Enhancing industry collaboration for skills acquisition improvement among business education students in Cross River State Universities

Akeke, M.N.G., Atah, C.A., & Ateb. T. A.

University of Calabar, Nigeria
Corresponding author; Dr. Mercy Akeke
mercyakeke64@gmail.com

DOI: 10.29322/IJSRP.16.02.2026.p17008
https://dx.doi.org/10.29322/IJSRP.16.02.2026.p17008

Paper Received Date: 19th December 2025
Paper Acceptance Date: 18th January 2026
Paper Publication Date: 6th February 2026

Abstract
The study looked at ways to strengthen industry collaboration to improve skills acquisition among business education students in Cross River State universities. The study was conducted in Cross River State, Nigeria using data from three universities. The study's population consisted of thirty-seven (37) lecturers from both federal and state universities in Cross River State, and the research design utilized was a survey. The questionnaire used in this study is the Strategy to Improve Industrial Collaboration to Improve Skills Acquisition of Business Education Students (SIICISABESQ), and the tool was validated by two experts from the faculty of Vocational and Science Education, University of Calabar. Testing the device gives a confidence factor index of 0.91. The mean (X) and standard deviation (SD) were used to answer the research questions, and the hypotheses tested at 0.05 significance level using an independent t-test. The result shows that strategies to enhance industry collaboration would be of enormous benefit to universities and industry when taken into consideration. It was recommended, among others, that there should be a sustainable policy that brings both universities and industry together.

***Key words**: Strategies, Industry, Collaboration, Skills Acquisition and Business Education*

Introduction

Aspiring for increased success, efficient processes, improved communication and innovation to yields organizational success is what leads to collaboration. It is frequently employed when people or organizations join their effort and resources to achieve shared goals and objectives and can simply be referred to as, ‘teamwork’. Collaboration can also be defined as the joining of forces between two or more organizations, institutions, or peoples. It can also be seen as working together constructively for mutual gain is referred to as collaboration. This could be at local, national or international levels and is actually a unique way to improve integrity, as well as the different identities of the organizations. However, there is potential for withdrawal from the partnership if when the need arises. Collaboration is a technique whereby organizations combine risks, obligations, and incentives in order to exchange information, modify actions, share resources, and improve each other's capabilities for mutual benefit and a common goal (Hill and Brian, 2006). Adding to this, Atah, Nwosu, and Bessong (2023), viewed that collaboration is the linking of businesses to develop and maintain a service or product throughout its life, including its final disposition. Collaboration often refers to a group of independent organizations coming together to pool and share resources, knowledge, processes, and risks in the interest of both parties. In other words, there must be a target benefit and a purpose for collaboration before an institution or group works together. Akpan and Umoh (2019) observed that industrial training helps bridge the gap between theoretical knowledge and practical business skills. This is absolutely necessary in bridging the gap between theory and practice in business education.

Business education needs to collaborate just like other businesses to accomplish desired goals because when firms collaborate, employees become better equipped and it plays prominent role in preparing students to become responsible citizens, capable of making the astute economic decisions that will benefit their personal and professional lives (Akeke, Oche, Ushie &Akuegwu, 2022). Embarking on this stimulates sharing resources in common and evenly distribution of information which strengthens each other's weaknesses. Industry collaboration significantly boosts students' employability and practical skills through structured internship and mentorship (Ezeani & Olaitan, 2020). Additionally, Alade & Lawal, (2021) viewed that public-private partnerships have enhanced entrepreneurial and ICT skills among business education students (Alade & Lawal, 2021).

It is incredible and fascinating to note that collaboration originated from creation. According to the Holy Bible, God the Father, who created heaven and earth said, 'let us make'. God worked in oneness with God the Son and God the Holy Spirit (the trinity) to accomplish the goals which informs why our creation is successful and flawless. If God could collaborate with God the Father, God the Son, and God the Holy Spirit, then individuals, groups, and entities ought to comprehend the significance and advantages of cooperation for successful method of instruction and learning. Two are better than one; the Bible states that since people receive a pleasant reward for their work (Ecclesiastes 4:9–12), they will assist one another if they stumble but woe to the person who trips and falls alone with no one to pull him up! And even if a man is able to defeat just one foe, he will face opposition from two more because a threefold cord is difficult to cut. In a nutshell, whenever several entities or groups work together, their efficiency exceeds that of one university (Atah and Ukah, 2021).

Strategies are seen as an organization's long-term direction and scope that generate benefit for the institutions and the organization through the sharing of resources for the achievement of desired goals (Akeke, Atah, and Eleng, 2023). According to Atah and Ukah (2021), a collaborative strategy is when an organization strategically partners with other industries to achieve certain goals. Given the aforementioned, strategic collaboration with industry can enhance business education and accomplish its goal of producing talented graduates to satisfy the expectations of a rapidly expanding society.

