




## Research Article

# Training and Development Needs of Early Childhood Educators for Effective Instructional Delivery in Awka-South Local Government Area, Anambra State Nigeria

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**Abstract:** This study investigated the training and development needs of early childhood educators for effective instructional delivery in Awka South Local Government Area, Anambra State, Nigeria. Two hypotheses and three research questions guided the study. Data were collected using a questionnaire titled Training and Development Needs Scale (TDNS) was administered to 130 early childhood educators. The acquired data were examined at a significance level of 0.05 using the independent t-test statistic, mean, and standard deviation. Results indicated that early childhood educators needed training in managing the classroom and school to deliver education effectively. The study also showed that early childhood educators require support for practical workshops on contemporary pedagogies to provide teaching effectively. Consequently, education and training allow educators to give kids a top-notch education. As a result, it can be said that training and development empower educators to give kids a top-notch education. It was suggested that the government hold educator training programs regularly, among other things. Such programs must deal with the subject matter, the utilization of teaching aids, the planning, and delivery of lessons, classroom management, and student evaluation.

**Keywords:** training need, development need, childhood educators, instructional delivery, inexperienced educator, experienced educator

## 1. Introduction

Teaching is a vocation that needs ongoing improvement due to the challenges presented by modern society. Early childhood educators require constant increases in knowledge and competence in new generational learning styles, development of technology, and information networks. The teaching profession is becoming more challenging and sophisticated as a result of advancements in many aspects of life, which encourage instructors to acquire better tools (Celik, 2023). However, professional development studies should be focused on the actual requirements of educators and contemporary pedagogical practices to be effective, as is also suggested by the research. The literature has suggested that professional training and development activities may alter instructors' instructional strategies and have a favorable impact on students' academic attainment and learning (Taylor, 2023; Volkova & Hill, 2023).

## 2. Statement of problem

Over time, educators have attributed low student performance to their use of ineffective teaching strategies. After their pre-service training, the majority of professional educators did not obtain any type of in-service training to keep up with the rapidly changing and technologically driven world (Gifford et al., 2023). This also applies to non-professional instructors, the majority of whom lack experience in the art of teaching and frequently fall short in carrying out their obligations. Despite playing a crucial role in ensuring educators' effectiveness, administrators of education and school heads seldom offer in-service training, conferences, seminars, refresher courses, or workshops for early childhood educators to develop themselves (Aubrey, 2019). Existing research on teacher training and instructional delivery in early childhood education has provided insights but faces limitations (Gelfer & Nguyen, 2019). Studies often lack longitudinal follow-up and may have small sample sizes, limiting generalizability. Contextual factors relating to Awka-South Local Government Area are majorly overlooked, and a focus on cognitive outcomes may disregard holistic development.

Standardization and ongoing professional development are underemphasized, and implementation challenges are not fully explored. Balancing quantitative and qualitative approaches, considering technology's evolving role, and examining parent and community involvement can address these limitations for a more comprehensive understanding of effective early childhood education practices. There is rising concern that educators' preparation has to be improved for them to perform their tasks as effectively as possible given the new educational obstacles. To date, relevant training and development needs of early childhood educators for effective instructional delivery in Awka South Local Government Area, Anambra State Nigeria are still mostly unknown. To close the gaps that exist, the present research aims to:

1. Determine the areas of training needs of early childhood educators for effective instructional delivery.
2. Establish the areas of development needs of early childhood educators for effective instructional delivery.
3. Find out the effects of educators' training and development on effective instructional delivery.

## 3. Literature review

In any educational institution, training and development are crucial concepts in the education of human resources. Training is the planned and systematic modification of behavior through learning events, programs, and instruction that enables people to achieve the levels of knowledge, skill, and competence required to carry out their work effectively (Howard et al., 2021). Development is defined as the advancement or maximization of a person's capability and potential through the implementation of learning and educational experiences (Day, 2021). Although some academics consider the two phrases to be synonymous, others see the terminology as distinct. Instead of developing organizational members' knowledge and abilities to prepare them for new responsibilities and challenges, development largely focuses on training organizational members on how to do their existing duties. Effective workforce training and development must get particular attention if the country's education system is to meet its objectives (Kotamraju, 2014).

