Ethno-epistemological view to achieve educational goals

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Abstract
From a teaching and learning perspective, the ethno-epistemological view can be used to achieve educational goals of democracy, quality, equity and access. Encouragement to ensure that the educational goals are achieved is seen in the curricula of many educational systems. However, implementers of educational goals aim to achieve educational goals using the Eurocentric perspective. The Eurocentric perspective has a context that is different from that of the ethno-epistemological perspective. For this reason, the objective of this concept paper is to emerge a hybrid approach to contextualize and address educational goals during teaching and learning through using an African ethno-epistemological perspective. There is a need to answer the question on how these goals be achieved using the construct of the ethno-epistemology view triggered the above objective. The mentioning of goals in a curriculum of an educational system aims to ensure teaching and learning are relevant and significant to trigger human development. Authors used a methodology involving analysis of sampled curricula in the region that suggest ethno-epistemological view can be useful to address educational challenges. The sampled curricula were selected basing on the fact that their curricula suggest decolonization. However, curricula do not mention how ethno-epistemological perspectives can be used to mitigate challenges teachers face when they want to achieve educational goals. This is also evident as sampled curricula emphasize the need to engage educational goals as important to meet the schooling needs of learners and students during the teaching and learning process. However, curricula do not mention how educational goals can be achieved using the ethno-epistemology view. Also, the use of questioning and follow-up questions to students during teaching reveal that educational goals can be addressed using an ethno-epistemological perspective. Findings were the use of culturally aligned analogies, similes, case studies and others ensured the success of implementing educational goals to contextualize teaching and learning. As a result, the ethno-epistemological perspective allows decolonizing the curriculum and contextualizing as deep learning occurs.

Keywords: *goals, ethno-epistemological, knowledge, curricula, contextualize, Africanize*

Introduction

Ethno-epistemology is the study of the phenomenon of knowledge from the perspective of particular culture of given specific communities as revealed in their cultural heritage, proverbs, folklores, traditions, and practices. Emphasis on achieving educational goals comes with a need to level teaching and learning inequalities. Inequalities arise on account of many factors. Sometimes, inequalities are attributed to the belief that the Euro-epistemology view of knowledge is the only source of knowledge. The other knowledge sources were fumigated, as Odora-Hopper (2002), suggests. To level this disparity, other knowledge sources were also brought in and considered to be of value. For instance, the Afro-epistemological view of knowledge was brought into the curricula of some countries (Higgs, 2011). The ethno-epistemological view is the view of knowledge some ethnic groups have about happenings in their surroundings (Irikefe, 2023). This can be informal or formal theories about knowledge and the same ethno theories form the assumptions on which the explicit formal theories are based (Zambrano & Greenfield, 2004). The objective is to emerge a hybrid approach to contextualize and address educational goals during teaching and learning through using an African ethno-epistemological perspective to enable achieving educational goals, namely access, democracy, quality and equity. To understand how the Afro-epistemic knowledge view can be useful in achieving educational goals, the researchers lay the context where the researchers also discuss the relationship between the goals and their nature. There is a discussion of curricula of certain Southern African Development Community (SADC) countries to reveal that they bring elements of Afro-epistemic that can be a tool in the

researchers' endeavour in this concept paper to ensure that teachers in their teaching practices address educational goals. This is then followed by focusing on the *Ubuntu philosophy* the researchers believe can be a tool a teacher can also use to achieve the goals. Finally, the researchers close by discussing how both forms of view, Afro-epistemic and Euro-epistemic exist side by side in school culture to achieve educational goals. This is achieved through discussing specific situations on how these educational goals of democracy, equity, access, and quality are addressed using the understanding from ethno-epistemic whose roots are in the *Ubuntu philosophy* and then the conclusion.

Context

Schooling where teaching and learning are engaged is done to ensure every member of the community is aware of knowledge the previous generation achieved. In so doing, makes knowledge intergenerational. Celik and Polat (2022), argue that intergenerational knowledge is knowledge exchange between different generations. When a generation is aware of that knowledge, the gained knowledge is applied and users keep on modifying it as discipline knowledge is dynamic (Han & Li, 2019). Hale (2013), argues that when knowledge is applied it does not become inert. Coupled with this, the knowledge remains extant in the community. *Does this happen in each education system?* Knowledge gained needs to have the above-mentioned nature to solve daily problems (Muchenje et al., 2021).

