

## DEVELOPING ENTREPRENEURIAL SKILLS AMONG STUDENTS THROUGH SCHOLARSHIP SCHEME AS AN EXCHANGE PROGRAMME FOR GLOBAL KNOWLEDGE AND TECHNOLOGY TRANSFER IN UNIVERSITIES

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### Abstract

The study investigated the various ways of developing entrepreneurial skills among students through scholarship scheme as an exchange programme for global knowledge and technology transfer in Universities in South East, Nigeria. Three research questions and three hypotheses guided the study. The study adopted a descriptive survey design with a population of five Federal Universities in South-South, Nigeria comprising 5,978 administrative and academic staff in the Faculties of Education and Social Sciences. A sample size of 750 administrative and academic staff was drawn from the universities using stratified random sampling technique. This included 170 administrative staff and 580 academic staff. The instrument used in the study was questionnaire tagged “Development of Entrepreneurial Skills among Undergraduate Students for Global Knowledge and Technology Transfer Questionnaire (DESUSGKTTQ)” developed by the researchers. The questionnaire was validated and the reliability yielded an index of 0.73. Mean scores, standard deviation and rank order scores were used as the statistical tools to answer the research questions, while t-test was used to test the hypotheses at a 0.05 alpha significant level. The findings revealed among others that, scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for self-development, self-reliance, be creative, innovative and acquire soft skills for global knowledge competitiveness and technology transfer. It equips the students with the entrepreneurial intentions, knowledge and skills needed for global competitiveness through technology transfer. The study revealed that, the outcome of exchange programmes through scholarship schemes on students’ entrepreneurial skill development in universities include: development of entrepreneurial mindset, practical experience and innovation, enhancement of soft-skills, networking and global perspectives, and increased self-efficacy. The study equally revealed that, scholarship scheme on entrepreneurship education will aid the students with the needed skills for societal development, empower them with understanding and capacity for the pursuit of entrepreneurial behaviour, as well as skills and attributes in widely different contexts. In essence, entrepreneurship education provides the students with knowledge, skills, attitude, ideas and motivation to encourage entrepreneurial success in variety of settings. Based on the findings, recommendations were made.

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**Keywords:** Entrepreneurial skills, university students, scholarship scheme, exchange programme, global knowledge, technology transfer

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### Introduction

In today’s world, knowledge is valued as the determinant driver of economic growth, development and competitiveness, which is transferable in educational institutions. Knowledge has turned to be a resource that drives the performance of universities today. Universities are institutions of higher learning where graduates of several disciplines are equipped with knowledge and skills by the lecturers through research for improved productivity (Ogaku, Nwabueze & Ezepe, 2025). Hence, knowledge is the awareness or perception of something, an object, event or phenomenon that develop the mind-set for improved productivity. Knowledge is

all about the understanding and skills obtained through experience or course of study in educational institutions for quality improvement (Nwabueze & Chukwuji, 2024). Hence, knowledge is described as facts, information, and skills acquired through experience or education from theoretical to practical point of view, which can be transferred to people through technology.

Knowledge also refers to the insights, interpretations, and practical know-how that people acquire to develop positively in life. It is the insights and intuitions gained through experience that guides a given behaviour or outcome for quality improvement. Kianto, Sáenz and Aramburu (2017) defined knowledge as a set of core competencies which organizations have developed to improve performance. Edikpa, Nwabueze and Iremeka (2018) stated that, knowledge is all about knowing and understanding concepts, becoming familiar with the concepts to be fully equipped with new knowledge, explicit skills, innovative ideas, and creative facts through academic instruction for personal growth and societal development. Knowledge could be seen as the implicit and explicit ideas referring to the ‘practical skills’ or ‘knowledge based on theories’ on academic concepts for individual and group academic improvement (Ogakuwu, Nwabueze & Ezepeue, 2025). Knowledge is an instrument designed to acquire relevant skills based on theory and practice, which can be gained within the four walls of educational institutions when properly managed (Madumere-Obike, Ukala & Nwabueze, 2015). Knowledge is important because it influences the decision making ability of any organization in transforming the world into knowledge-based economy.