The promotion of the abilities needed by educators in the classroom to provide the most effective and highest caliber of instruction to pupils is accomplished through a continual, never-ending process known as educator training and professional development (Gheysens et al., 2020). Different forms and techniques can be used to give educator training and professional development, including formal classrooms, symposia, conferences, projects, and web-enabled education. The pre-service training process may lead an educator to believe that she or he has received enough preparation, but it may not always prepare the educator to handle the problems encountered in the actual teaching environment (Bennett-Levy, 2019). To deal with the educational issues that must be regularly updated as they are encountered by students in the classroom, educators must demonstrate expertise in upgrading sustainable development. The teaching-learning process' sustainable growth is presently seen as a crucial component in the evolution of the educational system.

Throughout an educator's career, teaching experience is positively correlated with increases in student success. The increases in educator effectiveness brought on by experience are greatest during the first few years of teaching, but they continue to be considerable when instructors enter their second and sometimes third decades of employment. In addition to learning more as evidenced by standardized exams, children with more experienced instructors are also more likely to perform better on other success indicators, such as attendance at school (Podolsky et al., 2019). When educators operate

in an environment that is encouraging and helpful as well as when they gain experience in the same grade level, subject, or area, their efficacy rises more quickly. Greater student learning is supported by more experienced instructors for both their students as well as their peers and the school's pupils (Louws et al., 2017).

The education and credentials of the instructors who work in the program are among the most crucial components of a high-quality early childhood education program. Early childhood educators have a significant impact on the lives of young children; thus, they must be equipped with the skills and knowledge needed to do so (Azonuche, 2020; Nicholson et al., 2023). Sadly, not all early childhood educators have the necessary education or experience to deal with young children. This may have a detrimental effect on the level of care and education provided to children. Research consistently shows that the quality of early childhood education significantly influences a child's cognitive, social, emotional, and physical development. Well-trained educators are better equipped to provide developmentally appropriate activities and experiences that support children's growth and learning (Jeon et al., 2019).

Early childhood educators must consequently complete appropriate training before starting to deal with young children. Programs for preparing early childhood educators equip teachers with the abilities and information necessary to instruct young children successfully. Both teachers and students can profit from these initiatives (Berger et al., 2022). Early childhood educators need to be trained to guarantee that they have the knowledge and abilities required to deliver high-quality early childhood education. Molla and Nolan (2019) noted that training and development programs offer educators opportunities to enhance their teaching skills, knowledge, and competencies. By staying up-to-date with the latest research and best practices, educators can create more engaging and effective learning environments. Early childhood classrooms are diverse, with children from different backgrounds, abilities, and learning styles (Quinones et al., 2021; Azonuche, 2021). Proper training helps educators recognize and address individual learning needs, ensuring that every child receives the support and guidance they require.

Early childhood educators who have received the necessary training are better equipped to fulfill the developmental requirements of young children, provide a good learning environment, interact with children clearly and effectively, and choose and use the right curriculum and evaluation methods. Training for early childhood educators has several advantages. One of the most significant advantages is that it aids in instructors' comprehension of young children's developmental requirements (Thompson & Stanković-Ramirez, 2021). With this knowledge, teachers may design more engaging activities and learning opportunities for their pupils. Early childhood educator training may also assist educators in improving classroom management techniques and cultivating a more supportive learning environment for their pupils (Harrison et al., 2019). Training and development enable educators to understand and apply developmentally appropriate practices. These practices consider the unique needs and characteristics of young learners, promoting a balance between academics and play-based learning. Early childhood educators need training to create inclusive environments that celebrate diversity and support children with diverse abilities (Logan et al., 2020). Inclusive classrooms foster a sense of belonging, respect, and empathy among children.

The ability to better appreciate the significance of play and the involvement of a child's family in early childhood development is another significant advantage of early childhood educator preparation (Crawford et al., 2021; Azonuche et al., 2022). Children learn to explore their surroundings, solve issues, and build social and emotional skills via play, which is an essential component of how young children learn and develop (Inan, 2021). Teachers may build classrooms that are full of chances for play-based learning with the aid of early childhood educator training. Effective instructional delivery includes supporting children's social-emotional and nutritional development (Ogwu et al., 2021). Educators with proper training can nurture emotional intelligence, self-regulation, and positive relationships among children. In the digital age, technology can be a valuable educational tool when used appropriately (Anerua & Azonuche, 2010; Cumming & Wong, 2019). Training helps educators integrate technology into the classroom in meaningful and developmentally suitable ways.