Similarly, Uchenna, Okeke-Okonkwo, and Ifi (2018) claim that there is a need for business education programme to necessitate successful cooperation with the relevant industries that the graduates would work in. Although teaching practice and the student industrialized work experience scheme are requirements for students pursuing business education programme in Nigeria, the work experience that these students gain from these programs hardly meets their training requirements, and there is need for university management and industry to collaborate to give the learners more opportunities outside the classroom to be exposed to equipment and machines that are not found in the university environment. Universities and industry can both be involved in partnership to enhance students' skill acquisition and share human and material resources as needed. Additionally, this is done in order to meet the requirements of a post-industrial knowledge economy and to offer a variety of advantage that will boost innovation and improve social and educational outcomes for students and industry collaboration. Adding to the above viewpoint, Water (2016), maintain that partnership between universities and industry enable students to develop their skills effectively for employability. Collaboration could help in addressing some of the facility issues faced by Nigerian universities and give students the opportunity to learn from experts in the industry about advances in knowledge, new business models, and creative educational approaches in a practical way.

Interestingly, there is proof in the corporate world that partnership/collaboration enables partners' perspectives to come together, which at first can lead to creative instructional ideas that are immediately applicable to the corresponding employees. As a result, collaboration on educational programs generates real, immediate advantages for both the educational institution and the industry. Additionally, students are granted access to resources that are expensive for the schools to acquire. In a study carried out by Okwuanaso, & Modebelu, (2021) on assessment of industry collaboration in enhancing skill acquisition among Business Education

students in Nigerian Universitie, the final-year Business Education students and Business Education lecturers in two federal universities in South-West Nigeria were used as population. Area of Study was South-West Nigeria and the statistical tool used was mean, standard deviation, and t-test industry collaboration through internships, mentorship, and curriculum input significantly improves students' practical skills. It was recommended that, Strengthen the linkage between universities and industries through structured internship programs. Revise business education curriculum with active industry participation and that industries should be incentivized to invest in training and mentoring students.

Similarly, Edem, & Ikot, (2022) conducted a study on industry partnership and skill development of Business Education undergraduates in South-South Nigeria. The population of the study was 150 Business Education undergraduates and 30 industry-based supervisors in selected industries. Area of study South-South Nigeria and the Statistical Tool Used was Pearson Product-Moment Correlation and Multiple Regression Analysis. It was discovered that industries that engage with students report higher satisfaction with the preparedness of graduates for employment. Based on the findings, it was recommended among others that joint research and innovation projects between students and industries should be encouraged. Hence, it can be noted that collaboration enhances students' perfection of skills.

The educational achievement of business education students is seriously hampered in Nigeria by the lack of industry-university collaboration. This is because there are few opportunities for students to acquire practical expertise that will help them prepare for future employment, and the only way to afford them this opportunity is when there is a foster relationship between industry and university partnerships (Jackson 2015). Collaboration is significant not only because it is a more effective method of learning but also because it helps one prepare for success, creative thinking, problem-solving, and continuous development in a connected environment that is always changing. Njoku (2006) and Etonyeaku (2009) in Eloghbo and Akeke (2019) maintained that business education has a formidable force and it is an education aimed at the acquisition and equipping individuals with appropriate skills, knowledge, abilities, attitudes, values and competencies that will enable them to be self-employed and self-reliant (entrepreneurship) with emphasis on ICT skills. It is imperative for collaborative effort to be put in place for these practical skills to be acquired successfully. Therefore, it is crucial for universities of higher education to work together with industry to enhance skills acquisition among business education students in Nigerian universities to ensure a successful transformation of the university system and the industry.

Statement of problem

The nation faces a shortage of skilled personnel due to the frequently out-of-date quality of the courses offered at accredited educational institutions. Due to the distance between many college and university organizations and the tools and technologies used in modern industries, technology is moving faster than what universities can now offer in terms of teaching. Higher education graduates consequently lack the prerequisites for productive employment and are unprepared for working independently. In the above bedrock, the researchers therefore, examined strategies to enhance industry collaboration to enhance skill development and skill acquisition among business education students at Cross River State Universities.

The goals of the study

The primary goal of the study was to evaluate approaches to strengthen industry engagement for enhancing skill acquisition among business education students in universities in Cross River State. The investigation aimed to ascertain:

1. The opinions of male and female lecturers on how to improve industry collaboration and help business education students acquire better skills

2. State and Federal universities perceptions of the benefits of industry collaboration among business education students at Cross River State Universities

Research questions

To direct the investigation, the subsequent research questions were posed:

1. How can male and female lecturers improve industry partnerships to help students in business education develop skills?
2. What are the benefits of improved industry partnership for enhancing skill development among business education students?