As the world is transforming into knowledge-based economy, education has become the best platform to produce a competitive nation for global competitiveness. The resource-based views arbitrate that knowledge is the best source to be manipulated in order to attain diversity or innovation of teaching and learning activities in educational institutions (Al-Husseini, 2015; Supermane & Tahir, 2017). Thus, the universities are playing prominent role in managing their scarce knowledge and expertise to transform the educational activities through knowledge exchange and technology transfer. In spite of just delivering lessons, university lecturers in the 21<sup>st</sup> century need to be more responsible on assessing and enriching the existing knowledge to create new ideas for the delivery of transferable skills, innovative and creative thinking to the students (Igoni & Nwabueze, 2022). Therefore, an effective effort on knowledge creation and transfer are much needed as the foundation in transforming educational system along with technology and globalization. Hence, the university education is the major source of providing the required knowledge that will help generate and accelerate knowledge flow for modern-based economy through technology transfer. The general growth and development of any given nation are functions of the quality of its human resources produced, mainly by the system through proper knowledge creation, building, sharing and transfer for global competitiveness.

The concern for entrepreneurship education in universities in Nigeria is most desirable for quality output as it is the nation’s hope for national development through scientific and technology transfer. Technology transfer refers to the process of moving scientific discoveries, knowledge, or inventions from research institutions to the commercial sector (Kobylińska & Irimia-Diequez, 2023). According to Oragwu and Nwabueze (2014), technology transfer (TT) refers to the process of conveying results stemming from scientific and technological research to the market place and to wider society, along with associated skills and procedures, which can be an intrinsic part of the technological innovation process. Technology transfer is a complex process that involves many non-scientific and non-technological factors, and many different stakeholders (Noor, Halimah, Siti, Muslimin & Sharmaine, 2020). Technology transfer

is the process by which new inventions and other innovations created in those institutions' laboratories are turned into products and commercialized.

Technology transfer covers the complex value chain linking research to its eventual societal deployment. This begins with the discovery of novel technologies at research institutions, followed by the disclosure, evaluation and protection of these technologies (Trzmielak, Grzegorzczak-Nuttall & Gregor, 2025). Technology transfer helps to ensure that scientific and technological developments are accessible to a wider range of users who can then further develop and exploit the technology into new products, processes, applications, materials, or services, especially through scholarship scheme as exchange programme. This process allows breakthroughs made in university laboratories to be developed into real-world applications, serving as a crucial bridge between academic research and industry innovation through scholarship scheme as exchange programme.

Scholarship schemes as exchange programmes fully or partially fund students to study abroad for a semester or a year while maintaining enrollment at their home university. These opportunities provide cultural immersion, academic development, and global networking without disrupting ones' ongoing degree programme at their home universities (Nwabueze & Chukwuji, 2024). These programmes involve studying abroad in a different country, providing students with a global perspective and the opportunity to experience a completely new culture and educational system through the promotion of cross-cultural understanding and international friendships. (Nwabueze, Madu & Nweke, 2020). Scholarship exchange programmes in Nigeria combine financial support with cross-cultural academic or professional mobility for skill acquisition, knowledge creation and building.

Scholarship exchange programmes act as major catalysts for entrepreneurial skill development by yielding higher self-confidence, cross-cultural resilience and practical startup competencies for global competitiveness. They drive global knowledge and technology transfer by equipping students with the tools to innovate, build international professional networks and translate global practices into impactful local ventures (Emma-Ogola & Nwabueze, 2021). Scholarship schemes as exchange programmes accelerate entrepreneurial development by immersing students in diverse, innovation-driven ecosystems to equip them with global knowledge and technology advancements. This exposure equips them with the global competencies, cross-border networking, and technical know-how necessary to drive transnational business growth and facilitate technological innovation in their home countries. Developing entrepreneurial skills through scholarship schemes and exchange programmes bridges the gap between global knowledge and technology transfer in real-world business. The development of these entrepreneurial opportunities offers financial support, cross-border networking, and hands-on incubation through transforming theoretical business concepts into practical entrepreneurship-ready programmes.

