population
489 figure of 166,747 has the same number of schools (12) as Gokana Local
490 Government Area. In the same vein, Ogu/Bolo Local Government Area has a
491 population figure of 74,683 and 3 schols, while Opobo/Nkoro Local Government
492 Area with a relatively larger population figure of 151,511 also has equivalent
493 number of schools (3) as Ogu/Bolo Local Government Area. These findings
494 contradicts the position of Nwakpa (2015) who observed that schools should be
495 located in areas with high population density in order to have enough school
496 children. This means that neglecting population factor in siting schools could
497 result into a situation where many schools exist, but with few students. In the same
498 vein, Arinze (1991) noted that many primary and secondary schools arbitrarily
499 established in Nigeria proved to be unviable in the long run and had to be phased

500 out or reorganized by successive government. Politics of school mapping could
501 give rise to a situation where there could be more schools in certain localities more
502 than the actual need of the people in such locality. According to Nwadiani (2010)
503 this could result into waste of scarce educational resources.

504 **Conclusion**

505 From the preceding study politicization of education has had a profound influence
506 on school mapping processes. The primary objective of school mapping is the
507 sustenance of a good educational programme. Thus, it is very imperative to locate
508 educational facilities and resources in such a manner that would meet the
509 educational programmes they are meant to serve. School mapping from all
510 indications has not been given the attention it deserves in Rivers State. This calls
511 for equitable distribution of public secondary schools to ensure even educational
512 development of Rivers state.

513 Based on the study the following recommendations were made:

- 514 1. To entrench school mapping principles in the allocation of educational
515 resources in Rivers State, educational planners should be involved in the
516 process of school mapping.
- 517 2. The Rivers State Ministry of Education should commission a study on the
518 development of mapping activities in Rivers State. The availability of a

519 database will enhance equitable allocation of educational resources and
520 scientific school mapping in River State.

521 3. The principle of equity in the allocation of educational resources should be
522 given prime consideration by the political class to ensure balanced
523 educational development of Rivers State.

524 4. In furtherance to the principle of equitable distribution of public secondary
525 schools , the Rivers State Government should redistribute existing schools or
526 establish additional secondary schools in some local government areas
527 (LGAs) with relatively low number of public secondary schools. The Local
528 Government Areas include, Bonny, Omuma, Opobo/Nkoro, Oyibo and
529 Eleme.

530 5. There are total of fifty five (55) public secondary schools in riverine local
531 government areas as against one hundred and ninety (190) in the upland
532 local government Areas. This gross imbalance calls for redistribution or
533 establishment of new schools in riverine local government areas of Rivers
534 State.

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