



FUTURITY
Education

DOI: <https://doi.org/10.57125/FED.2024.12.25.17>

How to cite: Olawumi, K. B. (2024). In-Service Teachers' Awareness of Integrating Ubuntu Values in Teaching Environmental Education. *Futurity Education*, 4(4). 257-272.
<https://doi.org/10.57125/FED.2024.12.25.17>

In-Service Teachers' Awareness of Integrating Ubuntu Values in Teaching Environmental Education

Kayode Babatunde Olawumi

Doctor of Philosophy in Education, Postdoctoral Research Fellow School of Further and Continue Education, University of Fort Hare, Alice, South Africa, <https://orcid.org/0000-0003-3283-2488>

Correspondence email: kayode.olawumi1969@gmail.com.

Received: August 19, 2024 | **Accepted:** November 25, 2024 | **Available online:** December 13, 2024

Abstract: In recent years, there has been a renewed call to raise in-service teachers' awareness of incorporating Ubuntu principles into teaching environmental education in South Africa. This call has become urgent due to the increasing impact of climate change, particularly the devastating effects of flooding in Cape Town and extreme weather conditions experienced across the country. Grounded in critical pedagogy theory, this study seeks to enhance in-service teachers' understanding of Ubuntu values in the context of environmental education. The research employs a systematic literature review to assess the awareness levels of in-service teachers and their integration of cultural values, such as Ubuntu, in environmental education. Eight relevant articles were selected based on inclusion and exclusion criteria. The databases used for article selection included Google Scholar, ResearchGate, Scopus, ERIC, Web of Science, and EBSCO. The findings reveal a low awareness of Ubuntu values among in-service teachers, resulting in limited integration of these values into environmental education. Additionally, most in-service teachers did not encounter Ubuntu values in their pre-service education programs and exhibited little interest in incorporating them into their teaching practices. The study concludes that in-service teachers' awareness and integration of Ubuntu principles remain inadequate. It recommends that the Department of Basic Education provide targeted training to improve teachers' understanding of Ubuntu values and their application in environmental education.

Keywords: In-service teachers, Ubuntu values, Environmental Education, Teacher awareness, value education.

Introduction

The importance of raising in-service teachers' awareness of Ubuntu values in teaching environmental education in South Africa has become a subject of ongoing debate. Climate Change Education (CCE) has emerged as a key issue with cross-disciplinary and cross-sectoral implications in the country. The negative impact of climate change on the environment is a global challenge, requiring urgent and coordinated action to combat its effects (Apollo & Mbah, 2021). Flood incidents and other environmental issues have been reported in parts of South Africa, particularly in Cape Town. Natural phenomena and unethical human activities drive climate change, extreme weather, and ecological degradation (Dulari et al., 2020).

Given the disruptive effects of climate change on ecosystems, urgent steps must be taken, such as embedding environmental education in school curricula. Various international mitigation and adaptation strategies have been proposed to tackle climate change. As part of these efforts, the Kyoto Protocol and the United Nations Framework Convention on Climate Change (UNFCCC) have advocated for the inclusion of environmental education in educational systems worldwide. According to the Intergovernmental Panel on Climate Change (IPCC), addressing the effects of climate change is an urgent global task (Sezen-Barrie et al., 2020). Africa, in particular, has been identified as one of the most vulnerable continents, facing significant challenges due to its lack of effective adaptive strategies (Intergovernmental Panel on Climate Change, 2018).

Since unethical human behaviour is a key driver of environmental degradation, a humanistic approach based on Ubuntu values could serve as a remedy for addressing climate change (Chowdhury et al., 2021). However, many teachers, who are expected to be the key implementers of these policies, lack sufficient awareness of Ubuntu values (Mkosi et al., 2023). Many in-service teachers were not introduced to Ubuntu values during their pre-service education, failing to integrate these values into their environmental education teaching. Despite efforts by stakeholders to incorporate Ubuntu principles into environmental education in South African schools, the level of awareness among in-service teachers regarding the use of African cultural values in environmental education remains very low (Mkosi et al., 2023).

This study addresses this gap by developing recommendations based on research findings. To guide the investigation, the following question was formulated: What is the level of awareness of Ubuntu values among in-service teachers in teaching environmental education? This paper highlights the need to enhance in-service teachers' understanding of Ubuntu principles and their application in environmental education. The findings are significant, as they offer valuable insights into how in-service teachers approach the teaching of environmental education and the mitigation of environmental issues in South Africa.

Research Questions

This paper examines the in-service teachers' awareness of integrating Ubuntu values in teaching environmental education.

This paper will answer the following research questions:

1. How are in-service teachers integrating Ubuntu values into teaching environmental education?

2. What is the relevance of Ubuntu values in teacher practice?
3. How are in-service teachers promoting cultural awareness in their teaching?

The paper provides insight into the level of awareness of in-service teachers in integrating Ubuntu values into teaching. The finding from this study is unique because it will provide the compelling need for in-service teachers to be aware of Ubuntu values and integrate them into teaching environmental education. The study is unique because it will assist in-service teachers to teach environmental education from a humanistic perspective. In the era of climate change and global warming, it is essential to provide solutions to address the problem of climate change outside the conventional scientific method. Since climate change problems are caused mainly by human action and inaction, addressing the issue through the humanistic approach is desirable. This study is designed to enhance in-service teachers' awareness of Ubuntu values and integrate them into teaching environmental education. This will assist the learners in shaping their behaviour while interacting with their environment.

Literature Review

This study is grounded in critical pedagogy theory as the theoretical framework. In exploring the connections between politics, education, imperialism, and liberation, Paulo Freire popularised critical pedagogy (McLaren, 2000). According to Kincheloe (2004), critical pedagogy focuses on the social, cultural, cognitive, political, and economic dimensions that shape the broader community. The theory sheds light on how education can assist learners in acquiring a positive cultural value that promotes social change in the community (McLaren, 2016). Breunig (2005) describes critical pedagogy as an interaction between classroom teaching, the production of knowledge (content knowledge), the structure of the school, and the social and material conditions of the wider community and society. The relevance of this theory to the study lies in its support for pre-service teachers' grounding in Ubuntu's socio-economic and value systems and pedagogical practices. This foundation aids the integration of environmental education into teaching and learning. Additionally, it emphasises incorporating community values into classroom education, aligning with integrating environmental education into school curricula. The theory is also relevant because it points out the necessity of in-service teachers to acquire critical pedagogy for teaching environmental education from the humanistic moral and ethical points of view. Another relevance of the theory is that it will serve as a lens through which the author understands the awareness of in-service teachers and how they integrate Ubuntu in teaching environmental education.