Developing entrepreneurial skills involves cultivating critical competencies such as: financial literacy, strategic planning, resilience and adaptability, which can empower a student to turn innovative ideas into actionable values through exchange programmes. University students can rapidly build this foundation through continuous learning, experiential practice, and active engagement in scholarship schemes and exchange programmes for global knowledge and technology transfer into the real business world. Entrepreneurial skills are the practical abilities required to identify opportunities and turn innovative ideas into actionable value, and sustainably manage a business for global competitiveness (Nwabueze, Madu & Nweke, 2020). They encompass a blend of business management, strategic thinking and resilience, which are highly

valuable whether one is launching a startup or innovating within an existing organization (Madumere-Obike, Okeke & Nwabueze, 2013). Successful technology transfer in universities requires a blend of commercial and operational skills to bridge the gap between academic research and the market through entrepreneurship behaviour of the students.

Entrepreneurial skills include: creativity, innovation and risk-taking as well as the ability to plan and manage projects to achieve stated objectives of starting-up a business. Entrepreneurial skills are vital in promoting innovation, competitiveness and economic growth. According to Gatilab (2026), the essential skills for entrepreneurs may include: communication skill which helps the entrepreneurial ideas and build trust; decision-making skill for supporting timely business choices; financial awareness to help manage money wisely; problem-solving skill for handling unexpected issues; leadership skill for keeping teams aligned and motivated; adaptability skill for helping businesses respond to change; and strategic thinking skill for guiding long-term direction. Entrepreneurs with communication skill spend a lot of time explaining ideas, negotiating and building relationships; present ideas clearly to customers and partners; listen carefully to feedback and suggestions; and build stronger professional relationships (Nwabueze & Egenti, 2020). Those with decision-making skill compare options before taking action; make practical choices with limited information; and stay confident when making business decisions. Those with the skill of financial awareness track income, expenses and profits; set realistic pricing and budgets; and review basic financial reports regularly. Entrepreneurs with problem-solving skill identify the cause of problems quickly; look for practical and workable solutions; and learn from mistakes and adjust processes. According to Nwabueze, Chukwuji and Ugwoezuonu (2018), entrepreneurs with leadership skills motivate team members toward shared goals; delegate tasks based on strengths; and maintain a supportive work environment. Entrepreneurs need to possess adaptability skill to enable them set long-term goals for growth; look for new opportunities in the market; and prioritize actions that support future success.

Starting-up a business today means working in a fast-moving environment through global knowledge and technology for a more competitive, and customer relationship. Because of this, students need to understand the skills needed by entrepreneurs to make practical decisions and handle uncertainty while growing a business. University students are to be digitally aware of the basic knowledge of digital tools and innovative technologies through scholarship schemes as exchange programmes. Starting a business takes practical knowledge and innovative technologies to develop entrepreneurial skills through scholarship schemes as exchange programmes in universities.

### **Statement of the Problem**

The application of knowledge and technology transfer in entrepreneurship education programme in universities is very low which could be as a result of non-development of entrepreneurial skills among academic staff and students. The non-development of these skills could be as a result of non-involvement of the students in exchange programmes in universities due to poor finance. The students seen not to be given scholarship schemes to get involved in exchange programmes to acquire the needed entrepreneurial skills for global knowledge and technology transfer in universities in South East, Nigeria. Therefore, the researchers investigate the development of entrepreneurial skills among students through scholarship scheme as an exchange programme for global knowledge and technology transfer in Universities in South East, Nigeria.

### **Purpose of the Study**

The aim of this study was to investigate the development of entrepreneurial skills among students through scholarship scheme as an exchange programme for global knowledge and technology transfer in Universities in South East, Nigeria. Specifically, the objectives were to:

1. find out the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities;
2. ascertain how scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer in universities; and
3. find out the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities.

