IMPACT OF SECONDARY SCHOOL EDUCATION ON THE FUTURE OF THE PETROLEUM INDUSTRY IN NIGERIA

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ABSTRACT
Nigeria as a country depends majorly on the petroleum industry to meet its economic needs. It is then essential for her indigenes to participate in this industry. The secondary education builds the young minds and prepares them as a capable labour force to the nation. This paper investigated the state of secondary education in Nigeria and its impact on the future of the petroleum industry. A survey on 428 respondents was carried out, 44 of whom were teachers, 384 of the respondents were students from different classes ranging from senior secondary one (SS1) to three (SS3). From the results, it was concluded that the secondary education system in Nigeria is moving down the slope of greatness and that there would be a continuation of what the researcher term Oyibolization of the petroleum industry. There were different recommendations by the researcher, which include that the parents and teachers should discourage students from malpractice as this is one of the major reasons students don’t study. Awareness campaigns on the disadvantage of the student not studying should be carried out in all secondary schools in the nation. And also, an investment of funds by the government into the secondary education sector etc.

KEYWORDS: Secondary school education; Petroleum Industry; Impact; Education.

1. BACKGROUND OF STUDY
In this contemporary time, the significance of the secondary school education cannot be over emphasized, as it plays a large role in the development of a country’s labour force. If not well handled, the future of a country is jeopardized. Therefore, the need to properly grow the upcoming generations, as it is said; catch them young.

Onwioduokit and Tule (2002) posited that human resources form the critical basis for wealth of nations as well as typify the most essential variable in a country’s development. However, secondary education plays a fundamental but complex role in preparing young people for the labour market, especially for people who leave secondary education for a job, therefore, an increasing number of young people in secondary education mean increasing diverse talents, diverse job interests and job opportunities (Oruonye, 2014).

According to FRN (2004), the aim of secondary education within the overall Nigerian educational policy are the preparation for useful living within the society and preparation for higher education.
Also, it is aimed at developing a child better than the primary level, because it is obvious that primary education is insufficient for children to acquire literacy, numeracy, and communication skills (Ige, 2011; Yusuf, 2009). In spite of the role of secondary education, Ajayi (2002) and Omorogie (2005) reported that the secondary education in Nigeria is riddled with crises of various dimensions and magnitude all of which combine to suggest that it is at crossroad.

However, it is based on the absent of capable hands and the loss of trust on the indigenes that expatriates from different continents has taken control over the economy of this great nation Nigeria. Also, the mineral resources that is supposed to bring about growth to the economy and elevate poverty from the country has been seen doing the reverse and enriching other countries.

Hence, it has been recognized by most African countries at post-independence, on the need for their indigenes to take ownership and control of their natural resources for exploitation and transformation into economic growth, (Akindelano Legal Practitioners, n.d). In other to meet this goal, different policies and laws has been put in place by the various governments. The Nigeria oil and gas industry weren’t left out in these government policies. These enacted laws in Nigeria include the Industrial Training Fund 1971, Petroleum Technology Development Fund 1973, National Office of Technology Acquisition Act 1979 and Petroleum (Drilling and Production) Regulations, (Akindelano Legal Practitioners, n.d).

In addition, the oil and gas industry in Nigeria is like a football competition made for a state and all the players in the pitch are from different states entirely. To increase the participation of the Nigerian indigenes, the Nigerian Oil and Gas Content Development Act of 2010 was enacted. This Act according to Akindelano Legal Practitioners was enacted to promote the carrying out of activities in Nigeria and the use of Nigerian human, material resources and services.

This study is aimed at investigating the impact of the secondary school education on the future of the petroleum industry in Nigeria. To achieve this, the current state of secondary schools was evaluated and its impact to the petroleum industry was determined. In this course of this study, different questions came to mind. It includes;

a) Is the Nigerian secondary education moving forward?
b) Is there any relationship between the secondary school education and the petroleum industry?
c) What is the current state of the secondary schools in Nigeria?
d) Based on this current state, what will be the future of the petroleum industry in Nigeria in accordance to the Nigerian Oil and Gas Industry Content Development Act of 2010?

