

**THE RATIO 60:40 SCIENCE/ARTS AND HUMANITY  
ADMISSION POLICY IN DELTA STATE UNIVERSITY  
(2013 – 2017): A MYTH OR REALITY?**

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**Abstract**

*This paper examined the admission situation in Delta State University for the period 2013/14 – 2017/18 academic years to ascertain whether the federal government 60:40 science/arts and humanity admission policy ratio was strictly adhered to. It adopted the ex-post facto design as it investigated admissions offered in the past years. Three research questions were raised to guide the study. Findings revealed that the ratio of admitted to not admitted candidates was 28.72:71.28; that the overall ratio of science/arts and humanity admissions was 51.43:48.57, indicating a shortfall of 8.57% in favour of science admissions; and that there was no strict compliance to the federal government 60:40 science/arts admission policy ratio. The paper recommended that science based programmes should be expanded in the university and that the teaching and learning of science subjects at the primary and secondary school levels should be greatly improved in order to stimulate students' interests in the sciences in the early stage of their educational careers.*

**Keywords:** *Ratio, science, arts, humanity, government, admission policy.*

## Introduction

The world today is scientifically and technologically driven. It is in recognition of this notion that the Federal Government of Nigeria has ensured that the tertiary institutions especially the universities turn out graduates who will be scientifically and technologically compliant. This is to enable them usher in the much desired national developments in the areas of science and technology. It has put in place a number of policies to guide the conduct of the educational sector in general and the university subsector in particular. Otoja and Obodumu (2017) stated that the federal government/JAMB guidelines for admission to the federal, state and private universities is meant to provide access to federal and state universities based on academic merit, residential zones, or other government policies. Furthermore, the authors added that some of the most competent students who have great potentials are denied admission because of geographical constraints, discretion or over emphasis on science major as opposed to the arts. In a situational analysis of access to university education in Nigeria between 2011- 2015, the authors pointed out that universities were only able to accommodate 12.2%, 26.5%, 15.7% and 26.9% in 2011, 2012, 2013 and 2015 respectively of the qualified candidates prepared by Joint Admissions and Matriculation Board (JAMB).

Fabunmi (2005) pointed out that consequent upon the attainment of independence, it was discovered that the British system of education (6-5-2-3) did not meet the aspirations of Nigerians; hence the 6-3-3-4 educational policy was introduced in 1977. According to Fabunmi, this policy sought to introduce a functional technology-based education which could sustain the economy. It is in line with this policy that government's belief in science and technology courses as the 'magic wand' to our national progress was born and that was what prompted its stipulations in the National Policy on Education (FRN, 2014:30), which states that:

i. Technically-based professional courses in the universities shall have as components, exposure to relevant

future working environment.

- ii. It is imperative that teachers in professional fields have relevant industrial and professional experience.
- iii. A greater proportion of expenditure on university education shall be devoted to science and technology.
- iv. Not less than 60% of places shall be allocated to science and science-oriented courses in the conventional universities and not less than 80% in the universities of technology.

In support of the Federal Government's views about science and technology, Okonta (2007) citing Francis Bacon stated that the only goal of science is the endowment of human life with new inventions and riches. Again, Ndakogi, Wushishi and Chado (2019) citing Akpan (2010) opined that science has changed the world we live in today with scientific experiments, researchers, innovations and inventions and that its series of discoveries has helped man to understand the nature of the world and has improved it for the betterment of the society. So, considering the usefulness of science and technology to the development of the human person and his environment, it is only natural that science and technology should be given its rightful place in the scheme of things.

The importance of the university system in the development of the nation cannot be overemphasized. Its roles in the development of high level manpower, creating of professional courses and undertaking researches within the context of the needs of the nation (FRN, 2014) among other roles are all efforts geared towards the nation's development. Just like any other sector of the economy, the educational sector is guided by a number of policies. As defined by Agabi (2002:156), educational policies are goal-oriented decisions, actions and courses of actions in education that are authoritatively sanctioned by the government or the policy making agent based on the articulated educational interests, needs, issues and problems. Policies are guiding courses of actions that ensure consistency

when an organization is governed by its approval as a principle and practice (Adetunji, 2015). The objective of a policy is to guide people's action towards desirable group goals.

