Sources of Secondary School Science Teacher's Knowledge and Learner's Lived Experiences in An Inclusive School Setting in Kitwe, Zambia.

Chisangano Euralia[1]*, Westbrook l. Joanna[2]

[1]Department of Educational Studies, School of Education, Mukuba University, Kitwe, Zambia.

[2]Centre for International Education & Social Work, School of Education and Social Work, of Sussex, U.K.

*Corresponding Author

ABSTRACT

Background: Zambia, like any other country that is concerned with the rights to education of all learners, has prioritized inclusive education. Inclusive education is a fundamental right recognized by national and international policies. For example, Article 69 of the United Nations (2016) General Comment CRPD/C/GC/4 stresses the need for inclusive teacher education across all educational levels. In this context, our study investigated secondary school science teachers' sources of knowledge about inclusion and explored the lived experiences of learners with special education needs in an inclusive setup in Kitwe district, Zambia. Specifically, the study explored secondary school science teachers' sources of knowledge about inclusion and the lived experiences of some learners with Special Education Needs (SEN) in expanding their capabilities in an inclusive setup in Kitwe district, Zambia.

Methods: A qualitative case study design was employed, involving 12 participants: six science teachers and six learners with special education needs. These participants were purposively selected from three secondary schools recognized as successful inclusive schools in Kitwe district, located in the Copperbelt Province of Zambia. Data collection methods included semi-structured interviews and open-ended questionnaires. Thematic analysis was applied to analyse the collected data.

Findings: The study indicates that teachers' main sources of knowledge about inclusive education include pre-service training and in-service training through Continuous Professional Development (CPDs), seminars and workshops, literature, internet, and knowledge from other people through research. Further, the study indicated that most learners with Special Educational Needs (SEN) were determined, strong, full of self-esteem and resilient because of some positive attitudes and help they were receiving from some teachers and fellow pupils. However, they were constrained by their families' economic and financial status and the school environments, among them. As such, learners were not availed with complete freedom to make meaningful choices due to the above structural challenges which would not help to boost their capabilities. These findings underscore the need for deliberate programs to enhance the practical application of inclusive education principles both at school and the entire community.

Conclusion: Drawing from the study's insights, the following conclusions can be drawn; secondary school science teachers' main sources of knowledge about inclusive education include pre-service training and in-service training through CPDs, seminars and workshops, including literature, internet, and knowledge from other people through research. Economic and financial status and the school environment are among the constraints that make it difficult for learners with special education needs to realise their full potential in an inclusive setting. Our findings highlight the importance of deliberate programs to apply inclusive education principles both at home and in schools. The study, therefore, recommends collaborations between the schools

and stakeholders, including the communities as being crucial to realizing the full potential of learners with special educational needs in inclusive settings.

Keywords: Inclusive education, knowledge sources, collaboration, learners with special educational needs, lived experience, secondary school science teacher

BACKGROUND

The concept of inclusive education emerged from the efforts of disability groups that demanded equal treatments and opportunities for disabled people to participate equally in their communities (Stubbs, 2008). Inclusive education, despite being a key policy in several countries, has been an issue of international debate about what it really means, especially in relation to people with disabilities. Miles & Singal (2010) state that the initial vision of the International Education for All (EFA) goals was extremely broad and ambitious but the rhetoric of 'all' has overlooked the issue of disability and failed to reach the poorest and most disadvantaged children. Ainscow & Miles (2008) however, are of the view that inclusive education will be defined and enacted in different ways, different places, depending on the purpose and the nature of schooling, how it is organised, who has access to it and who is denied access. Stubbs (2008) on the other hand, acknowledges that there are many different understandings and interpretations which can affect, whether or not, outcomes of inclusion are successful or sustainable.

Students who have been identified as having special educational needs (SEN) are especially vulnerable to exclusion from the culture, curriculum, and community of mainstream schools because of the determinist beliefs that underpin them (Hart et al.2007). Further, Evans (2000), enunciates that including learners with special needs in regular schools remains a goal and challenge for most educational systems around the world. However, Miles et al. (2018) consider the concept of inclusive education to be concerned with removing physical, attitudinal, and structural barriers to enable social and academic participation of all learners. Further, Eunice, et al. (2015, p. 39) view inclusion in education as "a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning cultures, and communities, and reducing exclusion within and from education."