2. RESEARCH DESIGN/METHODOLOGY
A cross-sectional survey design was adopted for this research. The application of a cross-sectional survey method is appropriate in obtaining the behavioral pattern of a giving population on the basis
of their opinion, knowledge, attitude and perception toward a given social phenomenon, (May, 2001). Eboh (200) stated that cross-sectional surveys are aimed at collecting information on certain variables in a study population. And also, it covers physical characteristics of people, behavior of people, as well as the knowledge, attitude, opinions and beliefs that help explain the behavior, events and practices that are occurring or has occurred in the population. The cross-sectional survey design was considered appropriate for this study because of its potentials in covering a broad area of observation, using a selected sample from a fraction of a population to analyze a large population at a given point in time (Aldridge and Levine, 2001; Obokeze, 1990).

2.1. Sample Size
This research was carried out with size of 500 respondents, 100 of which are teachers and 400 of which are students.

2.2. Instrument of Data Collection
For this research, the instrument used for the collection of data was questionnaires. A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents (Gillham, 2008). The study used two different questionnaires, one prepared for the teacher category and the other for students.

2.3. Administration of Instruments
The question was admitted to the randomly chosen respondents from different schools. This made it easy for the clarification of ambiguities in the questionnaire and as well as for the prompt collection of completed questionnaire.

2.4. Method of Data Analysis
This study applied both quantitative and qualitative method of data analysis. The data from the questionnaire was computer processed using the statistical toolbox in MATLAB. Again, the data collected from the administered questionnaire was analyzed using descriptive statistics such as tables, bar-charts and percentages.

3. RESULTS
This section deals with the presentation and analysis of data obtained from the field. The field work was carried out between October and December 2018. Out of a total of 500 questionnaires that were distributed around, 428 copies of the survey instrument were validly filled and returned by the respondents. These lead to a return rate (RR) of 85.6% while 14.4% were not returned or validly filled. The responses from the entire completed and returned questionnaire were included in the analysis that follows below.

There were questions made specifically for teacher respondents which the student respondents were not permitted to answer and vice versa. And as a result of that, there will be some kind of segregation
when such questions will be analyzed. Figures and tables were used to show a clear and concise result of the study.

Table 1: Distribution of the respondents by sex (N = 428)

| Sex    | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male   | 171       | 39.95          |
| Female | 257       | 60.05          |
| Total  | 428       | 100            |

Source: field work 2018

Table 1 shows that out of a total of 428 respondents used for the study, 39.95% were males while 60.05% were females. This is a reflection of what is happening in the country as most male no longer want to go to school but are seeking for green pastures outside the country.

Figure 1 above, illustrates the distribution of the respondents in terms of their classes. 66 (15.42%) of the respondents were in Senior Secondary one (SS1), 130 (30.37%) of the respondents were in SS2, 188 (43.93%) of the respondents were in SS3 and 44 (10.28%) are teachers. This sums up the total of 428 respondents. And this shows that many of the respondents are from SS3, this is okay since they will be leaving the secondary school in a very short period and will have more insight about their school. The number of teachers that participated was very small because most of the teachers...
approached claimed they don’t have time to answer the questions as they have many works on their desk to attend to.

3.1. Teacher Respondents’ Results
The results from the teacher respondents are presented in this subsection.

![Figure 2: Pie chart representation of the distribution of teacher respondents qualifications (N=44).](image)

The figure (2) above illustrates the different qualifications of the teacher respondents. The bachelor degree (BSc) happens to be qualification that most of the respondents have, about 80% (35) of them. 11% (5) of the respondents have the NCE qualification, 5% (2) have the PGDE qualification, 2% (1) have the HND qualification and also 2% (1) have the M.SC qualification. This makes up 100% (44) teacher respondents. It can be therefore inferred that the teachers that teaches in the secondary school are to some degree qualified.

| Teaches Specialization | Area of Frequency | Percentage (%) |
|------------------------|-------------------|----------------|
| Yes                    | 32                | 72.73          |
| No                     | 12                | 27.27          |
The table (2) above shows the distribution of teacher respondents that teaches subject relating to their area of specialization. Respondents that teach their area of specialization were 32 (72.73%) while 12 (27.27%) teaches subjects outside their area of specialization making the total of 44 (100%) of the teacher respondents.