On the issue of admissions into Nigerian universities, the Federal Government put in place a number of policies to guide and checkmate the number of candidates offered admissions into the various programmes of the universities as well as to balance what is called the educationally backward states. These policies include:

- i. Federal government policy on 60:40 Science:Arts admission ratio.
- ii. Federal government policy on quota system/catchment area and backwardness policy.
- iii. Federal government policy on deregulation of university education.
- iv. National Universities Commission (NUC) policy on carrying capacity.

However, these policies put in place to checkmate the universities in the admission processes now seem to be some of the challenges hindering many intelligent applicants from securing admissions into the nation's tertiary institutions especially the universities.

### **Federal Government Policy of 60:40 Science/Arts Admission Ratio**

The importance of educational policies to the achievement of educational system's goals cannot be overemphasized. Okoroma (2006) defines a policy as an overall guide that gives the general limits and direction in which administrative actions will be taken. By reviewing Nwankwo (1990)'s work, Biokoro (2018) posits that policy is the first source of direction to any educational planning; emphasizing that planning merely operationalizes policy by charting and predicting activities and operations which would enhance the probability of adhering to and discussing the objectives as specified in the educational policy. This means that educational policies formulated by government ought to guide, aid, streamline

and position the educational system on the right path for continuous improvement.

The government's rationale behind the promulgation of the 60:40 admission ratio policy cannot be unconnected with the belief that the world is scientifically and technologically driven. As such, the country needs more scientists in all sectors of the economy, especially in oil industries for economic development and transformation of the nation. This policy entails that not less than 60% of places shall be allocated to science and science-oriented courses in the conventional universities (FRN, 2014:30, Section 69b). According to Otoja and Obodumu (2017), the implication of this policy is that many qualified liberal arts students are denied admission because the slots for arts and humanity-based courses are not enough to admit the majority of applicants. In an analysis of admission situation in Nigerian universities from 2012 – 2015, the authors reported that disciplines such as engineering, environmental technology and medical sciences have higher admission each year. In 2015, cumulative admission for sciences and arts related courses are 2,013,123 and 157,336 respectively. Again, in an article on an analysis of 60:40 ratio admission policy implementations for Kwara State tertiary institutions, Ndakogi, et al (2019) reported an overall low ratio of 48.35:51.65 science/arts admissions for the period 2011/2012 to 2015/2016 academic sessions against the stipulated 60:40 ratio. This implies that the policy has not been effectively implemented as science recorded a shortfall of 11.65% while arts and humanity based admissions recorded an excess of the same figure of 11.65%.

### **Statement of Problem**

Over the years, there has been a strong belief that faculties of education and social sciences are disciplines with high admission rates. That means that it has been a widely held opinion that these faculties and by extension arts/humanity based courses have higher students' population than the science based faculties irrespective of the federal government policy of 60:40 science/arts admission ratio. This was what prompted the

researcher's interest to undertake this study which was carried out to investigate and ascertain whether the government's 60:40 science/arts admission ratio policy was implemented during the years under review. Therefore, the question to be addressed in this paper is: Were the admissions in Science and Arts and humanity based faculties in Delta State University for the period 2013/14 – 2017/18 done in consonance with government's stipulations of 60:40 ratio?

### Research Questions

To guide the study, the following research questions were raised and answered:

1. What were the overall ratios of admitted to non-admitted candidates in Delta State University for the period 2013/14 – 2017/18 academic sessions?
2. What were the ratios of science to arts and humanity based courses' admissions per year for the period 2013/14–2017/18?
3. Do the admissions for the period 2013/14 – 2017/18 meet the federal government's policy of 60:40 science: arts and humanity ratio?

### Research Method

The researcher applied to the Registrar, Delta State University for approval to enable her collect the necessary data required for this study from Admissions office of the university with a checklist titled, "Analysis of the Demand and Supply of University Admission Places in Delta State University, Abraka 2013 – 2017". This application was approved and the researcher was granted access to the JAMB Print-Out Lists of Applicants and the University's UME/Direct Entry Admission Lists for the period 2013/14 – 2017/18 academic years. From these documents, data for this study were obtained and analysed using tables, percentage, ratios and graphs.

### Data Presentation and Analysis

The data collected were used to answer the research questions.

#### Research Question 1:

What were the overall ratios of admitted to non-admitted candidates in Delta State University for the period 2013/14 – 2017/18 academic sessions?