From the Zambian context, Simui, et al. (2009, p. 9) define inclusive education as "a continuous process of increasing access, participation, and achievement for all learners in general education settings, with emphasis on those at risk of marginalisation and exclusion". In Zambia, inclusive education isa relatively new concept. It is mainly associated with disability and the school, and it has a special needs perspective. Muzata (2021) further, contends that Zambia, to a certain extent, practices inclusive education as one of the models for the provision of special education to learners with disabilities. The emphasis is on integration of learners with mild and moderate disabilities into mainstream classrooms while those with severe disabilities remain in special schools, special units, and community rehabilitation centres. This, to some extent, encourages egregation.

Understanding the definitions of inclusive education from a Zambian context is cardinal as we look at the sources of knowledge of secondary school science teachers about inclusion. Moreover, inclusive education is a dynamic and evolving field, and teachers' sources of knowledge are critical to its effective implementation. Knowledge sources here refer to different fields of information from which teachers may draw their understanding of a particular subject (Shulman, 1987). Recent literature suggests that teachers acquire knowledge about inclusive education from a variety of sources:

A study by Mukelebai et al. (2020), which reviewed literature on preparation of pre-service teachers in inclusive pedagogies worldwide indicated that there was a strong emphasis on inclusive pedagogy with a bias to improving the quality of mainstream education and addressing educatiıonal inequality among others. The study, therefore, indicated that preservice teachers acquired some information about inclusive pedagogies and strategies through their preservice training. Further, Muzata (2018) conducted similar research earlier to investigate the teaching skills of special education pre-service students during teaching practice at the University of Zambia. The study sought to establish special education student teacher's skills and abilities to

balance between special education as a major and the teaching subject as a minor, when teaching learners with special educational needs (SEN). Although the study established the pedagogical challenges student teachers faced when teaching learners with SEN due to their concentration on demonstrating skills in their teaching subjects, it was clear that such student teachers acquired some skills and information about inclusive education during their pre-service teacher training.

Muwana and Ostrosky (2014) also examined university students' attitudes towards including students with disabilities in general education classrooms in Zambia. The study used undergraduate university students enrolled in the four-year teacher preparatory programme from a local Zambian public university. The results of the study indicated that overall, Zambian university students hold positive attitudes towards inclusion owing to the knowledge and skills acquired during their preservice training.

Not only do teachers acquire knowledge about inclusive education through their pre-service initial training but also during in-service training strategies. In-service professional development that includes workshops, seminars, and ongoing training sessions that teachers attend during their teaching careers such as Continuous Professional Development (CPD) trainings are cardinal (UNESCO, 2020; Shulman, 1986). CPD programs are increasingly tailored to address current educational challenges, such as inclusive education and assessment strategies. Teachers learn from their colleagues, mentors, and other professionals. Collaborative discussions, peer observations, and sharing experiences contribute to their knowledge base. Collaborative learning communities and professional networks have, therefore, become more prevalent, enabling teachers to connect with peers globally and exchange ideas. The field of professional development for teachers is continually evolving. New research and best practices emerge regularly, emphasizing the importance of staying updated through relevant workshops and courses.

The other source of teachers' knowledge about inclusive education and inclusive pedagogies is through research and publications. Most teachers rely on academic research and publications to stay informed about the latest developments in inclusive education. This includes research on policy matters involving inclusive education, papers published on educational frameworks and studies done on inclusive pedagogies (Thuan, 2023; UNESCO, 2020). Teachers use their subject-specific knowledge to make informed decisions about classroom instruction. Understanding the content deeply allows them to tailor their teaching methods effectively. Research continues to emphasize the importance of content knowledge in effective teaching. Teachers are encouraged to deepen their understanding of the subject matter.

Teachers also draw knowledge from written literature, including textbooks, research articles, and educational materials. The internet provides a wealth of resources, including educational websites, online courses, and scholarly databases. The availability of digital resources has expanded significantly, allowing teachers to access up-to-date information and teaching strategies online. The internet, educational platforms, and social media, therefore, serve as accessible sources for teachers to gain insights and share experiences about inclusive education (McManis, 2017; Thuan, 2023; UNESCO, 2020).