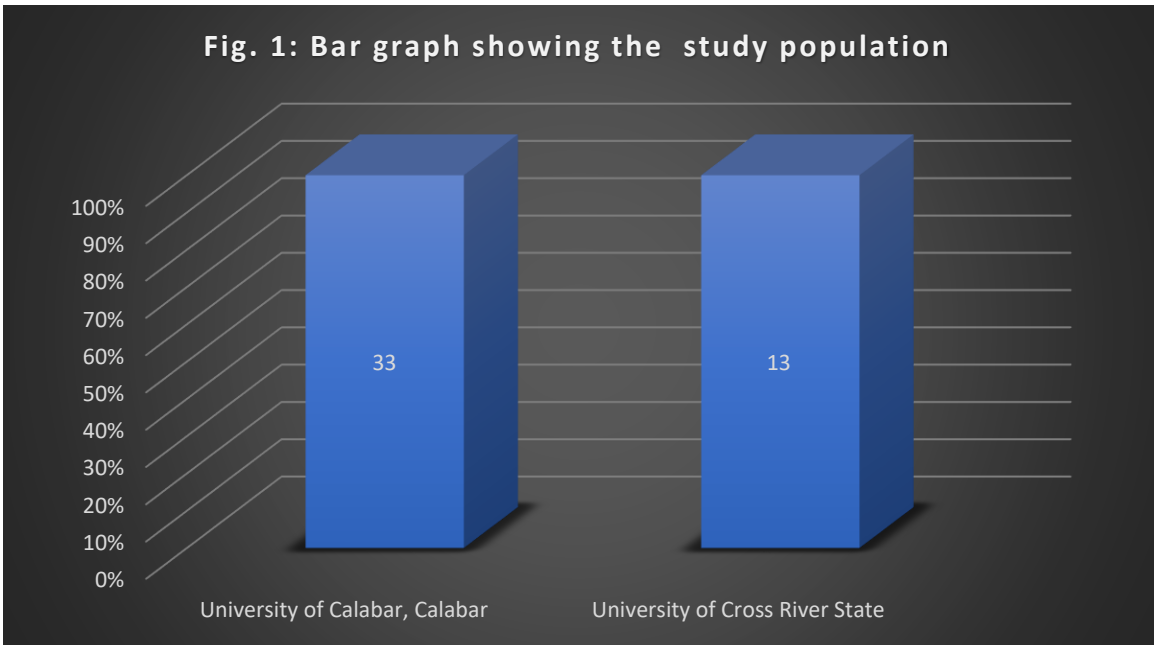
Research Hypothesis

Two hypotheses were raised to guide the study and were tested at the 0.05 level of significance.

1. There is no discernible difference between male and female academics in their assessments of the strategy to enhance industry collaboration for improving skills acquisition among business education students
2. The mean scores of both Federal and State institutions on the beneficial effects of improved industry collaboration for enhancing skill acquisition among business education students do not significantly differ from one another.

Research methodology

In order to improve students' skill development in business education at Cross River State universities, the study looked at measures to improve industry partnerships. Three universities were utilized for the study. Thirty-seven (37) lecturers from federal and state institutions in Cross River State were the population for the study, which used a survey research design. The Strategies to Enhance Industry Collaboration for Improving Skills Acquisition among Business Education Students (SICISABES) questionnaire was utilized in the study, and the instrument was approved by two professionals from the University of Calabar's department of vocational education. The instrument's dependability coefficient index throughout the trial test was 0.91. The study issues were addressed using the mean (X) and standard deviations (SD), and an independent t-test was employed to evaluate the null hypotheses at the 0.05 level of significance. The decision rule is that solutions that improve industry collaboration for boosting skill acquisition in business education are judged pleasant if the mean score is 2.50 or higher and disagreeable if the mean score is less than 2.50. 110 degrees of freedom and the 0.05 threshold of significance were used to test each hypothesis. The population of each university is shown in Figure 1 using a bar graph.