Table 3: Distribution of teacher respondents that are enjoying their jobs (N=44).

| Enjoying Job? | Frequency | Percentage (%) |
|---------------|-----------|----------------|
| Yes           | 42        | 95.45          |
| No            | 2         | 4.55           |
| Total         | 44        | 100            |

Source: field work 2018

From the table (3) above it’s seen that 95.45% (42) of the teacher respondents enjoys their teaching job and so are putting their best in teaching the students. While the remaining 4.55% (2) of the respondents agreed that they aren’t enjoying their job.

Also, the teacher respondents were asked to rate the attitude of students towards learning and the result is shown in a pie chart in the figure below:
Figure 3: Pie chart showing the rating of students by teacher respondents (N=44).

The pie chart in figure (3) above shows how the teacher respondents see the student’s attitude towards learning. 2 (5%) of the respondents rated the students’ attitude toward learning to be poor, 6 (14%) of the respondents rated them fair, 26 (59%) of the respondents rated them good (i.e. average), 8 (18%) of the respondents rated them very good while the remaining 2 (5%) respondents rated them excellent. This statistic shows that the student’s attitude towards learning is at the average benchmark.

Again, the teacher respondents were asked to rate the government concern towards schools and the result is represented in a 3D bar chart in the figure below;

Figure 4: Bar chart showing teacher respondents opinion on the Government’s concern toward schools (N=44).

From the figure (4) above, 9 (20.45%) of the teacher respondents rated that the government concern toward schools to be poor, 14 (31.82%) rated it to be fair, 13 (29.55%) rated it to be good, 7 (15.91%) rated it to be Very good while the remaining 1 (2.27%) rated it as excellent.

This shows that more than 50% of the respondents rated the government concern toward schools below average.

Furthermore, the teacher respondents were asked if the Nigerian Secondary education is moving forward or not. The result is show in the table below;
Table 4: Distribution of teacher respondents according to their opinion on the education system (N=44).

| Secondary Education | Frequency | Percentage (%) |
|---------------------|-----------|----------------|
| Moving Forward      |           |                |
| Yes                 | 24        | 54.55          |
| No                  | 20        | 45.45          |
| Total               | 44        | 100            |

Source: field work 2018

The table (4) above shows that 24 (54.55%) of the teacher respondents agreed that the Secondary Education system is moving forward while 20 (45.45%) of the respondents disagreed.

3.2. Student Respondents’ Results

Now the result from the student respondents will be presented. The student respondents were asked to give an average rating of the teachers that teaches them in their various school, the result is shown below:

Figure 5: Bar chart showing average teacher rating by student respondents (N=384)
Figure 5 above shows the average rating of teachers by student respondents from different class. It shows that one (1), one (1) and no respondents from the SS1, SS2, SS3 classes respectively (i.e. 0.52% (2) of the total student respondents) rated their teachers as poor. Two (2) respondents from SS3 class and no respondent from SS1 and SS2 classes (i.e. 0.52% (2) of the total student respondents) rated their teachers as fair. Also, nine (9), forty (40), and thirty eight (38) respondents from SS1, SS2 and SS3 classes respectively (i.e. 22.66% (87) of the total student respondents) rated their teachers as good. Thirty four (34), seventy four (74), and one hundred and thirteen (113) respondents from SS1, SS2 and SS3 classes respectively (i.e. 57.55% (221) of the total student respondents) rated their teachers as very good. While the remaining twenty two (22), fifteen (15) and thirty five (35) (i.e. 18.75% (72)) respondents from SS1, SS2, and SS3 respectively rated their teachers as excellent.

Furthermore, the student respondents were asked questions concerning some basic amenities that are supposed to be in a school. The answers are shown in the table below:

Table 5: Distribution of student respondents according to Laboratories in school (N=384).

| Do You Have Laboratories in you school? | Frequency | Percentage (%) |
|----------------------------------------|-----------|----------------|
| Yes                                    | 271       | 70.57          |
| No                                     | 113       | 29.43          |
| Total                                  | 384       | 100            |

Source: field work 2018

Table (5) above shows that 271 (70.57%) of the student respondents said that there are laboratories in their school while the remaining 113 (29.43%) of the student respondents said that there are none in their school. Also, they were asked if they are allowed to enter into the laboratories.

