



Undergraduate Biology Education Students' Perception of Teaching As A Profession

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Abstract

The study investigated Biology education students' perception of teaching as a profession. A descriptive survey design was adopted for the study. Four research questions and four null hypotheses guided the study. The population of the study was 680 Biology Education Students. The sample comprised 200 students from levels 100 to 400. Stratified random sampling and simple random sampling techniques were used in constituting the sample. The instrument used for data collection was the Biology Education Students Perception of Teaching as a Profession Questionnaire (BESPTAPQ). The reliability of the instrument was established by applying Cronbach alpha statistics to data in a correlation coefficient (s) 0.76 Percentage, mean and standard deviation were used to answer the research questions while t-test and analysis of variance (ANOVA) was used to test the hypothesis at 0.05 level of significance. The result of the study revealed that there is no significant difference between the percentage of students with positive and negative perceptions of teaching as a profession. The result also indicated no significant gender difference in students perception, and parental level of education and SES has no significant influence on the students perception of teaching as a profession, Consequent to the findings it was recommended among others that the cut off point for entry into the teaching career should be made as high as others like medicine engineering among others that are regarded as prestigious professions.

Keywords: Biology Education, Students, Perception, Teaching, Profession.

Introduction

A profession is a specialised subject that demands extensive training and understanding. It is differentiated by a distinct set of skills and knowledge, which are often acquired via formal education and intensive training. According to Amaele (2012), a profession requires particular training in a range of areas, hence classifying its members as an elite club. Similarly, Basak and Ghosh (2021) define a career as requiring specialist skills, knowledge, and competencies. In its most basic form, teaching consists of giving students with knowledge and information about a certain subject. According to Yusuf et al. (2014), teaching is a specialised activity that requires extensive skills and knowledge obtained via professional training. Enyi (2014) goes on to explain that education has a specific body of knowledge that is critical to societal advancement. A teacher, therefore, is someone who has the essential professional abilities to disseminate knowledge within a specified educational framework. This fosters the belief that teaching is a profession with a global reputation. According to Yusuf et al. (2014), education is highly valued in many developed countries and has a significant impact on national development. Nwanekezi (2011) highlights the importance of effective classroom management and instructional delivery for a country's development, as education remains the basis of societal growth. Teaching has long been considered one of the oldest and most respected jobs. Education is a strong tool for social change, with teachers at the heart of the effort. The Federal Republic of Nigeria (2004) says in its National Policy on Education that the quality of an educational system is closely linked to the skill of its teachers. Teaching was a well-regarded profession in Nigeria throughout the colonial and early post-colonial periods. Teachers were revered throughout the 1950s and 1960s, ranking second only to colonial officials in terms of social status. They had a major influence on young pupils' intellectual and moral development, imparting traits such as self-esteem, self-expression, discipline, and academic genius. Teachers were regarded in such high respect in society that many parents encouraged their children to seek careers in teaching. However, over time, the prestige of teaching in Nigeria has dwindled. The growth of new professional vocations, many of which were started by educators, has resulted in a decline in teaching's social position. Several government measures contributed to this decline, notably the recruitment of inexperienced individuals into the teaching profession.

A misconception arose that everyone with a diploma or degree could teach, leading to the employment of untrained people in elementary and secondary schools (Fauziah et al., 2024). To exacerbate the problem, the National Youth Service Corps (NYSC) program began sending graduates—many without teaching qualifications—to schools, perpetuating the myth that teaching does not require specialized skills (Alice, 2017). As a consequence, the reputation of the teaching profession has deteriorated, prompting many educators to seek alternative employment. In addition to recruitment challenges, Nigerian teachers have deplorable working conditions. Many schools have inadequate infrastructure, such as outdated buildings, overcrowded classrooms, and a lack of basic teaching tools. Teachers usually experience irregular compensation payments, little fringe benefits, and delayed promotions, all of which contribute to low morale in the profession. Furthermore, teacher training programs have lower entrance criteria than fields like medical, law, engineering, and accounting. Many students enroll in education programs not out of love, but as a last alternative since they do not meet the entry standards for their favourite disciplines. This dynamic has created the notion that teaching is a stepping stone rather than a permanent position. According to Okemakinde (2013), social perceptions regarding teachers encourage feelings of inadequacy, poverty, and professional insignificance, deterring many people from entering the field. Wehmeier et al. (2005) define belief, concept, or image as an individual's knowledge or interpretation of a topic. Robinson and Davidson (2010) describe perception as a person's viewpoint or interpretation of reality. The status of teaching as a profession, as determined by government policy and public opinion, has the ability to significantly impact how undergraduate education students perceive the industry. Fauziah et al. (2021) revealed that societal opinions towards teaching as a career are mostly negative. According to Oruc (2011), trainee instructors often see teaching as a realistic career option. Similarly, Nenty et al. (2015) revealed that trainee teachers consider teaching to be a professional subject, despite societal prejudices. However, the bulk of study on this topic has taken place outside of Nigeria, where views towards the teaching field may vary. Given the waning respect for teaching in Nigerian culture and many students' refusal to pursue education as a first-choice job, it is important to examine the views of Nigerian training teachers. As a result, the goal of this study is to look at how college Biology Education students at Ignatius Ajuru University of Education see teaching as a career.