The lived experiences of learners with special educational needs (SEN) in inclusive settings are multifaceted and deeply personal. Recent studies have shed light on these experiences:

A systematic review of the literature by Subban et al. (2022) on the student experiences of inclusive education in secondary schools indicated that five factors were reported by students as supporting inclusive education. The factors included supportive relationships; positive teacher beliefs; positive school leader beliefs; supportive teaching practices; and accessibility. However, the review also identified two factors as being barriers to inclusion. They included unsupportive school cultures and inappropriate learning support. The literature reviewed did not include anything from Kitwe district in Zambia, hence, the need for this study.

The study by Chitiyo and Muwana (2018) has highlighted some achievements made by Zambia and Zimbabwe in special education developments. They include developments in the areas of legislation, funding, attitudes towards disability/inclusion, inclusive education, and teacher preparation among others. The study indicated

that both countries have laws and policies that promote the education of learners with special educational needs. There is also evidence from both countries that attitudes towards learners with special educational needs and their inclusion in general education systems are shifting towards being more positive. The findings of this study, therefore, should be interrogated further to find out whether such findings have interpreted into positive learners' lived experiences in an inclusive setting.

A study by Ndesaula et al. (2021) on the lived experiences of learners with disabilities at Lunsemfwa Primary School, Kapiri-Mposhi District, Zambia revealed that learners with disabilities encountered stigma from their peers. It also revealed that learners lacked support from parents and guardians; lacked socialisation and encountered negative attitudes by teachers and peers. Such challenges were because of lack of sensitisation by the stakeholders on disability and lack of skills on how to handle learners with disabilities by some teachers. While this study indicates these findings, the earlier studies reviewed by Mukelebai et al. (2020) and Muwana and Ostrosky (2014) both indicate that teachers received necessary skills and knowledge to handle different learners in an inclusive setting and that their attitude towards inclusion was positive. With the inconsistencies in the findings of these studies, there was a need to carry out this study to bring out the status quo regarding learners' experiences in Kitwe.

A study by Thuan, (2023) on regular pre-service teachers' perception on inclusive education of students with disabilities in Vietnam revealed that there were insufficient initial teacher training and limited knowledge in teaching learners with special educational needs in regular classes. There was also lack of school support, limited awareness of the community about inclusion, lack of contact with learners with special educational needs, and the pre-service teachers' scepticism about the effectiveness of inclusive education as issues that are factors that affect prospective teachers' preparedness. These challenges should have a negative effect on learners' lived experiences in an inclusive setting. Therefore, this study was necessary to be undertaken.
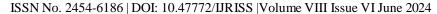
Finally, other studies identified lack of social inclusion as learners with SEN often face challenges in social inclusion. Little efforts were made to understand and improve their experiences of integration and participation in school life (Sarton& Smith, 2018). Other challenges faced by learners in an inclusive setting also included educational challenges faced such as the need for specialized support and the effectiveness of inclusive teaching strategies (Mercado&Regencia,2023). Communication and interaction were also identified as challenges because the way learners with SEN communicate and interact within the school environment is a key area of focus. Effective communication is essential for their full participation in school activities which in this case proved to be a challenge (Garcia, 2019).

Given the assumption that inconsistencies in learners' lived experiences and teachers' sources of information exist because of the structure of teacher preparation programmes, insufficient supports provided to facilitate the inclusion, and teachers' attitudes towards learners with SEN, as discussed above, this study became necessary to bridge the information gap.

METHODOLOGY

The study aimed to investigate secondary school science teachers' sources of knowledge about inclusion and explored the lived experiences of learners with SEN in an inclusive setup in Kitwe district, Zambia. Secondary School Science teachers in selected inclusive secondary schools in and some learners with SEN in those secondary schools in Kitwe district, Zambia were used. Furthermore, the study employed purposive sampling to select the three secondary schools and Secondary school science teachers and learners, with a sample size of 12 participants. The sample included 6 trained science teachers: 2 from each of the three secondary schools and 6 learners with SEN; 2 from each of the three secondary schools.

Three data collection instruments were used, including observation, semi-structured interviews, and open-ended questionnaires. Data was analysed using coding and thematic analysis. This involved consolidating, reducing, and interpreting what participants said and what the researchers had seen during actual lesson/activity delivery and read from the documents, interviews, and focus group discussions.

FINDINGS AND DISCUSSIONS OF THE STUDY

The study sought to investigate sources of secondary school science teachers' knowledge and learners' lived experiences in an inclusive school setting in Kitwe, Zambia. The following broad themes emerged: sources of secondary school science teachers' knowledge and learners' lived experiences in an inclusive setting.

