Inclusive Classroom Management Skills for Agricultural Science Teachers in Senior Secondary Schools in Abia State, Nigeria

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Abstract
Classroom management is vital for teachers, particularly in inclusive settings where students have diverse needs. Most agricultural science teachers in senior secondary schools in Abia State, Nigeria, were trained before the introduction of inclusive classrooms, limiting their effectiveness in such environments. This quantitative descriptive survey aimed to identify inclusive classroom management skills needed by these teachers. Data were collected from 124 teachers using the Agricultural Science Teachers Inclusive Classroom Management Skills Questionnaire (ASTICMSQ), developed by the researcher and validated by three experts. The instrument's reliability was 0.81 using Cronbach's alpha. Descriptive statistics (mean and frequency count) were used to answer research questions, while t-tests tested hypotheses at a 0.05 significance level. Findings revealed 20 inclusive classroom management skills, including setting clear rules, applying varied instructional strategies, and arranging the classroom to promote collaboration, interaction, and safety. However, teachers faced challenges such as negative attitudes toward students with special needs, lack of materials, and rigid curricula. Improvement strategies include setting minimum standards, integrating educational technology, and applying scaffolded teaching approaches. It is recommended that agricultural science teachers in Abia State should study and implement these skills to enhance inclusive teaching and learning outcomes.

Introduction

In recent years, there has been a growing shift from traditional classroom management practices to inclusive classroom management. This change is driven by the need to accommodate all learners and improve educational outcomes. An inclusive classroom is defined as a learning space where students of all abilities and backgrounds are integrated and participate equally in educational activities (Molina et al., 2012). It involves creating an environment that meets the diverse learning needs of all students, irrespective of their physical, cognitive, social, or emotional conditions (Lindner & Schwab, 2020). Inclusive classroom management comprises strategies and techniques used by teachers to support all students, particularly those with disabilities or special needs, in achieving academic success (Fung et al., 2022). According to Nishina et al. (2019), it entails adapting teaching methods, learning materials, and assessment

tools to address students' diverse needs, while fostering a culture of acceptance, respect, and collaboration. Mahoney and Hall (2017) add that inclusive practices include individualized support through differentiated instruction, assistive technologies, and extended time for tasks. Jayapriya and Vinay (2023) emphasize that inclusive classroom management should facilitate learners' academic, emotional, and social development through careful planning, implementation, and evaluation.

Inclusive classrooms are designed to promote equal learning opportunities and a sense of belonging among all students (Karlsudd, 2023). They foster cultural and socio-religious diversity, reduce discrimination and bullying, and encourage peer learning and empathy (Cook-Sather & Seay, 2021). Dewsbury (2017) notes that these environments also promote creativity and problem-solving, preparing students to live in a diverse society. Vossen et al. (2023) assert that inclusive classrooms enrich the learning process by accommodating a broad spectrum of experiences and perspectives. By using inclusive strategies, teachers can ensure that each student maximizes their potential and feels part of a supportive learning community (Sigstad et al., 2023). Inclusive classroom management is essential for ensuring equitable and high-quality education across all subjects, including agricultural science (KQED1, 2016).

Agricultural science is an interdisciplinary subject that integrates biological, physical, and social sciences in relation to agriculture and food production (Paul & Aithal, 2020). Its curriculum includes topics such as crop and animal production, soil and water conservation, agribusiness, biotechnology, and rural development (Mweetwa et al., 2012). Agricultural education plays a key role in addressing issues such as climate change, food security, and environmental sustainability (Kogo et al., 2021). In Abia State, the goals of agricultural science in secondary schools are to arouse student interest in agriculture, build basic knowledge and practical skills, and prepare students for self-reliance (Asogwa, 2013; National Policy on Education, FRN, 2013). These goals are to be achieved by agricultural science teachers in all classroom settings, including inclusive classrooms.