Teaching is one of the oldest and most important jobs, setting the basis for intellectual and cultural growth. Teachers play a crucial role in students' intellectual growth by teaching knowledge and skills that allow them to effectively deal with life's difficulties and add positively to social progress. Despite its vital importance, the teaching field is often overlooked and ignored by both the government and the general public. This worsening situation may affect new teachers' views, harming their commitment and final performance in the field. As a result, this might have far-reaching effects for the level of schooling provided to children. In light of these problems, the goal of this study is to look at the views of Biology Education students at Ignatius Ajuru University of Education towards the teaching career.

Aim and Objectives of the study

The goal of the study was to find out the perception of teaching as a profession by Biology education students, specifically the objectives were to:

1. ascertain the percentage of Biology education students with positive and negative perception of teaching as a profession
2. examine the influence of gender on Biology education students' perception of teaching as a profession.
3. determine the influence of parental level of education on Biology Education students' perception of teaching as a profession.
4. find out the perception of teaching as a profession by Biology Education Students based on their parents Socio-Economic Status (SES).

Research Questions

1. What is the percentage of Biology education students with positive and negative perception of teaching as a profession?
2. What is the influence of gender on perception of Biology education students of teaching as a profession?
3. What is the influence of parental education level on the perception of Biology education students of teaching as a profession?
4. What is the influence of parents' socio-economic status on the perception of Biology education students of teaching as a profession?

Hypotheses

1. There is no significant difference between the percentage of Biology education students with positive and negative perception of teaching as a profession.

2. There is no significant difference between male and female Biology education students in their perception of teaching as a profession.
3. There no significant influence of parental education level on Biology education students' perception of teaching as a profession.
4. There is no significant influence of parents' socio-economic status on Biology education students' perception of teaching as a profession.

Methodology

This study examined the opinion of Biology Education students regarding teaching as a career. To achieve this goal, the study chose a descriptive poll research methodology, which is ideal for measuring views, opinions, and thoughts within a specific group. The detailed poll methodology allowed for the collection of numeric data that gave insights into students' views on the teaching career. The group for the study contained 680 Biology Education students registered at Ignatius Ajuru University of Education. Given the large size of the population, a group of 200 students was chosen to ensure that the study stayed doable while still being representative of the entire student body. The stratified random sample method was applied. This meant separating the students into four groups based on their academic levels: 100-level, 200-level, 300-level, and 400-level. From each group, 50 students were randomly chosen using simple random sampling, guaranteeing that each level was sufficiently represented in the study. This method improved the generalizability of the results across all classes of Biology Education pupils.

Data collection was performed using a researcher-designed questionnaire named "Biology Education Students' Perception of Teaching as a Profession Questionnaire" (BESPTPQ). The instrument was organised into two main sections: Section A: This part took personal information about the subjects, such as gender, academic level, family education level, and socio-economic position. Section B: This section consisted of 20 items meant to measure students' views of teaching as a career. The items were organised using a Likert-scale style, allowing respondents to express the amount of their agreement or disagreement with each statement. To ensure the usefulness of the tool for data collection, experts in educational research and measurement reviewed the questionnaire to assess its content validity, clarity, and appropriateness for tracking students' views of the teaching career. Based on their feedback, necessary changes were made to enhance the instrument's validity.

Furthermore, the dependability of the instrument was found through a test study, in which the questionnaire was given to a small group of students who were not part of the main study. The internal consistency of the instrument was tested using Cronbach's alpha value, which gave a reliability score of 0.71. According to research guidelines, this number shows an acceptable level of dependability, proving that the tool was reliable and fit for use in the study. The data collected were carefully analysed using both descriptive and inferential statistical methods. The mean and Standard deviation) were used to answer the study questions. While the inferential statistics, the t-test and Analysis of Variance (ANOVA), were applied to test the null theorie

Results

Research Question 1: What is the percentage of Biology Education Students with positive and negative perceptions of teaching as a profession?