Sources of secondary school science teachers' knowledge

Under this theme, three sub themes emerged that included pre-service training; in-service programs such as Continuous Professional Development and written literature and internet.

Pre-service training

Secondary school science teachers indicated that their main source of information and knowledge about inclusive education was the initial training or the pre-service training that they had from various colleges and/or universities. Most teachers mentioned that they had done a 'compulsory' component of special education during their initial teacher training to equip them with the necessary skills and knowledge on how to handle learners with SEN. For example, one secondary science teacher indicated the following:

The initial training that I had during my preservice training provided me with a lot of information about inclusive education. I was trained on how to relate with the pupils on a one-to-one basis. I know how to identify and help slow learners and fast learners. The training, therefore, prepared me in planning my lessons according to learners' different abilities. (Secondary School Science Teacher B2).

Another secondary school science teacher from a different school had the following to say:

During my preservice training I acquired the necessary basics about inclusive education as part of the course. We learnt about how to handle Learners with Special Educational Needs in the college. Even when I went for further training at the University I also learnt about interventions and how best to teach Learners with Special Education Needs. I can, therefore, say that one of the sources of my knowledge about inclusive education is the training I had at the college and university. (Secondary School Science Teacher C2).

From the excerpts above, it can be confirmed that teachers acquired knowledge and some useful information about inclusive education from their preservice teacher training they had from universities and colleges of education. Universities and colleges of education provided student teachers with a course on inclusive education which serves as a source of knowledge about inclusive education for most of the teachers. The above revelations are in line with the findings of a study by Mukelebai et al. (2020) which indicated that worldwide pre-service teacher training presented a strong emphasis on inclusive pedagogy with a bias to improving the quality of mainstream education and addressing educational inequality among others. The findings also resonate well with those of the study by Muzata (2018) that established that despite student teachers having the pedagogical challenges faced when teaching learners with SEN due to their concentration on demonstrating skills in their teaching subjects, they had acquired some skills and information about inclusive education during their pre-service teacher training at the University of Zambia. The findings of this study resonate well with those of the previous studies because generally the world is moving towards inclusion, including Zambia. Therefore, universities and colleges of education that train teachers have been given the mandate to include a course on inclusive education to produce well knowledgeable teachers about inclusive education.

In-service programs

The study revealed that secondary school science teachers acquired knowledge about inclusive education strategies and pedagogies through various in-service programs such as Continuous Professional development (CPD) meetings organised in various schools, seminars, and workshops. For example, one science teacher pointed out the following:

Each department will go to attend a CPD meeting during school holidays, outside of the school to meet with other schools. We discuss in detail how best we can teach the subject to ensure that every learner benefits. Also, during the school term, we meet as department of natural sciences to discuss how best to be inclusive when teaching various science subjects such as biology, chemistry, physics, and integrated science. So, I can say that CPDs are sources of knowledge about inclusive education.(Secondary School Science Teacher A1).

Another secondary school science teacher from a different school submitted that she acquired knowledge about inclusive education pedagogies by attending workshops and seminars about inclusive education.

I have acquired most of the knowledge and information about inclusive education teaching strategies and how to generally handle learners with special educational needs through workshops and seminars. I have attended a number of workshops and seminars concerning inclusive education and have learnt a lot. (Secondary School ScienceTeacher B1).

The above revelations indicate how important Continuous Professional Development, seminars and workshops are in empowering in-service teachers with the knowledge and skills needed in an inclusive setting. This is in line with what gurus in inclusive education advocate for. They indicate that CPD programs, seminars and workshops are increasingly tailored to address the existing educational challenges such as inclusive education strategies. Through such programs, teachers learn from their colleagues, mentors, and other professionals on how best to deal with such challenges (UNESCO, 2020; Shulman, 1986). Collaborative discussions, peer observations, and sharing experiences, therefore, are important to realise inclusion in schools as they contribute to the teachers' knowledge base.

Written literature, research works, and internet

The study revealed that written literature, research, and internet are some of the other sources of teachers' knowledge and information about inclusive education strategies, knowledge, and information. This can be evidenced by the following excerpts:
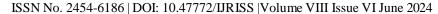
I can say that we use books to learn more about inclusive education, and usually go through published research works and researching through on internet. We have a computer lab which is connected to the internet, and we use it for researching. Sometimes we use personal cellphones to research on inclusive strategies.(Secondary School ScienceTeacher C1).