A teacher, according to Obanewa in Asogwa (2013) and Asogwa et al. (2023), is a trained professional equipped to manage classrooms and improve students' learning behaviour. Agricultural science teachers in this study are qualified individuals trained in agricultural education and licensed to teach in senior secondary schools. Some of the agricultural science teachers had taught an inclusive classroom based on their previous training and were regarded as experienced teachers in this study. Those who had not taught were inclusive classrooms were perceived as inexperienced teachers. Some had experience teaching students in inclusive classrooms, while others were considered inexperienced. Kelley and Knowles (2016) highlight the importance of early agricultural science teachers in building foundational knowledge and inspiring future agricultural professionals. It is vital to support these teachers with resources and training to ensure inclusive and quality education delivery. They are tasked with aligning their teaching with national education standards and organizing practical projects that develop students' agricultural competence (Easterly & Simpson, 2020; Van Haeften et al., 2012; Kidane & Worth, 2015).

Despite their importance, agricultural teachers in Nigeria face several challenges in managing inclusive classrooms. These include limited resources, large class sizes, low student interest, and inadequate training (Egunsola, 2014; Cleopas, 2023; Ikeh et al., 2014). Teachers in both Nigeria and Cameroon have reported a lack of training in differentiated instruction and inclusive strategies (Onyishi & Sefotho, 2020; Bechem & Valery, 2019). Training in classroom management has been shown to improve student behavior and academic success (Mihalic et al.,

2004). Moreover, inclusive teaching methods have been recommended for improving student learning and reducing teacher burnout (Bature et al., 2016), and teacher professionalism and ethics strongly impact student outcomes (Chukwu et al., 2020).

While studies have explored inclusive practices among preschool and elementary teachers (Hellmich et al., 2019; McKim & Velez, 2015; Umar et al., 2019; Sadik & Akbulut, 2015; Semerci & Balat, 2018), there is limited research on inclusive classroom management by agricultural science teachers at the senior secondary level in Nigeria, particularly in Abia State. Given the importance of teachers' beliefs and skills in successful inclusion (Baker, 2018; Hellmich et al., 2019), more studies are needed to identify the inclusive classroom management strategies most effective for agricultural educators.

Statement of the Problem

Inclusive education is a globally endorsed approach that promotes equal access to quality learning for all students, including those with disabilities. In Nigeria, the integration of inclusive practices into secondary education is a vital step toward achieving equity and social justice in schools. However, the successful implementation of inclusive education depends largely on teachers' capacity to manage diverse classrooms effectively. Agricultural science, a core subject with significant relevance to national food security and youth empowerment, is negatively affected when inclusive practices are weak or absent. In Abia State, one of the researchers observed between 2016 and 2018 during teaching practice supervision that many agricultural science teachers lacked inclusive classroom management skills. This deficiency was attributed to insufficient training and the failure to retrain teachers already in service before the introduction of inclusive education (Asogwa, 2013; Ndem, 2016). As a result, students with disabilities face exclusion, limiting their participation and achievement in agricultural education. Mavuso et al. (2022) emphasized that challenges in inclusive classrooms contribute to low interest and enrolment in agricultural subjects. Yet, no study has specifically examined these challenges in Abia State (Dabney et al., 2019). This study seeks to fill that gap by investigating the inclusive classroom management skills of agricultural science teachers, thereby informing policies and training programs that support equitable learning environments.

Research Objectives and Questions

S/N	Objectives	Research questions
1	To describe the demographic variables of the respondents	What are the demographic variables of the respondents?
2	To identify the inclusive classroom management skills that could be adopted by agricultural science teachers in senior secondary schools in Abia State.	What are the inclusive classroom management skills that could be adopted by agricultural science teachers in senior secondary schools in Abia State?
3	To examine the barriers faced by agricultural science teachers in managing inclusive classrooms in senior secondary schools in Abia State, Nigeria.	What barriers are faced by agricultural science teachers in managing inclusive classrooms in senior secondary schools in Abia State, Nigeria?
4	To suggest strategies for improving the inclusive classroom management skills of agricultural science teachers in senior	What are the strategies for improving the inclusive classroom management skills of

| secondary schools in Abia State, Nigeria. | agricultural science teachers in senior secondary schools in Abia State, Nigeria? |

Hypotheses

H_{01}: There is no significant difference in the mean responses of experienced and inexperienced teachers of agricultural science on the classroom management skills that could be adopted by agricultural science teachers in senior secondary schools in Abia State.

