



Data Article

Learning analytics: Data sets on the academic record of accounting students in a Nigerian University

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Definition of terms:

CGPA: Cumulative Grade Point Average

GPA: Grade Point Average

First Class: CGPA between 4.50 and 5.0

Second Class Upper Division: CGPA between 3.50 and 4.49

100 level result: First year result

Final CGPA: CGPA at graduation

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ABSTRACT

This paper presents data on the academic performance of a particular set of accounting students from the year of inception into a Nigerian university to the year of graduation. Descriptive analysis was performed on the dataset and a regression model which is capable of making predictions was fitted to the dataset. From the dataset, 24 out of the students who started with a first class result (CGPA above 4.50) still maintained a first class result at graduation. 4 out of the students who started with a first class result dropped to second class upper division before graduation. 4 out of the students who started with a second class upper division result moved to first class result before graduation. 28 out of 35 students who started with a second class upper division maintained a second class upper division result at graduation.

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Specifications Table

Subject area	Education
More specific subject area	Accounting Education
Type of data	Table and text file
How data was acquired	Primary data
Data format	Raw, analyzed using descriptive and inferential statistics
Experimental factors	Data sets on the academic record of a set of Accounting students from their year of admission into the University to the year of graduation
Experimental features	Information on the grade point average (GPA) and the cumulative grade point average (CGPA) of a set of Accounting students between their first academic session to their last academic session on campus
Data accessibility	Dataset is available in this article

Value of the data

- The data can be useful in the field of Education, Guidance and Counseling, Psychology, etc.
- The data can be useful for decision makers especially in the Ministry of Education.
- The data can be used to make predictions of academic performance.
- Statistical tools like chi-square test of independent, correlation analysis, regression analysis, time series analysis and so on can be applied to the data to make informed decisions.

1. Data

The dataset used in this study represents the GPA and CGPA of some undergraduate students. The students studied accounting and their academic performance was monitored for their four years on campus. The dataset involves seven (7) missing data points; details can be viewed in [Supplementary data](#). These missing data are highlighted in red and they represent information of (a) students who probably did not gain admission to study accounting but later changed to accounting in the second year following his/her outstanding performance in a closely related department in the first year (b) students who probably did not perform well or meet up with minimum promotion requirements and eventually dropped out from accounting department or entirely from the school (c) students who probably could not graduate with their mates as a result of failed courses, health issue and other personal reasons. The missing data points were eliminated totally for the sake of analysis. The dataset is summarized in [Table 1](#).

The dataset is represented graphically in [Figs. 1 and 2](#).

2. Experimental design, materials and methods

Nigeria like other countries in the world has higher institutions of learning with reputes. These higher institutions are either privately owned (by individuals or religious institutions) or owned by

Table 1
Summary statistics of the data.

	100 Level CGPA	Final CGPA
Minimum	2.1400	2.0262
Maximum	4.9500	4.9562
Mean	4.1290	4.0058
Variance	0.3554	0.4554
Skewness	−0.99	−0.61

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