Table 6: Distribution of student respondents according to those that have been into the lab (N=384)

| Have you Been to the Lab? | Frequency | Percentage (%) |
|----------------------------|-----------|----------------|


Table (6) above illustrates that 210 (54.69%) of the student respondents have been in their school laboratories, 61 (15.89%) haven’t been into their school laboratories either because its not functional or its just there for formalities. While the other 113 (29.43%) aren’t applicable because they don’t have laboratories in their school.

In addition, the student respondents were further asked if there is a library in their schools. The result is given in the below;

| Do you have library in your school? | Frequency | Percentage (%) |
|------------------------------------|-----------|----------------|
| Yes                                | 291       | 75.78          |
| No                                 | 93        | 24.22          |
| Total                              | 384       | 100            |

Source: field work 2018

The result above shows that 291 (75.78%) of the student respondents have library in their schools while the remaining 93 (24.22%) don’t have library in their schools. Also, the respondents were asked if they are allowed to use the library, the result is shown below;

Table 8: Distribution of student respondents according to those allowed to use the library (N=1384).
Are you allowed to use the library?

|                      | Frequency | Percentage (%) |
|----------------------|-----------|----------------|
| Yes                  | 266       | 69.27          |
| No                   | 25        | 6.51           |
| Not applicable       | 93        | 24.22          |
| **Total**            | **384**   | **100**        |

**Source:** field work 2018

The table (8) above illustrates that 266 (69.27%) of the student respondents are allowed to use the library in their schools, 25 (6.51%) of the student respondents are not allowed to use the library in their schools. While the remaining 93 (24.22%) aren’t applicable because they don’t have libraries in their schools.

Furthermore, the respondents were asked to rate their different schools, the result is represented in the figure below;

![Bar chart representation of the respondents' school rating (N=428)](image)

**Figure 6: Bar chart representation of the respondents’ school rating (N=428)**

The illustration in figure (6) above shows that three (3), six (6), twelve (12) and zero (0) respondents from class SS1, SS2, SS3 and teachers respectively (21 (4.91%) of the total respondents) rated their
various schools as poor, one (1), five (5), nineteen (19) and five (5) respondents from class SS1, SS2, SS3 and teachers respectively ( 30 (7.01%) of the total respondents) rated their various schools as fair. Also one (1), eight (8), forty (40) and fifteen (15) respondents from class SS1, SS2, SS3 and teachers respectively ( 64 (14.95%) of the total respondents) rated their various schools as good, four (4), twenty five (5), thirty one (31) and eleven (11) respondents from class SS1, SS2, SS3 and teachers respectively (71 (16.59%) of the total respondents) rated their various schools as very good. While the remaining fifty-seven (57), eighty six (86), eighty six (86) and thirteen (13) respondents from class SS1, SS2, SS3 and teachers respectively (242 (56.54%) of the total respondents) rated their various schools as Excellent.

Again, the student respondents were asked if they study and how many minutes do they study. The minutes of study was divided into two part, below sixty minutes (one hour) and above sixty minutes. The result is shown in the table below;

Table 9: Distribution of student respondents according to if they study (N=384)

| Do you study? | Frequency | Total | Percentage (%) |
|---------------|-----------|-------|----------------|
|                | SS1 | SS2 | SS3 |     |
| Yes           | 61  | 100 | 147 | 308 | 80.21 |
| No            | 5   | 30  | 41  | 76  | 19.79 |
| Total         | 66  | 130 | 188 | 384 | 100   |

Source: field work 2018

Table (9) above displays that 80.21% of the student respondents’ studies while the remaining 19.79% don’t. Under further investigation of those that claimed to study, the following result was discovered;

Table 10: Distribution of student respondents study minutes (N=384).

| How many minutes do you study? | Frequency | Total | Percentage (%) |
|-------------------------------|-----------|-------|----------------|
|                               | SS1 | SS2 | SS3 |     |
| Less than 60 minutes          | 34  | 63  | 75  | 172 | 44.79 |
| 60 minutes and above          | 27  | 37  | 72  | 136 | 35.42 |
It can be noted from the table above that only 35.42% of the student respondents engages in rigorous study activity, while the rest either study with laxity or don’t study at all.