As the world around us adapts and evolves, professional development for educators often focuses on teaching new methodologies and techniques as well as ways for putting the new teaching skills they have learned into practice. Such techniques include gamification, new forms of educational reforms, and technology. Gamification involves applying game design principles and mechanics to non-game contexts, such as education, to enhance engagement, motivation, and learning outcomes (Lamrani & Abdelwahed, 2020). It leverages the innate human desire for competition, achievement, and rewards. By integrating elements like points, badges, leaderboards, and challenges into educational activities, gamification aims to make learning more enjoyable and effective. Gamification can boost students' intrinsic

motivation by making learning fun and rewarding. A study by Marín-Díaz et al. (2020) found that gamification elements significantly increased engagement and motivation in an online learning environment. Games can provide a scaffolded approach to skill development, offering increasingly complex challenges as learners progress. This aligns with the Zone of Proximal Development (ZPD) concept by Vygotsky, helping learners stretch their abilities. Gamification enables real-time feedback through immediate responses to actions. This enhances self-assessment and helps students track their progress, which aligns with formative assessment practices (Tashiro et al., 2023). Gamified activities can encourage collaboration and healthy competition among students, fostering a sense of community and teamwork. Social interactions in gamified environments align with constructivist theories (Vygotsky, 1978). Games can adapt to individual learners' needs and pace, providing a personalized learning experience. This relates to the concept of differentiated instruction (Mengistie, 2020).

In addition to gamification, several other innovative educational reforms are shaping modern learning environments. This approach reverses traditional in-class and homework activities. Students engage with instructional materials outside class and use classroom time for active, collaborative, and problem-solving activities (Hsia et al., 2021). Project-Based Learning (PBL) focuses on learning through hands-on projects and real-world problem-solving. Students apply concepts in practical contexts, enhancing critical thinking and creativity (Almulla, 2020). Blended learning combines traditional classroom teaching with online resources and activities, allowing for flexibility, personalized learning, and increased student autonomy (Banihashem et al., 2023). Competency-Based Education (CBE) students progress based on demonstrated mastery of skills and knowledge rather than traditional time-based structures. CBE aligns learning outcomes with workforce needs (Brenner, 2022). Technology-driven adaptive platforms customize learning experiences based on individual strengths and weaknesses, optimizing learning pathways (Guraya, 2020).

Professional development for educators can also incorporate technology in education such as the deployment of online learning platforms. Platforms like Coursera, edX, and Khan Academy offer a wide range of courses, enabling learners to access education anytime and anywhere. Virtual Reality (VR) and Augmented Reality (AR) technologies immerse students in virtual environments, enhancing experiential and immersive learning (Ozdemir, 2021; Yirci et al., 2023). Artificial Intelligence (AI)-powered tools provide personalized recommendations, automate administrative tasks, and analyze student performance data to inform instructional decisions (Yang, 2022). The use of mobile devices enables on-the-go learning, interactive content consumption, and communication between students and educators (Morrison & Koole, 2018). Understanding the intellectual structure, evolution of distributed leadership, educational data mining and learning analytics help educators identify trends, understand student behavior, and improve instructional strategies (Karakose et al., 2022). Blockchain technology and evaluating the intellectual structure of the knowledge base on transformational school leadership can facilitate secure credential verification, academic record management, and micro-credentialing (Karakose et al., 2023). Incorporating gamification, new educational reforms, and technology can create dynamic and learner-centered educational experiences. However, it's essential to carefully design and implement these approaches based on educational research and best practices to ensure their effectiveness in enhancing learning outcomes.

Furthermore, the identification of needs is where effective planning for training and development should begin. The school's and each educator's needs, which demand training and development of the workforce, should be given first attention (Hervie & Winful, 2018). This may be the consequence of a situational evaluation, the use of facilities and equipment, changes in technology, curricula, and policies, competition, and social justice leadership in education to stay current (Yoon et al., 2021; Karakose et al., 2023). The programs to be implemented to address the issues are frequently determined by the needs. The scheduling, methods, resources, setting, and trainers should all be included in the plans and customized to the needs that have been determined. After everything is set up, it should be implemented effectively, with controls put in place to track development and the achievement of the program's goals.

## 4. Research questions

1. What are the areas of training needs of early childhood educators for effective instructional delivery?
2. What are the areas of development needs of early childhood educators for effective instructional delivery?
3. What are the effects of educators' training and development on effective instructional delivery?