### **Research Questions**

The following research questions guided the study.

1. What are the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities?
2. How can scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer in universities?
3. What is the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities?

### **Hypotheses**

The following hypotheses were tested at 0.05 level of significance.

1. There is no significant difference between the mean scores of administrative staff and academic staff on the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities.
2. There is no significant difference between the mean scores of administrative staff and academic staff on the ways scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer in universities.
3. There is no significant difference between the mean scores of administrative staff and academic staff on the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities.

### **Methods**

The study adopted a descriptive survey design. The population comprised 2,565 administrative and academic staff in the Faculty of Education of the five Federal Universities in South-East, Nigeria. This included 405 administrative staff (Deans, Associate Deans, Directors, Heads of Departments, and Unit Heads) and 2,160 academic staff. A sample size of 450 administrative and academic staff was drawn using stratified random sampling technique from the population representing 17.5%. This included 150 administrative staff and 300 academic staff from the five universities in South East, Nigeria. The instrument used for data collection was questionnaire tagged "Developing Entrepreneurial Skills for Global Knowledge and Technology Transfer Questionnaire (DESGKTTQ)" developed by the researchers. The questionnaire had two sections, section A & B. Section A consisted of demographic information of respondents such as



status, while section B consisted of questionnaire items designed to answer the research questions and test the hypotheses. The questionnaire was validated by three specialists from the Faculty of Education, University of Nigeria, Nsukka and the reliability tested using Crombach Alpha Method in determining the internal consistency, which yielded a reliability index of 0.89. The copies of the instrument were administered to respondents, and all were filled and collected for data analysis. Mean and standard deviation were used to answer the research questions and t-test was used to test the hypotheses at a 0.05 level of significance.

## Results

**Research Question One:** What are the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities?

**Table 1: Mean and Standard Deviation Scores of administrative Staff and academic staff on the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities**

| S/<br>N                      | Entrepreneurial skills needed by students for the development of global knowledge and technology transfer include: | Admin. Staff (150) |             | Acad. Staff (300) |             | Decision      |
|------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------|-------------|-------------------|-------------|---------------|
|                              |                                                                                                                    | Mea                | St.D        | Mea               | St.D        |               |
|                              |                                                                                                                    | n                  |             | n                 |             |               |
| 1                            | Intellectual property (IP) management                                                                              | 3.13               | 0.72        | 3.21              | 0.46        | Agreed        |
| 2                            | Decision-making                                                                                                    | 3.38               | 0.66        | 3.30              | 0.46        | Agreed        |
| 3                            | Leadership and technology translation                                                                              | 3.13               | 0.72        | 3.33              | 0.46        | Agreed        |
| 4                            | Problem-solving                                                                                                    | 3.06               | 0.74        | 3.33              | 0.46        | Agreed        |
| 5                            | Negotiation and adaptability                                                                                       | 3.19               | 0.70        | 3.38              | 0.45        | Agreed        |
| 6                            | Financial literacy                                                                                                 | 3.44               | 0.64        | 3.35              | 0.45        | Agreed        |
| 7                            | Strategic thinking                                                                                                 | 3.25               | 0.69        | 3.37              | 0.45        | Agreed        |
| 8                            | Digital literacy                                                                                                   | 3.19               | 0.70        | 3.35              | 0.46        | Agreed        |
| 9                            | Creativity and innovation                                                                                          | 3.44               | 0.64        | 3.41              | 0.45        | Agreed        |
| 10                           | Risk-taking and trust                                                                                              | 3.06               | 0.74        | 3.21              | 0.46        | Agreed        |
| 11                           | Communication                                                                                                      | 3.38               | 0.66        | 3.26              | 0.46        | Agreed        |
| <b>Aggregate Mean scores</b> |                                                                                                                    | <b>3.24</b>        | <b>0.69</b> | <b>3.32</b>       | <b>0.46</b> | <b>Agreed</b> |