H_{02}: There is no significant difference in the mean responses of experienced and inexperienced teachers of agricultural science on the barriers faced by agricultural science teachers in managing inclusive classroom in senior secondary schools in Abia State, Nigeria.

H_{03} There is no significant difference in the mean responses of experienced and inexperienced teachers of agricultural science on the strategies for improving inclusive classrooms management skills of agricultural science teachers in senior secondary schools in Abia State, Nigeria.

Theoretical Framework

This study was strengthened by Social Constructivist Theory and Ecological Systems Theory. Social Constructivist Theory was developed by post-revolutionary Soviet psychologist Lev Vygotsky in the early 20th century (Vygotsky, 1962). Social Constructivist Theory emphasizes the role of social interaction and cultural context in knowledge development. It emphasizes the importance of language, communication, and dialogue in learning, including inclusive classrooms. This theory suggests that knowledge is constructed through social interactions and experiences, and inclusive classroom management skills can be developed through collaborative learning and shared experiences among teachers and students.

Also, Bronfenbrenner's Ecological Systems Theory (1970) highlights how multiple, interacting systems influence human behavior. Its five key tenets—microsystem, mesosystem, exosystem, macrosystem, and chronosystem—explain how individual, interpersonal, and environmental factors shape inclusive classroom management. The microsystem (teacher-student interactions), mesosystem (teacher collaboration), and exosystem (school policies and training) directly affect teaching practices. The macrosystem considers cultural values and societal norms such as gender roles, ethnicity, and religion, while the chronosystem reflects how these dynamics evolve over time. This theory aligns with the study by offering a framework to examine how various levels of influence impact agricultural science teachers' ability to manage inclusive classrooms, ultimately promoting equity, access, and quality education in senior secondary schools.

Methodology

The study adopted a quantitative approach and a descriptive survey research design, which involved collecting quantitative data from the teachers of agricultural science using the Google Form channel. The study was conducted in Abia State, which has three education zones: Umuahia, Aba, and Ohafia.

Figure 1:

Map of Abia State showing the 17 local government areas

The target population of the study was 136 agricultural science teachers comprising 33 males and 103 females in senior secondary schools in Abia State (Abia State Secondary Education Management Board, 2018). The entire population was used, resulting in the use of the census sampling technique. The study used the Agricultural Science Teachers Inclusive Classroom Management Skills Questionnaire (ASTICMSQ), developed by the researcher from a literature review and validated by three seasoned experts: one teacher with 15 years teaching experience of agricultural science from senior secondary schools, one lecturer from the Department of Agricultural Education at the University of Nigeria, Nsukka, and the other from the Department of Special Education at the University of Calabar. All their inputs, observations, and corrections were used to produce the final copy of the instruction, leading to the mobility of items from 57 to 63. The ASTICMSQ had a 4-point bipolar response scale of strongly agree, agree, disagree, and strongly disagree. The instrument was trialled on 23 agricultural science teachers in Enugu and Calabar who had similar training and experience in the teaching profession. The Cronbach alpha reliability method was used to estimate the internal consistency of the questionnaire items. This provided a reliability coefficient of 0.81 which implies that the instrument is highly reliable (Taber, 2018).