Ubuntu Values and In-service Teacher Education

Ubuntu values are a unique African philosophy still being researched in the academic world. The concept "Ubuntu" has been defined by different authors and researchers as "a person in a person through other people" (Geber and Keane, 2017), which also translates to mean "I am because we are" (Letseka, 2012). The Ubuntu values apply to all areas of life in which wisdom is taught in a mutually beneficial manner. The principle emphasises the development of society, the environment, and the social-cultural practices the people hold in high esteem. Ndhlovu (2023) conceptualised Ubuntu as a philosophy that binds the socio-political, economic, and environmental life of the people together for the common good of the society. This assertion is important because it showcases the critical role Ubuntu philosophy can play in the life of the people generally as it relates to their co-existence. Ubuntu principles regulate the standard behavioural practices that connect people, which include mutual respect and interdependence of people that assist in uplifting society in the environment (Padayachee et al., 2023). These values are taught by the custodians, who are knowledgeable and well-versed in the indigenous practices and responsible for transmitting them from one generation to another (Kotze, 2024).

Creating awareness of Ubuntu values, particularly its integration into teaching, is critical to the sustainability of the environment (Gwekwerere & Shumba, 2021; Thakhathi & Netshitangani, 2020). The climate change problem is partly caused by people's unethical behaviour with their environment (Kuenzi et al., 2020). Studies have shown that this problem can be addressed by integrating Ubuntu values into teaching environmental education (Gwekwerere & Shumba, 2021; Kotze, 2024). The in-service teachers who are the curriculum implementers are crucial to integrating Ubuntu values into the curriculum. Maphalala (2017), in a study titled "Embracing Ubuntu in the Managing of Effective Classroom", reiterates that the Ubuntu value system has not influenced teacher education curriculum in Africa (Nkambule, 2023). The study, being a qualitative study, aver that the Ubuntu Values, a philosophy that relies on interpersonal, intrapersonal, and environmental values, can support in-service teachers to effectively teach environmental education in a manner that will equip learners with basic skills in interacting with their environment. The paper concludes that infusing Ubuntu African philosophy into the curriculum can support the infusion of African philosophy against the Western philosophy that dominates the educational system (Maphalala, 2017).

In another study by Olawumi et al. (2024) titled "Situating Ubuntu Philosophy in Pre-service Teacher Education", the authors aver the need for decolonising the teacher education curriculum by infusing the African Ubuntu values that preach togetherness, interrelatedness, and communalism. The paper recognised the need for producing teachers who are groomed in the Ubuntu African philosophy (Kgari-Masondo & Chingwanangwana, 2024) since teachers are the implementers of the curriculum (Alek et al., 2021); therefore, the teacher education program must be redesigned to infuse the African indigenous knowledge system (Mahabeer, 2021; Ofosu-Asare, 2024). African curriculum is designed to promote Western culture and philosophy and, therefore, should be decolonised to reflect African cultures and values (Asea, 2022). The paper recommends the integration of Ubuntu African philosophy into the teacher education programs across universities in South Africa to address the call for decolonisation of African education (Olawumi et al., 2024).

Mugumbate et al. (2024), in a study titled "Understanding Ubuntu and its Contribution to Social Work Education in Africa and Other Regions of the World", acknowledge the relevance of Ubuntu in all areas of life, including the family, communal, societal, or environmental and the spiritual belief system. This study corroborates the position of Chigangaidze and Chinyenze (2022), who assert the importance of Ubuntu philosophy in three domains: interpersonal, intrapersonal, and environmental values. The study describes Ubuntu as a source of knowledge, values, ethics, history, and the people's spiritual beliefs (Mugumbate et al., 2021; Nicolaidis, 2022). This position makes the integration of Ubuntu values in teaching environmental education critical because it touches on all aspects of the life of the people (Begum et al., 2022; Shabalala & Gumbo, 2023). The study attributed some impediments to the decolonisation of African education, including colonial history and lack of Ubuntu-inspired resources for the effective decolonising education system in South Africa and other African countries (Mugumbate et al., 2024).

Another study by Mathebula and Martinez-Vergas (2023) showcases Ubuntu philosophy as a moral value and advocates its inclusion in the higher education curriculum. The study is a qualitative and longitudinal study from 2016 to 2021 and findings indicate that students interrelate as a community that embraces the African Indigenous worldview with Ubuntu's decolonising potential (Mathebula & Martinez-Vargas, 2023). Mkosi et al. (2023) reveal that very little research has been done to develop strategies that can assist teachers in integrating Indigenous knowledge systems into their classrooms. The study concluded the need for a continuous teacher development program that enhances and assists in-service teachers in acquiring pedagogical skills to integrate IKS into their teaching.

The need to integrate value education into the teacher education program has been emphasised in Rwanda. A study titled “Whatever we do is dependent on values- Rwanda teacher educators’ actualisation of values and Ubuntu in teaching practices” investigates how teachers educators integrate Ubuntu values into teaching practices. The study reveals that Rwanda is in the process of integrating value education into teacher education practices through the adoption of different value-informed strategies. In Kenya, the Ubuntu values of togetherness and collectivism can promote humanism and the good of all in society. Value-creating education and Ubuntu education will assist in producing individuals capable of promoting quality of life and a positive community for all in Kenya (Odari, 2020). This assertion indicates that the place of Ubuntu in creating a just and egalitarian society where there will be coexistence and mutual understanding among the people in Africa depends on the effectiveness of integrating Ubuntu values into the teacher education program across Africa (Odari, 2020).

