Leaders' supervisory roles in service-learning programmes and implications for university graduates in Nigeria: a systematic review

Funciones de supervisión de los líderes en los programas de aprendizaje-servicio y sus implicaciones para los graduados universitarios en Nigeria: una revisión sistemática

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ABSTRACT

There is a gap between graduates' academic knowledge and the skills demanded in the labour market. This skill mismatch has driven scholars in the field of education to explore the potential of service learning in equipping graduates with relevant skills to meet evolving demands in the world of work. However, there exists a need for more research concerning the roles of supervisors in service-learning programmes and the potential for service-learning among graduates within the Nigerian university setting. This study systematically reviews the leadership supervisory roles in service-learning programmes and their implications for graduates' employability. Following

PRISMA methodology, the systematic literature review examines 14 articles published between 2012 and 2023 in four established databases—Web of Science, Scopus, Eric, and DOAJ. This review reveals a scarcity of scholarly exploration into the roles of supervisors in service-learning programmes within the Nigerian university education system. The outcomes of this study provide a foundation for informed decision-making in educational policy and practice, guiding policymakers to allocate resources effectively and administer targeted training programmes to address the challenges associated with service learning in university education. University education curricula should incorporate service-learning programmes to enhance graduate employability, career advancement, and economic growth.

Keywords. employability, service-learning, skills gap, supervisory role, university graduates

RESUMEN

Existe una brecha entre los conocimientos académicos de los graduados y las habilidades demandadas en el mercado laboral. Este desajuste de habilidades ha llevado a los académicos del ámbito educativo a explorar el potencial del aprendizaje-servicio para dotar a los graduados de competencias relevantes que respondan a las demandas cambiantes del mundo laboral. Sin embargo, se necesita más investigación sobre los roles de los supervisores en los programas de aprendizaje-servicio y sobre el potencial de este enfoque entre los graduados del entorno universitario nigeriano. Este estudio revisa sistemáticamente los roles de liderazgo y supervisión en los programas de aprendizaje-servicio y sus implicaciones para la empleabilidad de los graduados. Siguiendo la metodología PRISMA, la revisión sistemática de la literatura analiza 14 artículos publicados entre 2012 y 2023 en cuatro bases de datos consolidadas—Web of Science, Scopus, Eric y DOAJ. Esta revisión revela una escasa exploración académica sobre los roles de los supervisores en programas de aprendizaje-servicio dentro del sistema de educación universitaria en Nigeria. Los resultados de este estudio proporcionan una base para la toma de decisiones fundamentadas en políticas y prácticas educativas, orientando a los responsables políticos en la asignación eficaz de recursos y la implementación de programas de formación específicos para abordar los desafíos asociados al aprendizaje-servicio en la educación universitaria. Los planes de estudio de la educación universitaria deberían incorporar programas de aprendizaje-servicio para mejorar la empleabilidad de los graduados, el desarrollo profesional y el crecimiento económico.

Palabras clave. Empleabilidad, aprendizaje-servicio, brecha de habilidades, rol de supervisión, graduados universitarios.

INTRODUCTION

Service-learning programmes are students' industrial work experience for practical skills acquisition. Service-learning programmes are also known as community-based learning or skill-gap bridging. Service-learning combines academic learning and community service (Dugguh, 2018). In addition to developing civic responsibility and social awareness, these opportunities allow students to apply their knowledge and skills to real-world challenges (Adigun et al., 2023; Baker, 2019; Pérez-Ordás et al., 2021). Using service-learning techniques, students engage in meaningful community service while learning, teaching civic responsibility, and strengthening communities. Student civic engagement has gained popularity in Nigeria through service-learning programmes (Aliyu Deba et al., 2015; Gbadamosi, 2018; Olagoke-Oladokun et al., 2021). Through these schemes, students are exposed to actual work experience, materials, and machines that may not

have been made accessible within the school environment. However, the change of focus by students and other reasons have been affecting the effectiveness of these programmes (Amadike & Robinson, 2012). The concern of some of the students during industrial training is financial gain; consequently, they do not bother to go to the relevant industries but look for firms with attractive pay (Okolie et al., 2021; Olagoke-oladokun et al., 2020; Usman & Tasmin, 2015). Also, some students find it difficult to be absorbed in relevant industries, while others are rejected by companies for lack of funds and vacancies. Hence, some students must seek placement elsewhere (Okolie et al., 2021; Olagoke-Oladokun et al., 2020a; Olagoke-Oladokun et al., 2021). Some industries with the needed resources are unwilling to admit students for industrial attachments because they view some students as not being well prepared for training and having too many to cope with (Ahmad et al., 2018).

University education aims to train a high-level workforce and provide students with the necessary skills demanded in the industrial sector (Awodiji et al., 2022; Awodiji & Naicker, 2024). It is not enough to highlight the course contents but to identify and teach the students the skills needed for success in school and the workplace. The students are trained to provide solutions to social and economic problems. The skill gap in the job performance of university graduates shows a mismatch between university outputs and labour market demands (Omosunlade & Victoria, 2023). The discrepancy between the education provided by the institutions and the experience needed by industries creates a significant concern, not only for industrial establishments but also for all stakeholders (Ilori & Ajagunna, 2020; Mohamad et al., 2020; Otamiri & Odu, 2022; Singh & Tolessa, 2019). An automobile engineer is expected to be able to fix some faults in his car after graduation, just as every electrical/electronic graduate is expected to be able to handle wiring work perfectly. The students must be exposed to activities that allow for technology transfer and innovation. Employers meet with disappointment in their employees if they are given some tasks that need to demonstrate specific skills and such tasks are not carried out effectively due to a lack of technical know-how. Common observation shows that some artisans with academic qualifications can handle tools and equipment more effectively than graduates because of the former's exposure to practical training in various fields. Many Nigerian graduates possess more theoretical knowledge than practical skills. This problem is not limited to a particular field but across multiple disciplines.The researchers carried out this systematic review to provide a comprehensive and unbiased synthesis of the existing literature on leaders' supervisory roles in service-learning programmes and their implications for university graduates in Nigeria.

Research Questions

To address this aim, the systematic review attempts to provide answers to the following research questions:
- What are the impacts of service-learning on university graduates in Nigeria?
- What are school leaders' supervisory roles in service-learning programmes?
- What are the challenges and prospects of service-learning in Nigeria?

LITERATURE REVIEW

The service-learning programme aims to engage students in active learning outside the classroom to develop civic knowledge and skills. Service-learning programme (SLP) is an approach that incorporates academically relevant service activities into a course. In a structured learning environment, students combine knowledge and theory with service to connect theory to practice (Bringle, 2015). SLP is an approach to learning in which theory is taught in the classroom. At the same time, students volunteer with an agency (usually a non-profit or social service group) and engage in reflective activities to enhance their learning (Pérez-Ordás et al., 2021). SLP can be direct, indirect, research-based, and advocacy-based approaches (Bringle, 2015). Service-learning is a method of teaching and learning that promotes social awareness and applies classroom

learning through meaningful service to society (Moran, 2024). SLP activities are most effective when the service is woven into the curriculum and is a natural extension of the community. In preparing students for 21st-century success, service-learning is a crucial strategy. A SLP establishes links between course content and relevant community service experiences, allowing students to learn through active engagement (Dugguh, 2018). Pedagogically, SLP integrates progress-oriented knowledge acquisition and real-world application in response to the needs of society, people, and communities. SLP involves social and experiential pedagogical activities (Adigun et al., 2023; Carballo-Mendívil et al., 2019). Service-learning encompasses experiences, programmes, approaches, and perspectives that link classroom learning with civic engagement (Ellenbogen, 2017). SLP involves experiences that engage learners, allow them to reflect critically, link theory to practice and vice versa, and induce, synthesise, and experiment with new knowledge (Aliyu Deba et al., 2015). Service-learning is an educational experience where learners participate in a service that addresses a social problem (Hawes et al., 2021). Thus, SLP is a means of combining academics with community service. Students develop civic responsibility, social awareness, knowledge, and skills through these opportunities.

The concept of service-learning combines academic learning with community service. Students learn experientially through SLP as they engage in activities and reflect on their experiences. Among the many forms of service-learning are direct, indirect, advocacy, research-based service, and internships SLP (Benício et al., 2020; FSCJ Center for Civic Engagement, 2023; Gbadamosi, 2014; Gbadamosi et al., 2021). In Nigeria's context, SLPs are School-based service-learning, Community-based service-learning, and international service-learning (Gbadamosi et al., 2021):

i.   School-based service-learning is a programme in which students who participate in these programmes earn academic credit as part of the regular school curriculum. It combines theories, practices, and reflection tools to enhance knowledge and critical thinking skills for societal transformation (Vlok, 2018).

ii.   Community-based service-learning is not part of the school curriculum but instead offered by community organisations. These programmes are available as volunteer opportunities or internship requirements (Baker, 2019; Ellenbogen, 2017; V. T. Gbadamosi, 2018; Moran, 2024).

iii.   International service-learning is a component of SLP that allows students to serve as volunteers for a community organisation in another country. As a concept, international service-learning (ISL) integrates three educational components: service-learning, study abroad, and international education (Chan et al., 2021). Students can acquire cultural competency while developing professional skills through international service-learning (Nickols et al., 2013).