Decision Rule: Mean score of 2.50 and above = Agree; Below 2.50 = Disagree

Data on Table 1 present the mean and standard deviation scores of administrative Staff and academic staff on the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities. The respondents agreed on all the items presented in the table with high mean scores above the mean criterion of 2.50. The aggregate mean scores of 3.24 and 3.32 for Administrative Staff and Academic Staff indicated that, they agreed on the items in the Table. Therefore, the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities include: intellectual property (IP) management, decision-making, leadership and technology translation, problem-solving, negotiation and adaptability, financial literacy, strategic thinking, digital literacy, creativity and innovation, risk-taking and trust, and communication skills.

**Research Question Two:** How can scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer in universities?

**Table 2: Mean and Standard Deviation Scores of administrative Staff and academic staff on the ways scholarship schemes through exchange programmes aid students to develop the**

entrepreneurial skills needed for global knowledge and technology transfer in universities

| S/<br>N                      | Ways scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer include: | Admin.<br>Staff<br>(150)<br>Mea<br>n | St.<br>D    | Acad.<br>Staff<br>(300)<br>Mea<br>n | St.<br>D    | Decisi<br>on  |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------|-------------------------------------|-------------|---------------|
| 1                            | Developing innovation-driven ecosystems to equip students with global knowledge and technology advancements                                                          | 3.00                                 | 0.75        | 3.44                                | 0.45        | Agreed        |
| 2                            | Maintaining cross-border networking among the students to drive transnational business growth                                                                        | 3.06                                 | 0.74        | 3.44                                | 0.45        | Agreed        |
| 3                            | Equipping the students with technical know-how necessary to facilitate technological innovation in their home countries                                              | 3.44                                 | 0.64        | 3.42                                | 0.45        | Agreed        |
| 4                            | Allowing the students to build international professional networks for global competitiveness                                                                        | 3.63                                 | 0.59        | 3.33                                | 0.46        | Agreed        |
| 5                            | Acquiring access to innovation hubs and practical training                                                                                                           | 3.50                                 | 0.63        | 3.42                                | 0.45        | Agreed        |
| 6                            | Developing global knowledge among students for technology transfer                                                                                                   | 3.50                                 | 0.63        | 3.40                                | 0.45        | Agreed        |
| 7                            | Assisting the students live and study in a foreign environment to build vital "soft" entrepreneurial skills                                                          | 3.38                                 | 0.64        | 3.54                                | 0.44        | Agreed        |
| 8                            | Equipping the students with the entrepreneurial intentions through global knowledge competitiveness for technology transfer                                          | 3.69                                 | 0.58        | 3.45                                | 0.45        | Agreed        |
| 9                            | Creating new ideas for the delivery of transferable entrepreneurial skills for knowledge building                                                                    | 3.56                                 | 0.61        | 3.47                                | 0.45        | Agreed        |
| <b>Aggregate Mean scores</b> |                                                                                                                                                                      | <b>3.42</b>                          | <b>0.65</b> | <b>3.43</b>                         | <b>0.45</b> | <b>Agreed</b> |

Data on Table 2 present the mean and standard deviation scores of Administrative Staff and Academic Staff on the ways scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer in universities. The respondents agreed on all the items presented in the table with high mean scores above the mean criterion of 2.50. The aggregate mean scores of 3.42 and 3.43 for Administrative Staff and Academic Staff indicated that, they agreed on the items in the Table. Therefore, the ways scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer in universities include: developing innovation-driven ecosystems to equip students with global knowledge and technology advancements; maintaining cross-border networking among the students to drive transnational business growth; equipping the students with technical know-how necessary to facilitate technological innovation in their home countries; allowing the students to build international professional networks for global competitiveness; acquiring access to innovation hubs and practical training; developing global knowledge among students for technology transfer; assisting the students live and study in a foreign environment to build vital "soft" entrepreneurial skills; equipping the students with the entrepreneurial intentions through global

knowledge competitiveness for technology transfer; and creating new ideas for the delivery of transferable entrepreneurial skills for knowledge building.