Materials and Methods

This study required a thorough review and synthesis of literature on how in-service teachers incorporate Ubuntu values into their environmental education teaching. The systematic literature review (SLR) method was adopted for data collection and analysis to achieve this. As noted by Cooper et al. (2018), a systematic literature review helps identify areas with limited research and those that are well-studied or require further investigation. SLRs are popular in fields such as business and management because they provide transparent, structured protocols for searching and evaluating studies on a specific research topic (Deng, 2012; Macpherson & Holt, 2007). This approach is appropriate for the current study, as it allows the researcher to assess the need for in-service teachers to be well-versed in Ubuntu values and pedagogy to support integrating environmental education into teaching. It is important to note that the limited scope of available literature constrains the study's findings. As a result, generalising the findings is challenging due to the reliance on data derived from published articles (Cooper et al., 2018).

The researcher employed a systematic four-step process for this study to review the selected literature. The first step involved planning, which included determining relevant databases and identifying appropriate literature through search engines. This was followed by inclusion, analysis, synthesis, and the presentation of findings.

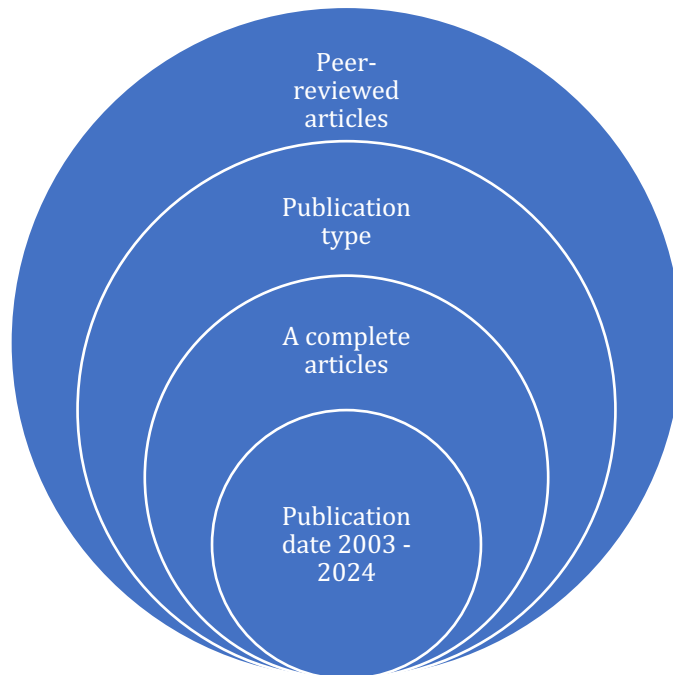
Inclusion and Exclusion Criteria

Literature was included based on the criteria that it falls within the scope of the study Stern et al. (2014). This technique assisted the researcher in determining relevant literature that falls within the scope of the study. The criteria adopted for the selection of literature include date of publication, peer-reviewed articles, and whole articles, excluding the abstract-only type of publication. These criteria are demonstrated in Figure 1. The author initially searched for relevant articles using the publication date and filtered to peer-reviewed articles related to in-service teachers and the integration of Ubuntu into teaching environmental education in South Africa.

Figure 1 illustrates the inclusive criteria approach developed for this paper.

Figure 1

Inclusive Criteria



Source: Designed for the study by the author.

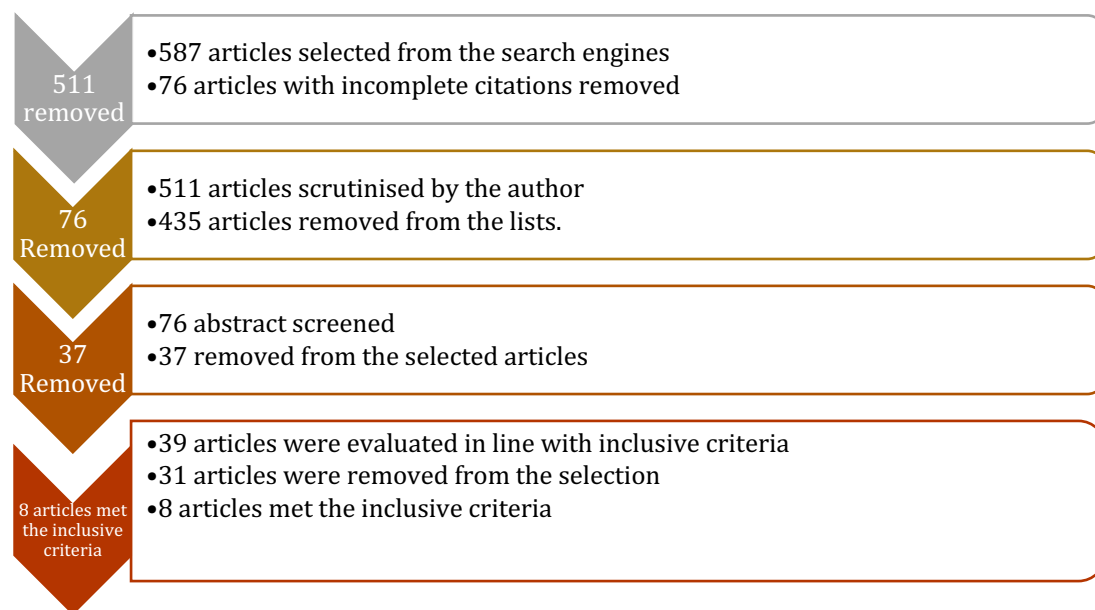
The author searches for articles from 2003 to 2024. The articles extracted from the search engine were peer-reviewed to ensure data accuracy and reliability. However, full-text articles were considered, indicating that articles with only abstracts were not considered for that study. Newsletters and other articles that were not peer-reviewed are excluded from the selection. Data were collected from databases like Google Scholar, ResearchGate, Scopus, ERIC, Web of Science, and EBSCO. The author searches for In-service teacher education awareness of Ubuntu values, Ubuntu values to teaching environmental education. The author continues the search with words like Ubuntu values and integration of Ubuntu into environmental education in South Africa to extract articles from the databases. Eight publications that satisfied the systematic review's selection criteria provided the data for the articles (Tawfik et al., 2019). The methodical review procedure that produced the eight papers chosen for the study's review is shown in the flow chart below.