The findings of the study

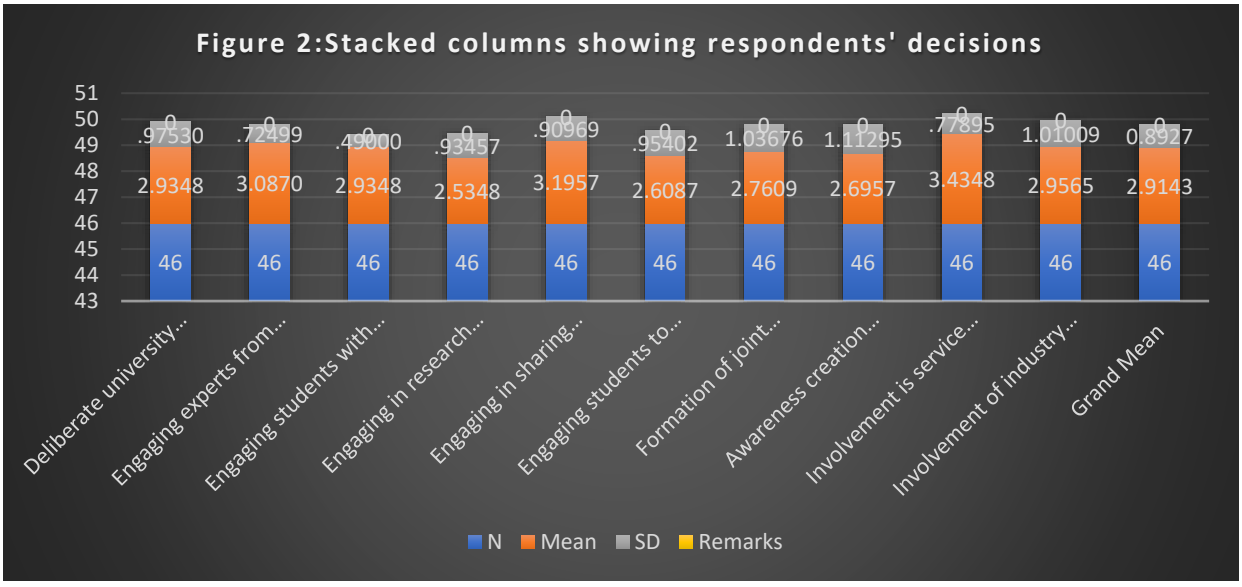
Research question 1

What are the key strategies being used by male and female instructors to improve industry collaboration and the students' development of skills?

Table One: shows the mean score of replies from respondents on strategies to improve business school students' acquisition of skills by fostering industry Collaboration.

S/No.	Items Statement	N	Mean	SD	Remarks
1	Deliberate university policy to accommodate students with industry	46	2.9348	.97530	Agree
2	Engaging experts from industry as resource personnel	46	3.0870	.72499	Agree
3	Engaging students with industry in internship programs	46	2.9348	.49000	Agree
4	Engaging in research and knowledge sharing through workshops	46	2.5348	.93457	Agree
5	Engaging in sharing facilities and equipment with industry	46	3.1957	.90969	Agree
6	Engaging students to visit industry during an excursion	46	2.6087	.95402	Agree
7	Formation of joint ventures between universities and industry	46	2.7609	1.03676	Agree
8	Awareness creation about the benefits of collaboration	46	2.6957	1.11295	Agree
9	Involvement is service delivery between the university and industry	46	3.4348	.77895	Agree
10	Involvement of industry experts to speak to students occasionally	46	2.9565	1.01009	Agree
	Grand Mean	**46**	**2.9143**	**0.8927**	**Agree**

All of the items suggest ways to improve industry collaboration for better skill acquisition among business education students, according to the data in Table 1, above. According to the analysis, items 1–10 received a mean score between 2.5348 and 3.4348, with a grand mean of 2.9143, which is more than the 2.50 cutoff point. This demonstrates that teachers in business education in Cross Rivers State, Nigeria, had the following beliefs: industry collaboration enhanced university students' skills acquisition for job employability after graduation. The standard deviation of 0.8927 is within the same range, indicating that respondents' mean scores are homogeneous. The result is further express in figure 2 using stacked column graph.