Although this may be true, this is only to those education systems where they address equity, access, quality and democracy. This is not the phenomenon observed in other education systems that knowledge is transferred to the next generation and is applied. This is evidenced by the fact that globally each education system keeps on overhauling the curriculum. In some education systems, there might be instances in which other learners are privileged and some are disadvantaged. Amukugo (1993) supports this claim as she explains that this was the case in Namibia, where before independence, certain disciplines were only learnt by those whose cultural views were aligned with Eurocentrism. This was also the same situation in South Africa during apartheid. Mujal-Leon (1988) indicates that blacks and other learners of colour except for the ruling elite were given an education that qualified them to be labourers. They were denied an education that would enable them to compete with their white counterparts economically, socially, and politically, denying other races the dimensions of democracy.

Zimbabwe, Zambia including Namibia as sampled countries and other SADC countries that are part of the population are not spared from the observed phenomenon, whereas the three countries were selected basing on the fact that their *curricula suggest decolonization*. This has made them come up with educational goals to ameliorate the situation after each one of these countries gained independence. This is not only seen in SADC countries but curriculum overhauling with intent to ensure achievement of the educational goals is a global phenomenon and is always taking place. This is supported by the fact that the sampled countries and any other have done curricula overhaul several times after gaining independence. Another most compelling evidence that countries do curriculum overhauls to address quality, equity, access and democracy is what Matear (2007), reports for Chile. However, before, schooling used the behaviourist theory of teaching and learning. To a certain extent, this constrained the achievement of educational goals, namely quality, democracy, equity and access. Educational goals were not easily attainable as the focus was Euro-centric knowledge, which could only be constructed using examples from one cultural view. In contrast, Irikefe (2023) suggests that ethno-epistemology studies the phenomenon of knowledge from the view of particular culture of given specific communities. Knowledge is manifested in their cultural heritage, proverbs, folklores, traditions, and practices. In the researchers' case, they used cultural heritage related to cultural, practices, case studies, analogy, similes, artefacts and even a cultural metaphor. These the researchers see as epitomizing concepts in the official curricula.

That is coming closer to valuing of knowledge sources from other cultures. Thus, the researchers embrace Taylor's (1871) stance that knowledge is embedded in culture. In so doing, the researchers' objective was to emerge a hybrid approach to contextualize and address educational goals during teaching and learning through using an African ethno-epistemological perspective. The non-consideration of those goals of education

emerged in a situation where others were privileged and others disadvantaged as is supported by literature from Mujal-Leon (1988) and Amukugo (1993). This serves to illustrate how the behaviourist view of teaching and learning anchored on Eurocentrism helped maintain the status quo and allowed the implementation of the educational goals mentioned. To arrest this situation, bodies regulating schooling, for instance, the Organization of African Unity (OAU) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) put in place the need to achieve quality, democracy, equity and access. Eurocentrism as the focus and theory of teaching in most cases took a behaviourist orientation, this resulted in not addressing the educational goals as evidenced by how the curricula of many countries were structured. Under these circumstances, the focus of this study was to explore how the same goals of education can be achieved in any country using the ethno-epistemological view. That is, there are so many examples that can be used to ensure that the educational goals can be achieved using the ethno-epistemological view of a specific culture. That is examples from other cultures can be used to address access, democracy, quality and equity, see examples in section on suggestions to achieve goals using Ubuntu philosophy. Despite emphasizing the use of ethno-epistemological views in the curricula of many countries to decolonize as Grosfoguel (2007), points out, the challenge is that the curricula do not mention how to bring this about.