Skill and skill-gap bridging

In education, skills are the abilities and competencies learners acquire through learning and experience that enable them to navigate and succeed in educational settings. These skills comprise a variety of analytical, social, interpersonal, and technical competencies essential to academic success and personal growth. Skill is the ability, competence, proficiency, and talent to successfully execute a given job or task. "Skills are the ability and capacity to carry out processes and responsibly use one's knowledge to achieve a goal (OECD, 2019, p. 2). Hollnagel (2012) defines skills as "the learned ability to carry out predetermined results often with the minimum outlay of time, energy, or both," highlighting the importance of learning in acquiring skills tailored to specific job requirements. The term "skill" encompasses practical proficiencies, competencies, and abilities that a graduate of a particular course has acquired through formal or informal training. A skill is the capability of performing an assigned task with competence by an individual and can be enhanced through learning (OECD, 2018). The ability to interact with one's environment is called a skill (Ahmad et al., 2018). These abilities encompass perception, selection, and execution of motor actions, learning, and memory. They are influenced by various factors, including individuals, the nature of the task, and the physical and social context in which they operate (Praetorius et al.,

2021). Skills are generally described as the learned ability to combine perceptual and motor abilities effectively to optimise performance within a specific task context (Lamri & Lubart, 2023). Skilled individuals can accurately perceive task demands, select appropriate goals, generate task plans to achieve these goals, and execute these plans smoothly and accurately (Awodiji & Magogodi, 2023; Winterton et al., 2006).

Skills are fundamental to understanding how people work, serving as a bridge between individual human operators and the workplace. It links cognitive and physical capabilities with task performance. A deep comprehension of skills enables human factors and ergonomics specialists to design systems that better suit human capabilities. Understanding human capacities is crucial in human factors and ergonomics, as it helps comprehend how people perform tasks and design systems tailored to their abilities. Skills involve a complex interplay between perception, cognition, motor control, learning, and memory (Winterton et al., 2006). Numerous factors influence them, including the individual, task, and context. Understanding skills is essential for designing effective human-machine systems. Human capital is conceptualised as the knowledge and skills an individual acquires through education and experience that increase their productivity in the marketplace (Becker, 1994).

Meanwhile, skill gap bridging refers to addressing and reducing the disparity between individuals' skills and those required for specific roles or tasks (Aljohani et al., 2022). According to Aljohani et al. (2022), skill gaps describe a situation where the skill levels of workers need to meet the requirements of their current jobs. The negative consequences due to the mismatch between the skills possessed by workers and those demanded by their roles have been variously explored by several studies (Allen & van der Velden, 2001; Awonuga, 2019; Ejiwale, 2019; Macdonald et al., 2018; Meta, 2022; Sarin, 2019). Ejiwale (2019) observes a significant barrier to economic mobility resulting from the skill gap among job seekers as they struggle to access quality jobs and career advancement. According to Awonuga (2019), individuals lacking the requisite skills may become stuck in low-wage, low-skill positions, contributing to income inequality and limiting upward mobility. Skill gap not only impacts the ability of job seekers to navigate the world of work (Awodiji & Magogodi, 2023; Oluwalola & Awodiji, 2021), but it also poses a significant challenge to the employer (Comyn & Brewer, 2015; Succi & Canovi, 2020). The growing competition driven by rapid technological advancements and evolving industry demands necessitates a workforce with up-to-date skills (Chaka, 2020; Rahmat et al., 2012).

Businesses relying on outdated skill sets face innovation, adaptability, and efficiency challenges. To stay competitive, companies require employees with the latest skills and expertise (De-Juan-Vigaray & González-Gascón, 2023), ensuring they can navigate complex technological landscapes and contribute to organisational success. A workforce that needs more essential skills may need help to meet industry standards, hindering product development, customer service, and overall business performance (Association for Talent Development, 2018; Elnaga & Imran, 2013; Ibrahim et al., 2017). Skill gap bridging can be achieved through collaborative efforts between industry and education (Association for Talent Development, 2018; Eniola-Arigbe et al., 2022). Establishing partnerships ensures educational programmes align with the job market's current and future needs (Eniola-Arigbe et al., 2022). Additionally, encouraging continuous learning within the workforce ensures that employees stay abreast of industry trends and advancements. Providing resources, mentorship, and opportunities for upskilling or reskilling empowers individuals to adapt to changing job requirements. Thus, commitment to lifelong learning is essential for both personal career growth and overall workforce resilience (Awonuga, 2019).

Leaders' roles in service-learning

Leadership in service-learning extends beyond traditional hierarchical structures, dictating the direction of the flow of authority. It encompasses various roles and responsibilities, including facilitation, coordination, and the ability to inspire and guide diverse groups of students towards

common goals (Awodiji & Naicker, 2024; Huda et al., 2018; Jordan & Schraeder, 2011). Thus, influential leaders in service-learning must possess unique skills, combining pedagogical expertise with community engagement (Pleasants et al., 2004; Warnick et al., 2014; Wurr & Hamilton, 2012). Several studies have identified three key leaders contributing to the success of service-learning programmes. They are Service-learning Directors (SLD), Faculty, and Community Partners (CPs) (Chan et al., 2021; Huda et al., 2018; Quirk & Gustafson, 2018). According to Huda et al. (2018), service-learning directors (SLD) oversee the overall planning, implementation, and assessment of service-learning programmes within educational institutions. SLD is crucial in coordinating efforts among faculty, students, and community partners. Faculty members are another critical leader within service-learning programmes. They integrate service-learning components into the curriculum, guide students in connecting academic content with real-world experiences, and facilitate reflective discussions (Castle & Osman, 2003; Fang, 2016). Faculty members are involved in identifying opportunities for students to apply theoretical knowledge to day-to-day problems they could spot in their community (Yusof et al., 2020).

Additionally, faculty members serve as guides and mentors, helping students navigate the challenges and successes of their service projects (Petker & Petersen, 2014; Resch et al., 2023; Yusof et al., 2020). Doing this fosters a sense of responsibility, empathy, and social awareness. Moreover, Community Partners (CP) collaborate with educational institutions to identify projects that align with the course's academic goals and the community's needs (Buchanan, 2014; Chambers & Lavery, 2017). According to Buchanan (2014), CPs also offer expertise, resources, and guidance on the practical aspects of community engagement, thus contributing to the overall success of service-learning. For example, a local environmental organisation partnering with a biology class might provide expertise on local ecosystems and offer access to fieldwork opportunities.

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opportunities.A critical examination of the literature reveals leaders' pivotal role in facilitating meaningful connections between academic coursework and community engagement. According to Eyler and Giles (1999), the four key components often shouldered by leaders in service-learning programmes are orientation, placement, supervision, and reflection. The roles of leaders in service-learning begin with the orientation process (Huda et al., 2018; Snell et al., 2015). Leaders are charged with ensuring that students receive comprehensive orientation sessions, covering not only the mission and vision of the community organisation but also the role students play in realising that mission (Lester, 2015; Snell et al., 2015). Proper orientation is a foundational step, establishing the framework for students to comprehend their responsibilities and expectations within the organisation (Hitt & Tucker, 2016). In addition, leaders are responsible for conveying organisational policies and procedures, issue resolution protocols, and expectations of students, creating a solid foundation for a successful service-learning experience.

The strategic placement of students within service-learning sites is another critical aspect of leaders' roles in SLPs (Held et al., 2019). Leaders must align course goals and objectives with site placements, ensuring a seamless integration of students' experiences at the local organisation with their academic coursework (Petker & Petersen, 2014; Yang et al., 2016). The alignment is essential for enhancing students' understanding and encouraging reciprocal learning between hands-on experiences and classroom studies (Eyler & Giles, 1999). Once students are oriented and placed, SLD often steps back from daily or weekly contact, making supervision by on-site mentors crucial. Adequate supervision is a shared responsibility between SLDs and CPs, requiring SLDs to educate their colleagues on SL pedagogy (Held et al., 2019; Olagoke-Oladokun et al., 2021).

The instructional role underscores the importance of topically relevant, human-centred placements, providing students with meaningful experiences that connect theory to practice (Eyler & Giles, 1999). The roles of leaders in service-learning programmes are only complete with establishing opportunities for critical reflection. Reflection serves as a mechanism for students to connect their experiences with course goals and broader societal issues (Lynch, 2017). Reflection sessions provide students with structured opportunities for contextualising experiences and challenging stereotypes and biases. Several studies suggest that leaders play a distinctive role in conducting these reflection sessions, collaborating with faculty members as "co-teachers" to emphasise the holistic understanding of service-learning goals (Clayton & Ash, 2005; Lynch, 2017).

Service-learning and graduate employability
University education has been subject to criticism from stakeholders, with business leaders from prominent corporations such as Apple, Microsoft, and Meta pointing out the continuous use of outdated educational approaches (Akorede, 2022). Over the years, critics have argued that university education fails to impart employability skills to students, skills which are increasingly essential for success in various environments and at all levels of employment (Bahyah & Ahmad, 2013; Elsaid & Schermerhorn, 1988; Gbadamosi et al., 2021) Service-learning, an experiential teaching method which involves integrating instruction with community service, addresses these concerns by enhancing academic learning, interpersonal skills, and a sense of responsibility while making meaningful contributions to the community (Kaye & Connolly, 2017). Service-learning using the experiential method has gained wide acceptance within the educational sphere. It has become the most preferable teaching method in several countries, such as the United States, Australia, and the United Kingdom, due to its effectiveness in equipping graduates with relevant skills that meet employers' demands.