Lastly, the student respondents were further asked if they would like to further their education into the tertiary institutions. The result is shown below

![Figure 7: Distribution of student respondents that indicated interest on attending a tertiary institution](image)

Figure 7: Distribution of student respondents that indicated interest on attending a tertiary institution
The stacked bar chart above shows the distribution of the student respondents that indicated interest on attending a tertiary institution. It can be seen clear that the green portion is much more that the red potion. That is, about 94.01% (361) of the student respondents indicated interest on attending a tertiary institution, while the remaining 5.99% (23) of the remaining student respondents weren’t interested on attending a tertiary institution, some due to financial reasons and others, personal reasons.

4. DISCUSSIONS
From the results gathered above, it reveals that the government concern toward secondary schools isn’t encouraging. Because many schools if not all have no basic learning infrastructures (Laboratories and Libraries) and those that have theirs aren’t functioning as there are no good
equipment inside. This is in agreement with Dr. J. E. Tabotndip statement that the secondary education level in Nigeria has not received adequate treatment for decades even in the phase of democracy. He also added and I quote “its success has been left to fate. Its administration has been left in the hands of the different states of the federation, which now treat its affairs at the least echelon of government action. Many state governments have displayed their lack of interest in the secondary education affairs entrusted to them by the Federal Government of Nigeria”.

In addition, Omorogbe (2013) rightly posited that the issues faced by the secondary education includes prompt payment of salaries, refusal to implement approved wages and salaries as outcomes of negotiations, supervision of schools, recruitment policies, reward structure for hard work, politicization of the education sector and etc. The Government appears to be paying lip service to funding of secondary education in Nigeria, Eimuhi and Ogedegbe (2015) added. This negligence of the government is reflected in many ways and most precisely in the education budget allocation. International benchmark on the percentage education should receive in relation to the total national budget is at least twenty-six percent (26%) but Nigeria’s education budget allocation have been revolving around five to fifteen percent (5-15%) with the resent budget of the 2020 fiscal year allocated to education being 6.7% far below the UNESCO standard of 26%. Experts agree that the most serious problem facing the Nigerian educational system is the manner, in which the sector is funded, organized, planned and administered (Aniekwu and Ozochi, 2010)

No doubt, the quality of education a nation can provide her citizens is a function of the funding profile accorded the education ministry at all levels (Eimuhi and Ogedegbe, 2015). Nigeria has not done much in this regard Omorogbe (2013) stated. Therefore, government’s lip service to education portrays an outward demonstration of commitment that may be seen to be there, but a closer perusal reveals yawning gaps that are craving for serious attention Eimuhi and Ogedegbe (2015) added.

Furthermore, it is observed that students in the Secondary schools don’t study as it is seen in table (9) above. Secondary education level prepares students for the tertiary institutions and also as a labour force to the nation. Secondary education is of great importance to the nation because it is a source of midlevel manpower production that is necessary to sustain and improve the economy (Taiwo, 1986). With this study attitude of students, it will be impossible for students to meet the minimum requirements into the tertiary institutions and thereby short changing the supply of manpower to the petroleum industry. The findings of Oruonye (2014) in Taraba State of Nigeria shows that the performance of students with credit passes in five subjects including English language and Mathematics which are the basic requirements for transiting to the next level (tertiary institution) has not exceeded 15 percent. This cannot be farfetched in other states of the nation. Akinsolu, (2005) and Olatoun, (2012) poised that this mass failure in the terminal examination has made observers to regard the secondary education in the country as inefficient and wastage of resources.
5. CONCLUSION
This current study sought to explore the impact of secondary education on the future of the petroleum industry in Nigeria. Since the petroleum industry is one of the major industry developing the economy of Nigeria, there is then need for its indigenes to be major players in the industry. From this study it can be concluded that there is a need for awareness on the importance of studying to the secondary school students and provision of conducive learning environment and appropriate materials by the government.