The need to ensure the achievement of democracy, access, equity and quality in schools is an idea that emerged soon after World War II as Rogacheva (2016) illustrates. Immediately after sanctioning the need to practice democracy in schools and any social structure, colonizers, Europe, United States of America and others who were in full control of their education systems did so in their countries. In contrast, democracy in schools was absent in colonized countries like the SADC countries and others. Of course, the failure to introduce democracy in schools in colonized countries is not because of ignorance of the need for democracy in schools. This was done to keep on under-privileging certain countries, as the belief was to maintain the status quo (Zeigler, 1970). Democracy in schools started to be talked about after each

country gained independence in colonized countries. This is evident since in the sampled countries and those in the entire population teacher-centred approach was the approach in teaching and learning (Mosweunyane, 2013).

Dewey's (1966) work about democracy in schools had spread to all six continents of the world (Passov, 1982). Three ways used for this were: (1) Dewey's visits to foreign lands which, included Japan, China, Turkey, and the Union of Soviet Socialist Republic (USS R); (2) translations of Dewey's work related to democratic schools was done in at least thirty-five languages; and finally, (3) the many students from other countries who went to school with Dewey and his friends at Teacher Colleges, Columbia University and other American Universities and colleges where Dewey's philosophy was taught. Those who had come in contact with Dewey returned home to become leaders in their countries' ministries and universities but never managed to implement democratic schools that brought critical pedagogy to make classroom activities more humane in their home countries (Shaduk, 2014). However, today, the entire SADC countries and other countries in the global world are anxious to make sure there is democracy in the schools, as they believe sound pedagogical approaches are a measure of democracy (Israel, 2000). This is evident as institutes of learning constantly ask stakeholders to do evaluation and reflection to measure the effectiveness of implementing democracy. However, in SADC, the approach to make democracy and other goals emerge in schools is still using the Eurocentric view instead of the Afrocentric view the curricula of these countries advocate. The researchers look into the nature of these goals before they discuss how the current curricula in SADC are aligned to the ethno-epistemic view but do not reveal how the philosophy in such view can be used to ensure goals of education are implemented successfully.

Nature and relationship of democracy, equity, access and quality in an educational setting

The promotion of democracy in education as encouraged by UNESCO and the African Union (AU), is to ensure education meets the necessities of the learner, the community and society. Democracy in education does this through developing reflective and critical individuals. The individuals become collaborative problem-solvers and creative

flexible thinkers. This occurs if they have engaged in deep learning, ability to link existing knowledge to new knowledge (Liu, 2022). The characteristics of democracy at a school must manifest themselves. According to Chakma (2022), there are several principles of democracy. These principles are liberty, equality, fraternity, the dignity of the individual, cooperation, sharing responsibility and others. These dimensions deeply influence education. This is attributed to the nature of democracy in education, it being universal and compulsory, serving the entire population and obligatory, a broad-based curriculum which allows all to participate. Learner-centred and community–centred must be another nature. Education or schooling becomes democratic if it embraces the culture of the learners. Decentralizing it allows *access* to everyone. Education becomes worthy if the citizens engaged in it can apply it to solve daily problems. Finally, a *democratic* education develops a globally focused citizen who can be involved in active associations that propel economic growth.

These features of democracy are also seen in the Ubuntu philosophy where the ethno-epistemological view of knowledge is embedded. Chimbi and Jita (2022) in Zimbabwe have the same view. It is for this reason that the researchers intended to illustrate how these tenets of democracy can be fulfilled using the ethno-epistemological view. As will be seen later in the next paragraphs, each SADC country encourages the use of an ethno-epistemological view in teaching practices, but this is still not fulfilled to achieve educational goals as teachers in practice do not see this relationship. The Ubuntu philosophy encourages social justice to emerge in communities and this is a clear manifestation that democracy is dependent on elements of social justice. According to Fraser (2007), there are different dimensions of social justice, for example, representational, recognition and redistribution. *The representational* dimension of social justice is to empower one to enable him/her to have his/her voice heard in debates that may be political as s/he defends him/herself in given situations. On the other hand, the second dimension of social justice, *recognition,* comes about if the cultural aspects of the learners are embraced. Finally, the *redistribution* dimension of social justice sees that the disparity in the distribution of resources is

dismantled through the use of locally culturally sensitive hybridized pedagogical styles (Bhabha, 1986). That is decolonizing existing Eurocentric structures and allowing them to coexist with Afrocentric structures using cultural views as they also bring alternative ways of knowledge construction that are democratic (Grosfoguel, 2007). In so doing everyone is enabled to participate in the socioeconomic and political arena. They researchers' view then is that if they consider educational democracy as a function it then depends on these three dimensions of social justice. This is also true to view educational democracy as having elements of access, equity and quality as researchers discuss below.