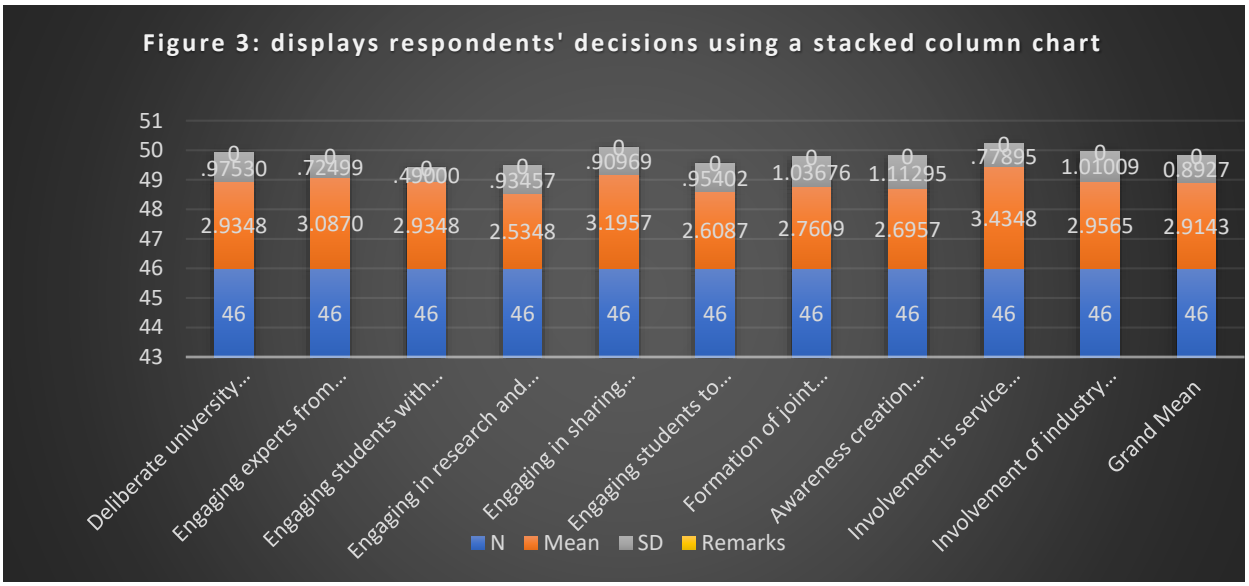
Research question two

What benefits do federal and state university lecturers in Cross River State see in enhancing industry partnership to improve students' skill development?

Table 2: Average response rating on benefits for enhance industry-Collaboration for improving skills acquisition as perceived by State andFederal universities lecturers

S/No.	Items Statement	N	Mean	SD	Remarks
11	New idea generation	46	2.8696	.93354	Agree
12	Increased job productivity and skill acquisition among students and staff	46	2.9348	.95224	Agree
13	Establishing avenues for sponsoring educational programs	46	3.3261	.66848	Agree
14	Creating opportunities for job employment among students	46	2.8261	.60752	Agree
15	Establishing opportunities for relationships among the collaborators	46	3.3478	.48154	Agree
16	Fostering cooperative problem-solving among collaborators	46	2.5043	.83983	Agree
17	Increase in knowledge among collaborators	46	3.2826	.45524	Agree
18	Creating opportunities to enhance students' skill acquisition	46	3.0652	.85381	Agree
19	Opportunity to be involved in community development	46	3.0217	1.16408	Agree
20	Possibility of fostering social skills	46	3.2391	.89901	Agree
	Grand Mean	**46**	**3.0414**	**0.7855**	**Agree**

The findings in Table 2 show that item11–20 received a mean score between 2.5043 and 3.2391, alongside an average of 3.0414, it exceeds the standard mean of 2.50, which implies that the respondents agreed that there are*benefits to* industry collaboration to enhance skills acquisition among business education students as perceived by state and state teachers at universities in Cross River State. The standard deviation of 0.7855 is within the range of agreement, indicating that respondents' mean scores are homogeneous.The results are shown in the figure 3 using a stacked column chart.



Hypothesis one

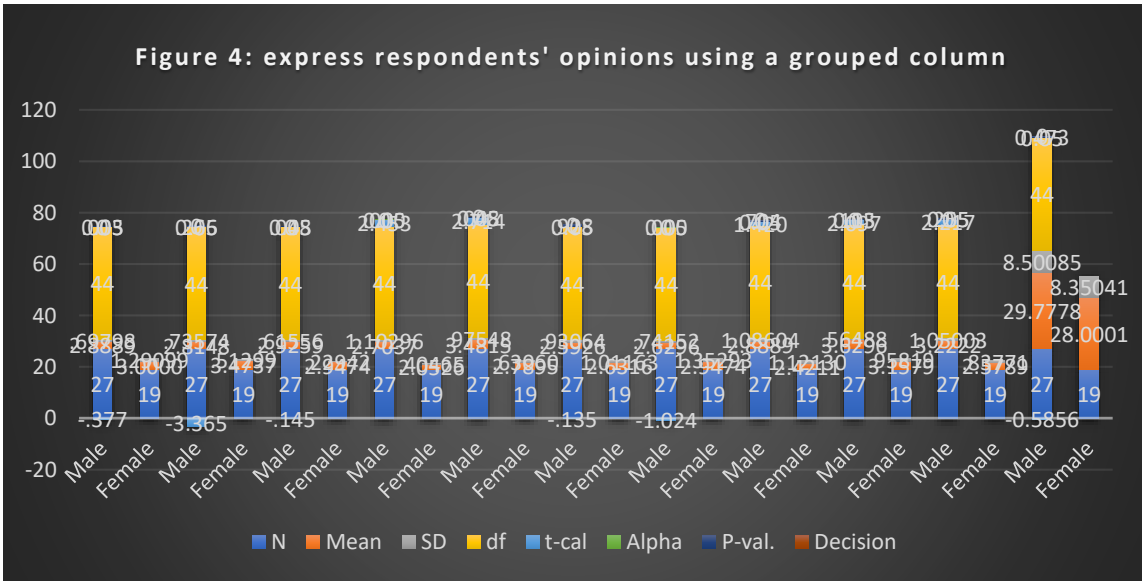
There is no discernible disparity between male
and female university lecturers' evaluations of collaboration between industries strategies for enhancing skill development among business education students.