Therefore, the findings revealed that the Nigeria secondary education is on is way down the slope of greatness. That is, it’s at a state of backwardness. And with the present condition of the system there will be great negative impact on the petroleum industry in Nigeria which including the domination of expatriates in the industry. Moreover, the enacted laws by the government will be rendered futile as there will be no enough capable labour force available to meet the fast-growing petroleum industry. And therefore, the continuation of what I term the Oyibolization of the Oil and Gas sector.

6. RECOMMENDATION
Based on the findings of this study, the following recommendations proposed to guide the government, organizations, institutions and the general public:

- Government should invest into the education system. This should be done by the increase in the budget allocated to the education to meet at least the UNESCO standard.
- Government should provide laboratories and libraries for school as this will help build the students. Children are happy when they see what they are told or taught about in class manifest real and it makes them want to try it. This will then help the student cultivate a study habit thereby increasing their academic performance.
- Parents and teachers should discourage students from malpractice as this is one of the major reason students don’t study. Parents should stop providing malpractice aid (such as paying of impersonators etc.) for their wards and teachers should stop receiving money from parents and students in other to help pass and promote them.
- Awareness campaigns on the disadvantage of student not studying and malpractice should be carried out in all secondary schools.
- Encouragement from parent and teachers should be given to students that tries to make a difference.

REFERENCE
Ajayi I. A. (2002). “Resource factors as correlates of secondary school effectiveness in Ekiti State”. Nigerian Journal of Counselling and Applied Psychology 1(1):109-115.
Akindelano Legal Practitioners (n.d). “Review of Nigeria’s local content legislation”.

http://ijessr.com
Akinsolu, A. O. (2003). “Provision and management of facilities for primary education in Nigeria”. Paper presented at the conference of Nigeria Association of Educational Administration and planning (NAEAP). University of Ibadan. Oct 29th – 31th

Aldridge, A. and Levine, K. (2001). “Surveying the social world: principles and practices in survey research”. Buckingham: Open University Press.

Aniekwu, N. and Ozochi, C. A. (2010). “Restructuring education, training and human-resource development in the Nigerian construction industry”. Journal of Science and Technology, Education Research 1(5): 92 – 98.

Eboh, E. (2009). “Social and economic research: principles and methods”. Enugu: Africa Institute of Applied Economics,

Eimuhi J. O. and Ogedegbe B. G. (2015). “Fundamental Issues in the Management of Secondary Education in Nigeria”. Journal of Emerging Trends in Educational Research and Policy Studies. 6(7): 265-270

Federal Republic of Nigeria (FRN) 2004. “National Policy on Education”. Lagos: NERDC Press, P. 13.

Ige A. M. (2011). “Myths and realities of falling standard of education in Nigeria: The way forward”. Nigeria Journal of Professional Teachers 2:36-48.

May, T. (2001). “Social research: issues, methods and process (2nd ed.)”. Berkshire: Open University Press.

Obikeze, D. S. (1990). “Methods of data analysis in the social and behavioural sciences”. Enugu: Auto-Century Publishing Co. Ltd.

Olatoun, A. A. (2012). “Resource utilization and internal efficiency in Nigerian secondary schools: Implications for socio problems of education”. International Journal of Sociology and Anthropology 4(1): 23-30.

Omoregie N. (2005). “Re-packaging secondary education in Nigeria for great and dynamic economy”. Paper presented at the 2nd Annual National Conference of Association for Encouraging Qualitative Education in Nigeria (ASSEQEN). 9th-11th May.

Omorogbe, S. K. (2013). “School Management and Academic Performance in Nigerian Secondary Schools: Issues, Challenges and Prospects”. A Paper Presented at the South-South Mandatory Continuing Professional Training (MCPT) Workshop for Principals held in Benin City, Edo State, Nigeria.

Onwioduokit, E. and Tule, E. (2002). “Sustainable Education Financing in Nigeria: (Options)”. Paper Presented at the 43rd NES Conference, Lagos 6th - 8th August.

Oruonye E. D. (2014). “The Challenges of Quality Secondary Education in Taraba State”. Journal of Educational and Social Research 4(3): 499-505

Taiwo, C. O. (1986). “The Nigerian education system: past, present and future”. Lagos: Academy Press Ltd.

Yusuf H. O. (2009). “Strategies for improving the teaching of reading comprehension in primary Schools”. Journal of Educational Research and Development 4(3):63-68.