Selection Criteria

The paper employs the PRISMA selection process, as indicated in Figure 2.

Figure 2

PRISMA Flowchart



Source: Designed by the author.

The authors chose articles based on viewpoints gathered through document, qualitative, and quantitative analysis. The questionnaire, focus group discussions, and interviews were used to collect data for these publications. Eight articles were chosen for review, and the evidence in the table provides comprehensive details regarding each of them.

Table 1

Showing eight articles selected for review.

S/N	Author(s) & date	Title	Design & Methods	Key Findings related to the study
1.	Ngubane and Makua (2021)	Ubuntu pedagogy – transforming educational practices in South Africa through an African philosophy: From Theory to Practice	Documents and Literature.	Ubuntu's ideology decolonises South African education, strengthens Ubuntu's role in reintroducing African values into the country's educational system, and helps students rediscover and embrace their cultural heritage and values.
2.	Kayira (2015)	(Re) Creating Spaces for Ubuntu: postcolonial Theory and Environmental Education in South Africa	Qualitative Document review	The study of environmental education is tied to colonial Western thought and discourse, and the Eurocentric education system still exists in Southern Africa.
3.	Grange (2012)	Ubuntu, ukama, environmental and moral education.	Literature	Moral education must extend to the self or humans and the environment and be guided by Ubuntu.
4.	Horsthemke (2009)	Rethinking humane education.	Qualitative	Decline in moral values, human abuse and environment, moral education, and environmental

				education for humans and non-humans.
5.	Mathebula and Martinez-Vargas (2023)	Ubuntu is a valued capability for university students in South Africa.	Qualitative and participatory research. Interview.	Ubuntu inspires interdependence among university undergraduate students and students to develop the capacity of Ubuntu for decolonial potential.
6.	Makhanya and Mzinyane (2024)	Understanding Ubuntu and its contribution to social work education in Africa and other region of the world.	Document analysis	Hindrance to the full integration of Ubuntu at all levels of education includes a lack of Ubuntu-inspired educational resources.
7.	Quan-Baffour and Room (2015)	Ubuntu-inspired training of adult literacy teachers as a route to generating "community" enterprises	Case study/focus group discussion	Strengthening socio-economic and community practices through ubuntu values.
8.	Van Norren (2022)	African Ubuntu and Sustainable development goals: seeking human relations and service in development.	Interview	Ubuntu prioritises the SDG goals of equality (SDG 10), Inclusion (SDG 16), and partnership (SDG 17). In Ubuntu, sustainability will be replaced by the "community of life," individuality by "collective agency," and knowledge acquisition by measurement by emotional connection with others.

Results

The study's key findings indicate that in-service teachers have a low awareness level of Ubuntu values and are not integrating them while teaching environmental education in South Africa.

Integrating Ubuntu Values into the Teaching Environmental Education

The effects of climate change on the environment worldwide have been alarming and require urgent attention. Literature reveals that many countries worldwide have attempted to address the problem. One of the critical interventions is integrating environmental education into the school curriculum to provide a platform for creating awareness of the magnitude of the problem using the humanistic approach (Anderson, 2010; Apollo & Mbah, 2021). Since human factors cause climate change problems, it becomes imperative that addressing the issue through the humanistic approach to education is desirable. Climate change is a sudden change in the atmosphere caused by factors other than natural climatic fluctuation. The import of this definition is that integrating environmental education into the school curriculum will empower learners to develop a positive attitude towards their environment, thereby relieving it (Mochizuki & Bryan, 2015).

The findings from the literature reveal that teaching environmental education is tied to colonial Western thought and discourse, and the Eurocentric education system still exists in Southern Africa (Kayira, 2015). Integrating environmental education into the school curriculum will require that the values and cultural practices of people like the Ubuntu that advocate togetherness, co-existence, and cooperation take centre stage. Learners must learn how to interact with their environment in a friendly and sustainable manner and realise the benefits of mutual co-existence in their environment. The findings also reveal an inadequate supply of Ubuntu-inspired resources that can aid the teaching of environmental education by in-service teachers (Makhanya & Mzinyane, 2024; Odari, 2020; Olawumi et al., 2024). Stakeholders and curriculum designers must ensure the development of essential resources for integrating environmental education.

Effective environmental education strategies can protect the environment from increasingly depleted natural resources for sustainable development (Uralovich et al., 2023). Accordingly, Ubuntu-inspired education can help students acquire information and competencies to champion the struggle to manage their natural resources sustainably. This indicates that environmental education can raise the standard of living, assisting in making responsible decisions on economics and politics globally. Environmental education is a multidimensional approach to addressing the problem of climate change (Kayira, 2015). According to literature, the environmental education concept also examines explicitly the relationship between humans and the environment and seeks to create a platform for creating awareness of the need to conserve the environment to prevent global warming and other environmental disasters (Kopnina, 2015; Liu, 2018). The ecological education concept adopts the strategy to address the ecosystem through knowledge sharing, experience, values, and indigenous practices (Ardoin et al., 2020; Toomey et al., 2017). This definition indicates that environmental education is a multifaceted and interrelated approach that seeks to address climate change.

Ubuntu Values and Teacher Education

The findings reveal that the education system in South Africa is still connected to the colonial culture and values (Ngubane and Makua 2021). This shows that students are not linked to their cultural values and heritage by internalising the Ubuntu values of togetherness, co-existence, and cooperation. Through sharing love, respect, unity, interconnection, communalism, and affection with others, the Ubuntu Philosophy—an African philosophy—emphasises humanity and the idea of being human (Mkosi et al., 2023; Mubangizi & Kaya, 2015). The Ubuntu idea highlights the similarities and understandings shared by all living things, including humans (Mubangizi & Kaya, 2015). The Ubuntu concept strongly emphasises humanity, the African value system, justice, and fairness (Qobo & Nyathi, 2016). This indicates that Ubuntu values can assist in shaping the moral behaviour of learners towards their environment when fully integrated into the teacher education program. Literature also affirms the need to consider the development of in-service training programs for in-service teachers that will be tailored to the Ubuntu principles and values.