One research assistant who was a member of the Agricultural Science Teachers Platform in Abia State was employed to administer the questionnaire designed in Google Form to the teachers via WhatsApp. The questionnaire was administered to 136 members of the platform generally and privately, while the email addresses of those who were not on the platform were solicited and sent to them. Phone calls were equally made to those who did not reply to their email after 2 weeks. In all, a total of 124 (31 males and 93 females) teachers responded to the request, achieving a 91% return rate, which was highly reliable for the study (Sileyew, 2019). This process lasted for 2 months, one week, and 3 days, starting from January 20th to April 28th, 2023. The data collected were analysed using frequency counts, weighted mean, standard deviation, and t-test statistics. A mean value of 2.50 or above was considered accepted, while a value below 2.50 was not accepted. Null hypotheses were not rejected when the p-value was greater than 0.05 and rejected when the p-value was less than 0.05.

The first page of the online Google form contained instructions and a request for informed consent from participants. Only individuals who gave their express consent "yes" to partake in the activity in the Google Form were granted permission to proceed. The act of participation was entirely voluntary, granting participants the liberty to refuse or retract at any point in time without incurring adverse repercussions. The entirety of the data collected was treated with the utmost confidentiality, ensuring the anonymisation of all information and restricting access solely to the principal investigator. Data was securely stored on password-protected computers and locked cabinets. Findings were used solely for research purposes and academic dissemination without disclosing individual participant identities. The study received ethical clearance from the Institutional Ethics Committee, and modifications or amendments were submitted for review and approval. The plagiarism was tested with plagiarism Xchecker, which showed 100% uniqueness.

Findings of the Study

The findings for the study were obtained from the research questions answered and hypotheses tested through the data collected and analysed in Tables 1 to 3.
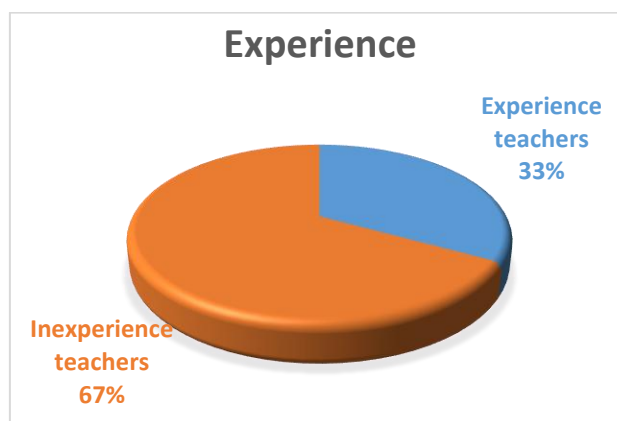
Figure 2:

Gender of the respondents
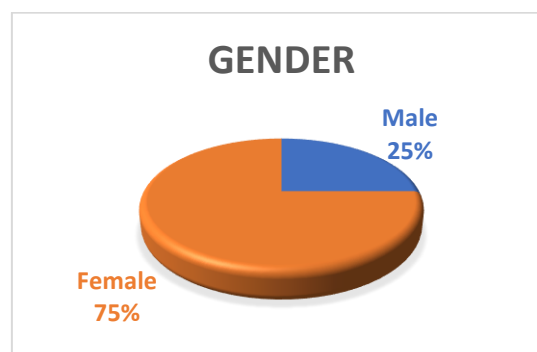
The result of the analysis in Figure 2 shows that there were more female agriculture teachers (n=93; 75%) than male counterparts (31; 31%) who participated in the study. This implied that the majority of respondents were females, but the results were the views of both genders and can be generalised.

Figure 3:

Experiences of the Respondents

The findings of the analysis in Figure 3 shows that there were more inexperienced teachers of agriculture (83; 67%) than experienced teachers (41; 33%) who had taught students in an inclusive classroom. This indicated that most respondents have not had any interaction with students with special needs in an inclusive classroom. However, the experience of the teachers helped to add credence to the validity of the findings.