In a separate interview, another secondary school science teacher echoed the following sentiments:

I would say we also learn a lot about inclusive education methods from books and sometimes through the internet where one can search for what he/she wants to know about inclusive education.(Secondary School ScienceTeacher A2).

The above study findings about books, research works and internet being the other sources of knowledge about inclusive education pedagogies and strategies confirm those of other studies reviewed earlier in this study. For example, the study by Thuan (2023) indicates that most teachers rely on academic research and publications to stay informed about the latest developments in inclusive education. Furthermore, McManis, (2017); Thuan, (2023) and UNESCO, (2020) all indicate that teachers also draw knowledge from written literature, including textbooks, research articles, educational materials which sometimes they access through the internet which provides a wealth of resources, including educational websites, online courses, and scholarly databases. The current and previous studies present similar findings despite being conducted in different areas. This might confirm the fact that Zambia is part of the globe village. Research works and books that may be accessed through internet are sources of up-to-date information about inclusion globally.

From the discussion above, it is imperative to note that secondary school science teachers utilise CPDs, seminars, workshops, books, research works and internet to learn more about inclusive education strategies and pedagogies. This is in addition to the knowledge that they acquired from universities and colleges of

education during their initial preservice training. From these findings, it is imperative for advocates of inclusive education to continuously promote such avenues since they are modes through which teachers can be empowered with the necessary knowledge and skills in inclusive education.

Learners' lived experiences in an inclusive setting.

Under this theme, the abbreviation 'LWSEN' will be used to refer to Learners with Special Educational Needs. Under this theme, two sub themes emerged and they include learners' positive lived experiences and learners' negative lived experiences.

Learners' positive lived experiences

learners with SEN revealed their lived experiences of how they have tried to negotiate with certain aspects of their school life, how they learn science and how they are assisted by the teachers and other learners to develop and expand their capabilities. The main finding was that learners experienced positive attitudes from family members and some teachers and fellow pupils. This makes them become determined, strong, full of self-esteem, resilient, and did not want to give up on what they were aspiring to be or do. For example, one learner had this to say:

My mother has always been there for me. She is everything to me …. sometimes she is just like my best friend or sister…. At home we do things together …. she has always encouraged me to be like others and not to wait for favours.(LWSEN2).

Family support of children with Special Educational Needs is important as it encourages such learners to be positive in life and concentrate on school. Hence, another learner narrated how she received support from the family members to ensure that she went to school:

My father gives me money for transport to school from his business. Sometimes when the business is not doing well, my cousin who is working gives me the money instead.(LWSEN4).

Not only did learners with Special Educational Needs receive positive support from family members, but also from some teachers and fellow pupils. This is evidenced by the excerpts below:

My best friend James (pseudo name) is not in my class – he is in grade 10. He became my friend because we used to see each other every day when walking to school, then we started talking and visiting each other at home.(LWSEN1).

Another learner submitted that a teacher encouraged her to aim higher and work hard at school:
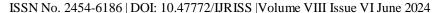
My teacher believed in me and said that I could do better and would one day become bigger than what I thought. It encouraged me to be serious with school and I was one of the best pupils at grade 9. (LWSEN6).

Some teachers such as Guidance and Counselling teachers could even talk to other pupils to accept and help learners with special educational needs. This was revealed in the excerpt below:

I went back to school; my classmates were talked to by the guidance teacher about my condition and the need to accept and support me.(LWSEN3)

Because of the support and encouragements that learners with special educational needs received from teachers and fellow pupils, they were proud of their schools. One learner therefore, submitted: *My school is very nice; it can't be compared to where my brothers and sisters are…. I laugh at and make fun of them when they upset me. I tell them that I go to school by bus – I don't walk!* (LWSEN5).

The above findings about different lived experiences of various learners with special educational needs

indicate that some teachers are willing to put to practice what they have learnt about inclusive education and willing to make their schools inclusive for everyone. The findings are in line with those of a systematic review of the literature by Subban et al. (2022) which revealed five factors that were supporting inclusion. The factors included supportive relationships; positive teacher beliefs; positive school leader beliefs; supportive teaching practices; and accessibility. The current findings also resonate well with those revealedby a study by Chitiyo and Muwana (2018) that indicated that Zambia and Zimbabwe had made developments in the areas of legislation, funding, attitudes towards inclusive education. The study further indicated that there was evidence from both countries that attitudes towards learners with special educational needs and their inclusion in general education systems were shifting towards being more positive. These findings of the current study support those of the previous studies partly because all the studies were done in Zambia. Therefore, it could be submitted that Zambia is making some positive strides in realising inclusion in schools.