Employability refers to a graduate's skills, knowledge, values, and attitudes that make them both employable and valuable to employers (Cheng et al., 2022). It encompasses a range of factors that contribute to a graduate's readiness for the workforce, extending beyond academic qualifications to include practical skills, interpersonal competencies, and the ability to adapt to the demands of a

specific profession or industry (Awodiji & Magogodi, 2023; Bahyah & Ahmad, 2013; Chukwu et al., 2020; Okolie, Igwe, et al., 2020).

One key aspect of service-learning's impact on graduate employability is its ability to develop practical, job-relevant skills (Asefer & Abidin, 2021; Mainga et al., 2022). It was established that students engaged in service-learning projects acquire hands-on experience, allowing them to apply theoretical knowledge in real-world situations (Holmes et al., 2022; Lynch, 2017; Snell et al., 2015). Such practical applications foster the development of skills like problem-solving, critical thinking, and project management, all of which are highly valued by employers across industries. Service learning also plays a crucial role in cultivating soft skills and interpersonal competencies that are highly valued in the world of work (Chaka, 2020; Holmes et al., 2022; Snell et al., 2015). Rutti et al. (2016)revealed in a study that students involved in service-learning activities significantly improve communication, teamwork, and cultural sensitivity. Often cited as essential by employers, soft skills contribute to graduates' ability to navigate diverse workplace environments and collaborate effectively with colleagues and clients (Asefer & Abidin, 2021; Bahyah & Ahmad, 2013; Chukwu et al., 2020). In addition, service-learning has been proven to resonate well with the changing expectations of employers who seek graduates with a well-rounded skill set and a demonstrated commitment to social responsibility (Lynch, 2017). A survey conducted by Tan et al. (2022) revealed that employers increasingly prioritise candidates with experiences beyond academic achievements. Furthermore, including service-learning experiences on resumes signals to employers that graduates have not only acquired academic knowledge but have also applied it in real-world situations, showcasing a proactive and socially conscious approach (Tan et al., 2022)

METHODOLOGY

According to Page et al. (2021, p. 4), the PRISMA approach states that "systematic review is a rigorous research approach that involves the formulation of clearly defined research questions, and the systematic identification and selection of relevant studies to produce more reliable findings that can be used to inform decision making." Higgins et al. (2023) added that a systematic review requires a researcher to search various databases meticulously, establish the inclusion and exclusion criteria, critically appraise study quality, systematically extract data, and synthesise results. Following the guidelines provided by Page et al. (2021) and Higgins et al. (2023), this study synthesised service-learning literature in a precise and dependable way to address the predefined research questions. Thus, the study employed a systematic review approach to answer the three research questions that guide the study: (1) What are the impacts of skill-gap bridging among university graduates? (2) What are leaders' and supervisors' roles in service-learning programmes? (3) What are the challenges and prospects of service learning in Nigeria?

Eligibility criteria
To attain the objectives of this study, a meticulous and rigorous eligibility criterion was defined to identify the most pertinent studies in the service-learning field. In the initial phase of the electronic database search, the parameters of the literature review were defined using specific criteria: (1) the time frame was restricted to the years 2012 to 2023, (2) the inclusion of studies published in the English language, and (3) a focus on Nigeria context related kinds of literature. The extended time (2012–2023) was chosen to develop a comprehensive understanding of service-learning programmes in Nigerian universities, analyse the role of supervisors' roles in-depth, and explore the prospect of service-learning programmes in bridging skill gaps among university graduates (See Table 1).

Table 1. Inclusion/exclusion criteria and key words

Criteria	Inclusion List	Exclusion List	Keywords
Time frame	Literature published between 2012-2023	Literature published before 2012	Leadership Service-learning.
Language	Literature written only in English	Literature not written in the English language	Skill-gap bridging University graduate
Data source	Online literature published in the academic database (WoS, Scopus, Eric, and DOAJ) and grey pieces of literature (Conference proceedings, theses and dissertations; technical reports)	Any literature not found on reliable databases or websites; non-scholarly literature (magazines, newspapers, blogs, conference abstracts, and trade journals, among others)	Supervisors' role Nigeria higher education Graduates' employability Experiential learning Skill development Community service
Context	Research relevant to service-learning and leaders' supervisory roles within Nigeria's higher institutions.	Literature not relevant to service-learning and leaders' supervisory roles within Nigeria	

Information and sources

This systematic review's **information and sources** section details the comprehensive search strategy used to identify relevant studies, which aligns with PRISMA 2020 guidelines (Page et al., 2021). This includes a thorough search of academic databases such as Scopus, Web of Science (WOS), ERIC, and DOAJ, along with grey literature sources like conference proceedings, theses, and dissertations. Each source was searched using tailored keywords and filters to ensure relevance to the study's objectives. The review also involved manual searches and reference list reviews to capture additional studies (Higgins et al., 2023). All searches were conducted between June 15 and June 18, 2024, ensuring the most up-to-date literature was considered (See Table 2).

Table 2. Summary of databases, search strings, filters, and dates of last search for systematic review

Source	Database/Sources	Search String	Filters Applied	Date Last Searched/Consulted
Academic Databases	Scopus	(("service-learning") AND ("skill-gap bridging" OR "skills development") AND ("supervisors' role" OR "leadership") AND ("university graduates" AND "Nigeria"))	Time frame: 2012–2023; Language: English; Peer-reviewed articles	December 15, 2023
	Web of Science (WOS)	(("service-learning") AND ("skill-gap bridging" OR "skills development") AND ("supervisors' role" OR "leadership") AND ("university graduates" AND "Nigeria"))	Time frame: 2012–2023; Language: English; Articles and reviews	December 15, 2023
	ERIC	("service-learning" AND "skill-gap bridging" AND "supervisors' role" AND "university graduates" AND "Nigeria")	Time frame: 2012–2023; Language: English; Peer-reviewed journal articles and reports	December 16, 2023
	DOAJ	("service-learning" AND "skill-gap bridging" AND "supervisors' role" AND "graduates' employability" AND "Nigeria")	Time frame: 2012–2023; Language: English; Focus on social sciences and education	December 16, 2023

Source	Database/Sources	Search String	Filters Applied	Date Last Searched/Consulted
Manual Search and Grey Literature	Grey Literature Sources	Keywords were consistent with database searches. Sources included conference proceedings, theses, dissertations, and technical reports.	N/A	December 17, 2023
Reference Lists and Organisations	Reference Lists	Reviewed reference lists of key articles to identify additional studies not captured in database searches.	N/A	December 19, 2023
	Organisations	A general search for grey literature through relevant academic and professional organisations.	N/A	N/A

Search strategy

The approach employed for this systematic review involved comprehensive searches across multiple academic databases, including Web of Science (WOS), Scopus, ERIC, and DOAJ, along with manual searches and reference list reviews. Specific search queries were tailored to each database, focusing on key terms like "service-learning," "skill-gap bridging," "supervisors' role," and "university graduates" within the Nigerian context. Filters were applied to restrict results to English-language publications from 2012 to 2023, ensuring relevance to the study's objectives. Limits were set to exclude non-peer-reviewed sources, conference abstracts, and grey literature, except where explicitly targeted. This rigorous strategy aimed to identify the most pertinent studies while ensuring replicability and transparency in line with PRISMA 2020 guidelines. The themes and keywords applied in the study of service-learning and employability within Nigerian higher education are presented in Figure. We wish to declare that PROSPERO was not registerd.

Table 3. Full search strategies, filters, and limits for systematic review

Database/Source	Search Query	Filters Applied	Limits
Web of Science (WOS)	TS=("service-learning") AND TS=("skill-gap bridging" OR "skills development") AND TS=("supervisors' role" OR "leadership") AND TS=("university graduates" AND "Nigeria")	Time Frame: 2012–2023 Language: English Document Type: Articles and reviews only	Excluded non-peer-reviewed sources, book reviews
Scopus	TITLE-ABS-KEY(("service-learning") AND ("skill-gap bridging" OR "skills development") AND ("supervisors' role" OR "leadership") AND ("university graduates" AND "Nigeria"))	Time Frame: 2012–2023 Language: English Document Type: Peer-reviewed articles only	Excluded conference abstracts, editorials, book chapters
ERIC	("service-learning" AND "skill-gap bridging" AND "supervisors' role" AND "university graduates" AND "Nigeria")	Time Frame: 2012–2023 Language: English Document Type: Peer-reviewed journal articles and reports	Excluded grey literature, non-peer-reviewed reports
DOAJ	("service-learning" AND "skill-gap bridging" AND "supervisors' role" AND "graduates' employability" AND "Nigeria")	Time Frame: 2012–2023 Language: English	Only included journals indexed in

Database/Source	Search Query	Filters Applied	Limits
		Focus: Social sciences and education, open-access journals	DOAJ with full open access
Manual Search	Keywords consistent with database search queries	N/A	Only included studies with full-text access available
Reference Lists	Manual review of reference lists from key articles	N/A	Included additional studies if meeting inclusion criteria

Figure 1. Key concepts and themes in service-learning and employability within nigerian higher education

Selection process

The selection process for this systematic review was carefully designed to ensure that only studies meeting the predefined inclusion criteria were included. The process involved several steps, with methods to maintain rigour and minimise bias:

❖ **Initial Screening**
- o **Reviewers Involved**: Two independent reviewers initially screened titles and abstracts.
- o **Method:** Both reviewers independently screened each of the 1,782 records retrieved from the databases and additional sources. They assessed whether the studies met the inclusion criteria based on the title and abstract alone.
- o **Resolution of Disagreements**: Discrepancies between the two reviewers were resolved through discussion. When a consensus could not be reached, a third reviewer was consulted to make the final decision.

