

INDUSTRIAL TRAINING SCHEME AND ACADEMIC ACHIEVEMENT OF BUSINESS EDUCATION STUDENTS AT FEDERAL UNIVERSITY OTUOKE

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Abstract

This study investigated the relationship between the industrial training scheme and academic achievement of business education students at Federal University Otuoke. Specifically, it sought to: (i) determine the relationship between internship duration and academic achievement, and (ii) examine the relationship between skill acquisition level and academic achievement. A correlational survey design was employed as the research methodology. The population of the study comprised all business education students at Federal University Otuoke in the 2023–2024 academic session. A purposive sampling technique was used to select a representative sample of the population. Data were collected using two researcher-developed instruments: The Industrial Training Scheme Scale (ITSS) and the Students' Academic Achievement Scale (SAAS), both structured to measure the variables under investigation. The instruments' validity was ensured through expert reviews from the Departments of Business Education and Measurement and Evaluation at Federal University Otuoke. Reliability testing using Cronbach's Alpha yielded coefficients of 0.88 and 0.87 for ITSS and SAAS, respectively, indicating strong internal consistency. Data were analyzed using descriptive and inferential statistics, including the Pearson Product Moment Correlation Coefficient (PPMC). The results revealed a significant positive relationship between internship duration, skill acquisition level, and academic achievement. These findings highlighted the importance of adequately structured industrial training schemes in enhancing the academic performance of business education students.

Keywords: Industrial Training Scheme, Internship Duration, Skill Acquisition Level, Academic Achievement

Introduction

Industrial training is a crucial component of business education, providing students with hands-on experience to bridge the gap between theoretical knowledge and practical application. The effectiveness of industrial training schemes in enhancing students' academic achievement has been widely discussed in educational research (Kolawole & Igwe, 2020). Business education, as a discipline, is designed to equip students with relevant knowledge, skills, and competencies required for entrepreneurship, employment, and self-reliance (Okon & Udo, 2021). Industrial training, particularly through internship programs, plays a pivotal role in achieving these objectives by allowing students to acquire practical skills and professional exposure that complement classroom learning.

Industrial training has been recognized as a significant contributor to students' academic achievement, as it reinforces theoretical learning with practical experience, thereby fostering a more comprehensive understanding of business concepts. Research has shown that students who actively engage in industrial training tend to perform better academically due to their ability to apply learned principles in real-world scenarios (Adebayo & Salami, 2020). Exposure to workplace environments enhances critical thinking, problem-solving skills, and adaptability, all of which are essential for academic excellence. Moreover, students who undergo structured industrial training programs often demonstrate improved academic motivation and a higher level of engagement with their coursework, as they can relate abstract theories to practical situations. Thus, industrial training serves as an essential academic enrichment tool that strengthens students' learning outcomes and overall performance in business education.

Internship duration is a significant factor that influences the extent to which students benefit from industrial training. Longer internship periods have been linked to improved practical knowledge, problem-solving abilities, and overall academic performance (Adeyemi & Olatunji, 2019). Business education students at Federal University Otuoke are expected to undergo industrial training as part of their curriculum to enhance their competencies and ensure they are well-prepared for the labor market. However, the extent to which internship duration affects their academic achievement remains an area that requires empirical investigation.

Additionally, the level of skill acquisition during industrial training is a key determinant of students' academic performance. Practical exposure gained through industrial training enables students to integrate theoretical concepts with real-world applications, thereby fostering deeper understanding and improved academic outcomes (Eze & Nwosu, 2022). The ability to acquire industry-relevant skills not only enhances students' academic achievement but also increases their employability and entrepreneurial prospects. However, there is limited empirical evidence on how skill acquisition levels during industrial training impact business education students' academic success at Federal University Otuoke.

This study, therefore, seeks to examine the relationship between industrial training and academic achievement of business education students, focusing on two critical aspects: the duration of internship and the level of skill acquisition. By analyzing these factors, the study aims to provide insights into the effectiveness of industrial training schemes in improving students' academic performance and professional readiness. The findings will be beneficial to educators, policymakers, and industry stakeholders in designing and implementing more effective industrial training programs that align with the needs of business education students.