Learners' negative lived experiences

The study revealed that learners with special educational needs faced some challenges that made their lives difficult for them to be in school as early as they were required. For example, one learner submitted:

I use public transport when coming to school but sometimes I am told that the bus is full and there is no space for the wheelchair. Then I must wait for another one. In such circumstances, I end up reporting late to school. (LWSEN5).

Learners also submitted that during first days at school, they faced some challenges such as stigma and discrimination especially from fellow pupils. For example, one pupil narrated:

During my first few days at school, I struggled with the strange 'looks' I received, I was asked questions about why I had no limbs, and that made me not to want to go back to school or any other public place anymore – I stayed away for close to three weeks, I would cry, stay without eating, and was ashamed and embarrassed ....(LWSEN2).
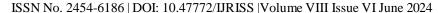
Furthermore, learners faced challenges when it came to using public convenient rooms such bathrooms and toilets at school. One learner bemoaned the bad state of such places:

Some people are very careless! They leave the toilets very filthy without pouring water. It is not good for us girls because we must sit on the toilet all the time…. Then one must clean before sitting on it because one can get germs from there. Not only that, but we also need to use a bucket to pour water after using the toilet. That becomes difficult for someone like me.(LWSEN4).

Not only did pupils face the above challenges but also accessibility of key places within the school. When a learner on a wheelchair wanted to use a bathroom, she had to be assisted by others, the situation which created low self-esteem within such learners. For example, one learner narrated how she struggled whenever she needed to use a toilet:

Whenever I need to use a toilet, the wheelchair remains outside the door. My friends must lift and carry me on to the toilet…. I usually have some dettol to disinfect the toilet seat and some tissue to wipe with. All this is done by my friends. I feel I am a burden to them and an embarrassment to me…. I try not to use the toilet often. (LWSEN3).

The above revelations point out to the fact that although Zambian schools are trying to realise inclusion, there are still several impediments that need to be addressed. These findings resonate well with those of other studies such as the ones by (Sarton & Smith, 2018) and (Mercado & Regencia, 2023). The two studies identified lack of social inclusion as one of the challenges faced by learners with SEN. The studies indicated that little efforts were made to understand and improve their experiences of integration and participation in school life and therefore, questioned the effectiveness of inclusive strategies. Furthermore, the study by Garcia (2019) indicated that there was lack of proper interaction of learners with SEN within the school environment. These

findings seem to resonate well because all the studies seemed to bring out the struggles that learners with special educational needs face, especially in developing countries with a lot of social economic hardships.

CONCLUSION

The study has revealed that secondary school science teachers use many sources of acquiring knowledge and information about inclusive strategies that they need to realise inclusion within their schools. Their initial pre-service teacher training, in-service training programs such as CPDs, seminars and workshops are used as sources of knowledge. Other modes used include books, research works and internets. There is, therefore, a need to equip such modes with the up-to-date information about inclusion pedagogies and strategies that can be accessed by such teachers. The study has further unearthed various lived experiences of learners with special educational needs. Such lived experiences are either positive or negative. There is a need for policy makers and management in schools to ensure that they put necessary measures in place to ameliorate the situation to realise real inclusion in these schools.