**Table 1:** Overall Ratio of Admitted to Not Admitted Candidates in Delta State University 2013/14 – 2017/18 Academic Sessions

Year	No. of Applicants	No. Admitted	% Admitted	% Not Admitted	Ratio of Admitted to Not Admitted
2013/14	20,605	6,734	32.68	67.32	32.68:67.32
2014/15	15,944	4,702	29.49	70.51	29.49:70.51
2015/16	26,612	6,480	24.34	75.66	24.34:75.66
2016/17	25,012	5,990	23.94	76.06	23.94:76.06
2017/18	14,421	5,554	38.51	61.49	38.51:61.49
<b>Total</b>	<b>102,594</b>	<b>29,460</b>	<b>28.72</b>	<b>71.28</b>	<b>28.72:71.28</b>

Computed from fieldwork, 2020

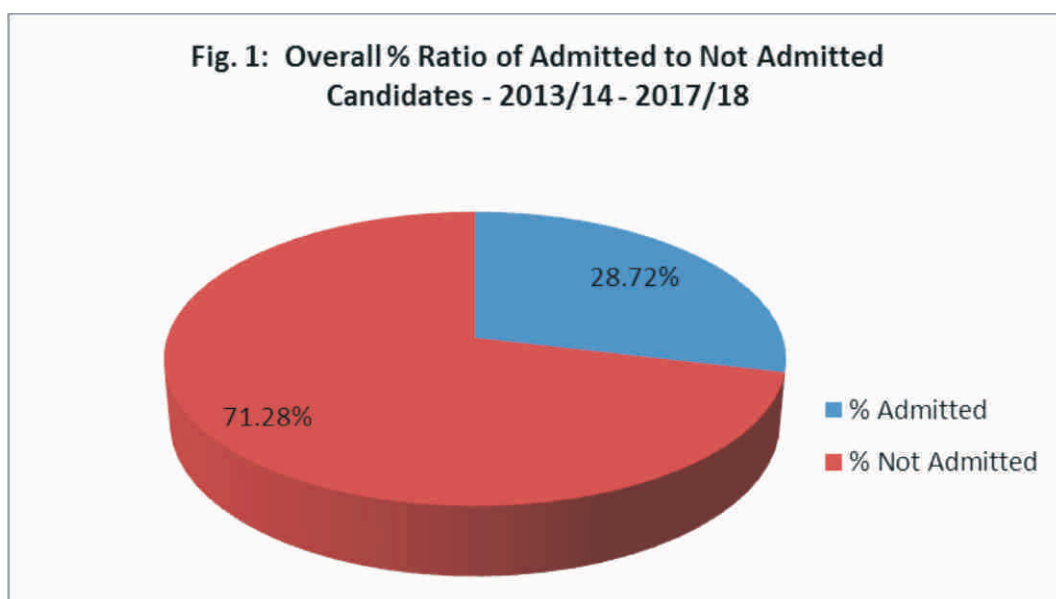
Table 1 presents the overall numbers of applicants, admissions, percentage admitted, percentage of unmet admissions as well as the ratio of admitted to not admitted candidates per session for the period 2013/14 – 2017/18. It indicates that 2015/16 had the highest number of applicants (26,612); while 2013/14 had the highest number of 6,734 admitted candidates during the years under

review. On the percentage rate of admitted candidates per session, 2017/18 recorded the highest percentage as 38.51% (representing 5,554) of the 14,421 applicants for the session was offered admission. 2016/17 recorded the least percentage of 23.94 admitted candidates and so the academic session had the highest percentage rate of 76.06 unmet admissions. For the overall ratio



of admitted to not admitted candidates for the five years under review, the table shows that of the 102,594 applicants, 29,460 candidates were offered admissions. This gives a ratio

of 28.72:71.28 admitted to not admitted candidates, which is graphically represented thus:



**Research Question 2**

What were the ratios of science to arts and humanity based admissions in Delta State University, Abraka per year for the period 2013/14 – 2017/18 academic sessions?