## 5. Research hypotheses

Two null hypotheses tested at a 0.05 level of significance were formulated to guide the conduct of the study.

- There is no significant difference in the areas of training needs of experienced and inexperienced early childhood educators for effective instructional delivery.
- There is no significant difference in the areas of development needs of experienced and inexperienced early childhood educators for effective instructional delivery.

## 6. Method

The survey research design was the approach used for this investigation. The research area was the Awka South Local Government Area of Anambra State, Nigeria. Early childhood educators numbering 665 from the 45 public primary schools in Awka South Local Government Area made up the study's population. In this study, a total of 30 schools and 130 educators were randomly sampled. Among the educators, there were 40 inexperienced and 90 experienced early childhood educators. The researcher created a questionnaire to collect pertinent data for the study. The replies to the questionnaire were created using a 4-point Likert scale, with 4 denoting Strongly Agree, 3 denoting Agree, 2 denoting Disagree, and 1 denoting strongly disagree. The questionnaire was duly validated by 3 experts, one from the Early childhood education department and two from the Measurement and Evaluation Department. The various sections of the questionnaire included: (Cluster 1) personal details, (Cluster 2) areas of training needed by early childhood educators for effective instructional delivery, (Cluster 3) areas of development needed by early childhood educators for effective instructional delivery, and (Cluster 4) the effects of educators' training and development on effective instructional delivery.

The internal reliability of the instrument was examined in this study using Cronbach's alpha ( $\alpha$ ). Cronbach's alpha method can determine the correlation between the outcomes of each test item and the test's total score. The Cronbach's alpha value for this instrument is 0.76, which is regarded as appropriate for the study. The participants gave their opinions in response to the remarks, basing their decisions on those opinions. Google forms® was used to electronically deliver the survey to the respondents.

A total of 130 respondents participated in the survey. The statistical package for the social sciences, version 22, was used to calculate the mean and standard deviation. Using inferential statistics (independent test) with 128 degrees of freedom and a 0.05 threshold of significance, the study hypotheses were also investigated. To determine whether to accept or reject the null hypothesis, the crucial value and estimated t-value are compared. The null hypothesis is accepted if the absolute calculated t-value is lower than the critical t-value; alternatively, it is rejected if the absolute computed t-value is greater than the critical t-value.

## 7. Results

### *7.1 Objective 1: the areas of training needed by early childhood educators for effective instructional delivery*

Table 1 above showed the areas of training needs of early childhood educators for effective instructional delivery. However, administration and control of the classroom and school is an area of training needs of early childhood educators for effective instructional delivery (3.30). It is obvious that Understanding the concepts behind blended learning (3.23). Meanwhile, formative evaluation and understanding of the subject's content were rejected by both experienced and inexperienced educators with a mean score of (1.53). On the whole, items 1, 2, 4, 5, 6, 7, and 10 were all accepted with mean scores above 2.50 while items 8 and 9 were rejected for scoring below the cut-off point.

**Table 1.** Mean and standard deviation on the areas of training needs of early childhood educators for effective instructional delivery

S/N	ITEMS	Inexperienced N = 40			Experienced N = 90		
		$\bar{X}$	SD	Decision	$\bar{X}$	SD	Decision
1	Administration and control of the classroom and school	3.30	0.84	Accepted	3.34	0.46	Accepted
2	Knowledge of competency-based education	2.88	0.93	Accepted	2.88	0.49	Accepted
3	Knowledge of flipped learning	3.33	1.10	Accepted	2.51	0.23	Accepted
4	Designing and developing curricula	2.00	1.16	Rejected	3.28	0.40	Accepted
5	Understanding the concepts behind blended learning	3.23	0.99	Accepted	3.32	0.48	Accepted
6	Techniques for teaching inclusive education	1.80	1.17	Rejected	2.62	0.38	Accepted
7	Addressing the needs of brilliant children requires cooperation and teamwork.	3.03	1.06	Accepted	2.23	0.49	Rejected
8	Using unique apparatus and facilities	2.28	1.00	Rejected	2.07	0.47	Rejected
9	Formative evaluation and understanding of the subject's content	1.53	1.00	Rejected	1.72	0.21	Rejected
10	Technology improved instruction, organizing, and assessment	3.05	1.05	Accepted	2.56	0.21	Accepted
	Cluster means	2.643	1.03		2.653	0.382	