Objectives of the Study

This study investigated the relationship between industrial training scheme and academic achievement of business education students at Federal University Otuoke. Specifically, the study sought to:

- i. Determine the relationship between internship duration and academic achievement of business education students at Federal University Otuoke.
- ii. Examine the relationship between skill acquisition level and academic achievement of business education students at Federal University Otuoke.

Research Questions

The following research questions guided the study:

- i. What is the relationship between the internship duration on the academic achievement of business education students at Federal University Otuoke?
- ii. What is the relationship between skill acquisition level on the academic achievement of business education students at Federal University Otuoke?

Null Hypotheses

The following null hypotheses were formulated and will be tested at a 0.05 level of significance:

- H₀₁: There is no significant relationship between internship duration and academic achievement of business education students at Federal University Otuoke.
- H₀₂: There is no significant relationship between Skill acquisition level and academic achievement of business education students at Federal University Otuoke.

Methodology

This study adopted a correlational survey research design to examine the relationship between internship duration, skill acquisition, and academic achievement among Business Education students at Federal University Otuoke. A correlational survey design is appropriate for investigating the association between two or more variables, determining the direction and strength of the relationships (Nwankwo, 2016). This design enabled the collection of relevant data from Business Education undergraduates who had participated in industrial training, thereby facilitating an assessment of the relationship between the independent and dependent variables. The population of the study comprised all 562 Business Education students at Federal University Otuoke, Bayelsa State. A sample of 362 Business Education students was selected using a purposive sampling technique. The sample consisted of all third-and fourth-year students from the 2023/2024 academic session who had participated in the mandatory industrial training scheme. This ensured that only students with relevant exposure to the training experience were included in the study. The instruments used for data collection was a structured questionnaire titled “Impact of Industrial Training Scheme Scale (IITSS)” and “Students’ Academic Achievement Scale (SAAS),” developed by the researcher. The questionnaire consisted of two sections:

- i. **Section A:** Collected demographic information of respondents, including age, gender, and year of study.
- ii. **Section B:** Comprised five sub-sections (A–E) measuring key study variables, namely: internship duration, skill acquisition, student engagement, institutional support services, and industry exposure. Responses were rated on a five-point Likert scale ranging from Strongly Agree (5) to Strongly Disagree (1).

Students' academic achievement was assessed using the Students' Academic Achievement Scale (SAAS), which extracted students' results from official department records.

Academic achievement was categorized on a five-point scale: First Class (5), Second Class Upper (4), Second Class Lower (3), Third Class (2), and Pass (1).

Face validity of the instrument was ensured by three experts in Educational Measurement and Evaluation. To determine the reliability of the instrument, a pilot study was conducted with 20 Business Education students from a neighbouring university who shared similar characteristics with the target population. The Cronbach Alpha reliability formula was used to assess internal consistency, yielding reliability coefficients of 0.88 for IITSS and 0.87 for SAAS, which were considered appropriate for the study. The researcher personally administered the questionnaire to students with assistance from a research assistant within the university. Prior to distribution, respondents were briefed on the purpose of the study and the significance of their participation. A one-on-one questionnaire administration method was employed to maximize response rates and ensure the accuracy of data collection. The research questions were answered using correlation coefficients, while hypotheses were tested using Pearson Product Moment Correlation (PPMC) at a 0.05 level of significance. The interpretation of the correlation values was as follows:

- i. $r \geq 0.5$ – Strong relationship
- ii. $r < 0.5$ – Weak relationship

For hypothesis testing, if the calculated p-value exceeded the critical p-value (0.05), the null hypothesis was rejected. Conversely, if the calculated p-value was less than 0.05, the null hypothesis was accepted.

Results

Research Question 1: What is the relationship between the internship duration on the academic achievement of business education students at Federal University Otuoke?