❖ **Full-Text Review**
- o **Reviewers Involved**: The same two independent reviewers then performed a detailed review of the 52 full-text articles that passed the initial screening.
- o **Method:** Each reviewer independently evaluated the full texts against the inclusion criteria, which focused on relevance to service learning, skill-gap bridging, supervisors' roles, and the context of Nigerian higher education.
- o **Resolution of Disagreements**: Disagreements during the full-text review were again discussed between the reviewers, with a third reviewer providing the final decision when necessary.

❖ **Final Inclusion**
  o After the full-text review, 13 studies were deemed to meet all the inclusion criteria and were included in the qualitative synthesis.

Study selection

Study selection is considered one of the most significant decisions required in a systematic review process (Hallinger, 2018; Page et al., 2021; Stoll et al., 2019). Adhering to Page et al. (2020) guidelines, the study selection procedure comprised three sequential steps: (1) screening the titles of all retrieved research articles against the inclusion criteria stated earlier; (2) reviewing abstracts and screening the initially chosen articles for eligibility; and (3) conducting a comprehensive full-text review for the final inclusion decision, evaluating their suitability vis-à-vis the research objectives. Initially, 576 articles were retrieved from Eric, 824 from Scopus, and 128 from DOAJ, making a total of 1528 articles sourced from the three databases. In addition, a manual search was performed, and six articles relevant to the study were found. After eliminating duplicates across all databases, 76 unique articles remained. Following the title and abstract screening, 52 articles proceeded to full-text review. Ultimately, only 13 articles were selected, meeting all three inclusion criteria. Figure 1 provides an overview of the systematic literature review search protocol based on Page et al.'s (2021) PRISMA guidelines for preferred reporting items in systematic reviews and meta-analyses.

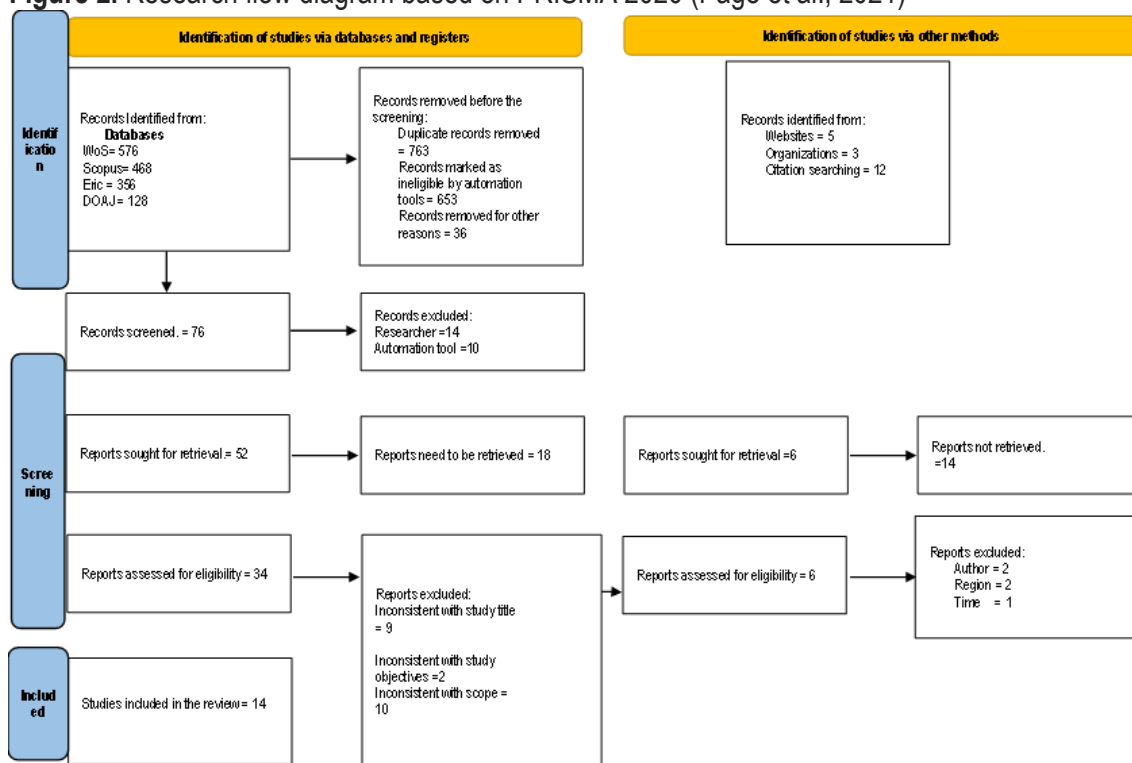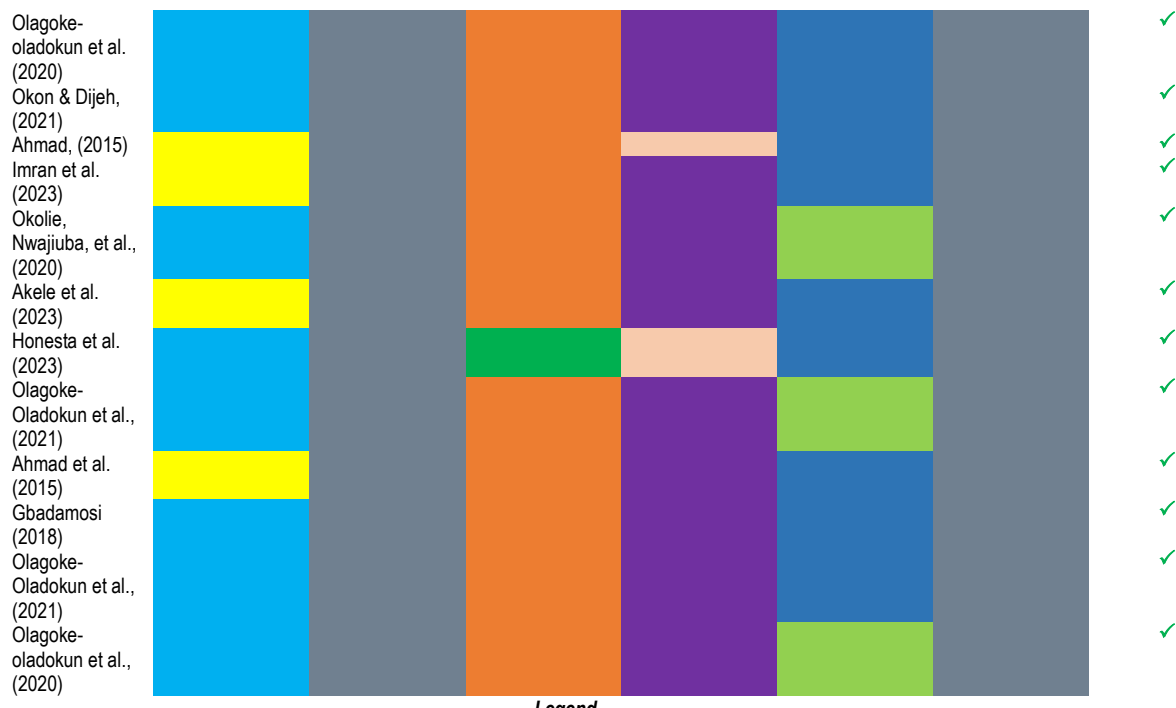**Figure 2.** Research flow diagram based on PRISMA 2020 (Page et al., 2021)

Table 4. Quality assessment matrix for the included studies

Study	Study Design	Sample Size	Risk of Bias	Data Collection Methods	Statistical Analysis	Results & Conclusions	Ethical Considerations
Emasealu & Umeozor, (2015)							✔
Gbadamosi (2021)							✔

Legend

Study Design: Green=Excellent, Blue=Very Good, Yellow=Good; Risk of Bias: Red=High, Orange=Medium, Green=Low; Data Collection Method: Purple=Valid, Teal=Reliable; Statistical Analysis: Appropriate=Blue; Sample Size: Adequate= Slate Gray; Result and Conclusion: Clear & Relevant= Slate Gray; Ethical Considerations: Yes= ✓

Method of analysis

Content and thematic data analysis methods were applied sequentially to address the research questions, leveraging data obtained from previous studies. These methods ensured a systematic approach to synthesising and interpreting the findings, which were crucial for answering the research questions comprehensively. The first research question was addressed by integrating findings from five previous studies, which provided a robust foundation for understanding the underlying themes and patterns. These studies were carefully selected to ensure they were relevant and offered diverse perspectives. The second research question was explored by analysing four pertinent pieces of literature, each contributing unique insights that enriched the overall understanding of the subject matter. The third research question was established based on insights from five additional literature sources, which provided further depth and context to the research. This methodical approach ensured that the analysis was thorough and that the research questions were answered with high accuracy and relevance. The subsequent section of the paper delves into a detailed discussion of the results derived from each study, offering a robust interpretation of the data and highlighting the implications of the findings concerning the research questions

RESULTS AND DISCUSSION

RQ1: What are the impacts of service learning on university graduates in Nigeria?