Table 1: Percentage Analysis of students with positive and negative perception

Perception	Number(n)	Percentages (%)
Positive	118.00	59
Negative	82.00	41

The table 1 indicated that 118 students, representing 59 percent, had positive perception while 82 students representing 41 percent had negative perception of teaching as a profession. The result is that a greater percentage of the students' are of the view that teaching is a profession.

H₀₁: There is no significant difference between the percentage of students with positive and negative perception of teaching as a profession.

Table 2: t-test analysis of the percentage of students with positive and negative perception of teaching as a profession

Student perception	N	Mean	SD	Df	t	P	Decision
Positive	118.00	2.93	0.31	198	.558	.741	NS
Negative	82.00	2.84	0.26				

*NS = Not Significant $p(0.741) > 0.05$ level of significance.

The mean and standard deviation of students who had a positive perception of teaching as a profession were 2.93 and 0.31, respectively, while the mean and SD of students who had a negative perception were 2.84 and 0.26, respectively, according to the independent t-test on the percentage difference between the two groups. Though the H₀₁ indicates that there is no significance, the difference between the percentage of students who have a positive and negative perception of teaching as a profession is retained, and the t-cal was 0.558 at df 198 and $P=0.741$ because the P-value = 0.74, >0.05 , the level of significance. As a consequence, the proportion of pupils who have a good and negative view does not vary much.

Research Question 2: What is the influence of gender on the students' perception of teaching as a profession?

Table 3: Mean and standard deviation of male and female students' perception of teaching as a profession

Gender	N	Mean	SD
Male	108.00	2.83	0.30
Female	92.00	2.82	0.27

Table 3: Shows the Mean and standard deviation of male and female students' perception of teaching as a profession. The male had a mean and SD of 2.83 and 0.30 respectively. The result is that more of the male students had better perception than the female students.

H₀₂: There is no significant difference between male students and female students in their perception of teaching as a profession.

Table 4 t-test analysis of male and female Students perception of teaching as a profession

Gender	N	Mean	SD	Df	T	p-value	Decision
Male	108.00	2.83	0.30	198	.458	.648	NS
Negative	92.00	2.82	0.27				

* NS = Not significant $p(.648) > 0.05$ level of significance.

The independent sample t-test on the difference in male and female students' perceptions of teaching as a career revealed that male students' mean and SD were 2.83 and 0.30, respectively, whereas female students' mean and standard deviation were 2.82 and 0.27. The t-cal is 0.458 at df 198, with $p = 0.648 > 0.05$. The H₀₂, which indicates that male and female students have similar perceptions of teaching as a vocation, is kept.

Research Question 3: What is the influence of parental education level on students' perception of teaching as a profession?

Table 5: Mean and standard deviation of parents' education level on students' perception of teaching as a profession?

Parent education	N	Mean	SD
Bachelor	48.00	2.88	0.33
N C E	69.00	2.83	0.27
O N D	65.00	2.79	0.29
F S L C	18.00	2.78	0.21
Total	200.00	2.83	0.9

Table 5 displays the mean and standard deviation of the impact of parental educational level on students' perceptions of teaching as a vocation. Students whose parents had a bachelor's degree had a mean and standard deviation of 2.88 and 0.33, respectively. Those whose parents had NCE had a mean of 2.83 and SD 0.27, those

with OND had a mean of 2.79 and SD 0.29, and those with FSLC had a mean of 2.78 and SD 0.21. The results suggest that kids whose parents have a Bachelor's degree had a higher mean score than others in their impression of teaching as a vocation, indicating a better perspective.

H03: There is no significant influence of parental educational level on students' perception of teaching as a profession.

Table 6: Summary of ANOVA of parental education on students' perception of teaching as a profession.

	Sum of squares	df	Mean square	F	Sig
Between groups	0.24	3.00	0.08	0.95	0.42
Within groups	16.21	196.00	0.08		
Total	16.45	199.00			

The result from Table 6 shows the ANOVA of the influence of parents' educational level on students' perception of teaching as a profession. The result showed no significant influence of parental educational level on students' perception of teaching as a profession ($F = 95$, $df\ 196$ $P = 0.42$). The null hypothesis that there is no significant influence of parent education level on students' perception of teaching as a profession is retained.