Table 3 shows the results of an independent t-test on the mean ratings obtained from participants for male and female lecturers on industry collaboration strategies that will help students in business education develop their skills.

S/No.	Respondent' Category	N	Mean	SD	df	t-cal.	Alpha	P-val.	Decision

1	Male	27	2.8889	.69798	44	-.377	0.05	.003	Accepted
	Female	19	3.0000	1.29099					
2	Male	27	2.8148	.73574	44	-3.365	0.05	.266	Accepted
	Female	19	3.4737	.51299					
3	Male	27	2.9259	.61556	44	-.145	0.05	.048	Accepted
	Female	19	2.9474	.22942					
4	Male	27	2.7037	1.10296	44	2.453	0.05	.000	Accepted
	Female	19	2.0526	.40465					
5	Male	27	3.4815	.97548	44	2.714	0.05	.048	Accepted
	Female	19	2.7895	.63060					
6	Male	27	2.5926	.93064	44	-.135	0.05	.928	Accepted
	Female	19	2.6316	1.01163					
7	Male	27	2.6296	.74152	44	-1.024	0.05	.000	Accepted
	Female	19	2.9474	1.35293					
8	Male	27	2.8889	1.08604	44	1.420	0.05	.704	Accepted
	Female	19	2.4211	1.12130					
9	Male	27	3.6296	.56488	44	2.097	0.05	.113	Accepted
	Female	19	3.1579	.95819					
10	Male	27	3.2222	1.05003	44	2.217	0.05	.255	Accepted
	Female	19	2.5789	.83771					
	Male	**27**	**29.7778**	**8.50085**	**44**	**-0.5856**	**0.05**	**0.473**	**Accepted**
	Female	**19**	**28.0001**	**8.35041**					

The finding in Table 3 is that -0.5856 is below the minimum threshold of 0.05 of evidence at 44 degree of independence and with a significance level of 0.473.This indicates that there was not a significant distinction between male and female university academic assessments of the best ways to increase industry collaboration and help business education students develop their abilities. The research hypothesis is therefore accepted. figure 4 shows the findings using clustered column.