**Table 2:** Science/Arts and Humanity Admission Ratios Per Year for 2013 - 2017

Faculties	Academic Sessions										Total for All Sessions	
	2013/14		2014/15		2015/16		2016/17		2017/18			
	Science	Arts	Science	Arts	Science	Arts	Science	Arts	Science	Arts	Science	Arts
Agric.	280		206		389		219		169		1263	
Arts		797		700		745		708		557		3507
Basic Med. Sci.	699		524		797		732		793		3545	
Clinical Med.	58		78		65		66		77		344	
Edu. (Sci. & Arts)	728	1310	312	799	433	1205	498	1021	274	815	2245	5150
Engineering	0		0		0		45		230		275	
Law		175		155		145		0		129		604
Mgt. Sci.		265		319		430		353		326		1693
Pharmacy	71		84		94		95		106		450	
Science	1711		928		1486		1495		1409		7029	
Soc. Science		640		597		691		758		669		3355
<b>Total</b>	<b>3547</b>	<b>3187</b>	<b>2132</b>	<b>2570</b>	<b>3264</b>	<b>3216</b>	<b>3150</b>	<b>2840</b>	<b>3058</b>	<b>2496</b>	<b>15151</b>	<b>14309</b>
<b>% of Sci. to Arts</b>	<b>52.67</b>	<b>47.33</b>	<b>45.34</b>	<b>54.66</b>	<b>50.37</b>	<b>49.63</b>	<b>52.59</b>	<b>47.41</b>	<b>55.05</b>	<b>44.95</b>	<b>51.43</b>	<b>48.57</b>

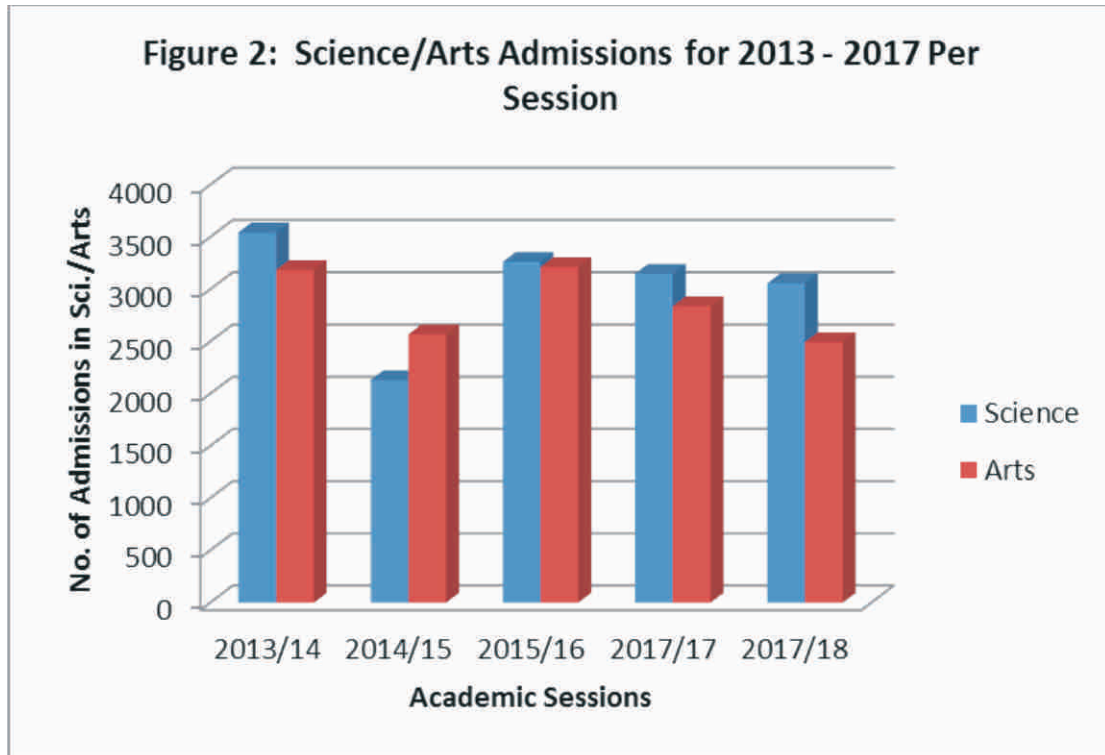
Computed from fieldwork, 2020

Table 2 indicates that of the eleven faculties in the University, six are in the sciences, four in the arts and humanities while education has programmes in both

sciences and arts with a greater percentage of its programmes in the arts/humanities. It presents the total numbers of candidates offered admission in science/arts and

humanity based courses per year for the 2013/14 – 2017/18 academic years. It also shows the percentage rate of science/arts related admissions during the period under review. It presents 2017/18 academic session as the year with the highest rate of 55.05:44.95. This is closely followed by