The findings from the literature explore the need for moral education not only for self or humans but also for the environment and be guided by Ubuntu (Grange, 2012; Quan-Baffour et al., 2019). Moral education must extend to the environment by ensuring the learners appreciate the need to protect the environment from a cultural perspective. The Ubuntu concept is an African community's way of thinking. It is connected to the lifestyle of the native Africans. Its tenets are based on the humanistic ideals that indigenous African values hold dear. The Indigenous Ubuntu ideology is based on values like kindness, solidarity, cooperation, respect, and compassion (Ngubane & Makua 2021). Broodryk (2005) said that providing a consistent definition of Ubuntu can lead to talking points being taken out of context, and the term's true meaning is lost. Bhengu (2010), however, defined the Ubuntu philosophy as an indigenous African way of life that advocates for African culture's communal solidarity to further humanity, compassion, respect, collectivity, tolerance, unity, and other positive traits. According to Mugumbate and Chereni (2019), Ubuntu African philosophy is Black African indigenous people's traditional ways of life and is a synthesis of Black African indigenous people's traditional ways of life that enhance human dignity. According to this perspective, the core principles of the Ubuntu concept are the importance placed on humanity, compassion, solidarity, and other essential indigenous values specific to each ethnic group.

Role of In-Service Teacher in Promoting Cultural Awareness

In-service teachers are expected to implement the curriculum delivery and acquire relevant skills to promote learners' cultural awareness, such as Ubuntu values. Knowledge of learners' cultural

backgrounds and perspectives of students in a multicultural environment in South Africa is essential. Teachers, being the implementers in the curriculum delivery, are expected to be at the forefront of integrating African values like the Ubuntu and Indigenous Knowledge (IK). Studies by Jacobs (2015) indicated that for teachers to effectively discharge their role in the classrooms, workshops and training programs like continuous teacher professional development must be provided along with teaching resources that are Ubuntu or IK focus. The study findings reveal that training teachers on Ubuntu and other cultural values like IK will enhance their skills to promote cultural awareness. Keane et al. (2017) observed that teachers' attitudes to teaching cultural values were responsible for the lack of learners. A study titled "Why Indigenous Knowledge Has a Place in School Curriculum" indicates that science teachers' hostile attitude toward learners' cultural awareness because they come from different backgrounds was responsible for their inability to teach cultural values in the classroom. The findings also indicated that teachers already have bloated curricula and struggle to cover the syllabus.

Another study by McKnight (2015) indicates that South African teachers do not spend quality time teaching African indigenous values. This view aligns with the position expressed by Keane et al. (2017) in that teachers are not spending quality time learning African Indigenous values due to the need to cover the syllabus. Kaya and Seleti (2013) also described the teachers struggling to cover the curriculum, which is already bloated with topics for the term. These teachers, as reported by Kaya and Saleti (2013), developed a negative attitude toward integrating African indigenous values into their teaching in African schools and described the curriculum as too academic to address African problems. Literature indicates that teachers are not performing the role of integrating African indigenous values in their teaching. Researchers suggest that government and other critical stakeholders ensure that in-service teachers are empowered to address this gap.

Discussion

Both human and natural phenomena cause climate change problems. The effects of the problem are enormous, affecting countries worldwide and calling for different approaches to mitigate the situation, especially the need for integrating environmental education into the school curriculum to create awareness about its devastating effects. The negative impact of climate change on the environment is a global challenge, requiring urgent and coordinated action to combat its effects (Apollo & Mbah, 2021). Flood incidents and other environmental issues have been reported in parts of South Africa, particularly in Cape Town. Natural phenomena and unethical human activities drive climate change, extreme weather, and ecological degradation (Dulari et al., 2020). Addressing these problems, the Kyoto Protocol and the United Nations Framework Convention on Climate Change (UNFCCC) have advocated for the inclusion of environmental education in educational systems worldwide.

However, since climate change and global warming are partly caused by human action and inaction, the study advocates adopting a humanistic ethics-led approach to addressing the problem. Ubuntu values are a philosophy that advocates togetherness and communalism and recognises the humanity of other people. In-service teachers are drivers of the implementers of the curriculum who are not aware of the Ubuntu values and, therefore, do not integrate Ubuntu values while teaching environmental education. This may be partly because Ubuntu values were not part of the pre-service teacher education program, or they have a negative attitude toward integrating Ubuntu values while teaching environmental education. Literature also reveals a lack of professional development for teachers that is Ubuntu-driven. The training programs offered by the school leadership and the Subject advisors are general in outlook. In contrast, specialised training focusing on Ubuntu is desirable for effectively integrating Ubuntu into environmental education. Also noted from the findings is the inadequate supply of Ubuntu-inspired resources that can aid the teaching of environmental education by in-service teachers (Makhanya & Mzinyane, 2024; Odari, 2020; Olawumi et al., 2024). Stakeholders

and curriculum designers must ensure the development of essential resources for integrating environmental education. Collaboration between the educational planners and other stakeholders is needed to enhance the development of teaching resources, which is Ubuntu's focus. In-service teachers will require the teaching resources to effectively integrate Ubuntu values into teaching environmental education.

Integrating values education, such as Ubuntu values, into the curriculum for effective environmental education teaching is another dimension of addressing climate change from a humanistic approach. Research from two African countries, Rwanda and Kenya, indicates the importance of integrating value education into teaching practice for a sustainable community and to produce learners with sufficient skills to function well in community development. The position integration aligns with the critical pedagogy theory underpinning this research. The necessary theory focuses on the social, cultural, cognitive, political, and economic dimensions that shape the broader community and how education can assist learners in acquiring a positive cultural value that promotes social change (Kincheloe, 2004; McLaren, 2016).

Limitations of the Study

This study explores the in-service teacher awareness of integrating Ubuntu values into teaching environmental education. As a review paper, the study adopted the review of relevant published articles to provide recommendations for addressing the gaps. However, empirical data were not collected from participants to address the phenomenon limiting findings from the study. The author believes collecting empirical data for this study will make findings more scientific. Also noted is that the study was limited to South Africa, and articles focusing on South Africa were given preference while considering the inclusion criteria for article selection. Other researchers can undertake to extend this type of study to other countries in Africa by increasing the number of articles reviewed.