**Research Question Three:** What is the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities?

**Table 3: Mean and Standard Deviation Scores of administrative Staff and academic staff on the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities**

| S/<br>N                      | The outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development include:                              | Admin. Staff (150) |             | Acad. Staff (300) |             | Decision      |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------|-------------------|-------------|---------------|
|                              |                                                                                                                                                     | Mea<br>n           | St.<br>D    | Mea<br>n          | St.<br>D    |               |
| 1                            | Development of entrepreneurial mindset                                                                                                              | 3.38               | 0.66        | 3.47              | 0.45        | Agreed        |
| 2                            | Development of practical experience and innovation                                                                                                  | 3.19               | 0.70        | 3.46              | 0.45        | Agreed        |
| 3                            | Enhancement of soft-skills                                                                                                                          | 3.31               | 0.67        | 3.44              | 0.45        | Agreed        |
| 4                            | Networking for global perspectives                                                                                                                  | 3.50               | 0.63        | 3.33              | 0.46        | Agreed        |
| 5                            | Increased self-efficacy                                                                                                                             | 3.50               | 0.63        | 3.42              | 0.45        | Agreed        |
| 6                            | Empower students with the understanding of entrepreneurial behaviour                                                                                | 3.38               | 0.66        | 3.54              | 0.44        | Agreed        |
| 7                            | Empower students with the entrepreneurial capacity for the pursuit of business projects                                                             | 3.44               | 0.64        | 3.43              | 0.45        | Agreed        |
| 8                            | Empower students with the entrepreneurial intentions start-up a business of their own                                                               | 3.69               | 0.58        | 3.45              | 0.45        | Agreed        |
| 9                            | Equip students with the tools to innovate and build international professional networks to translate global practices into impactful local ventures | 2.75               | 0.84        | 2.53              | 0.51        | Agreed        |
| <b>Aggregate Mean scores</b> |                                                                                                                                                     | <b>3.20</b>        | <b>0.74</b> | <b>3.24</b>       | <b>0.47</b> | <b>Agreed</b> |

Data on Table 3 present the mean and standard deviation scores of Administrative Staff and Academic Staff on the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities. The respondents agreed on all the items presented in the table with high mean scores above the mean criterion of 2.50 except item 29 that has low mean scores from both staff. The aggregate mean scores of 3.20 and 3.24 for Administrative Staff and Academic Staff indicated that, they agreed on the items in the Table. Therefore, the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities include: development of entrepreneurial mindset, development of practical experience and innovation, enhancement of soft-skills, networking for global perspectives, increased self-efficacy, empower students with the understanding of entrepreneurial behaviour, empower students with the entrepreneurial capacity



for the pursuit of business projects, empower students with the entrepreneurial intentions start-up a business of their own, and equip students with the tools to innovate and build international professional networks to translate global practices into impactful local ventures.

### Hypotheses

**Ho<sub>1</sub>:** There is no significant difference between the mean scores of administrative staff and academic staff on the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities.

**Table 4:** Summary of t-test analysis on the difference between the mean scores of administrative staff and academic staff on the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities

| Staff  | N   | Mean | St.D | df  | t-calculated value | t-critical value | Decision           |
|--------|-----|------|------|-----|--------------------|------------------|--------------------|
| Admin. | 150 | 3.24 | 0.69 | 448 | - 0.189            | ±2.00            | Fail to Reject Ho1 |
| Acad.  | 300 | 3.32 | 0.46 |     |                    |                  |                    |

**N/B:** Significant Value = 0.05; df = degree of freedom; N = Number of Sampled Staff; St.D = Standard Deviation

Data presented on Table 4 showed the summary of t-test analysis on the difference between the mean scores of administrative staff and academic staff on the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities. The null hypothesis was accepted because the t-calculated value of - 0.189 is less than the t-critical value of ±2.00 at 448 degree of freedom and 0.05 level of significance. This implies that, there is no significant difference between the mean scores of administrative staff and academic staff on the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities in South East, Nigeria.