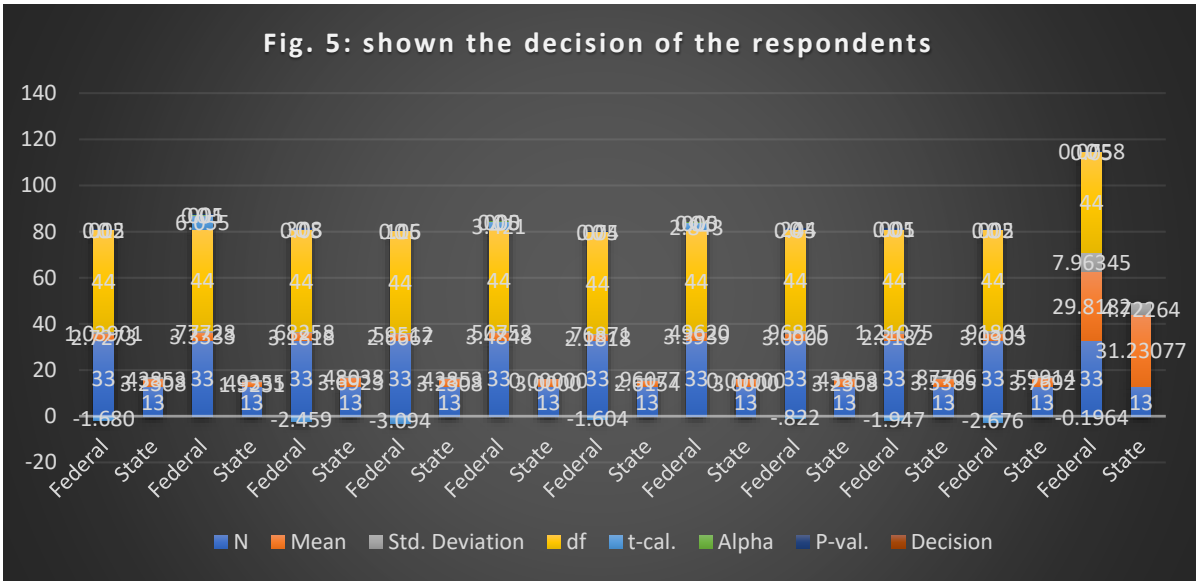
Hypothesis two

There is no discernible difference between both federal and state universities on the mean ratings on the benefits of enhance industry collaboration for improving skills acquisition among business education students

Table 4: Independents t-test on the mean rating of Federal and State Universities on the benfits of enhence industry collaboration for improving skills acquisition among business education students

Items	respondents' Category	N	Mean	Std. Deviation	df	t-cal.	Alpha	P-val.	Decision
11	Federal	33	2.7273	1.03901	44	-1.680	0.05	.012	Accepted
	State	13	3.2308	.43853					
12	Federal	33	3.3333	.77728	44	6.055	0.05	.001	Accepted
	State	13	1.9231	.49355					
13	Federal	33	3.1818	.68258	44	-2.459	0.05	.308	Accepted
	State	13	3.6923	.48038					
14	Federal	33	2.6667	.59512	44	-3.094	0.05	.116	Accepted
	State	13	3.2308	.43853					
15	Federal	33	3.4848	.50752	44	3.421	0.05	.000	Accepted
	State	13	3.0000	0.00000					
16	Federal	33	2.1818	.76871	44	-1.604	0.05	.074	Accepted
	State	13	2.6154	.96077					
17	Federal	33	3.3939	.49620	44	2.843	0.05	.000	Accepted
	State	13	3.0000	0.00000					
18	Federal	33	3.0000	.96825	44	-.822	0.05	.244	Accepted
	State	13	3.2308	.43853					
19	Federal	33	2.8182	1.21075	44	-1.947	0.05	.001	Accepted
	State	13	3.5385	.87706					
20	Federal	33	3.0303	.91804	44	-2.676	0.05	.002	Accepted
	State	13	3.7692	.59914					
	Federal	**33**	**29.8182**	**7.96345**	**44**	**-0.196**	**0.05**	**0.0758**	**Accepted**
	State	**13**	**31.23077**	**4.72264**					

The data in Table 4 revealed that, at the 0.05 mark of significance, the t-cal. value of -0.196 is significantly lower than the P-val. of 0.0758 at 44 degrees of freedom. This indicates that there are no significant variations between Federal and State institutions' mean ratings of the benefits of improved industry collaboration for enhancing students' skill levels. In this note, therefore, the hypothesis was accepted. Clustered chart shown the result in fig. 5.



Decision of the findings

The study revealed that the various strategies to enhance industry partnerships to help business education students develop the skills they need, such as deliberate university policy to accommodate students with industry, Engaging experts from industry as resource personnel, Engaging students with industry in internship programs, engaging in research and knowledge sharing through workshops, engaging in facility and equipment sharing with industry, engaging students to visit industry during an excursion, forming joint ventures between universities and industry, Awareness creation about the benefits of collaboration, Involvement is service delivery between the university and industry, and the occasional involvement of industry experts to speak to students is a strategy to enhance university and industry collaboration. This result agrees with Atah and Ukah (2021). Their research showed that collaboration between universities and other industries would change the way that educational institutions would work toward their predetermined objectives.

This may be due to the fact that collaboration exposes students of business education to industry and provides them with access to equipment and facilities that are not available in learning environments, which may aid in the development of acquisition skills among the university's students. The result from the research hypothesis states that the mean score for male and female lecturers on the strategies does not significantly differ from one another to enhance industry collaboration for improving Business education students at Cross River State's universities are developing unique skills. This demonstrates that the null hypothesis is true. This result is in consonance with Atah and Ukah's (2021) findings, which opine that business education should partner with industry to give students greater chances for practical employment experience and to acclimate them to the workplace, and that business education should be equally involved in international collaborations to enhance the quality and worth of the educational system in Nigerian universities.

The study revealed that the benefits of industry collaboration, such as new idea generation, increased job productivity, and skill acquisition among students, avenues for sponsoring educational programs, opportunities for job employment among students, and opportunities for relationships among the collaborators, Fostering cooperative problem-solving among collaborators, increasing knowledge among collaborators, Creating opportunities to enhance students' skill acquisition, the opportunity to be involved in

community development, and the possibility of fostering social skills enhance the improvement in skill acquisition among business education students, as perceived by state and federal university lecturers in Cross River State.