Conclusions

The paper examines in-service teacher awareness and its integration with environmental education in South African classrooms. Climate change is a global phenomenon that has affected countries worldwide, including South Africa. As a result of the magnitude of the problem, the paper suggests that the problem must be addressed from a cultural perspective like the Ubuntu. The study concludes that in-service teachers are unaware of Ubuntu values and are reluctant to integrate them while teaching environmental education. This could be because Ubuntu values were not part of their pre-service teachers' education program. The study also noted a lack of in-service training programs on Ubuntu values that can capacitate the in-service teachers to integrate Ubuntu while teaching environmental education (Mkosi et al., 2023). The paper recommends that the Department of Basic Education and other critical stakeholders develop an in-service teacher training program focusing on the humanistic approach to teaching environmental education. Also, the paper recommends that relevant stakeholders like the research institute and other researchers consider the development of resources in terms of teaching and learning materials that will assist in-service teachers in integrating Ubuntu into teaching environmental education.

Suggestions for Future Research

The author suggests that qualitative data can be obtained to explore and examine in-service teacher awareness and its integration with environmental education in Africa. The findings from the current study cannot be generalized because this is a review paper, and published articles were reviewed to examine the awareness of in-service Ubuntu teachers in teaching environmental education.

Acknowledgements

None.

Conflict of Interest

None.

Funding

The Author received no funding for this research.

References

- Alek, R., Fitria, H., & Eddy, S. (2021). The role of teachers in implementing curriculum 13 in primary schools. *JPGI (Jurnal Penelitian Guru Indonesia)*, 6(1), 291–295. <https://doi.org/10.29210/021043jpgi0005>
- Anderson, A. (2010, September 16). *Combating climate change through quality education*. The Brookings Institution. <https://www.brookings.edu/research/combating-climate-change-through-quality-education/>
- Apollo, A., & Mbah, M. F. (2021). Challenges and Opportunities for Climate Change Education (CCE) in East Africa: A Critical Review. *Climate*, 9(6), 93. <https://doi.org/10.3390/cli9060093>
- Ardoin, N. M., Bowers, A. W., & Gaillard, E. (2020). Environmental education outcomes for conservation: A systematic review. *Biological Conservation*, 241, 108224. <https://doi.org/10.1016/j.biocon.2019.108224>
- Asea, W. B. (2022). Epistemic decoloniality of westernised higher education: A discourse on curriculum justice and knowledge integration at historically white universities in South Africa. *Arts and Humanities in Higher Education*, 21(4), 375–393. <https://doi.org/10.1177/14740222221104343>
- Begum, A., Liu, J., Qayum, H., & Mamdouh, A. (2022). Environmental and moral education for effective environmentalism: An ideological and philosophical approach. *International Journal of Environmental Research and Public Health*, 19(23), 15549. <https://doi.org/10.3390/ijerph192315549>
- Bhengu, M. J. (2010). Ubuntu: An African spirituality. In I. Colalillo Kates & C. L. Harvey (Eds.), *The Wheels of Soul in Education* (pp. 31–40). Brill. https://doi.org/10.1163/9789460911897_005
- Breunig, M. (2005). Turning Experiential Education and Critical Pedagogy Theory into Praxis. *Journal of Experiential Education*, 28(2), 106–122. <https://doi.org/10.1177/105382590502800205>
- Broodryk, J. (2005). *Ubuntu management philosophy: Exporting ancient African wisdom into the global world*. Knowres Publishing.
- Chigangaidze, R. K., & Chinyenze, P. (2022). What it means to say, 'a person is a person through other persons': Ubuntu through humanistic-existential lenses of transactional analysis. *Journal of Religion & Spirituality in Social Work: Social Thought*, 41(3), 280–295. <https://doi.org/10.1080/15426432.2022.2039341>

- Chowdhury, J. S., Wahab, H. A., Mohd Saad, M. R., Roy, P. K., Hamidi, M., & Ahmad, M. M. (2021). Ubuntu Philosophy: 'I Am Because We Are' – A Road to 'Individualism' to Global Solidarity. In H. A. Wahab, H. S. Chowdhury, S. H. B. A. B. Ah, & M. R. Mohd Saad (Eds.), *Advances in Religious and Cultural Studies* (pp. 361–381). IGI Global. <https://doi.org/10.4018/978-1-7998-7480-5.ch022>
- Cooper, C., Booth, A., Varley-Campbell, J., Britten, N., & Garside, R. (2018). Defining the process to literature searching in systematic reviews: A literature review of guidance and supporting studies. *BMC Medical Research Methodology*, *18*, 1–14 <https://doi.org/10.1186/s12874-018-0545-3>
- Deng, P. (2012). The Internationalization of Chinese Firms: A Critical Review and Future Research*. *International Journal of Management Reviews*, *14*(4), 408–427. <https://doi.org/10.1111/j.1468-2370.2011.00323.x>
- Dulari, P., Bhushan, B., Chandel, V. C., & Bhushan, A. (2020). Protecting the Environment through Sustainable Development Goals (SDG). *World*, *9*(4), 21–28. <https://environmentaljournal.org/article/protecting-the-environment-through-sustainable-development-goals-sdg>
- Geber, H., & Keane, M. (2017). Ubuntu and transformational mentoring in South Africa: 7 principles of a culturally integrated mentoring response. In D. A. Clutterbuck (Ed.), *The Sage Handbook of Mentoring* (pp. 501–507). SAGE.
- Grange, L. L. (2012). *Ubuntu, ukama*, environment and moral education. *Journal of Moral Education*, *41*(3), 329–340. <https://doi.org/10.1080/03057240.2012.691631>
- Gwekwerere, Y. N., & Shumba, O. (2021). A call for transformative learning in Southern Africa: Using Ubuntu pedagogy to inspire sustainability thinking and climate action. In R. Iyengar & C. Kwauk (Eds.), *Curriculum and Learning for Climate Action* (pp. 188–205). Brill. https://doi.org/10.1163/9789004471818_011
- Horsthemke, K. (2009). Rethinking humane education. *Ethics and Education*, *4*(2), 201–214. <https://doi.org/10.1080/17449640903326813>
- Intergovernmental Panel on Climate Change. (2018). *Global Warming of 1.5 C, an IPCC Special Report on the Impacts of Global Warming of 1.5 C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty*. Geneva, Switzerland.
- Jacobs, K. R. (2015). *The classroom implementation of indigenous knowledge in the science curriculum by science teachers in the Western Cape Province, South Africa* [Unpublished doctoral dissertation]. Cape Town, South Africa: University of Cape Town. <http://hdl.handle.net/11427/15553>
- Kaya, H. O., & Seleti, Y. N. (2013). African indigenous knowledge systems and relevance of higher education in South Africa. *International Education Journal: Comparative Perspectives*, *12*(1), 30–44. <https://openjournals.library.sydney.edu.au/IEJ/article/view/7436>
- Kayira, J. (2015). (Re) creating spaces for uMunthu: Postcolonial theory and environmental education in southern Africa. *Environmental Education Research*, *21*(1), 106–128. <https://doi.org/10.1080/13504622.2013.860428>