Table 1: Pearson Product Moment Correlation (PPMC) analysis on the relationship between the internship duration on the academic achievement of business education students at Federal University Otuoke

		Internship Duration	Academic Achievement
Internship Duration	Pearson Correlation	1	.670**
	Sig. (2-tailed)		.000
	N	349	349
Academic Achievement	Pearson Correlation	.670**	1
	Sig. (2-tailed)	.000	
	N	349	349

Source: Fieldwork, 2024

The data presented in Table 1 indicated that, the correlation coefficient (r-value) between internship duration and academic achievement is .670. Since the r-value is positive and greater than 0.5, then a strong positive relationship exists. Therefore, there is a strong positive relationship between the internship duration and academic achievement of business education students at Federal University Otuoke.

Research Question 2: What is the relationship between skill acquisition level on the academic achievement of business education students at Federal University Otuoke?

Table 2: Pearson Product Moment Correlation (PPMC) analysis on the relationship between skill acquisition level and academic achievement of business education students at Federal University Otuoke

		Skills Acquisition Level	Academic Achievement
Skills Acquisition Level	Pearson Correlation	1	.578**
	Sig. (2-tailed)		.000
	N	349	349
Academic Achievement	Pearson Correlation	.578**	1
	Sig. (2-tailed)	.000	
	N	349	349

Source: Fieldwork, 2024

The data presented in Table 2 indicated that, the correlation coefficient (r-value) between skill acquisition level and academic achievement is .578. Since the r-value is positive and greater than 0.5, then a strong positive relationship exists. Therefore, there is a strong positive relationship between the skill acquisition level and academic achievement of business education students at Federal University Otuoke.

Null Hypothesis 1: Internship duration does not have a significant relationship with academic achievement of business education students at Federal University Otuoke.

Table 3: Pearson Product Moment Correlation (PPMC) analysis on the relationship between the internship duration on the academic achievement of business education students at Federal University Otuoke

		Internship Duration	Academic Achievement
Internship Duration	Pearson Correlation	1	.670**
	Sig. (2-tailed)		.000
	N	349	349
Academic Achievement	Pearson Correlation	.670**	1
	Sig. (2-tailed)	.000	

The data presented in Table 3 above indicated that, at r-value of .670 the p-value is 0.000. Since the p-value is less than 0.05 alpha level then the null hypothesis is rejected. Therefore, the null hypothesis which states that, Internship duration have a significant

relationship with academic achievement of business education students at Federal University Otuoke is rejected.

Null Hypothesis 2: Skill acquisition level does not have a significant relationship with academic achievement of business education students at Federal University Otuoke.

Table 4: Pearson Product Moment Correlation (PPMC) analysis on the relationship between skill acquisition level and academic achievement of business education students at Federal University Otuoke

		Skills Acquisition Level	Academic Achievement
Skills Acquisition Level	Pearson Correlation	1	.578**
	Sig. (2-tailed)		.000
	N	349	349
Academic Achievement	Pearson Correlation	.578**	1
	Sig. (2-tailed)	.000	
	N	349	349

Source: Fieldwork, 2024

The data presented in Table 4 above indicated that, at r-value of .578 the p-value is 0.000. Since the p-value is less than 0.05 alpha level then the null hypothesis is rejected. Therefore, the null hypothesis which states that, Skill acquisition level have a significant relationship with academic achievement of business education students at Federal University Otuoke is rejected.

Discussion of Findings

Relationship between internship duration and academic achievement of business education students at Federal University Otuoke

The result in research question one, revealed that Internship duration have a strong positive and significant relationship with academic achievement of business education students at Federal University Otuoke. The findings from research question one indicates that the duration of internship experience has a strong, positive, and significant relationship with the academic achievement of business education students at Federal University Otuoke. This suggests that longer internship durations are associated with improved academic performance among these students, which aligns with the notion that practical, hands-on experience enhances theoretical knowledge and academic success. The positive correlation implies that an increase in the duration of internship experience corresponds to an increase in students' academic achievement scores.