Table 1:

Mean Ratings And T-Test Analysis of Experience and Inexperience Teachers of Agricultural Science on Inclusive Classroom Management Skills (N=124)

S/N	Inclusive Classroom management skills	x̄	σ	Sig.	Remark
1.	Establish clear, consistent rules and procedures for the classroom and laboratory activities.	3.33	.81	.56	A, NS
2	Provide students with the knowledge and skills necessary to compete in a global economy	3.07	.80	.58	A, NS
3	Use a variety of instructional strategies to engage students in active learning	3.33	.78	.54	A, NS
4.	Arrange the seating, equipment, and materials to suit the learning objectives or activities	3.45	.77	.55	A, NS
5.	Allocate sufficient time for instruction, practice, assessment, and feedback	3.35	.81	.57	A, NS
6.	Use time on task strategies to maximize student learning and minimize disruptions	3.31	.79	.56	A, NS
7.	Monitor and assess student progress regularly.	2.96	.92	.57	A, NS
8	Provide opportunities for students to develop leadership skills through experiential learning	3.01	.80	.55	A, NS
9.	Foster positive relationships with students	3.27	.79	.56	A, NS
10.	Learn about their backgrounds, interests, strengths, and challenges.	2.94	.82	.58	A, NS
11.	Communicate with parents and guardians about student progress and expectations.	2.79	.94	.56	A, NS

12.	Work with business or industry partners for students' authentic learning experiences	2.99	.85	.54	A, NS
13.	Maintain professional ethics and conduct	2.71	1.06	.54	A, NS
14.	Understand the characteristics, needs, and preferences of all the students.	2.55	1.14	.56	A, NS
15.	Promote a positive classroom climate	3.09	.90	.58	A, NS
16.	Create a sense of community, belonging, and mutual respect among students.	2.78	1.05	.40	A, NS
17.	Model enthusiasm, curiosity, and passion for learning	3.11	.88	.56	A, NS
18.	Integrate technology into instruction	2.85	1.01	.79	A, NS
19.	Use appropriate technology tools such as computers, projectors, smart boards, tablets, software, apps, etc to enhance student learning, engagement, and creativity	3.33	.80	.55	A, NS
20	Manage emergencies and crises by following the school safety protocols.	3.26	.82	.09	A, NS

σ = standard deviation of a population, Sig. =significance level (>.05), A= Agreed, NS=not significant

The data in Table 1 showed that all 20 items had mean values ranging from 2.55 to 3.45 and were above the cut-off point of 2.50 on a 4-point scale. This indicated that the respondents agreed that all 20 items were classroom management skills that could be adopted by agricultural science teachers in senior secondary schools in Abia State. The Table showed that the standard deviation of all 20 items ranged from .77 to 1.14, which means that the respondents were not too far from the mean and opinion of one another in their responses. The data on hypotheses tested in Table 1 revealed that all 20 items had p-values ranging from .09 to .79, which were greater than the alpha-value of 0.05. This implied that there was no significant difference in the mean ratings of the responses of experienced and inexperienced teachers of agricultural science in secondary schools. Therefore, the hypothesis of no significant difference was upheld for each of the items on classroom management skills that could be adopted by agricultural science teachers in senior secondary schools in Abia State.

Table 2:

Mean Ratings and t-test Analysis of experience and inexperience teachers of Agricultural science on barriers faced by agricultural science teachers in managing inclusive classroom (N=124)

S/N	Barriers to Inclusive Classroom management skills	$\bar{x}$	σ	Sig.	Remark
1.	Inadequate resources or facilities, such as tools, equipment, libraries, laboratories, and out-of-school activities	3.80	1.03	.63	A, NS
2	Lack of necessary qualifications, competencies, or skills to teach in inclusive classrooms.	3.44	.54	.19	A, NS
3	Large class sizes, which make it difficult to cater for the individual needs of students	2.77	.72	.68	A, NS
4.	Diverse student needs and abilities, which require different teaching methods and strategies	3.00	.92	.85	A, NS