## 7.2 Objective 2: the areas of development needed by early childhood educators for effective instructional delivery

**Table 2.** Mean and standard deviation on the areas of development needs of early childhood educators for effective instructional delivery

S/N	ITEMS	Inexperienced N = 40			Experienced N = 90		
		$\bar{X}$	SD	Decision	$\bar{X}$	SD	Decision
11	Sponsorship for oversea courses	3.35	0.79	Accepted	3.13	0.47	Accepted
12	Provision of incentives for participation in education conferences	2.85	0.94	Accepted	2.51	0.50	Accepted
13	Approval to enroll in qualification programs	3.35	1.09	Accepted	3.14	0.50	Accepted
14	Observation visits to other schools	3.15	1.09	Accepted	1.94	0.44	Rejected
15	Registration with professional development network	3.25	0.97	Accepted	2.47	0.43	Rejected
16	Encouraging individual and collaborative research	3.20	1.17	Accepted	3.07	0.49	Accepted
17	Effective mentoring and peer observation	3.05	1.05	Accepted	3.01	0.45	Accepted
18	Support for student counseling seminars	3.20	0.75	Accepted	1.54	0.20	Rejected
19	Sponsorship for practical workshops on modern pedagogies	3.50	0.97	Accepted	3.21	0.49	Accepted
20	strengthening evidence-based research on teaching	2.18	1.14	Rejected	2.66	0.36	Accepted
	Cluster means	3.35	0.79		3.13	0.47	

Table 2 above showed the areas of development needs of early childhood educators for effective instructional delivery. Sponsorship for practical workshops on modern pedagogies is an area of development needs of early childhood educators for effective instructional delivery (3.50). On item 15, the inexperienced respondents agreed that registration with a professional development network (3.25) while it was disagreed by experienced respondents with a mean score of (2.47) corresponding to a standard deviation of 0.43. On the whole, items 11, 12, 13, 16, 17, and 19 were all accepted by both experienced and inexperienced educators with mean scores above 2.50 while items 14, 15, 18, and 20 were rejected either by experienced or inexperienced.

### 7.3 Objective 3: the effects of educators' training and development on effective instructional delivery

**Table 3.** Mean and standard deviation on the effects of educators' training and development on effective instructional delivery

S/N	ITEMS	Inexperienced N = 40			Experienced N = 90		
		$\bar{X}$	SD	Decision	$\bar{X}$	SD	Decision
21	Training and development allow educators to pick up new abilities and information.	2.25	1.16	Rejected	2.99	0.45	Accepted
22	Training and development enable instructors to provide students with a high-quality education.	3.65	0.88	Accepted	2.91	0.45	Accepted
23	Training and development allow educators to improve their academic credentials.	3.33	0.88	Accepted	2.92	0.26	Accepted
24	Training and development help educators to advance in their careers.	2.50	1.16	Accepted	3.40	0.45	Accepted
25	Training and development allow educators to play a crucial part in the effective execution of several educational policies and initiatives.	3.20	0.64	Accepted	2.42	0.45	Rejected
26	Training and development promote instructors' competence, dependability, and responsibility while also broadening and deepening their knowledge.	2.83	1.20	Accepted	2.58	0.41	Accepted
27	By learning the subject material, educators who have undergone in-service training become more qualified.	2.95	1.34	Accepted	2.54	0.41	Accepted
28	Educators with in-service training become more qualified by being inspired at work.	2.45	1.30	Rejected	2.76	0.45	Accepted
29	Educators who have received in-service training are competent in their academic fields and can successfully address the requirements of students.	3.25	0.97	Accepted	2.53	0.19	Accepted
30	Educators who have undergone in-service training are effective in the classroom.	3.38	0.86	Accepted	2.83	0.27	Accepted
		2.979	1.039		2.788	0.379	

The result in Table 3 revealed the effects of educators' training and development on effective instructional delivery. Training and development enable instructors to provide students with a high-quality education (3.65). Yet, training and development promote instructors' competence, dependability, and responsibility while also broadening and deepening their knowledge. The experienced respondents rejected that training and development allow educators to play a crucial part in the effective execution of several educational policies and initiatives (2.42) while all were accepted since it produces mean scores above the cut-off point 2.50.