In answering the first research question, findings from selected studies, as shown in Figure 2, revealed the eight significant impacts of skill-gap bridging among university graduates in Nigeria. The impacts identified include an increased level of employability, the potential for career advancement, technological innovation and adaptation, industrial alignment, reduced knowledge and work disparity, increased employee satisfaction, reduced unemployment, and an increase in workplace productivity (Adamu et al., 2017; Okon & Dijeh, 2021; Gbadamosi, 2021; Helens-Hart, 2015; Olagoke-oladokun et al., 2020). Considering these impacts, it becomes imperative for

universities to equip graduates with diverse skills, including problem-solving, decision-making, technical, interpersonal, team building, management, and leadership, to succeed in the world of work (Babalola & Oni, 2021). Furthermore, a recent study by (Olagoke-oladokun et al., 2020) revealed that the increasing skills gap in the Nigerian labour market is driven by the mismatch between the supply of and demand for skills in the economy. The supply side of the skills gap is attributed to a mismatch between the skills students acquire in the education system and the skills employers need. The causes of the skills mismatch in Nigeria include poor education quality, lack of exposure to technology, lack of industry linkages, lack of information about career options, lack of skills required by employers, lack of skills utilisation, lack of skills certification, and lack of government policies on human capital development (Emmanuel, 2020).

Similarly, the need to consider the impacts of skill-gap bridging is further amplified with the direction and structure of the Nigerian university curriculum. As pointed out by (Olujuwon et al., 2020), a curriculum that lacks practical training and focuses solely on the acquisition of theoretical knowledge would only produce a half-informed graduate who is exceptional within the four walls of the classroom but incapable of navigating the complexities associated with work in the real world. To address this situation, educational bodies in Nigeria must consider the impacts of skill-gap bridging on university graduates. The government must invest in vocational and technical training to equip students with the skills they need after graduation. A shift from theory to technological skills that meet the demands of work of the Century is required in the university curriculum.

Figure 3. Impacts of skill-gap bridging on university graduates in Nigeria.
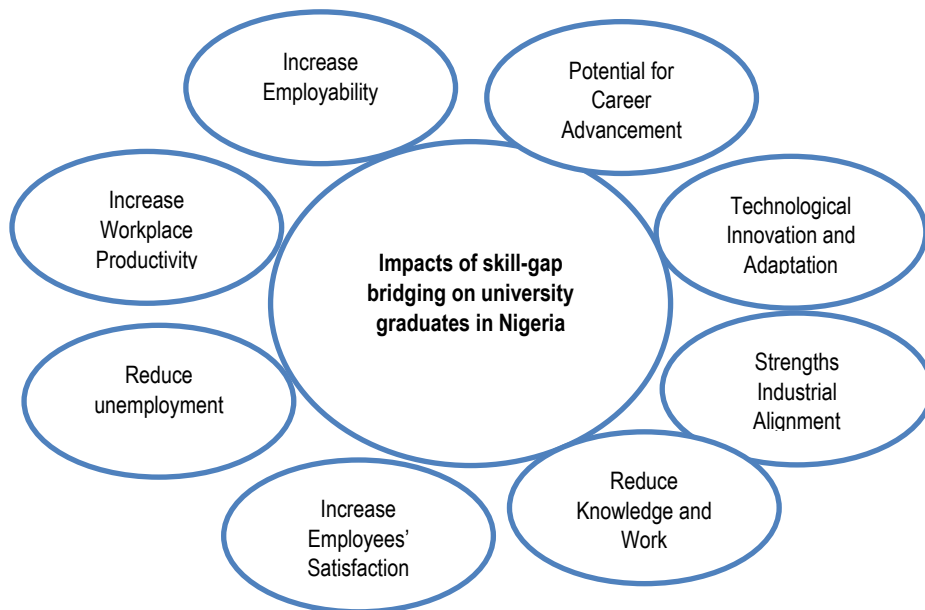
RQ2: What are leaders' supervisory roles in service-learning programmes?

In answering this research question, four kinds of literature were included after screening and eliminating duplicates. The literature identified five important leaders' supervisory roles in service-learning programmes, as presented in Figure 3.

Figure 4. Leaders supervisory roles in service-learning programmes
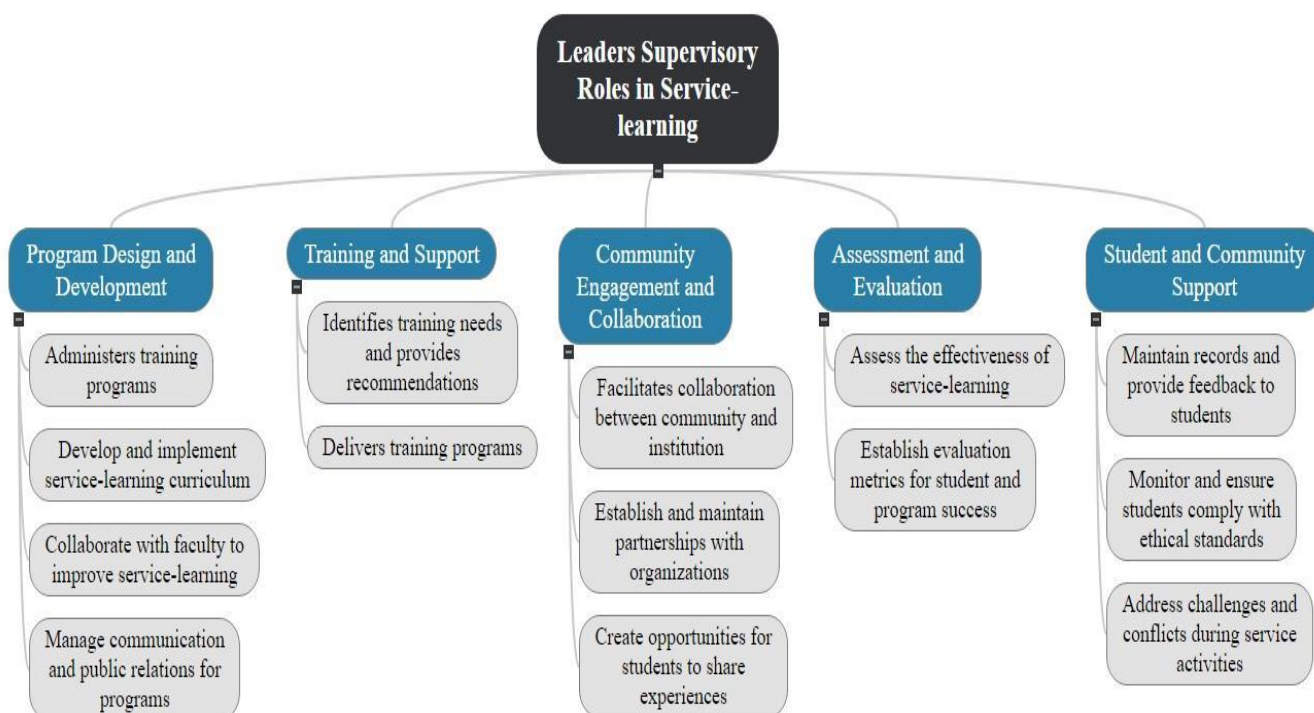
Supervisors' roles in service-learning programmes are numerous and critical to students' learning experience and future career advancement (Fletcher & Tyson, 2017). As shown in Figure 4, supervisors strongly impact the design and development of service-learning programmes. They collaborate with educators to create curricula that seamlessly integrate academic content with meaningful community service. Thus, it is vital to ensure that students understand their academic subjects holistically while actively contributing to community welfare (Ahmad et al., 2018). Another essential role supervisors play, as revealed in the study, is providing training and support for students. Supervisors serve as mentors, providing essential training and support to students engaged in service-learning programmes. They conduct workshops, seminars, and one-on-one guidance to equip students with pedagogical skills, teaching strategies, and cultural competence. Supervisors go beyond traditional curricular training and teaching support; they actively form strong partnerships with students outside the school environment as they embark on their service-learning journey. In pre-service training programmes, for instance, Ategwu et al. (2022) reported that supervisors are required to support pre-service teachers, give a considerable amount of feedback and collaborate with them even to the point of team teaching. The supervisor helps to prepare pupils to work with a pre-service teacher, provides a working area, accepts him/her as co-workers, and shares responsibilities whenever possible. Resch et al. (2023) also reported that supervisors must acquaint pre-service teachers with pertinent school policies, regulations, philosophy, priorities, and assessment criteria, immediately involve them in specific classroom tasks, and plan a schedule together for assuming classroom responsibilities. Hence, it will allow pre-service teachers to assume increasing responsibility quickly and effectively.