Research Question 4: What is the influence of parental SES on students' perception of teaching as a profession?

Table 7: Mean and standard deviation of the influence of parents' SES on students' perception of teaching as a profession.

Parent SES	N	Mean	SD
Employed	67	2.89	0.30
Unemployed	101	2.80	0.29
Business	32	2.80	0.23
Total	200	2.83	0.29

Table 7 displays the mean and standard deviation of the impact of parental SES on students' perception. Students with working parents had a mean of 2.89 and a standard deviation of 30. Students whose parents are jobless had a mean of 2.79 and a standard deviation of 0.29, while those whose parents are businessmen had a mean of 2.80 and an SD of 0.23. The findings revealed children with working parents had a higher perception score of teaching as a vocation than others.

HO4: There is no significant influence of parents' SES on students' perception of teaching as a profession

Table 8: Summary of ANOVA of the influence of Parents SES in students' perception of teaching as a profession.

	Sum of squares	df	Mean square	F	Sig
Between groups	.428	2	.214	2.63	.074
Within groups	16.02	197	.081		
Total	16.45	199			

The result from Table 8 shows the summary of ANOVA of the influence of parents' socio-economic status on students' perception of teaching as a profession. The result indicated no significant influence of parents' Socio-economic status on students' perception of teaching as a profession ($F = 2.63$, $df\ 198$, $p = 0.074 > 0.05$). The null hypothesis that there is no significant influence of parents' SES on students' perception of teaching as a profession is retained.

Discussion

The statistics given in Tables 1 and 2 represent the view of Biology Education students on teaching as a career. While a majority of the students had a good attitude, the difference between those with positive and negative impressions was not statistically significant. This finding contradicts with past study, such as those done by Achimugu (2005), Lawal (2012), and Oruc (2011), which suggested a mostly good image of teaching as a career

among students. Similarly, the present study contradicts the findings of Nenty et al. (2015), who discovered a considerable perspective of teaching as a vocation among teacher trainees.

Furthermore, Tables 3 and 4 reflect the perception of teaching as a career based on gender discrepancies among Biology Education students. The data indicate that male students displayed a higher and more favourable view than their female counterparts, yet the difference was not statistically significant. This coincides with the findings of Audu and Egharevba (2016), who reported that gender did not greatly alter students' opinion of teaching as a profession. However, the current study opposes the findings of Nenty et al. (2015), who revealed a strong gender effect, with female trainees perceiving teaching as a career more positively than their male counterparts. Tables 5 and 6 analyse the influence of parental education level on Biology Education students' perception of teaching as a career. The statistics reveal that kids whose parents have a Bachelor's degree tend to have a more favourable view of teaching compared to those whose parents possess an NCE, OND, or FSLC certificate. However, the change was not statistically significant. The observed trend may be attributed to the increased level of enlightenment among degree-holding parents, who may have a better knowledge of the noble nature of teaching and subsequently implant this appreciation in their children. This agrees with studies of Adeyemi and Ukoha (2020), which reveal that parental education level considerably effects students' work views

The present finding is inconsistent with that of Schleicher (2023) which suggest that children whose parents are degree holders consider teaching as a secondary career compared to medicine, engineering and law. Additionally, Tables 7 and 8 evaluate the influence of parental socioeconomic status (SES) on students' perception of teaching as a career. The results suggest that teenagers whose parents are working have a more favourable perspective compared to those whose parents are unemployed or participating in lower-income employment. Nevertheless, no meaningful influence of parental SES on students' perception was discovered. This finding is comparable with the research of Ushe et al. (cited in Gatawa et al., 2023), who underlined the role of parental SES in determining children's social integration and career choices. Studies by Okonjo and Adebayo (2021) further illustrate that parental SES could indirectly effect teenagers' professional objectives via exposure to diverse work opportunities and societal expectations.

Conclusion

Based on the findings, it is concluded that the gender of students, parental educational level and parents' SES are no determinants of Biology education students' perception of teaching as a profession and also, more of the students are happy with their choice of teaching career, thereby holding a positive perception.

Recommendations

1. The government should prioritize recruiting individuals with formal teaching qualifications to enhance the professional status of teaching and ensure quality education delivery.
2. The entry requirements for teacher education programs should be strengthened to attract high-achieving students, similar to other prestigious professions such as medicine, law, and engineering.
3. The government should improve teachers' working conditions by ensuring timely salary payments, providing adequate teaching facilities, and creating a more conducive learning environment to enhance job satisfaction and retention.

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