- Keane, M., Khupe, C., & Seehawer, M. (2017). Decolonising methodology: Who benefits from indigenous knowledge research? *Educational Research for social change*, 6(1), 12–24. <https://doi.org/10.17159/2221-4070/2017/v6i1a2>
- Kgari-Masondo, M. C., & Chingwanangwana, B. (2024). Examining the Pragmatism of *Unhulized* Leadership in Schools Amid Socio-Political and Economic Turbulence in Zimbabwe: The Experiences of School Heads and Teachers in Marondera District. *Leadership and Policy in Schools*, 1–13. <https://doi.org/10.1080/15700763.2024.2313015>
- Kincheloe, J. L. (2004). *Critical Pedagogy Primer*. Peter Lang US. <https://doi.org/10.3726/978-1-4539-1455-7>
- Kopnina, H. (2015). Neoliberalism, pluralism and environmental education: The call for radical re-orientation. *Environmental Development*, 15, 120–130. <https://doi.org/10.1016/j.envdev.2015.03.005>
- Kotze, C. J. (2024). “I am because we are”: Novice teacher mentoring support needs from an Ubuntu perspective. *International Journal of Mentoring and Coaching in Education*. <https://doi.org/10.1108/IJMCE-02-2024-0011>
- Kuenzi, M., Mayer, D. M., & Greenbaum, R. L. (2020). Creating an ethical organizational environment: The relationship between ethical leadership, ethical organizational climate, and unethical behavior. *Personnel Psychology*, 73(1), 43–71. <https://doi.org/10.1111/peps.12356>
- Letseka, M. (2012). In defence of Ubuntu. *Studies in Philosophy and Education*, 31, 47–60. <https://doi.org/10.1007/s11217-011-9267-2>
- Liu, S.-C. (2018). Environmental Education through Documentaries: Assessing Learning Outcomes of a General Environmental Studies Course. *EURASIA Journal of Mathematics, Science and Technology Education*, 14(4), 1371–1381. <https://doi.org/10.29333/ejmste/83653>
- Macpherson, A., & Holt, R. (2007). Knowledge, learning and small firm growth: A systematic review of the evidence. *Research Policy*, 36(2), 172–192. <https://doi.org/10.1016/j.respol.2006.10.001>
- Mahabeer, P. (2021). Decolonising the school curriculum in South Africa: Black women teachers’ perspectives. In S. Morreira, K. Lockett, S. H. Kumalo, & M. Ramgotra (Eds.), *Decolonising Curricula and Pedagogy in Higher Education* (1st ed., pp. 97–119). Routledge. <https://doi.org/10.4324/9781003159278-6>
- Makhanya, T. B., & Mzinyane, B. M. (2024). Mazibuyele emasisweni: The nexus of Ubuntu philosophy, climate change and green social work. *Critical and Radical Social Work*, 1–18. <https://doi.org/10.1332/20498608Y2024D000000034>
- Maphalala, M. C. (2017). Embracing Ubuntu in managing effective classrooms. *Gender and Behaviour*, 15(4), 10237–10249. <https://hdl.handle.net/10520/EJC-c1eb0d3be>
- Mathebula, M., & Martinez-Vargas, C. (2023). Ubuntu as a valued capability for university students in South Africa. *Journal of Student Affairs in Africa*, 11(2), 17–33. <https://doi.org/10.24085/jsaa.v11i2.3624>
- Mugumbate, J., & Chereni, A. (2019). Using African Ubuntu theory in social work with children in Zimbabwe. *African Journal of Social Work*, 9(1). <https://www.ajol.info/index.php/ajsw/article/view/184222>