**Ho<sub>2</sub>:** There is no significant difference between the mean scores of administrative staff and academic staff on the ways scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer in universities.

**Table 5:** Summary of t-test analysis on the difference between the mean scores of administrative staff and academic staff on the ways scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer in universities

| Staff | N   | Mean | St.D | df  | t-calculated value | t-critical value | Decision           |
|-------|-----|------|------|-----|--------------------|------------------|--------------------|
| Admin | 150 | 3.42 | 0.65 | 448 | - 0.024            | ±2.00            | Fail to Reject Ho1 |
| Acad  | 300 | 3.43 | 0.45 |     |                    |                  |                    |

Data presented on Table 5 showed the summary of t-test analysis on the difference between the mean scores of administrative staff and academic staff on the ways scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer in universities in South East, Nigeria. The null hypothesis was accepted because the t-calculated value of - 0.024 is less than the t-critical value of ±2.00 at 448 degree of freedom and 0.05 level of significance. This implies that, there is no significant difference between the mean scores of administrative staff and academic staff on the ways scholarship schemes through exchange programmes aid students to develop the

entrepreneurial skills needed for global knowledge and technology transfer in universities in South East, Nigeria.

**Ho<sub>3</sub>:** There is no significant difference between the mean scores of administrative staff and academic staff on the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities.

**Table 6: Summary of t-test analysis on the difference between the mean scores of administrative staff and academic staff on the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities**

| Staff  | N   | Mean | St.D | df  | t-calculated value | t-critical value | Decision       |
|--------|-----|------|------|-----|--------------------|------------------|----------------|
| Admin. | 150 | 3.20 | 1.74 | 448 | - 0.140            | ±2.00            | Fail to Reject |
| Acad.  | 300 | 3.24 | 0.47 |     |                    |                  | Ho1            |

Data presented on Table 6 showed the summary of t-test analysis on the difference between the mean scores of administrative staff and academic staff on the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities in South East, Nigeria. The null hypothesis was accepted because the t-calculated value of - 0.140 is less than the t-critical value of ±2.00 at 448 degree of freedom and 0.05 level of significance. This implies that, there is no significant difference between the mean scores of administrative staff and academic staff on the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities in South East, Nigeria.

## Discussion

The findings of the study revealed that, the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities include: intellectual property (IP) management, decision-making, leadership and technology translation, problem-solving, negotiation and adaptability, financial literacy, strategic thinking, digital literacy, creativity and innovation, risk-taking and trust, and communication skills. The test of hypothesis one had shown that, there is no significant difference between the mean scores of administrative staff and academic staff on the entrepreneurial skills needed by students for the development of global knowledge and technology transfer in universities in South East, Nigeria. In line with the findings, Gatilab (2026) revealed the essential entrepreneurial skills needed by students for global knowledge and technology transfer to include: communication skill which helps the entrepreneurial ideas and build trust; decision-making skill for supporting timely business choices; financial awareness to help manage money wisely; problem-solving skill for handling unexpected issues; leadership skill for keeping teams aligned and motivated; adaptability skill for helping businesses respond to change; and strategic thinking skill for guiding long-term direction. University students can rapidly build this foundation through continuous learning, experiential practice, and active engagement in scholarship schemes and exchange programmes for global knowledge and technology transfer into the real business world. Entrepreneurial skills are the practical abilities required to identify opportunities and turn innovative ideas into actionable value, and sustainably manage a business for global competitiveness (Nwabueze, Madu & Nweke, 2020). They encompass a blend of business management, strategic thinking and resilience, which are highly valuable whether one is launching a startup or innovating within an existing organization (Madumere-Obike, Okeke & Nwabueze, 2013). Successful technology

transfer in universities requires a blend of commercial and operational skills to bridge the gap between academic research and the market through entrepreneurship behaviour of the students. Entrepreneurial skills are vital in promoting innovation, competitiveness and economic growth.

