

**PERCEIVED EFFECTIVENESS OF ORIENTATION & MOBILITY
PROGRAMME AMONG PRE-SERVICE TEACHERS IN FEDERAL
COLLEGE OF EDUCATION (SPECIAL), OYO**

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Abstract

One of the primary goals of the Federal College of Education (Special), Oyo, is to prepare pre-service teachers as professional special education teachers, with specific focus on the Orientation and Mobility (O&M) programme for training in the Department of Education of Learners with Visual Impairment. This study aimed to determine the perceived effectiveness of the O&M programme among pre-service teachers at the college. Specific objectives included evaluating the level of knowledge and skills acquired and assessing the perceived effectiveness of the programme. A descriptive survey-type methodology was adopted, targeting 200-level and 300-level students in the Department of Education for Learners with Visual Impairment. A sample of 100 participants were selected using convenience sampling. Data was collected using the Perceived Effectiveness of Orientation and Mobility Programme Questionnaire (PETEOMPQ), which demonstrated high reliability (coefficient of 0.93) and validity (coefficient of 0.78). Responses were rated on a 4-point Likert scale. Data analysis was conducted using SPSS, employing descriptive statistics including frequency counts, mean, and standard deviation. Results indicated that pre-service teachers generally disagreed that they had acquired significant knowledge and skills in understanding and applying O&M principles (Mean: 2.10, SD: 0.934), assessing needs (Mean: 2.48, SD: 0.858), understanding safety protocols (Mean: 2.24, SD: 0.855), and using relevant tools and equipment (Mean: 2.13, SD: 0.647). Furthermore, they perceived the O&M programme as ineffective in preparing them to support learners with visual impairments. The programme was not seen as comprehensive (Mean: 2.18, SD: 0.902), enhancing practical skills (Mean: 2.35, SD: 0.583), or preparing them to create a safe and supportive environment (Mean: 2.16, SD: 0.636). The curriculum was also perceived as inadequate (Mean: 2.45, SD: 1.039). In conclusion, the study highlights significant areas for improvement in the O&M programme at the Federal College of Education (Special), Oyo. Suggestions that covered the areas to be improved upon were highlighted: include updating and expanding the curriculum, increasing practical training, boosting teacher confidence, and conducting periodic evaluations to ensure the programme's relevance and effectiveness.

Keywords: *Orientation, Mobility, Pre-Service Teachers, Effectiveness, Visual Impairment*

Introduction

The preparation of pre-service teachers as professional special education teachers is one of the primary goals of the Federal College of Education (Special), Oyo. The Orientation and Mobility (O&M) programme remains a crucial aspect of the curriculum for training teacher trainees in the Department of Education of Learners with Visual Impairment. Exposing pre-service teachers to this programme also plays a pivotal role in this endeavour by offering specialised training programmes to equip them with the necessary skills and knowledge for effective professional practice. Attaining these feats comes with its challenges. According to Orly & Ronen (2019), preparing pre-service teachers for professional practice in special education remains a significant challenge in many teacher colleges and universities globally. Research indicates that inadequate preparation is still prevalent. Further, the authors report a lack of practical pedagogical training and insufficient development of self-efficacy in teaching students with special needs. Consequently, these inadequacies in teacher training programmes highlight the urgent need for more integrated and comprehensive training approaches that better prepare all teachers. Ajuwon, Olawuwo, Ahon, Griffin-Shirley, Nguyen & Stallings (2022) submit that in many developing countries, orientation and mobility (O&M) services and programmes are inadequate. This study therefore explores the perceived effectiveness of orientation & mobility programmes among pre-service teachers in the Federal College of Education (Special), Oyo.

Preparation of Special Education Teachers in Nigeria

Ramirez (2020) submits that becoming a teacher is complex, multifaceted and is marked by numerous challenges and moments of excitement. This journey begins with early interactions with significant individuals in one's life and continues through the observation of teachers and structured classroom instruction. For those who choose teaching as a lifelong vocation, it results in specialised training and immersive teaching experiences. Training exposure provides pre-service teachers with essential resources to develop their coaching and teaching skills. Although pre-service teachers consistently demonstrate a high degree of pedagogical ability, their teaching performance varied significantly over the three academic years. More so, teaching efficiency is compromised when pre-service teachers exhibit lower levels of pedagogical awareness. Conversely, a high level of pedagogical competence was associated with outstanding teaching performance. These results underscore the critical importance of pedagogical competence in shaping the teaching effectiveness of pre-service teachers.