The OAU and UNESCO suggested the educational goals in order to address inequality found in education systems across the globe. Educational inequality is the unequal distribution of academic resources, including but not limited to school funding, qualified and experienced teachers, books, and technologies, to socially excluded communities. This echoes or resonates very well with the redistribution dimension of social justice and the researchers said it is a variable determining democracy. Some communities tend to be historically disadvantaged and oppressed. Individuals belonging to these disadvantaged groups often do not have access to schools with sufficient resources. Inequality leads to major differences in the educational success or efficiency of these individuals and ultimately lowers social and economic movement. Inequality in education is broken down into different types of regional inequality, inequality by sex, inequality by social stratification, inequality by parental income, inequality by parent occupation, and many more.

One of the main hurdles facing education systems specific to those countries where the education system was skewed, for example, the SADC countries is to develop an equitable system where access to learning institutions goes alongside equity without undesirably affecting quality and one that is regionally and ethnically representative. From an education point of view, equity is to do with fairness and inclusiveness (Thompson & Thompson, 2018). Further, Thompson and Thompson (2018) suggest that equity and access are vital components of quality education. The procedure of emerging such a system cannot be achieved instantaneously and it is a gradual

trajectory. SADC countries' historical past combined with these countries' ethnic make-up as well as their socio-economic standing make access with equity a complex hurdle to defeat if Afro-epistemological view of knowledge construction is not embraced. Several sources show that this challenge is not typical to SADC countries alone. It is evident as Matear (2007) reports about the education status in Chile stated earlier. Although strides have been made in terms of opening up learning institutions for marginalized communities and for previously disadvantaged people, schooling system of many countries are not yet accessible to all. When countries realized the need to overhaul the curriculum to remove hurdles preventing the attainment of equity, access, quality and democracy, they worked to come up with a new curriculum that could meet the needs of the people. The researchers look into the curricula of some of the SADC countries to see if they point out some elements which foster the achievement of the curriculum educational goals.

Curriculum structure in science
There is convincing evidence that the education that was there before each country gained independence was not meeting the educational goals of democracy, equity, access and quality. For this reason, Namibia, Zimbabwe, Zambia and others in the SADC did a curriculum overhaul. The product of each overhaul mentions the need to embrace the ethno – epistemological view, the Afrocentric view of knowledge construction. Even though there is this encouragement, there is no mention of how the Afrocentric view could be used to achieve educational goals over the Eurocentric view. This is evident from some extracts of curricula of certain SADC countries the researchers selected and analysed. Only those extracts of the curricula which point to the idea of Afrocentric were discussed here. Also, only some curricula were selected to discuss here coupled with the fact that they all believed the curricula needed to meet certain international standards, universality, and consequently, there are some congruence in the themes of these curricula in each country discussed. It is important to realize that curricula need to be regional and universal to serve the needs of not only a region but also global needs. A universal curriculum is one according to Gibbons and Neuman (1985) that prepares an individual to live successfully in an uncertain world, make constructive contribution to his community, and adapt easily when he moves from one school in a region to another school in another region, and also to actively pursue solutions to global problems. Curricula in the SADC countries were planned taking into account these tenets as researchers see from the discussion that follows.