The findings of the study equally revealed that, the ways scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer in universities include: developing innovation-driven ecosystems to equip students with global knowledge and technology advancements; maintaining cross-border networking among the students to drive transnational business growth; equipping the students with technical know-how necessary to facilitate technological innovation in their home countries; allowing the students to build international professional networks for global competitiveness; acquiring access to innovation hubs and practical training; developing global knowledge among students for technology transfer; assisting the students live and study in a foreign environment to build vital "soft" entrepreneurial skills; equipping the students with the entrepreneurial intentions through global knowledge competitiveness for technology transfer; and creating new ideas for the delivery of transferable entrepreneurial skills for knowledge building. The test of hypothesis two had shown that, there is no significant difference between the mean scores of administrative staff and academic staff on the ways scholarship schemes through exchange programmes aid students to develop the entrepreneurial skills needed for global knowledge and technology transfer in universities in South East, Nigeria. Scholarship schemes as exchange programmes fully or partially fund students to study abroad for a semester or a year while maintaining enrollment at their home university. These opportunities provide cultural immersion, academic development, and global networking without disrupting ones' ongoing degree programme at their home universities (Nwabueze & Chukwui, 2024). These programmes involve studying abroad in a different country, providing students with a global perspective and the opportunity to experience a completely new culture and educational system through the promotion of cross-cultural understanding and international friendships (Nwabueze, Madu & Nweke, 2020). Scholarship exchange programmes in Nigeria combine financial support with cross-cultural academic or professional mobility for skill acquisition, knowledge creation and building.

The findings of the study finally revealed that, the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities include: development of entrepreneurial mindset, development of practical experience and innovation, enhancement of soft-skills, networking for global perspectives, increased self-efficacy, empower students with the understanding of entrepreneurial behaviour, empower students with the entrepreneurial capacity for the pursuit of business projects, empower students with the entrepreneurial intentions start-up a business of their own, and equip students with the tools to innovate and build international professional networks to translate global practices into impactful local ventures. The test of hypothesis three had shown that, there is no significant difference between the mean scores of administrative staff and academic staff on the outcome of exchange programmes through scholarship schemes on students' entrepreneurial skill development for global knowledge and technology transfer in universities in South East, Nigeria. Scholarship exchange programmes act as major catalysts for entrepreneurial skill development by yielding higher self-confidence, cross-cultural resilience and practical startup competencies for global competitiveness. Scholarship exchange programmes drive global knowledge and technology transfer by equipping students with the tools to innovate, build international professional networks and translate global

practices into impactful local ventures (Emma-Ogola & Nwabueze, 2021) Scholarship schemes as exchange programmes accelerate entrepreneurial development by immersing students in diverse, innovation-driven ecosystems to equip them with global knowledge and technology advancements.

### Conclusion

Based on the findings of this study, it was concluded that global knowledge and technology transfer can be achieved through the development of entrepreneurial skills among the students. And these entrepreneurial skills are achievable through the involvement students in scholarship schemes on exchange programmes for the development of global knowledge and technology transfer in universities. Hence, scholarship exchange programmes act as major catalysts for entrepreneurial skill development by yielding higher self-confidence, cross-cultural resilience and practical startup competencies for global competitiveness.

### Recommendations

Based on the findings, the following recommendations were made.

1. Students should be given scholarships to be involved in exchange programmes to enable them develop the entrepreneurial skills for global knowledge and technology transfer in universities in South East, Nigeria.
2. Students should apply in different scholarship schemes to gain access to exchange programmes needed to develop the entrepreneurial skills for global knowledge and technology transfer in universities in South East, Nigeria.
3. Universities should fund students' involvement in exchange programmes through scholarship schemes to acquire entrepreneurial skill for global knowledge and technology transfer.

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