However, the success of the service-learning programme hinges on effective community engagement and collaboration. As revealed in Figure 3, supervisors act as liaisons between academic institutions and community organisations, ensuring that service activities align with the community's actual needs. This role facilitates collaboration by fostering strong relationships, encouraging dialogue, and identifying opportunities for mutually beneficial partnerships. Through

their efforts, supervisors contribute to creating sustainable initiatives that positively impact both students and the communities they serve (Ategwu et al., 2022). Moreover, the progress of service-learning programmes must be closely monitored to ensure that their objectives are duly met. Supervisors play a pivotal role in developing robust assessment and evaluation mechanisms that gauge the effectiveness of service-learning experiences. They do this by designing tools to measure students' academic achievements, personal development, and the impact of their contributions to the community. Supervisors provide valuable feedback that informs programme enhancements by conducting thorough evaluations, ensuring continuous improvement and alignment with evolving educational and community needs. Beyond academic instructions, supervisors provide student and community support. They maintain records and provide feedback to students, ensure students comply with ethical standards and cultural norms and practice in the community where they serve. They also address challenges and resolve conflicts that may arise during service learning (Fletcher & Tyson, 2017).

RQ3: What are the challenges and prospects of service-learning programmes in Nigeria?
In answering the third research question, the study found five relevant studies identifying the challenges and prospects of service learning within the study area (Nigeria), as shown in Figure 4.

Figure 5. Challenges of service-learning programmes (SLP) in Nigeria
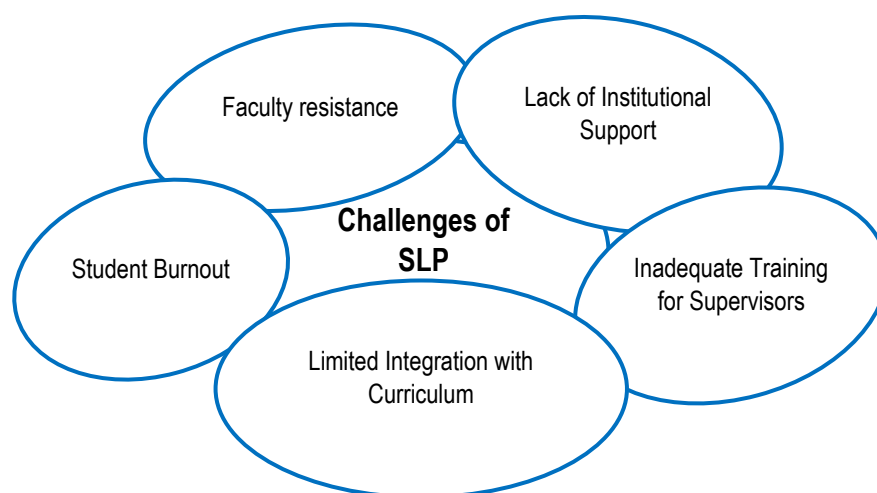
Although service-learning has been one of the most popular experiential learning pedagogies employed in many institutions of higher learning globally, its introduction and reception into public universities in Nigeria have encountered challenges. One significant barrier to effective curriculum implementation and service-learning practice in Nigerian universities is faculty resistance (Olagoke-Oladokun et al., 2021). Faculty resistance refers to the reluctance or opposition displayed by academic faculty members toward adopting or incorporating certain educational practices, methodologies, or initiatives (Garcia & Karen, 2023). According to (Olagoke-oladokun et al., 2020), resistance to service learning in Nigeria is influenced by unfamiliarity with the pedagogical approach and concerns about its effectiveness.

In addition, faculty members and other educational stakeholders in Nigerian higher institutions perceive service learning as time-consuming or divergent from traditional teaching methods, which leads to resistance to its incorporation into the curriculum (Gbadamosi, 2018). The resistance is exacerbated when there is a lack of institutional support. With the backing of the university administration, faculty members may feel supported and confident to invest time and effort into

service-learning initiatives. This lack of institutional support can also contribute to inadequate training for supervisors. If universities do not prioritise training for faculty and supervisors involved in service learning, the quality of the learning experience may be compromised.

Moreover, the limited integration of service-learning with the curriculum can also exacerbate faculty resistance and hinder students' engagement. When service-learning activities are not seamlessly woven into course content, faculty may perceive them as an additional burden rather than an integral part of the learning experience. The disconnect between service learning and academic objectives can lead to a lack of motivation among students, contributing to student burnout. Suppose students perceive the service commitment as overwhelming and disconnected from their academic pursuits. In that case, burnout becomes a significant issue, impacting their well-being and the effectiveness of the service-learning programme. Thus, addressing faculty resistance, enhancing institutional support, providing adequate training, and integrating service-learning seamlessly into the curriculum are interconnected factors essential for creating a successful and sustainable service-learning environment.

Despite the challenges faced by incorporating a service-learning framework into university education in Nigeria, the prospect of its integration into university education and beyond remains robust. Service-learning will be a veritable tool to promote experiential learning and community engagement for undergraduate students in Nigeria. Implementing service-learning in Nigerian universities could address several societal challenges while enhancing the overall educational experience for students.

In Nigeria, where community development is crucial and the poverty level keeps growing because of unemployment, service-learning can serve as a tool to equip graduates with specific skills needed in the job market (Okon & Dijeh, 2021). Additionally, service learning can create student networking opportunities (Bowen, 2015; Gbemiga et al., 2020; Yusof et al., 2020). Collaborating with local communities, NGOs, or businesses during service projects allows students to build professional connections and expand their networks (Caspersz & Olaru, 2017; Hawes et al., 2021). Thus, it can prove beneficial when seeking employment or internships after graduation.

Another prospect of incorporating service learning in Nigeria is fostering student civic responsibility and social awareness (Gbadamosi et al., 2022; Omosunlade & Victoria, 2023). By engaging in community service projects, students can better understand their communities' social, economic, and cultural issues (Ajayi, 2022). Therefore, it enriches their education and instils a sense of responsibility to contribute meaningfully to society.

Table 5. Overview of included studies by findings

Study	Study Area	Key findings
Emasealu & Umeozor, (2015)	University of Port Harcourt	This study highlights the importance of establishing a functional community resources centre as a sine qua non to bridging university skill gaps.
Gbadamosi (2021)	Federal universities in Oyo, Lagos, and Osun states	This study provides a framework for Nigerian universities to embrace service-learning curricula for employability and entrepreneurship skills to improve the quality of labour supply and graduates in the workplace.
Olagoke-oladokun et al. (2020).	Federal University, Kashere & University of Ibadan	The study underscores the incorporation of service-learning into university curricula to bridge skill gaps among graduates.
Okon & Dijeh, (2021)	University of Calabar	The study developed an approach to facilitate the implementation of service-learning programmes to bridge skill gaps among technical education graduates.
Ahmad, (2015)	Abubakar Tafawa Balewa University	This study proposed a comprehensive methodology for implementing service-learning programmes among vocational and technological education students. The findings identify

		industrial training as a means to bridge skill gaps among university graduates.
Abdullahi & Othman, (2021)		
Imran et al. (2023).	Osun State University	This study highlights students' logbook maintenance and acting as liaison officers as the critical roles of Supervisors in the implementation of service-learning programs in Technical and Vocational Education and Training (TVET)
Okolie et al.(2020)	Six Nigerian public universities	This study underscores supervisors' roles in mentoring and evaluating student performance, community engagement, guidance, and oversight. It argues that graduate skill gaps occur due to supervisors' incompetency in discharging their roles effectively during service-learning programmes.
Akele et al. (2023)	Niger Delta University Bayelsa, Federal University of Otuoke, Bayelsa and Jasper Boro College of Education	This paper established the role of the supervisor as a mediator. It was ascertained that supervisors are responsible for maintaining positive relationships between the cooperating teacher, the school, the university and teacher education during the service-learning programme.
Honesta et al. (2023)	University of Nigeria, Enugu State University of Science and Technology, and Godfrey Okoye University	This study indicates that record maintenance, training delivery, monitoring, and evaluation are indispensable for supervisors to meet service-learning's aims and objectives.
Olagoke-Oladokun et al., (2021)	University of Ibadan	This study identified significant challenges in implementing service-learning programs in Nigeria, such as insufficient time, limited knowledge of implementation, lack of funds, poor student cooperation, inadequate supervision, logistical issues, and a structured guideline for service-learning implementation.
Ahmad et. al. (2015)	Abubakar Tafawa Balewa University	This study identifies challenges in implementing service-learning programmes in Nigeria's public universities, primarily focusing on technical and vocational education (TVE). These challenges include misconceptions, a lack of clear focus, and inadequate resources.
Gbadamosi (2018)	University of Ibadan	This study examines the factors impeding the implementation of service-learning programmes in Nigeria's southwest universities. The study found that the lecturer's poor receptivity to service learning resulted from a lack of awareness, training, and resistance to change.
Olagoke-Oladokun et al., (2021)	University of Ibadan	This study found that service-learning influences university graduates by providing educational value, offering insights into societal challenges and career paths, creating opportunities for personal growth, and fostering a strong connection between academic learning and community needs.
(Olagoke-oladokun et al., 2020)	University of Ibadan	This study established the framework for incorporating service learning in public universities. Service-learning programmes can prepare pre-service teachers for the workforce and enhance their employability skills.