- Mugumbate, J. R., Mupedziswa, R., Twikirize, J. M., Mthethwa, E., Desta, A. A., & Oyinlola, O. (2024). Understanding Ubuntu and its contribution to social work education in Africa and other regions of the world. *Social Work Education*, 43(4), 1123–1139. <https://doi.org/10.1080/02615479.2023.2168638>
- McKnight, M. (2015). *Teachers' experiences of indigenous knowledge systems (IKS) found in the life sciences curriculum: A case study of life sciences teachers at a high school in the Pinetown District* [Unpublished master's dissertation]. Durban, South Africa: University of KwaZulu-Natal. <http://hdl.handle.net/10413/13753>
- McLaren, P. (2000). Paulo Freire's pedagogy of possibility. In S. Steiner, H. Frank, P. McLaren, & R. Bahruth (Eds.), *Freirean pedagogy, praxis and possibilities: Projects for the new millennium* (pp. 1-21). New York: Falmer Press. <https://doi.org/10.4324/9780203009550>
- McLaren, P. (2016). *This fist called my heart: The Peter McLaren reader*. Information Age Publishing, Incorporated.
- Mkosi, N. N., Mavuso, M. P., & Olawumi, K. B. (2023). Using Ubuntu Values in Integrating African Indigenous Knowledge into Teaching and Learning: A Review of Literature. *International Journal of Learning, Teaching and Educational Research*, 22(5), 140–159. <https://doi.org/10.26803/ijlter.22.5.7>
- Mochizuki, Y., & Bryan, A. (2015). Climate Change Education in the Context of Education for Sustainable Development: Rationale and Principles. *Journal of Education for Sustainable Development*, 9(1), 4–26. <https://doi.org/10.1177/0973408215569109>
- Mubangizi, J., & Kaya, H. (2015). African Indigenous Knowledge Systems and Human Rights: Implications for Higher Education, Based on the South African Experience. *International Journal of African Renaissance Studies - Multi-, Inter- and Transdisciplinarity*, 10(2), 125–142. <https://doi.org/10.1080/18186874.2015.1107985>
- Ndhlovu, T. P. (2024). Food (in)security, the moral economy, and *Ubuntu* in South Africa: A Southern perspective. *Review of International Political Economy*, 31(1), 199–223. <https://doi.org/10.1080/09692290.2022.2161110>
- Ngubane, N., & Makua, M. (2021). Ubuntu pedagogy–transforming educational practices in South Africa through an African philosophy: from theory to practice. *Inkanyiso: Journal of Humanities and Social Sciences*, 13(1), 1–12. <https://doi.org/10.4102/ink.v13i1.9>
- Nicolaides, A. (2022). Duty, Human Rights and Wrongs and the Notion of Ubuntu as Humanist Philosophy and Metaphysical Connection. *Athens Journal of Law*, 8(2), 123–134. <https://doi.org/10.30958/ajl.8-2-2>
- Nkambule, B. I. (2023). The Perceived Heads of Departments' Infusion of Ubuntu Values in Curriculum and Knowledge Sharing Leadership in Under-Resourced Public Schools. *Journal Of Curriculum Studies Research*, 5(2), 186–205. <https://doi.org/10.46303/jcsr.2023.26>
- Odari, M. H. (2020). Role of Value Creating Education and Ubuntu Philosophy in Fostering Humanism in Africa. *Journal of Interdisciplinary Studies in Education*, 9(SI), 56–68. [https://doi.org/10.32674/jise.v9iS\(1\).1857](https://doi.org/10.32674/jise.v9iS(1).1857)
- Ofosu-Asare, Y. (2024). *Decolonising Design in Africa: Towards New Theories, Methods, and Practices* (1st ed.). Routledge. <https://doi.org/10.4324/9781032692647>

- Olawumi, K. B., Mavuso, M. P., & Duku, N. S. (2024). Situating Ubuntu Philosophy in Pre-service Teacher Education. *International Journal of Learning, Teaching and Educational Research*, 23(8), 605–623. <https://doi.org/10.26803/ijlter.23.8.31>
- Padayachee, K., Maistry, S., Harris, G. T., & Lortan, D. (2023). Integral education and Ubuntu: A participatory action research project in South Africa. *South African Journal of Childhood Education*, 13(1), Article a1298. <https://doi.org/10.4102/sajce.v13i1.1298>
- Qobo, M., & Nyathi, N. (2016). Ubuntu, public policy ethics and tensions in South Africa's foreign policy. *South African Journal of International Affairs*, 23, 421–436. <https://doi.org/10.1080/10220461.2017.1298052>
- Quan-Baffour, K. P., & Romm, N. R. (2014). Ubuntu-inspired training of adult literacy teachers as a route to generating “community” enterprises. *Journal of Literacy Research*, 46(4), 455–474. <https://doi.org/10.1177/1086296x15568927>
- Quan-Baffour, K., Romm, N. R. A., & McIntyre-Mills, J. (2019). Ubuntu: A Dialogue on Connectedness, Environmental Protection and Education. In J. McIntyre-Mills & N. R. A. Romm (Eds.), *Mixed Methods and Cross Disciplinary Research* (pp. 221–250). Springer International Publishing. https://doi.org/10.1007/978-3-030-04993-5_10
- Sezen-Barrie, A., Miller-Rushing, A., & Hufnagel, E. (2020). 'It's a gassy world': starting with students' wondering questions to inform climate change education. *Environmental Education Research*, 26(4), 555–576. <https://doi.org/10.1080/13504622.2019.1610158>
- Shabalala, N. P., & Gumbo, M. (2024). Africanising Distributed Leadership in Environmental Education Curriculum Management. *Southern African Journal of Environmental Education*, 39. <https://doi.org/10.4314/sajee.v39i.11>
- Stern, C., Jordan, Z., & McArthur, A. (2014). Developing the review question and inclusion criteria. *AJN The American Journal of Nursing*, 114(4), 53–56. <https://doi.org/10.1097/01.NAJ.0000445689.67800.86>
- Tawfik, G. M., Dila, K. A. S., Mohamed, M. Y. F., Tam, D. N. H., Kien, N. D., Ahmed, A. M., & Huy, N. T. (2019). A step by step guide for conducting a systematic review and meta-analysis with simulation data. *Tropical Medicine and Health*, 47(1), 1–9. <https://doi.org/10.1186/s41182-019-0165-6>
- Thakhathi, A., & Netshitangani, T. G. (2020). Ubuntu-as-Unity: Indigenous African proverbs as a ‘re-educating’ tool for embodied social cohesion and sustainable development. *African Identities*, 18(4), 407–420. <https://doi.org/10.1080/14725843.2020.1776592>
- Toomey, A. H., Knight, A. T., & Barlow, J. (2017). Navigating the Space between Research and Implementation in Conservation. *Conservation Letters*, 10(5), 619–625. <https://doi.org/10.1111/conl.12315>
- Uralovich, K. S., Toshmamatovich, T. U., Kubayevich, K. F., Sapaev, I. B., Saylaubaevna, S. S., Beknazarova, Z. F., & Khurramov, A. (2023). A primary factor in sustainable development and environmental sustainability is environmental education. *Caspian Journal of Environmental Sciences*, 21(4), 965–975. https://cjes.guilan.ac.ir/article_7155.html
- Van Norren, D. E. (2022). African Ubuntu and Sustainable Development Goals: Seeking human mutual relations and service in development. *Third World Quarterly*, 43(12), 2791–2810. <https://doi.org/10.1080/01436597.2022.2109458>