No.	Item	Mean	σ	Sig.	Decision
5.	Low motivation or interest among students with negative attitudes towards agriculture	3.31	.47	.50	A, NS
6.	Insufficient teacher training and support, especially on inclusive education and pedagogy	3.00	.65	.74	A, NS
7.	Negative attitudes and stereotypes towards students with disabilities or special needs	3.06	.71	.39	A, NS
8	Inaccessibility of learning environment, which may pose architectural or mobility barriers for some students	3.37	.72	.54	A, NS
9.	Absence of support services, such as guidance counsellors, special educators, therapists, or assistants.	3.39	.76	.71	NA, NS
10	Lack of clear policies and guidelines on inclusive education at the national and state levels	3.46	.76	.91	A, NS
11	Irrelevant, irresponsive, or unadaptable curriculum to the diverse contexts, interests, and aspirations of learners	3.47	.55	.46	NA, NS
12	Ambiguous policies, guidelines, or frameworks to support inclusive education	3.79	.41	.65	NA, NS
13	Lack of awareness and advocacy among stakeholders	3.43	.56	.07	NA, NS
14	Absence of collaboration and partnership among schools and teachers	2.71	.74	.31	NA, NS
15	Lack of motivation and commitment by schools and teachers	2.95	.95	.56	NA, NS
16	Inability of schools or teachers to adopt or adapt innovative and creative approaches to teaching in inclusive classrooms	3.32	.47	.54	NA, NS
17	Lack of confidence or self-efficacy by schools and teachers to implement inclusive education	2.98	.67	.54	NA, NS
18.	Poor monitoring and evaluation of the implementation and outcomes of inclusive education	3.02	.73	.56	NA, NS
19	Inadequate research or evidence in schools to inform their inclusive education decisions and actions.	3.36	.73	.58	NA, NS

σ = standard deviation of a population, Sig. =significance level (>.05), A= accepted, NS=not significant

The data in Table 2 showed that all the 19 items had their mean values ranged from 2.71 to 3.80 and were above the cut point of 2.50 of a 4-point scale. This indicated that the respondents agreed that all the 19 items were barriers faced by agricultural science teachers in managing inclusive classrooms in senior secondary schools in Abia State, Nigeria. The Table showed that the standard deviation of all the 19 items ranged from .41 to 1.03, which means that the respondents were not too far from the mean and opinion of one another in the responses. The data on hypothesis tested in Table 1 revealed that all 19 items had their p-values ranged from .79 to .09, which were greater than the alpha-value of 0.05. This implied that there was no significant difference in the mean ratings of the responses of experienced and inexperienced teachers of agricultural science in secondary schools. Therefore, the hypothesis of no significant

difference was upheld for each of the items on barriers faced by agricultural science teachers in managing inclusive classrooms in senior secondary schools in Abia State, Nigeria.

Table 3:

Mean Ratings and t-test Analysis of experience and inexperience teachers of Agricultural science on strategies for improving inclusive classroom management skills (N=124)