Relating these findings to the effectiveness of the O & M programme among pre-service teachers in the Federal College of Education (Special), Oyo, the preparation of pre-service teachers faces similar challenges and opportunities. In Nigeria, the integration of special education elements into teacher preparation programmes aims to equip future teachers with the skills (O & M included) needed to support learners with visual impairment in inclusive classrooms. However, effective implementation of this curriculum remains a significant concern. Relatedly, studies have highlighted that many lecturers, although academically qualified, lack professional training in O & M in particular and special education in general, which impedes the development of practical teaching skills among pre-service teachers. Addressing these challenges in Nigeria requires a comprehensive approach.

Teacher preparation in Nigeria faces significant challenges, particularly regarding the adequacy and effectiveness of pre-service training programmes. For instance, Garba & Dungurawa (2017) conducted a study focusing on pre-service teacher education at Kano University of Science and Technology, Wudil, in which they highlighted critical issues in curriculum implementation. The primary objective of the study was to assess whether teaching practice exercises provide student-teachers with the necessary professional experiences. The research, guided by three objectives and corresponding research questions, employed a descriptive survey design. The population included all 400 level science education students, with a sample of 196 out of 350 students selected randomly based on Research Advisors' guidelines (2006). Data were collected using a researcher-developed instrument, the 'Pre-Service Teacher Education Questionnaire' (PTEQ), which was validated by experts from the Department of Education. The instrument demonstrated a reliability index of 0.83, established through the Pearson Product Moment Correlation (PPMC) tool. Findings revealed that the teaching practice exercises were inadequate in developing the professional experience of the students. Furthermore, the study found that the course content was not effective in producing professional teachers.

These findings underscore the broader issues within Nigeria's teacher preparation programmes which cut across general and special education. Despite the integration of special education elements into the curriculum, the delivery of these programmes often fall short due to several factors. Many lecturers, although academically qualified, lack professional training in special education, leading to ineffective teaching practices. Additionally, essential facilities are frequently unavailable or inadequate, further hindering the development of practical skills among student-teachers. Addressing these challenges requires an urgent need for comprehensive reforms. This includes hiring professionally qualified lecturers, improving the availability and quality of teaching facilities, and ensuring that the curriculum is effectively implemented to meet the professional needs of student-teachers. By addressing these issues, Nigeria can enhance the quality of its teacher preparation programmes and especially with respect to O & M, thereby producing more competent and effective professional special educators capable of meeting the diverse needs of their students.

Integrating special education elements into Nigerian teacher preparation programmes aims to equip pre-service teachers with the skills necessary for teaching exceptional learners in regular classrooms. However, effective implementation remains problematic due to several critical challenges. These deficiencies highlight the urgent need for the Nigerian government to employ professionally qualified personnel and provide adequate resources to ensure the curriculum's objectives are met, thereby enhancing the preparation of teachers to support exceptional learners effectively in inclusive settings (Eleri, 2013).

Orientation and Mobility Programme in Nigeria

Orientation and mobility (O&M) training equips individuals with visual impairment with essential skills for independent navigation, crucial for their inclusion in educational settings. Yet, it remains underemphasised in many developing countries like Nigeria. Yakubu, Bodang, & Amwe (2017) describe O&M as the skills and techniques that enable individuals with visual impairment to navigate their environments independently, efficiently, and safely. These skills start developing with

basic body, spatial, and environmental awareness in infancy, progressing to more advanced techniques as the individual grows. Additionally, the importance of O&M training lies in its role in fostering independence and enhancing the quality of life for persons with visual impairment. Further, the field of O&M training originated after World War II to assist blinded veterans and has since evolved to include structured university programmes for training O&M specialists. These specialists work with adults, school-aged children, and increasingly younger populations, including preschool-aged children. Regarding special education, O&M training is crucial for enabling students with visual impairments to fully participate in and benefit from educational environments.

Statement of the Problem

The Orientation and Mobility (O&M) programme is a critical aspect of the curriculum for training teachers in the Department of Education of Learners with Visual Impairment. Despite the significance of this programme, there are persistent challenges in effectively preparing pre-service teachers. This is evident in the submission of Orly & Ronen (2019) that many teacher training institutions globally struggle with inadequate preparation, practical pedagogical training, and the development of self-efficacy in teaching students with special needs. In Nigeria, there are challenges regarding insufficient O&M services and programmes (Ajuwon et al., 2022). Consequently, there is an urgent need to assess the perceived effectiveness of the O&M programme among pre-service teachers at the Federal College of Education (Special), Oyo, to identify areas for improvement and ensure that teachers are adequately prepared to support learners with visual impairments in inclusive settings.

Purpose of the Study

The general purpose of this study was to determine the perceived effectiveness of orientation & mobility programme among pre-service teachers in Federal College of Education (Special), Oyo

Specific objectives included to:

1. to evaluate the level of knowledge and skills acquired by pre-service teachers in the O&M programme at the Federal College of Education (Special), Oyo.
2. to assess the perceived effectiveness of the O&M programme in preparing pre-service teachers to support learners with visual impairments.