UNESCO (2010) discusses that the Zambian curriculum encourages the teaching practitioners to come up with a localized curriculum. The localized curriculum needs to be extracted and guided by what is in the Zambia Ministry of Education (2013) curriculum framework document. To achieve coming up with a localized curriculum the curriculum document suggests that one can selectively use local language, appropriate selection of cultural activities, bring in the classroom teaching practice cases based on the local environment, local themes and cross-cutting issues. Furthermore, the Zambia Ministry of Education (2013) curriculum framework document mentions the need to achieve the educational goals under discussion in this work. Still it does not say how they could be achieved using the Afrocentric view even though there are a lot of indicators that it embraces the use of Afrocentric view. That is, it agrees with what is currently believed that there is no one knowledge source but a multiple of them which need to be incorporated together in order to develop a global sensitive individual through ensuring access, equity, quality and democracy in schools.

In the same fashion, the Zimbabwe Curriculum Framework for Primary and Secondary Education (ZCFPSE) (2015-2022) encourages that the curriculum needs to embrace both local and international views. That is, the curriculum needs to produce an individual who is scientifically literate and for that to occur one must have experienced those goals, democracy, quality, equity and access during his/her schooling period. They should have accessed education that is of quality under equity conditions. The curriculum emphasizes the embracing of local culture to ensure a local curriculum which addresses context. It is equally important to note that this curriculum points explicitly at the need to engage indigenous knowledge where the ethno-epistemic view of knowledge is embedded. This is seen where it explains that

tolerance will be cultivated through learning about each other's arts and crafts, music and dances, poems, rituals, cuisine and attire with roots in indigenous knowledge systems. This is the first area where the researchers see in a curriculum how the goal of equity is made to emerge but not mentioned. Embracing knowledge in those cultural activities makes it fair as not only one individual's cultural activities are considered, but all. The curriculum does not only consider indigenous knowledge as the only source but also sees other sources as valuable as it suggests that "…learners acquire competencies informed by both indigenous knowledge and other knowledge systems" (ZCFPSE, p. 7). Emphasis is placed on the use of indigenous language in teaching practices as seen from this theme of indigenous language being mentioned in several pages of the curriculum document.

Namibia is not spared from pointing out the importance of educational goals of access, equity, quality and democracy that need to be achieved for deep learning to occur. These are explicitly stated unlike in the other two countries' curricula presented above. Also, the Namibian national curriculum for basic education (Ministry of Education, Arts and Culture, 2016) embraces the idea that knowledge sources are multiple and are inclusive of ethno-epistemological view to construct knowledge. It further strengthens the idea that sources of knowledge are multiple, by stating that, "knowledge encompasses indigenous knowledge, local and national culture, and international and global culture" (p. 2). In the hope that the teachers as curriculum implementers, might not misunderstand the term "indigenous knowledge", the document simplifies this to "local knowledge" and also tasks the teachers to obtain it from communities around the school as they are the custodians of it. Recognising that knowledge is embedded in language is commended as the idea of local languages is encouraged. To make it even better for the elementary school, the curriculum recommends that language of teaching and learning should be that of the community in the school surroundings.

The extracts of the three curricula sampled looked at are sufficient for us to point out how using the Afrocentric view, which brings out the Ubuntu philosophy, can be used to achieve the goals of education. It is in the

Ubuntu philosophy where the researchers see the tenets of access, equity, quality and democracy. It is for this reason that the researchers discuss the Ubuntu philosophy below.

Ubuntu philosophy

Ubuntu is a supra-national ideology that has been in existence prior to colonization and being rejuvenated and made extant (Ajitoni, 2024). Through using it as a tool, the researchers see it can be useful to achieve educational goals. It is a philosophy common among the Bantu people of sub-Saharan Africa. Ubuntu is a word from the Nguni language family (IsiNdebele, IsiSwati, IsiXhosa and IsiZulu) of Southern African countries meaning humanity, humility, kindness and generosity (Bangura, 2009). In Zimbabwe, the term used to refer to this philosophy is Unhu, among Shona people. In Tanzania the term is referred to as Ujamaa whereas in Kenya, the term Harambee is common to describe this philosophy. Namibia, on account of language diversity, the late President Geingob used the term Harambee to refer to this philosophy. The Sotho of Lesotho refers to it as 'Botho', the Chewa/Nyanja of Malawi and Zambia call it 'Umunthu', while the Banyambo of northern Tanzania and the Baganda of Uganda term it 'Obuntu'. The fact that this construct, Ubuntu has a name in each and every language in southern Africa and the world is a clear indication that this philosophy is real and indeed exists. A construct or an object becomes real and exists if it has a name in each and every language. For instance, a tree is real, it exists and one would see that each language has a name for a tree. A construct cannot have a name in many languages if it does not exist.