S/N	Inclusive Classroom management skills	x̄	σ	Sig.	Remark
1.	Establish clear and consistent rules and procedures for the classroom and laboratory activities.	3.82	.38	.12	A, NS
2	Provide students with the knowledge and skills necessary to compete in a global economy	3.45	.53	.14	A, NS
3	Use a variety of instructional strategies to engage students in active learning	2.85	.68	.18	A, NS
4.	Arrange the seating, equipment, and materials to suit the learning objectives and activities	3.08	.87	.34	A, NS
5.	Allocate sufficient time for instruction, practice, assessment, and feedback	3.30	.46	.09	A, NS
6.	Use time on task strategies to maximize student learning and minimize disruptions	3.03	.64	.06	A, NS
7.	Monitor and assess student progress regularly.	3.11	.69	.37	A, NS
8	Provide opportunities for students to develop leadership skills through experiential learning	3.38	.70	.21	A, NS
9.	Foster positive relationships with students	3.33	.78	.26	A, NS
10.	Learn about their backgrounds, interests, strengths, and challenges.	3.36	.79	.15	A, NS
11.	Communicate with parents or guardians about student progress and expectations.	3.46	.55	.15	A, NS
12.	Work with business and industry partners to provide relevant and authentic learning experiences for students	3.44	.54	.08	A, NS
13.	Maintain professional ethics and conduct	2.76	.71	.34	A, NS
14.	Understand the characteristics, needs, and preferences of all the students.	3.00	.91	.39	A, NS
15.	Promote a positive classroom climate to ease collaboration	3.31	.46	.12	A, NS
16.	Create a sense of community, belonging, and mutual respect among students.	3.00	.65	.05	A, NS
17.	Model enthusiasm, curiosity, and passion for learning	3.05	.71	.11	A, NS
18.	Integrate appropriate technology such as computers, projectors, smart boards, tablets, software, apps, etc to enhance student learning, engagement, and creativity	3.30	.46	.15	A, NS
19	Manage emergencies and crises by following the school safety protocols.	3.03	.64	.18	

σ = standard deviation of a population, Sig. =significance level (>.05), A= Agreed, NS=not significant

The data in Table 3 showed that all 19 items had mean values ranging from 2.76 to 3.85 and were above the cut-off point of 2.50 on a 4-point scale. This indicated that the respondents agreed that all 19 items were strategies for improving the inclusive classroom management skills of agricultural science teachers in senior secondary schools in Abia State, Nigeria. The table showed that the standard deviation of all 19 items ranged from.38 to.91, which means that the respondents were not too far from the mean and opinion of one another in their responses. The data on hypotheses tested in Table 1 revealed that all 19 items had p-values ranging from.05 to.39, which were greater than or equal to the alpha value of 0.05. This implied that there was no significant difference in the mean ratings of the responses of experienced and inexperienced teachers of agricultural science in secondary schools. Therefore, the hypothesis of no significant difference was upheld for each of the items on strategies for improving inclusive classroom management skills of agricultural science teachers in senior secondary schools in Abia State, Nigeria.

Discussion of Findings
Figures 2 and 3 show that 93.5% of agricultural science teachers were female, and 83.7% were inexperienced, with most having no prior experience teaching students with special needs. While gender may influence teaching style, Afolabi (2024) emphasize that training and competence are more crucial for inclusive teaching. The high percentage of inexperienced teachers aligns with Stevenson et al. (2020) view that inexperience hinders effective classroom management and support for diverse learners. Moreover, the lack of exposure to inclusive classrooms suggests a gap in teacher preparation. Mavuso et al. (2022) stress that successful inclusion requires hands-on experience and continuous training. Although the few experienced teachers added credibility to the study, their limited number highlights the urgent need for professional development. Thus, the findings reveal a pressing need for structured training to equip agricultural science teachers with the skills required for inclusive classroom management. Table 1 presents 20 inclusive classroom management skills for agricultural science teachers in Abia State senior secondary schools. These skills include establishing clear rules, using various instructional strategies, arranging seating and materials, and equipping students with knowledge for global competitiveness. Both experienced and inexperienced teachers agreed on these skills, suggesting a shared understanding of effective inclusive classroom management. This supports Rose and Meyer (2002), who emphasized the importance of diverse instructional methods to address varying learning needs. Similarly, Marzano and Marzano (2003) noted that clear rules and structure enhance student engagement and reduce disruptive behavior. Harlin et al. (2007) also identified these competencies—rules, strategy variety, material arrangement, and experiential learning—as vital for inclusive teaching across cognitive, affective, and psychomotor domains. Dunlosky et al. (2013) further advised the use of cooperative and hands-on learning to improve retention. Scott (2015) highlighted the need for inclusive classroom designs that accommodate mobility and collaboration. UNESCO (2017) advocates equitable access for all learners, while Barrett et al. (2015) and Friend and Bursuck (2018) emphasized the need for predictability and organization in inclusive settings. These findings reinforce the global relevance of inclusive classroom management in agricultural education.
 Table 2 revealed 19 barriers faced by agricultural science teachers in managing inclusive classrooms in senior secondary schools in Abia State, Nigeria. The barriers faced by agricultural science teachers in managing inclusive classrooms include inadequate resources, a lack of qualifications, large class sizes, and diverse student needs. Both groups of teachers agreed on these challenges, confirming the validity of the result. This result is in conformity with Bronfenbrenner's (1970) finding that various factors at different levels (individual, interpersonal, and environmental) influence the inclusive classroom management skills of teachers of agriculture in senior secondary schools. Begum et al. (2019) highlighted challenges