REFERENCE

1. Ainscow, M. & Miles, S. (2008). Making Education for All Inclusive: Where Next? *Prospects*, 38,15-34.
2. Chitiyo, M., & Muwana, F. (2018). Positive Developments in Special Education in Zambia and Zimbabwe. *International Journal of Whole Schooling, 14;1.*
3. Eunice, L.A., Nyangia, E.O., &Orodho, J.A. (2015). Challenges Facing Implementation of Inclusive Education in Public Secondary Schools in Rongo Sub-County, Migori County, Kenya. *Journal of Humanities and Social Science (IOSR-JHSS),* Vol. 20 (4), 39-50.
4. Evans, P. (2000). Evidence-based Practice: how will we know what works? An International Perspective. In, H. Daniels (ed.), *Special Education Re-formed: Beyond Rhetoric* (pp. 69-84).London, Falmer.
5. Garcia, J.R. (2019). Exploring the Lived Experiences of Inclusive Learners with Special Educational Needs (LSEN) in Surigao City National High School.*Ascendens Asia Journal of Multidisciplinary Research*, *3(2d).*
6. Hart, S., Drummond, M. & McIntyre, D. (2007). *Learning Without Limits*, in Florian, L. *The Sage Handbook of Special Education*. London, SAGE Publications.
7. McManis, L.D. (2017). Inclusive Education: What It Means, Proven Strategies, and a Case Study. *Accessed from***https://resilienteducator.com/classroom-resources/inclusive-education/**
8. Mercado, J. c., &Regencia, P.A.G. (2023). Inquiry on the Lived Experiences of Teachers Handling Learners with Special Needs in the Division of Biñan City. *Multidisciplinary Journal of Psychology and Education, 9: 622-630.*
9. Miles, S. & Singal, N. (2010). Education for All, and Inclusive Education Debate: Conflict, Contradiction or Opportunity? *International Journal of Inclusive Education*, 14 (1), 1-15.
10. Miles, S., Westbrook, J., & Croft, A. (2018) Inclusions and Exclusions in Rural Tanzanian Primary Schools: Material Barriers, Teacher Agency and Disability Equality. *Social Inclusion,* Vol. 6 (1), 73-81.
11. Mukelebai, L., Siakalima, D., Simalalo, M., Kaputa, T., Musankuleni, F., Mooka, G., & Muleya, G. (2020). International perspectives on preparing pre-Service teachers for inclusive education pedagogies: Implications for developing countries. *American Journal of Educational Research, 8,* (12)
12. Muwana, F. C., & Ostrosky, M. M. (2014). Factors related to pre-service teachers' attitudes towards inclusion: A case for Zambia. *International Journal of Inclusive Education*, 18, (8),PP763-782. DOI: 10.1080/13603116.2013.835877
13. Muzata, K.K. (2018). Teaching Skills of Special Education Students during Teaching Practice: The Case of the University of Zambia Pre-service Special Education Students.*Multidisciplinary Journal of language and Social Sciences Education*, 1, (1), PP103-137.
14. Muzata, K. K. (2021). *Special and inclusive education provision in the Zambian context*. Lusaka, Zambia: The University of Zambia Press.

15. Ndesaula, J., Kakana, F., Nsama P., &Simui, F. (2021). Lived Experiences of Learners with Disabilities at Lunsemfwa Primary School, Kapiri-Mposhi District, Zambia. *International Journal of Research and Scientific Innovation (IJRSI)*, VIII, (X), PP 89 – 95

16. Sarton, E., & Smith, M. (2018). UNICEF Think Piece Series: Disability Inclusion. Challenge of inclusion for children with disabilities – experiences of implementation in Eastern and Southern Africa. Nairobi: UNICEF Eastern and Southern Africa Regional Office.

17. Shulman, L. (1986). Those who Understand: Knowledge Growth in Teaching. *Educational Researcher*, 15, 4–14.

18. Shulman, L. (1987). Knowledge and Teaching: Foundations of the New Reform. *Harvard EducationalReview*. 57 (1) 1-21.

19. Simui, F., Waliuya, W., Namitwe, C., & Munsanje, J. (2009). *Implementing Inclusive Education on the Copperbelt in Zambia* (Mufulira & Ndola). Sight Savers International in Partnership with Ministry of Education in Zambia.

20. Stubbs, S. (2008). *Inclusive Education: Where there are few resources*. Oslo, Atlas Alliance.

21. Subban, P., Woodcock, S., Sharma, U., & May, F. (2022). Student experiences of inclusive education in secondary schools: A systematic review of the literature. *Journal of Teaching and Teacher Education*, 119, https://doi.org/10.1016/j.tate.2022.103853

22. Thuan, L.(2023). Regular pre-service teachers' perception on inclusive education of students with disabilities in Vietnam. Pdf accessed from https://gupea.ub.gu.se/handle/2077/79046

23. UNESCO (2020). Inclusive teaching: Preparing all teachers to teach all students. Global Education Monitoring Report Team. accessed from: https://unesdoc.unesco.org/ark:/48223/pf0000374447