This philosophy stresses teamwork, communitarianism, tolerance, and not only love for fellow humans but also for non-living and non-human. As an illustration of those mentioned features, the Nguni say "*Umuntu ngumuntu ngabantu*" – translating to "a person is a person through other persons". Bangura (2009) abridges this to, "To be human is to affirm one's humanity by recognizing the humanity of others in its infinite variety of content and form" (pp. 35-36). This saying is the cornerstone of the African way of life and spirituality which acknowledges linguistic, historical and cultural diversity. In spite of the socio-politico-economic dislocations and

distortions caused by colonization, the Bantu of sub-Saharan Africa continue to share the values of Ubuntu. Metaphorically, Ubuntu is an umbilical cord uniting the different Bantu groups. Ubuntu adopts the supremacy of cooperative solidarity over individualism by emphasizing that "I am because we are, we are because I am" (Murove, 2014, p. 36). This is supported by a saying in Shona that "Chikunwe chimwe achitswanyi inda" – translating to "One finger does not crush lice" Also, when the researchers were very young growing up, they were taught not to harm any inmate or animate thing on earth. The belief was that they all helped to make you what you are. From the biomass pyramid view, this is true as all animate and inanimate objects help one another to coexist on the earth's surface.

It is this understanding of Ubuntu where the community ethno – epistemological view is embedded can be used as a tool to bring access, equity, quality and democracy in a classroom setting. The researchers now discus examples or situations which serve to achieve the educational goals which are in indigenous knowledge which the curricula encourage teachers to use. Despite this being in place, there is no evidence that teachers see the Ubuntu philosophy as a tool to achieve access, equity, democracy and quality, henceforth the researchers illustrate this.

Suggestions to achieve goals using Ubuntu philosophy

In this section, the researchers suggest how educational goals can be achieved through Ubuntu philosophy. On account of having many contexts that can be used to measure prevalence of educational goals in an education system, the researchers only focus on how these educational goals can be achieved in a classroom setting. A classroom provides the environment important to develop learners, and since they are brought up under varied circumstances and privileges, learners show differences in their performance (Tyagi, 1991). That is, the researchers' suggestions are on how educational goals can be achieved in a classroom setting when a teacher is teaching by changing pedagogical styles to bring those linked to ethno-epistemological view of knowledge construction as Israel (2000) epitomizes that sound pedagogical styles ensure the prevalence of democracy. The researchers discus first equity and then access as they are components of quality as

Thompson and Thompson (2018) suggest. Quality is then discussed and finally democracy where the other three goals are manifested.

Equity

In the schools in the SADC countries and elsewhere globally, there is a richness in cultural diversity. Learners or students come from communities that have many diverse cultural backgrounds and socioeconomic standings. Pedagogical styles that seek or aim to address equity must embrace the Ubuntu philosophy. The Ubuntu philosophy suggests that no one must be left behind, implying that injustices in treating learners at school is removed. The reason to remove injustice pedagogical styles is that the researchers need each other as revealed in the Ubuntu philosophy. The teacher and the learner in this case need one another. There should be a dialectical relationship between the two to create a conducive teaching and learning environment. If teaching and learning is to be free from injustice, knowledge should not only come from the teacher but also from the learner. That is the empty vessel theory, Freire (1970) and Piaget (1950) discourage cannot achieve equity. The idea of a learner who is a blank slate is not accommodated in these pedagogical styles linked to Ubuntu. Since the teacher needs each learner to participate in class discussions, he or she must enable all the learners to have their prior knowledge discussed in class.