Document characteristics

Authorship and Collaboration Patterns refer to how scholars engage in research, individually or collectively, to produce academic publications. These significant patterns reveal how diverse perspectives and interdisciplinary approaches are integrated into the research ecosystem (Katz & Martin, 1997). In this review, 27 authors contributed to the work in Service Learning, with 4 producing single-authored documents.

$$Average\ Coauthors\ per\ Doc = \frac{Total\ Number\ of\ Authors}{Total\ Number\ of\ Documents} = \frac{27}{14} \approx 3$$

$$International\ Coauthorships = \frac{2}{14} \times 100 \approx 15\%$$

On average, each document involved three coauthors, indicating a strong tendency toward collaboration. Notably, 15% of these collaborations were international, underscoring the global engagement and shared interest in advancing Service-learning methodologies. These patterns demonstrate the balance between individual and collaborative research efforts and the importance of international partnerships in enhancing the scope and impact of Service Learning research.

Table 6. Summary of authorship and collaboration pattern

| Category	Details
Total Number of Authors	27
Authors of Single-Authored Docs	4
Coauthors per Doc	3
International Coauthorships (%)	15%

Figure 6. Network map showing collaboration among researchers
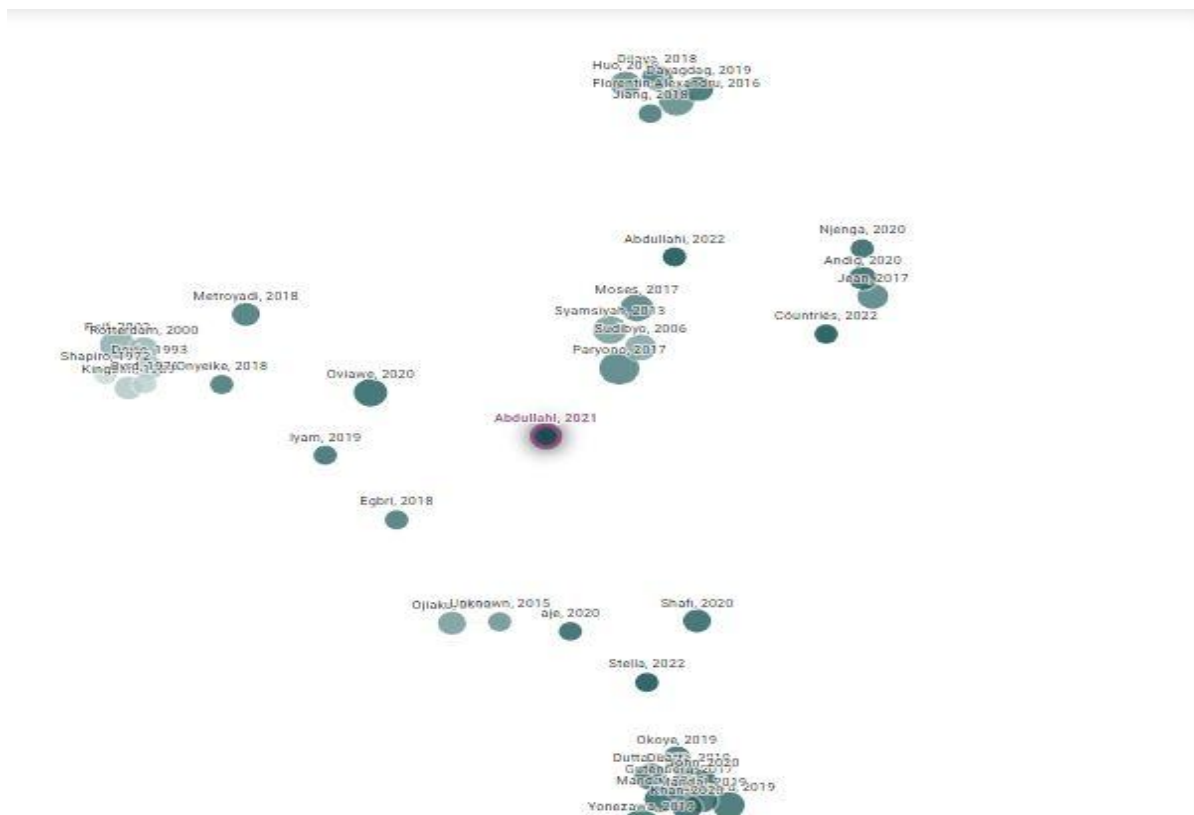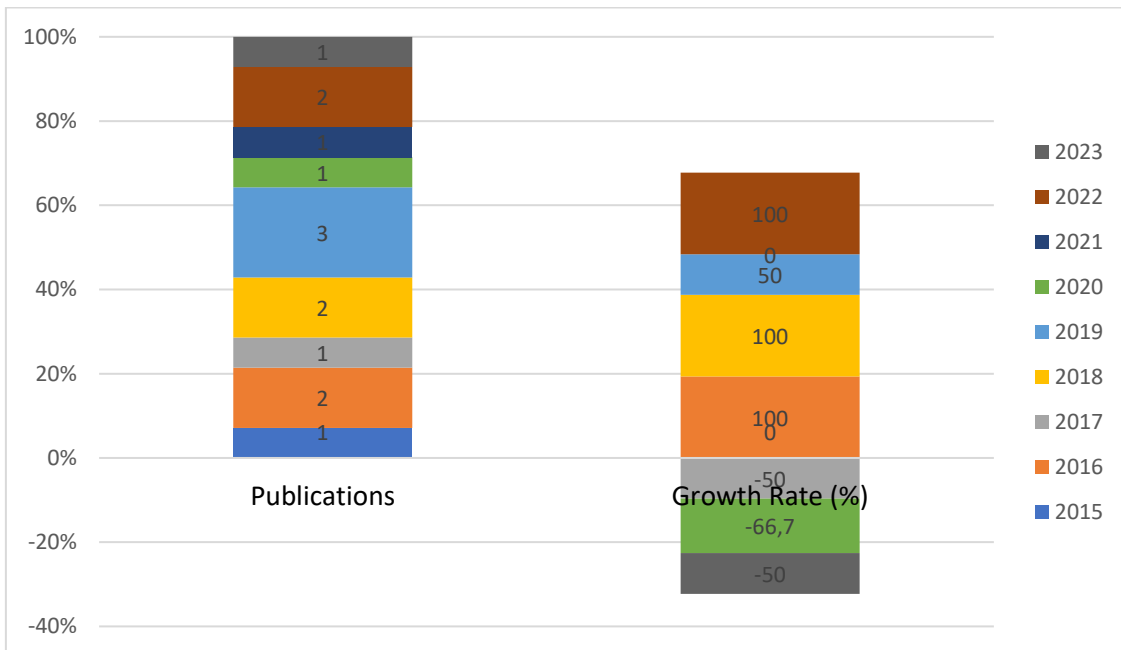
Research output

Research output refers to the measurable outcomes of academic activities, including the number of publications, citations, and other metrics that indicate the productivity and impact of research within a specific field (Bornmann & Marx, 2013). Assessing research output in Service Learning is essential for understanding the discipline's growth, influence, and evolving trends. Research output analysis helps gauge the expanding interest and scholarly contributions shaping the field's development (Figure 6).