Research Questions

The following research questions guided this study:

1. What is the level of the knowledge and skills acquired by pre-service teachers in the Orientation and Mobility (O&M) programme at the Federal College of Education (Special), Oyo?
2. What is the perceived effectiveness of the O&M programme in preparing pre-service teachers to support learners with visual impairments?

Methodology

The descriptive research of the survey-type study was adopted for this study. The population comprises 200-level and 300-level students in the Department of Education for Learners with Visual Impairment, Federal College of Education (Special), Oyo. The random sampling method, which employed the convenience technique, was utilised to select a sample of 100 participants for a survey conducted among the entire population. The name of the research instrument used to collect

relevant data was the Pre-service Teacher Perception of Orientation and Mobility Programme Questionnaire (PRETPOMQ). A pilot test was conducted to assess its reliability and validity before its final administration. The instrument demonstrated high reliability, with a coefficient of 0.93, indicating reliability in measurement. Further, the validity coefficient was established at 0.78.

Data was collected from respondents after consent was obtained, in a face-to-face presentation of the questionnaire. Question items were rated on a 4-Likert scale from Agree to strongly Disagree (1- Strongly Disagree, 2-Disagree, 3-Agree and 4-strongly agree). Collation, coding, entry and analysis were conducted using SPSS. Descriptive statistics of frequency count, mean and standard deviation were used to arrive at remarks which informed the conclusion of the research regarding how 200-level and 300-level students of FCE (Special) perceived the effectiveness of the O and M programme.

Results and Discussion of Findings

Research Question 1: What is the level of knowledge and skills acquired by pre-service teachers in the Orientation and Mobility (O&M) programme at the Federal College of Education (Special), Oyo?

Summary of Response

Item	N	Mean	Std. Deviation	Remark
I understand the principles of O&M	100	2.10	.934	Disagreed
I am confident of my ability to apply O&M principles	100	2.23	.779	Disagreed
I understand safety protocols during O&M training	100	2.24	.855	Disagreed
I know how to assess the O&M needs of individuals with visual impairment	100	2.48	.858	Disagreed
I know how to use O and M tools and equipment	100	2.13	.647	Disagreed
Total valid	100			

The table above indicates that pre-service teachers in the O&M programme at the Federal College of Education (Special), Oyo, generally disagreed that they have acquired significant knowledge and skills in understanding and applying O&M principles, assessing needs, understanding safety protocols, and using relevant tools and equipment. The consistency of the mean scores across different items suggests a uniform poor level of confidence and proficiency among the sampled pre-service students.

Research Question 2: What is the perceived effectiveness of the O & M programme in preparing pre-service teachers to support learners with visual impairments?

Summary of Response

	N	Mean	Std. Deviation	Remark
The O & M programme is comprehensive and covers all necessary aspects of supporting learners with visual impairments	100	2.18	.902	Disagreed
I feel confident in my ability to apply the skills learned in the O&M programme to real-world scenarios	100	2.26	.519	Disagreed
The practical experiences provided by the O&M programme have enhanced my ability to support learners with visual impairments	100	2.35	.583	Disagreed
I am confident in my ability to create a safe and supportive environment for learners with visual impairments as a result of the O&M programme	100	2.16	.636	Disagreed
The curriculum of the O&M programme is well-structured and meets the needs of pre-service teachers	100	2.45	1.039	Disagreed
Total valid	100			

The findings on the table suggest that pre-service teachers perceive the O&M programme at the Federal College of Education (Special), Oyo, as ineffective in preparing them to support learners with visual impairments. The majority of respondents disagreed that the programme is comprehensive, that it enhances their practical skills, and that it prepares them to create a safe and supportive learning environment. Additionally, the curriculum is perceived as not meeting their needs adequately. These insights highlight areas for improvement in the O&M programme to better equip pre-service teachers with the necessary knowledge and skills.

Discussion of Findings

For Research Question 1, the summary of responses indicates that pre-service teachers in the O&M programme at the Federal College of Education (Special), Oyo, generally disagreed with all the statements regarding their knowledge and skills acquisition. The mean scores ranged from 2.10 to 2.48, with standard deviations between 0.647 and 0.934. These results suggest a consistent perception of inadequate understanding of O&M principles, lack of confidence in applying these principles, insufficient knowledge of safety protocols, inability to assess the needs of individuals with visual impairments, and a lack of proficiency in using O&M tools and equipment. The mean scores suggest a consensus of low confidence and proficiency in understanding and applying O&M principles, assessing the needs of individuals with visual impairments, understanding safety protocols, and using O&M tools and equipment. These findings suggest that the programme may not be effectively

imparting the necessary foundational knowledge and practical skills required for O&M training.