in implementing inclusion to include poverty, gender inequality, ethnicity, remoteness, language barriers, disabilities, climate impacts, and Rohingya children's humanitarian crisis in Bangladesh. It is often difficult to decide on learning materials because of a lack of teacher comprehension about students with special needs (Rohmatullaili, 2023).

Table 3 outlines 19 strategies for improving inclusive classroom management skills among agricultural science teachers in senior secondary schools in Abia State, Nigeria. These include establishing clear rules for classroom and laboratory activities, equipping students with global-relevant skills, using diverse instructional strategies, and adjusting seating and materials to meet learning goals. The agreement between experienced and inexperienced teachers on these strategies lends credibility to the findings. Vygotsky (1962) supports this, asserting that teachers construct knowledge and skills through social interaction and shared experiences. Similarly, Isaeva et al. (2006) note that inclusive classrooms thrive when teachers create engaging environments, assess understanding, adapt to students' abilities, and manage time efficiently. Evertson and Weinstein (2006) highlight key inclusive practices like rule-setting, space organization, monitoring student progress, and maintaining positive relationships with students and parents. Tichá et al. (2019) identified four core strategies—active learning, peer tutoring, cooperative learning, and direct instruction—as essential for inclusivity. Bozkuş (2021) emphasized rules, engagement, and classroom climate, while Rohmatullaili (2023) stressed the role of teacher attitudes. Begum et al. (2019) underline the importance of context-based policies in inclusive education. These findings offer a framework for fostering inclusive agricultural classrooms in Abia State.

Conclusion and Recommendations

Teachers of agricultural science are faced with several challenges in an inclusive classroom that affect students' interest, achievement, and enrolment in high school agriculture. The study explored inclusive classroom management skills for agricultural science teachers in senior secondary schools in Abia State, Nigeria. Based on the findings of the study, it can be concluded that agricultural science teachers in senior secondary schools in Abia State, Nigeria, acknowledge the: importance of classroom management skills, barriers faced in managing inclusive classrooms, and strategies for improving inclusive classroom management skills. Based on the study's findings, specific recommendations for improving inclusive classroom management skills among agricultural science teachers include the following:

1. Teachers should establish teacher networks in Abia State where educators can share experiences, learn from each other, and create a culture of acceptance and respect within classrooms.
2. To enhance inclusive classroom management, agricultural science teachers should be equipped with practical skills and encouraged to collaborate and network, sharing experiences, strategies, and resources to effectively manage diverse classrooms.
3. The Ministry of Education should organise workshops, seminars, in-service and pre-service courses to enhance the classroom management skills of agricultural science teachers, focusing on inclusive practices and strategies.
4. Schools should create a supportive environment that encourages inclusive practices, providing resources and support to teachers in managing inclusive classrooms effectively.
5. Educational policymakers should prioritise the implementation of inclusive education policies, providing guidelines and support for agricultural science teachers in managing inclusive classrooms.
6. Further research should be conducted to explore additional classroom management skills, barriers, and strategies specific to agricultural science at all levels of education in inclusive settings.

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