Figure 7. Annual publication trend on leaders' supervisory roles in service-learning programmes
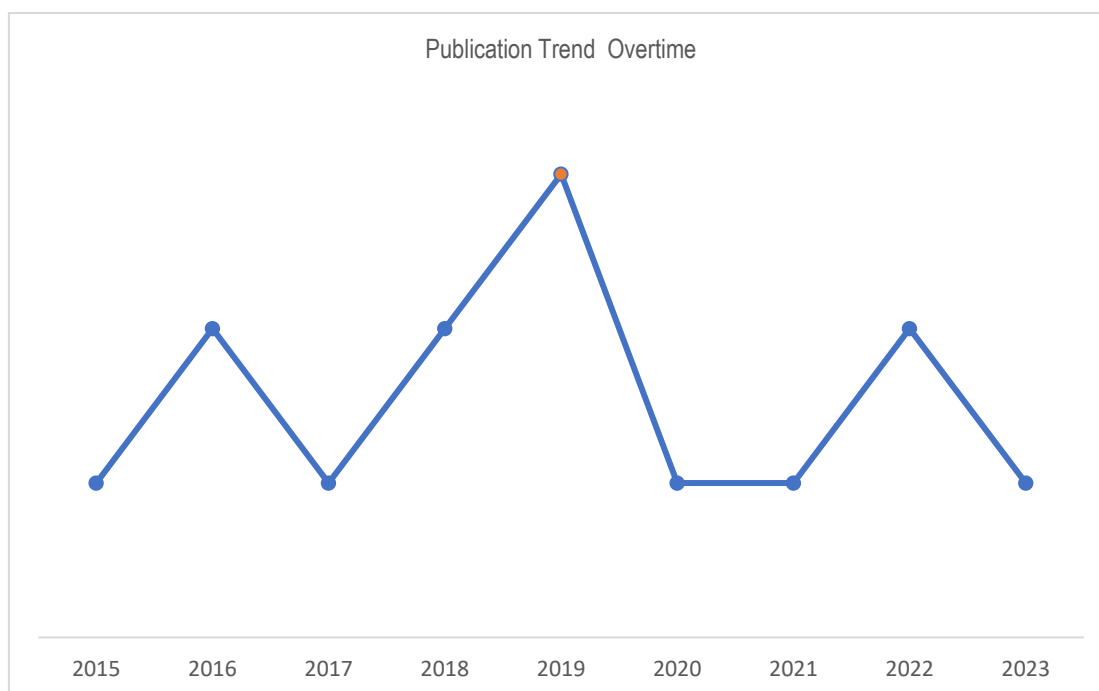
The publication trend in the Figure illustrates a fluctuating pattern over the years, reflecting the sporadic attention given to research in Leaders' Supervisory Roles in Service-learning Programmes in Nigeria. Beginning with a single publication in 2015, interest in the subject increased slightly in 2016 and 2018 but failed to sustain momentum, as evidenced by the alternating rise and fall in publication numbers. The peak in 2019, with three publications, suggests a brief period of heightened scholarly interest, potentially driven by increasing recognition of the importance of service learning in bridging the skill gap among Nigerian graduates. However, this interest did not maintain consistency, as subsequent years saw a significant decline, with publications dropping to one per year in 2020, 2021, and 2023. This erratic publication trend may indicate challenges in the academic community's engagement with the topic, possibly due to limited resources, lack of institutional support, or insufficient awareness of the critical role that leadership and supervision play in the success of service-learning programmes. These fluctuations highlight the need for more sustained research efforts to fully explore and address the implications of supervisory roles in enhancing graduate employability through service learning.

Figure 8. Annual publication growth rate in SL

Further analysis of research output between 2015 and 2023 indicates a period of active academic engagement and growth. During this time, 14 documents were produced, drawn from 8 different sources, reflecting a diverse and well-rounded research base. The field has experienced an annual growth rate of 12.5%, indicating increasing interest and scholarly activity. The documents, averaging 4 years of age, balance established research and newer studies that contribute fresh insights (Fig 8).

$$Annual\ Growth\ Rate = \left(\frac{Publications\ in\ final\ year - Publications\ in\ first}{-year\ publications\ in\ the\ first\ year}\right)$$
$$\times \frac{100}{Number\ of\ years}$$

$$Annual\ Growth\ Rate = \left(\frac{7-4}{4}\right) \times \frac{100}{9} \approx 12.5\%$$

$$Average\ Citations\ per\ Doc = \frac{400}{10} = 10$$

$$Total\ References\ by\ Average = 14 \times 23 = 320$$

Each document in this research has received an average of 10 citations, highlighting its significant relevance and impact within the academic community. This citation count reflects these studies' scholarly recognition and influence on further research in the field. Collectively, the studies reference 320 sources, demonstrating a meticulous and comprehensive approach to exploring Service Learning. This extensive referencing showcases the depth of the research, as it draws

upon a wide array of literature to provide a well-rounded understanding of the subject matter. The broad range of sources indicates a thorough investigation into various aspects of Service Learning, ensuring that the research is grounded in a solid empirical foundation. This approach advances knowledge in the field and underscores the importance of Service Learning as a critical area of study in educational and community contexts.

Table 7. Summary of research output of included studies

Category	Details
Timespan	2015–2023
Documents	14
Sources	8
Annual Growth Rate (%)	12.5%
Document Average Age	4 years
Average Citations per Doc	10
References	320

Figure 9. Average citations per document for studies on leaders' supervisory roles in service-learning programmes in Nigeria
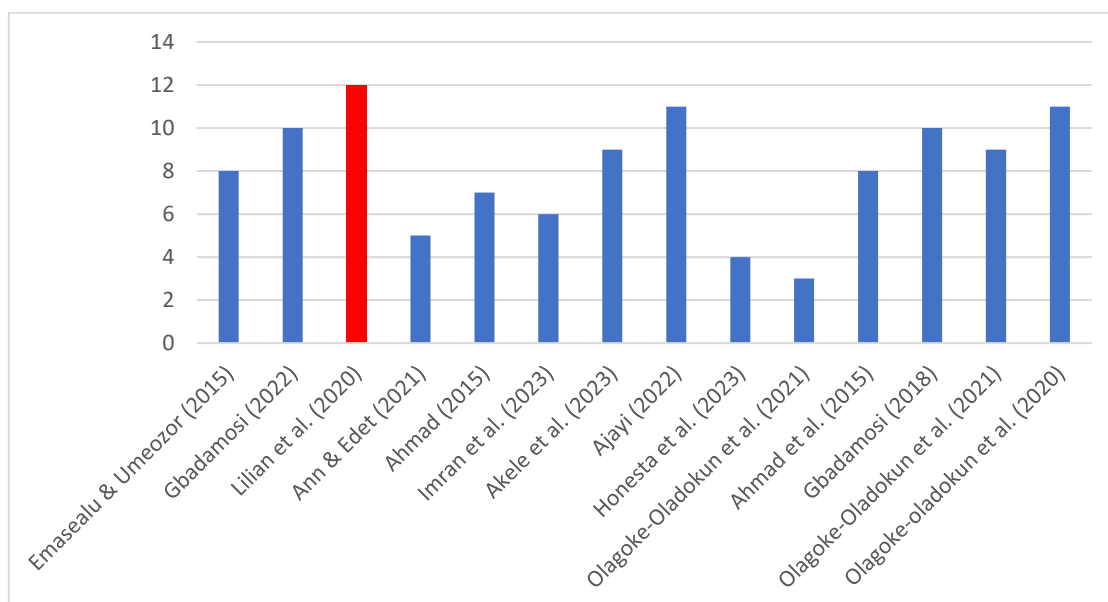
The average citations per document for the study on "Leaders' Supervisory Roles in Service-learning Programmes and Implications for University Graduates in Nigeria" reflects the scholarly impact of the selected publications. The number of citations per document varies, with the highest being 12 citations for the work by Olagoke-oladokun et al. (2020) and the lowest being three citations for Olagoke-Oladokun et al. (2021). Most documents fall within the 7 to 11 citations, indicating moderate academic engagement with the topic. More recent publications, such as those by Gbadamosi (2021) and Ajayi (2022), have also garnered significant citations, suggesting ongoing interest and relevance in the research community. It is also interesting to know that citations of Olagoke-Oladokun et al. spiked significantly in a 2021 publication. This distribution of citations underscores the growing recognition of the importance of leadership and supervision in service learning. However, it also indicates variability in how other scholars receive and utilise different studies

CONCLUSION AND IMPLICATIONS

Authors should discuss the results and how they can be interpreted in perspective of previous studies and of the working hypotheses. The findings and their implications should be discussed in the broadest context possible. Future research directions and limitations may also be highlighted.

This research has substantially contributed to the knowledge base by synthesising diverse literature in service learning. The study comprehensively reviews leaders' supervisory roles in service-learning programmes and bridging skill gaps among university graduates in Nigeria. The findings underscore service-learning's potential in equipping graduates with pertinent skills for employment and career advancement. Moreover, the research reveals that the implementation of service-learning initiatives in Nigeria faces obstacles such as a limited understanding among educational stakeholders regarding the scope and framework of service-learning, poor reception, and insufficient resources for effective implementation. Furthermore, the analysis of studies on service learning in Nigeria indicates a need for more scholarly exploration into the roles of supervisors in service-learning programmes and the broader field. Consequently, there is a pressing need for further studies to delve deeply into how service-learning programmes can be seamlessly integrated into tertiary education curricula to enhance graduate employability, career advancement and overall growth and development of the country.

Learning and teaching are enhanced by the integration of instructive and meaningful community service into service-learning. Through it, students develop intellectually, mature as people, and show civic engagement. Students' service-learning experiences are greatly influenced by their supervisors. Graduates' employability is likely to improve due to supervisors' service-learning participation.

By ensuring that theory is implemented in practical contexts, supervisors can assist students in developing practical abilities linked to their subject of study. Employers place great importance on soft skills like communication, teamwork, problem-solving, and time management, all of which students can develop through mentoring. Furthermore, supervisors also frequently have a strong network inside their communities or industries, which can benefit students, too. Students can make important career contacts when given the chance to network and be introduced. Strong letters of recommendation also result from supervisory guidance, which is essential for job applications. In addition, supervisors can help students grasp workplace dynamics and expectations by providing them with insights into the professional work environment.

Supervisors can teach students how to manage and complete projects successfully, a skill they can apply in the workplace. Students can improve their performance by learning from their experiences and receiving constructive supervisor feedback. Students' relevance to real-life problems is increased when a supervisor combines academic curriculum with service opportunities.

Honouring and appreciating students' accomplishments with the supervisor during SLP can inspire them and boost their self-efficacy. Moreover, supervisors are a valuable source of knowledge for students regarding ethical standards and professional behaviour.

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