This result confirms a significant, positive correlation between internship duration and academic achievement, emphasizing the practical importance of extended internships for academic development in business education. The findings align with previous studies by Adeyemi and Adeyemo (2018), Olawale and Sulaiman (2019) who reported a positive association between internship duration and academic performance in Nigerian universities,

attributing this to the hands-on exposure and skill acquisition that internships provide. Similarly, Eze and Okonkwo (2020) observed that internships serve as a bridge between theoretical knowledge and practical application, fostering better academic outcomes.

In contrast, the current results diverge from the findings of Ojo (2020), who identified no significant relationship between internship duration and academic achievement in some disciplines, suggesting that the benefits of internships might be more discipline-specific, with business education students potentially gaining unique advantages from extended practical experiences. Nonetheless, this study highlights the critical role of internships in enhancing academic performance, particularly for business education students who require practical, real-world exposure to excel academically.

Relationship between skill acquisition level and academic achievement of business education students at Federal University Otuoke

The result in research question two revealed that skill acquisition level has a strong positive and significant relationship with the academic achievement of business education students at Federal University Otuoke. The findings from research question two indicate that the level of skill acquisition has a strong, positive, and significant relationship with the academic achievement of business education students at Federal University Otuoke. This suggests that higher levels of skill acquisition are associated with improved academic performance, supporting the view that acquiring relevant, practical skills reinforces theoretical knowledge and enhances academic success. The positive correlation implies that an increase in skill acquisition level corresponds to an increase in students' academic achievement scores.

This result confirms a significant, positive correlation between skill acquisition level and academic achievement, emphasizing the value of hands-on skill development for academic advancement in business education. The findings are consistent with earlier studies by Akinbode and Ojo (2019), Chukwuemeka and Okoro (2020), who found that higher skill acquisition levels positively impacted students' academic performance, arguing that practical skills empower students to apply their theoretical knowledge more effectively. Similarly, Nwankwo and Ugochukwu (2021) noted that skill acquisition programs equip students with practical tools that improve their learning outcomes, especially in fields requiring a high level of technical competence.

In contrast, these findings differ from those of Akpan (2019), who found no significant relationship between skill acquisition and academic achievement among students in non-technical disciplines, suggesting that the impact of skill acquisition might vary by field, with business education students particularly benefiting from skill-based learning. Nevertheless, this study underscores the importance of skill acquisition in boosting academic performance, particularly for students in business education who benefit from practical competencies that enhance their understanding and application of classroom knowledge.

Conclusion

This study investigated the relationship between internship duration, skill acquisition level, and the academic achievement of business education students at Federal University Otuoke. The findings reveal a strong positive and significant correlation between both internship duration and skill acquisition level with students' academic performance. These results highlight the critical role that practical, hands-on experience plays in reinforcing theoretical knowledge, thereby improving academic success. Specifically, longer internship durations and higher levels of skill acquisition are associated with enhanced academic achievement, underlining the importance of experiential learning in business education.

The study's findings align with previous research that emphasizes the value of internships in bridging the gap between theoretical knowledge and real-world application. In particular, business education students seem to gain unique advantages from extended internships and skill acquisition programs, which equip them with the tools and practical exposure necessary to excel in their academic pursuits. These findings also contrast with some studies that suggest the benefits of internships and skill acquisition may be discipline-specific, pointing to the need for further research to explore the varying impacts across different fields of study.

In conclusion, the study advocates for the integration of extended internships and skill acquisition programs into business education curricula, as they play an instrumental role in improving academic outcomes. Educational institutions should consider strengthening partnerships with industries to provide students with more opportunities for hands-on experiences, ensuring that students graduate not only with theoretical knowledge but also with practical skills that enhance their academic success and employability.

Recommendations

The following recommendations were put forward:

1. Internship programs for business education students should be extended for one year to allow for more hands-on experience, which can significantly enhance academic performance.
2. Universities should enhance and expand skill acquisition initiatives to provide business education students with comprehensive, hands-on training that directly contributes to their academic success.

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