### 7.4 Hypothesis 1: The result of comparing the areas of training needs of experienced and inexperienced early childhood educators for effective instructional delivery

The results of the statistical analysis (t-test) indicate that there is no significant difference between the areas of training needs of experienced and inexperienced early childhood educators for effective instructional delivery. The calculated t-value (-0.06) is smaller than the critical t-value (1.656) at a significance level of 0.05 and 128 degrees of freedom. Therefore, the null hypothesis is accepted, suggesting that there is no statistically significant distinction between the two groups in terms of their training needs.

**Table 4.** t-test analysis on differences in the areas of training needs of experienced and inexperienced early childhood educators for effective instructional delivery

Educator Experience	<i>n</i>	$\bar{x}$	SD	<i>t</i> -cal	<i>t</i> -crit	df	sig.
Inexperienced	40	2.64	1.03				
				0.06	1.656	128	0.05
Experienced	90	2.65	0.38				

### 7.5 Hypothesis 2: The result of comparing the areas of development needs of experienced and inexperienced early childhood educators for effective instructional delivery

The statistical analysis (t-test) results from Table 5 indicate that there is no significant difference in the areas of development needs between experienced and inexperienced early childhood educators for effective instructional delivery. The calculated t-value (1.637) is smaller than the critical t-value (1.656) at a significance level of 0.05 and 128 degrees of freedom. Consequently, the null hypothesis is accepted, suggesting that there is no statistically significant distinction in the development needs of the two groups of educators.

**Table 5.** t-test analysis on differences in the areas of development needs of experienced and inexperienced early childhood educators for effective instructional delivery

Educator Experience	<i>n</i>	$\bar{x}$	SD	<i>t</i> -cal	<i>t</i> -crit	df	sig.
Inexperienced	40	3.35	0.79				
				1.637	1.656	128	0.05
Experienced	90	3.13	0.47				

## 8. Discussion of findings

Research question 1 covered the areas of training needs of early childhood educators for effective instructional delivery. The conclusion drawn from Table 1 shows that early childhood educators need expertise in managing and controlling the classroom and school to provide teaching effectively. According to Obee et al. (2022), classroom management is the most significant school-level determining requirement for educators, and this conclusion is consistent with their findings. The findings indicated that early childhood educators need to receive training to effectively manage/



administer the classroom and school. In light of this finding, Fresko and Levy-Feldman (2023) upheld the need for educators and administrators to receive appropriate training to maintain their commitment to providing real learning opportunities for all children, rather than just those who will take part in and be evaluated by high stakes exams that have little meaning for them. Early childhood educators were found to have a significant need for formative assessment and content comprehension to provide efficient teaching, which benefits school performance. In a related finding, Herman et al. (2015) suggest that teachers' formative assessment practices are positively related to student learning. Feeling adequately prepared for the task also positively predicts fuller application of the classroom assessment (Zhang et al., 2023).

Research question 2 covered the areas of development needed by early childhood educators for effective instructional delivery. The findings indicated that early childhood educators need to focus on their professional development to give good training. According to Shishido and Kashiwagi (2020), practical workshops on contemporary pedagogies guarantee the quality of the instructor. It takes a multilayered approach to provide educators with the support they need to successfully transition what they learn in a professional development environment to the classroom (Ma et al., 2021; Grierson & Woloshyn, 2013). Early childhood educators play a crucial role in shaping the foundation of a child's learning journey. To enhance their instructional delivery, educators must possess a comprehensive skill set. Firstly, understanding the concepts behind blended learning is imperative. As children increasingly engage with digital tools, educators should be well-versed in integrating online resources and traditional methods seamlessly. A study by Ayob et al. (2023) emphasizes the significance of blending face-to-face instruction with technology to create dynamic learning experiences. Secondly, a grasp of competency-based education (CBE) is essential. CBE focuses on individualized progress based on mastery rather than time. Early childhood educators need to design learning activities that cater to each child's developmental level, fostering a sense of achievement and independence. Rwigema and Andala (2022) underscore the importance of aligning CBE with workforce needs, ensuring children acquire relevant skills. Lastly, knowledge of flipped learning is paramount. Educators should adeptly design pre-class activities that introduce concepts, allowing in-class time for interactive and collaborative activities. SawitreePipitgool and SomkiatTuntiwongwanich (2021) emphasize the role of flipped learning in enhancing critical thinking and problem-solving skills. These concepts, empower educators to create engaging, personalized, and holistic learning experiences that foster children's growth and development.