The results concur with those of Emeasoba and Ezeani (2018), who found that there are advantages to university-industry collaboration if the chance is not taken for granted. If university graduates had the chance to learn from and be instructed by subject-matter experts in their field, they could be able to find employment and forge new friendships for future transactions. The outcomes of the research hypothesis showed the average ratings of federal and state universities on the benefits of enhanced industry collaboration for improving the development of skills among the university students in the study area. The findings imply that the idea of a null hypothesis is accepted.

Concusion

Based on the research results, it was determined that various strategies were urgently needed, including intentional university policy to accommodate students with industry, hiring industry experts as resource personnel, involving students in internship programs with industry, participating in research and knowledge sharing through workshops, sharing facilities and equipment with industry, and encouraging students to visit industry during an excursion. In order to improve the acquisition of skills for employability or self-reliance among students, it is essential that universities and industry collaborate to share resources. This is because the university environment today may not have the necessary facilities and equipment to instill the appropriate knowledge in the students, and the industry could help in this manner.

Recommendations

The following recommendation were made:

1. In order to develop regeneration programme, there should be opportunities whereby universities and industry work together to enhance skill development in students.
2. There should be a sustainable policy that brings together both universities and industry.
3. Any parties engaging in collaboration should ensure there is trustworthiness among the collaborators.

REFERENCES

Akeke, MNG, Atah, CA & Eleng, SN (2023). Strategies for reducing insecurity in Nigeria through business education training. *Contemporary Journal of Education and Development. 3 (1*): 1-10 https://cirdjournal.com/index.php/cjed/article/view/1050

Akeke, MNG, Oche, PE, Akuegwu, BA & Ushie, PU (2022). Entrepreneurial skills for business education graduates' employability in Cross river state, Nigeria. *Educational Research and Reviews. 17(4): 138-144.*

Akpan, EJ, & Umoh, AE (2019). Assessment of industrial training programme in bridging skill gaps in business education students. *African Journal of Educational Research and Development, 11(2):* 89–99.

Alade, OA, & Lawal, TT (2021). *Impact of public-private partnership on entrepreneurial skill development among business education students*. Journal of Educational Innovation and Practice, *6(3:,* 142–153.

Atah, CA & Ukah, TA (2021). Synergy and collaboration among business educators in Universities in Cross River State, Nigeria. *International Journal of Education and Evaluation, 7 (3):* 149-159

Atah, CA, Nwosu, B, & Bessong, E (2022). Students variables and the development of employability mastery on undergraduates business education students in Federal Universities in Southern Nigeria. *Mediterranean Journal of Social Sciences, 13*(6): 57-67. DOI https://doi.org/10.36941/mjss-2022-0048.

Edem, MJ, & Ikot, AS (2022). Industry Partnership and Skill Development of Business Education Undergraduates in South-South Nigeria. *International Journal of Educational Research and Development, 14(2)*: 85–97.

Elogbo, EE & Akeke, MNG, (2019). Extent of utilization of world wide web and e-mail in instructional delivery of business education in federal universities in South-South, *Nigeria, Nigerian Journal of Business Education (NIGJBED), 6 (1),*:217-220.

Emeasoba, NC & Ezeani, AN (2018). collaborative research in entrepreneurship programme for global competitiveness. *Association of Business Educators of Nigeria Conference Proceedings, 5(1)*: 723-733.

Ezeani, NS, & Olaitan, NI (2020). Industry-academic partnership and employability skills of business education students in Nigerian universities. *Nigerian Journal of Business and Management Education, 9(1):* 55–65.

Jackson, D (2015). Employability skill development in work-integrated learning: Barrier and best practice. Studies in Higher Education. Https://doi.or/10.1080/03075079.2013.842221

Okwuanaso, SI., & Modebelu, MN(2021). Assessment of Industry Collaboration in Enhancing Skill Acquisition among Business Education Students in Nigerian Universities. Nigerian *Journal of Business Education, 8(1):* 112–121.

Tsignab, A (2013). Business school-industries linkage. *International Journal of Science and Research (IJSR), 6(14*): 576-579.

Uchenu, CA., Okeke-Okonkwo, C1 & Ifi, CC (2018). Improving business education Programme through effective school-industry collaboration for national building. *Association of Business Educators of Nigeria Conference proceedings*. *5(1):* 709-722

Waters, JJ (2016). Revamping academics incentive to engage in university-industry collaboration. *International Journal of Business and Social science, 2 (4):* 26-33