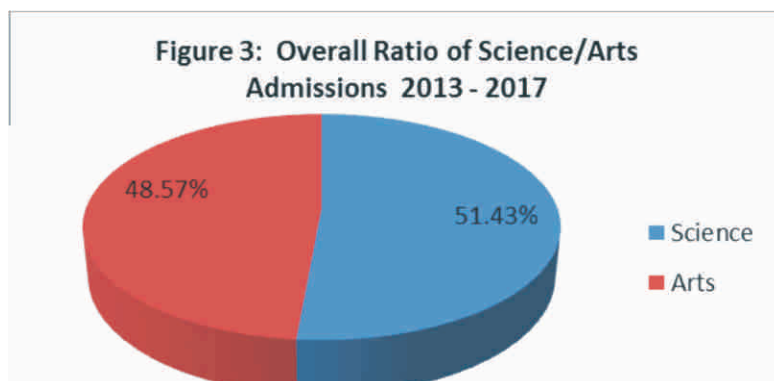
2013/14 with a ratio of 52.67:47.33 and 2016/17 with a ratio of 52.59:47.41. It equally presents 2014/15 as the only academic session with the least percentage rate of 45.34:54.66 Science/Arts ratio. This is graphically presented thus:



**Research Question 3**

Do the admissions for the period 2013/14 – 2017/18 meet the federal government's policy ratio of 60:40 science/arts and humanity based courses? Table 2 revealed the ratio of science to arts and humanity based courses per academic session for the period under review. It indicates that all the academic sessions except 2014/15 had ratios of approximately 50 – 55 science to 45 – 50 arts and humanity

based admissions. 2014/2015 was the only academic session with a ratio of 45.34 sciences to 54.66 arts and humanity admissions. The table equally reveals that none of the academic years recorded a ratio of 60:40 as stipulated by the federal government. Figure 3 presents a graphic representation of the overall ratio of 51.43:48.57 science to arts and humanity based admissions for the period under review.



## Discussion of Findings

The finding of this study as related to research question one revealed the level of compliance to the 60:40 ratio science/arts and humanity based admissions in Delta State University for the period 2013 – 2017. It showed the percentage ratio of admitted to not admitted candidates per academic session with 2017/2018 recording the highest ratio of 38.51:61.49. 2016/2017 recorded the least ratio of 23.94:76.06; while the overall ratio stood at 28.72:71.28 admitted/not admitted candidates. This finding affirms that of Otoja and Obodumu (2017) where their findings showed that between 2011 and 2015, Nigerian universities were only able to accommodate 12.2%, 26.5%, 15.7%, and 26.9% in 2011, 2012, 2013 and 2015 respectively of the qualified candidates prepared by JAMB.

Furthermore, the finding as it concerns research question two equally showed the ratios of science to arts and humanity based admissions per academic year for the period under review and indicates that in specific terms, only 2017/18 academic session recorded the highest percentage rate of 55.05:44.95 science/arts ratio, giving a shortfall of 4.95% for science admissions. Even when viewed in absolute terms, the findings showed an overall ratio of 51.43:48.57 science/arts admissions (with a shortfall of 8.57% for the sciences) during the period 2013 – 2017. This indicates that both in specific and absolute terms, the implementation of the federal government policy of 60:40 science/arts and humanity admission ratio in Delta State University is still a myth and one can say with all sincerity that compliance to this policy is still far from being a reality. So, the finding contradicts the federal government's 60:40 science/arts admission policy (FRN, 2014) stipulation that not less than 60% of places shall be allocated to science and science-oriented courses in conventional universities and not less than 80% in the universities of technology. Again, it is worthy to note that all through the years under review, arts/humanity based courses recorded above 40% of the admissions, which ought to be the norm; with 2017/18 having the least figure of 44.95%. A critical look at table 2 on the total admission figures (334, 275 and 450 respectively) for faculties of Clinical Medicine, Engineering and Pharmacy for five years points out the contradictions of this study with that of Otoja and Obodumu

(2017) when the authors reported that between 2012 and 2015, disciplines such as Engineering/Environmental Technology, Medicine and Science have higher admission each year; with 2015, having cumulative admission of 2,013,123 and 157,336 respectively (representing 92.75 and 7.25%) for sciences and arts related courses.