Additionally, early childhood educators require support for their professional development network registration. Fenech and King (2022) stated that early childhood educator registration establishes standards for educators in the nation, which is thought to be a mechanism to increase the caliber of early childhood education and care. This conclusion is consistent with Fenech and King's findings. Because of this, no one may enter the teaching profession without receiving the necessary training. According to recent studies on continuing educator support, instructors who get on-the-job assistance, direction, and evaluation from supervisors or specially trained support staff embrace a wider variety of instructional techniques and use new skills and strategies more frequently and effectively (Dunn et al., 2018; Aminian et al., 2015). The study demonstrates that promoting individual and group research among early childhood educators will aid in the efficient delivery of education in the Awka South Local Government Area. According to Dalby (2021), providing chances for professional development encourages educator collaboration. Increased educator effectiveness, better student test score improvements, and educators' openness to accept innovations have all been connected to cooperation with coworkers and the culture of trust and information sharing that collaboration fosters.

Research question 3 covered the effects of educators' training and development on effective instructional delivery. The findings demonstrated that training and development help educators succeed in their professions while enabling instructors to offer pupils a high-quality education. The findings of this study concur with Hervie and Winful's (2018) assertion that educator professional development affords them the chance to break from their routine and take on the role of the student instead of the instructor. Because they believe they are getting the professional support they need to become better educators, this keeps educators interested. After all, professional development cultivates the skills of educators who wish to hold leadership roles in the classroom, and educators must absorb the knowledge of current leaders to evolve into successful leaders in the future. Students and educators both benefit from professional education development, but educators gain the most since it helps them become more effective instructors and prepare for careers as capable school administrators (Bragg et al., 2021; Ansari & Pianta, 2018). By enabling them to provide pertinent and customized course instructions for today's pupils, professional training and development turns instructors into better and

more competent educators. To guarantee the delivery of high-quality elementary, secondary, and university education, training and resource development are crucial (Abosedo, 2015; Mphale & Mhlauli, 2014). The results of this study show that educators' competence, reliability, and responsibility are encouraged via training and development, which also broadens and deepens their knowledge. The significance of educator development and training has both direct and indirect links to the quality of education delivery. It also increases educators' competence to carry out their work effectively by acquiring new knowledge and skills and keeping up with curriculum changes and educational reforms (Fauzan et al., 2021; Volkova & Hill, 2023).

## **9. Implications and suggestions based on results and findings**

### ***9.1 Implications of results and findings***

The study's findings underscore the importance of tailored training programs for early childhood educators. Training should focus on addressing the identified needs, such as competency-based education, blended learning, and effective classroom management. The results highlight the significance of ongoing professional development for educators. Incentives, sponsorship for courses, and opportunities for collaboration and research can motivate educators to continually enhance their skills and knowledge. Institutions should establish a culture of continuous learning to support educators' growth and effectiveness. The rejection of certain training and development needs, such as designing curricula and using unique apparatus, suggests the need for curriculum designers and administrators to reconsider these aspects. Efforts should be made to integrate these topics into training and development programs to address educators' potential limitations in these areas.

The acceptance of technology-related training needs indicates the growing importance of technology in early childhood education. Institutions should prioritize training educators on technology-enhanced instructional strategies and tools to ensure the effective integration of digital resources into the classroom. The findings highlight the importance of collaboration, teamwork, and cooperation, especially in addressing the needs of brilliant children. Educational institutions should foster a collaborative environment where educators work together to support exceptional students and implement effective teaching strategies.

### ***9.2 Suggestions based on results and findings***

Develop customized training workshops that focus on the areas of training and development needs identified in the study. These workshops should provide practical strategies, tools, and resources to empower educators to excel in their instructional delivery. Establish a system of incentives to encourage educators to participate in education conferences, enroll in qualification programs, and engage in collaborative research. Recognizing and rewarding educators for their professional growth can lead to higher levels of engagement and commitment. Implement regular observation visits to other schools and promote peer observation as a way for educators to learn from each other's best practices. This can create a culture of sharing and continuous improvement. Given the acceptance of blended learning concepts, integrate blended learning strategies into early childhood education. Create opportunities for educators to experience and apply these methods in their teaching practices. Conduct longitudinal studies to track the long-term impact of training and development on educators' instructional delivery and student outcomes. This can provide valuable insights into the sustainability and effectiveness of various training approaches. Develop comprehensive training programs that equip educators with techniques for teaching inclusive education. Focus on strategies to address diverse learning needs and create inclusive classroom environments. Establish cooperative initiatives and strategies to support the needs of brilliant children. Encourage educators to collaborate with parents, administrators, and specialists to provide a well-rounded educational experience.