Concerning Research Question 2, the perceived effectiveness of the O&M programme was similarly viewed negatively by pre-service teachers. Responses regarding the perceived effectiveness of the Orientation and Mobility (O&M) programme at the Federal College of Education (Special), Oyo, in preparing pre-service teachers to support learners with visual impairments revealed that respondents generally disagreed that the programme is comprehensive (Mean: 2.18, SD: 0.902), enhances practical skills (Mean: 2.35, SD: 0.583), prepares them to create a safe and supportive environment (Mean: 2.16, SD: 0.636), and has a well-structured curriculum meeting their needs (Mean: 2.45, SD: 1.039). Confidence in applying learned skills to real-world scenarios was also rated low (Mean: 2.26, SD: 0.519). These findings indicate the perceived ineffectiveness of the programme, suggesting the need for significant improvements to better equip pre-service teachers. The majority disagreed that the programme is comprehensive or that it effectively prepares them to support learners with visual impairments. Confidence in applying skills to real-world scenarios, creating a safe and supportive environment, and the perceived structure and relevance of the curriculum were all rated poorly. This uniform dissatisfaction indicates that the programme may not be meeting its educational objectives or the needs of its students.

These findings fall short of the finding by Sapp and Hatlen (2010) who emphasised the importance of comprehensive and practical O&M training for educators working with students, with visual impairment suggesting that gaps in training can significantly impact educational outcomes. Similarly, the study by Eifler, Campean, Husung & Schleich (2023) highlighted the necessity for robust curriculum design and practical experiences. This suggests that deficiencies in the O&M programme at the Federal College of Education (Special), Oyo, could hinder pre-service teachers' preparedness and confidence.

Conclusion

In conclusion, the findings from this study suggest a need for significant improvements in the O&M programme at the Federal College of Education (Special), Oyo. The low levels of perceived knowledge and skill acquisition, coupled with negative perceptions of the programme's effectiveness, highlight critical areas for development. Aligning the programme with best global practices from successful models and incorporating comprehensive, hands-on training could enhance the preparedness and confidence of pre-service teachers, ultimately benefiting learners with visual impairments.

Suggestions

This study presents the following recommendations:

1. The College should update and expand the curriculum to ensure it comprehensively covers all necessary aspects of Orientation and Mobility (O&M) principles, safety protocols, and practical applications.
2. The College should increase the focus on hands-on, practical experiences to better equip pre-service teachers with the skills needed to apply O&M principles in real-world scenarios and support learners with visual impairments effectively.

3. The College should implement targeted training sessions aimed at boosting the confidence of pre-service teachers in applying O&M principles, including more interactive and supportive learning environments.
4. The College should conduct periodic evaluations of the O&M programme, involving feedback from pre-service teachers, to identify and address specific areas of improvement, ensuring the curriculum remains relevant and effective

References

- Ajuwon, P. M., Olawuwo, S. O., Ahon, A. T., Griffin-Shirley, N., Nguyen, T., & Stallings, R. Y. (2022). Orientation and Mobility Services in Nigeria by Vision Status. *International Journal of Special Education*, 37(2), 1-13.
- Crispel, O., & Kasperski, R. (2019). The impact of teacher training in special education on the implementation of inclusion in mainstream classrooms. *International Journal of Inclusive Education*. <https://doi.org/10.1080/13603116.2019.1600590>
- Eifler, T., Campean, F., Husung, S., & Schleich, B. (2023). Perspectives on Robust Design - An Overview of Challenges and Research Areas Across Industry Fields. *Proceedings of the Design Society*, 3. <https://doi.org/10.1017/pds.2023.289>
- Eleri, N. O. E. (2013). Constraints to effective implementation of elements of special education curriculum in teacher preparation programme in Nigeria: A case study of colleges of education. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 1(5), 12-16. <https://www.iosrjournals.org>
- Garba, T. M., & Dungurawa, K. B. (2017). Pre-service teacher education in Nigeria: A case study of Kano University of Science and Technology, Wudil, Kano State. *Northwest Journal of Educational Studies*, 1(1), 12-16.
- Ramirez, I. A. L. (2020). Teaching preparedness of pre-service teachers: Perception to practice. **International Journal of Studies in Education and Science (IJSES)*, 1(1), 15-35.
- Sapp, W., & Hatlen, P. (2010). The Expanded Core Curriculum: Where we have been, where we are going, and how we can get there. *Journal of Visual Impairment & Blindness*, 104(6), 338–348.
- Yakubu, A. F., Bodang, J. R., & Amwe, R. A. (2017). Orientation and mobility programmes for students with visual impairment: Implication for inclusive education. *International Journal of Academic Research in Education and Review*, 5(3), 95-100. <https://doi.org/10.14662/IJARER2017.016>