Again, the study affirms Ndakogi, Wushishi and Chado's (2019) finding that a ratio of 48.35:51.65 science/arts candidates were offered admissions in Kwara State tertiary institutions between 2011/2012 – 2015/2016 academic sessions. Even though the ratio of science to arts admission is slightly lower in their study, the fact remains that both studies revealed that admissions within the period studied do not meet the federal government 60:40 science/arts admission ratio stipulations.

## Implications for Educational Planning

The findings of this study have brought to the limelight Delta State University, Abraka and by extension the Nigerian university system's non-compliance to the federal government 60:40 science/arts admission policy. These have far-reaching implications for educational planning. This is because as fewer number of candidates are admitted into the science/technology based programmes such as Clinical Medicine, Pharmacy and Engineering on a yearly basis, fewer and fewer number of Medical Doctors, Pharmacists and Engineers would be produced and graduated by the university. This makes it impossible for the university to comply to government's stipulations of 60:40 science/arts admission ratio. Therefore, higher education in the area of science and technology should be planned with a view to accomplishing the policy.

## Conclusion

The study investigated the admission situation in Delta State University from 2013 – 2017. The results established the fact that compliance to federal government 60:40 science/art admission policy has been a myth and not yet a reality during the years under review. The federal government's stipulation has not been met in specific and absolute terms. This implies that even when the results were viewed per academic session or the five-year period of the study, both yearly and overall admission ratios were below the

norm. Considering the important role of science/technology based education in the development of the nation, human resources, infrastructures and facilities in the area of science/technology should be expanded to enable the university meet up with the government 60:40 science/arts admission policy.

### Recommendations

The federal government's 60:40 science/arts admission policy can be a reality in Delta State University if the following recommendations are considered:

1. The university's inability to admit candidates in line with the federal government's 60:40 science/arts ratio is an indication that the infrastructures and facilities as well as the human resources needed to accommodate more candidates in the science oriented courses are not just available. Therefore, it is recommended that expansion programmes in the science based courses (especially Clinical Medicine, Engineering and Pharmacy) should be taken as a matter of urgency by government, management and stakeholders alike, in order to improve admissions; and then balance the manpower needs of the nation in the area of science/technology.
2. It is not enough for the federal government to make policies that would favour the sciences without setting in motion appropriate machineries that would stimulate learners' interest in the sciences. Therefore, to make school leavers have the prerequisite qualifications that would enable them secure admissions into science/technology based courses at the university level, the teaching and learning of science subjects at the primary and secondary school levels should be greatly improved.

### References

- Adetunji, A. T. (2015). Implementing government policies in university education: Challenges faced by Nigerian Universities' principal officers. *Net Journal of Social Sciences*. 3(1): 9-16.
- Agabi, O. G. (2002). *Finance and economics of public education*. Port Harcourt: International Centre for Educational Services.
- Biokoro, O. B. (2018). School administrator and the implementation of educational policies in Delta State in a recessed economy. *DELSU Journal of Educational Research and Development*, 17(1), 216–234.
- Fabunmi, M. (2005). Historical analysis of educational policy formulation in Nigeria: Implications for educational planning and policy. *International Journal of African & African American Studies*, 2.
- Federal Republic of Nigeria (2014). *National Policy on Education*. Lagos: NERDC.
- Ndakogi, M. G., Wushishi, D. I., & Chado, A. M. (2019). Analysis of 60:40 Ratio Admission Policy Implementations for Science and Arts related Courses in Kwara State Tertiary Institutions. *Journal of Science, Technology, Mathematics and Education (JOSTMED)* 15(4).
- Okonta, P. N. (2007). The place of Mathematics in Scientific and Technological Developments. Being a paper presented at the 44<sup>th</sup> Annual National Conference of the Mathematical Association of Nigeria (MAN) held at the Federal College of Education (Technical), Asaba from 27<sup>th</sup> August to 1<sup>st</sup> September, 2007.
- Okoroma, N. S. (2006). Educational policies and problems of implementing in Nigeria. *Journal of Adult Learning*, 46(2), 243–263.
- Otoja, R. I., & Obodumu, E. (2017). Access to University Education in Nigeria: Issues and Trends. *International Journal of Progressive and Alternative Education*, 4(1). Retrieved on 17<sup>th</sup> April, 2020.