## **10. Recommendations**

Based on the findings of this study and their implications, the following recommendations were made:

- The government and NGOs should regularly arrange training in the form of in-service, training courses, master

classes, and symposiums for both educators and administrators to help them develop the abilities to teach, converse, and manage an inclusive education as well as to keep them informed of the necessary changes and innovative thinking in inclusive education.

- Educators need to be more motivated to find resources in the environment that might significantly improve students' conceptual comprehension.

- Frequent needs analysis contacts between pertinent in-service training institutions, the government, educators, and other pertinent stakeholders are required. This will allow them to plan trainings that actively reflect the goals and requirements of instructors.

- The creation of a resource center where instructional materials may be stored and accessed by educators is recommended.

## 11. Limitations of the study

Despite the valuable insights provided by the study on the training and development needs of early childhood educators for effective instructional delivery, several limitations should be acknowledged. Firstly, the study was conducted in a specific geographical and cultural context (Awka-South Local Government Area, Anambra State, Nigeria), which may limit the generalizability of the findings to other regions with different sociocultural backgrounds. Secondly, the study utilized a cross-sectional design, capturing a snapshot of educator needs at a particular point in time. Longitudinal research would provide a more comprehensive understanding of how these needs evolve over an extended period. Additionally, the reliance on self-reported data from educators may introduce response bias or social desirability effects, affecting the accuracy of the results.

## 12. Future directions

To address the limitations and contribute further to the field of early childhood education, future research could consider the following avenues:

1. **Cultural Variability:** Conduct similar studies in different regions and cultures to compare training and development needs. Exploring how cultural factors influence these needs would provide a more comprehensive understanding of educator requirements.

2. **Mixed-Methods Approaches:** Integrating qualitative methods, such as interviews or focus groups, could provide a deeper understanding of educators' experiences, perceptions, and challenges related to training and instructional delivery.

3. **Parent and Community Involvement:** Investigate the role of parents and the community in supporting early childhood educators' training and development efforts. Collaboration between educators, parents, and the community could enhance instructional delivery and student outcomes.

4. **Technology Integration:** Explore the integration of technology-driven training methods, such as online courses or virtual simulations, to enhance early childhood educators' skills and knowledge.

5. **Teacher Retention and Well-being:** Investigate how training and development programs influence teacher retention rates and overall well-being. Understanding the connection between professional growth and job satisfaction can contribute to better educator support.

## 13. Conclusion

In conclusion, the study investigating the training and development needs of early childhood educators for effective instructional delivery in Awka-South Local Government Area, Anambra State, Nigeria, has shed light on crucial aspects that impact the quality of early childhood education. Through a comprehensive examination of educators' needs, the study has illuminated significant findings that hold implications for both educational practice and policy. The study's primary objective was to identify the areas of training and development needs among early childhood educators.

Notably, the research highlighted the importance of addressing key areas, such as administration and classroom control, competency-based education, blended learning, and technology-enhanced instruction. These findings emphasize the evolving landscape of education and underscore the necessity of equipping educators with the skills and knowledge required to adapt to modern instructional methods and technology integration.

Furthermore, the study underscored the value of ongoing professional development and collaboration among educators. Incentives, sponsorships for courses, and opportunities for research and observation visits emerged as crucial elements for enhancing educators' effectiveness. The study's outcomes echo the global call for continuous learning and the cultivation of a community of educators committed to excellence in early childhood education. The implications of this study extend beyond the local context of the Awka-South Local Government Area. By recognizing the specific needs of early childhood educators and acknowledging the significance of tailored training and development, educators, institutions, and policymakers can collaborate to create a more enriching and impactful learning environment for young learners. This study's contribution lies in its provision of insights that pave the way for targeted interventions, improved instructional practices, and ultimately, a higher quality of early childhood education in Anambra State and beyond.

## Conflict of interest

The authors declare no competing financial interest.

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