Learners' prior knowledge about the constructs or concepts the teacher discusses with students is embedded in indigenous knowledge the learner brings from home. To use prior knowledge to achieve equity, the teacher uses the ethno-epistemological view of knowledge. Curriculum materials are compiled from few individuals and in the process use examples from their culture. This disadvantages learners who are not from that culture as a result one cannot achieve equity if that curriculum is constructed and used with learners from diverse backgrounds. Rather one needs to source the ethno-epistemological view of such concept being taught from each individual learner's ethno-epistemic view of knowledge and then bring the concept in the official curriculum for discussion. In so doing, a learner is helped to develop deep learning. According to Liu (2022), deep learning is of great significance as it enables learners to

participate globally as they would have developed the standard discipline language. Equity tasks teachers to be fair in their practices. One way to address equity using Ubuntu is the understanding that Eurocentric view of knowledge is what the teacher wants the learner to construct for him to be able to operate globally. But because it is not easy for a learner to quickly construct it, what he does is to incorporate it with the ethno-epistemological view of that particular construct he wants the learner to know.

For instance, in science the supposed knowledge the teacher wants learners to construct is that atmospheric pressure decreases with increase in altitude. At the top of a mountain, there is low atmospheric pressure and at sea level there is high atmospheric pressure. Now, the example in the official curriculum is that of the experience of a passenger who feels that his ears get closed as the aeroplane goes higher where atmospheric pressure is low. Sweets are given to the passenger to bring the two pressures in equilibrium, for example, atmospheric pressure and blood pressure. This example to enable a learner construct this knowledge in the official curriculum is not within his prior knowledge. It is most probably that those few learners who would have gone in an aeroplane might understand this. To achieve equity, the teacher's meta-norms caution him to take experiences of his learners about atmospheric pressure variation from their communities. For instance, cultural practices where they go diving under the water, they experience the same phenomenon of ears closing because of high pressure under the water. The two pressures, atmospheric and blood pressure are in disequilibrium. In addition, other learners come from mountainous areas. When they climb these mountains, and when at the apex, they experience nose bleeding attributed to the fact that the two pressures are not in equilibrium, the atmospheric pressure and the blood pressure. This disequilibrium makes blood pressure to be more consequently burst the veins and arteries in the nose and this causes nose bleeding. Such an approach brings a hybrid pedagogical style that Bhabha (1986) recommends as cultural translation is important in a school where there is diversity. In so doing, equity is made to emerge as Ubuntu philosophy emphasise fair treatment of all learners. Similarly, access can be addressed in the same manner as like in the case of emerging equity. What follows is how access can be addressed using the ethno-epistemological view. The researchers start by summarizing what access is all about even though they have done it in previous sections, but this time relating it to Ubuntu.

Access

The researchers use a cultural analogy to further explain what access is all about and illustrate how the ethno-epistemological view of knowledge can be used to achieve it in a classroom setting. The analogy that the researchers bring in is that of a teacher who prepares a party for his learners in the classroom where there are learners who are short, of middle height and some who are tall. However, he places the food for the party on an elevated platform; for instance, food for the party is on top of a table standing on another table. Those who can access are those who are tall. The short learners will not access the food. This serves as base domain knowledge for the target domain knowledge of the knowledge the teacher wants to construct with learners positioned in such a way that others cannot access it. For instance, it might be the cause of bringing mediums of instructions which other learners are not proficient in. To achieve access, the teacher's meta-norms in the Ubuntu philosophy cautions him to look for cultural artefacts that reflect knowledge he intends to teach. For instance, when teaching a geometrical shape such as a cone, the teacher gives an example of an ice cream cone as an example of the shape of a cone. Some learners do not even know what ice cream is and this deprives them to access that knowledge of a cone. Instead, what the teacher can do is to look into the community if there are any shapes which are similar to a cone. That is, he brings cultural artefacts which have the shape of a cone and then uses them to show what a cone is. In schools closer to the big rivers such as the Zambezi, Kunene, Limpopo, communities use fish traps that are cone shaped. These are good cultural artefacts that can be used to ensure that access is achieved in a classroom setting. What guides the teacher to bring these artefacts is the fact that the ethno-epistemological view was used to come up with that structure since that cultural artefact is similar to the cone in other cultural settings.

Quality

The researchers have seen in the above discussion that access and equity are components of quality. Under these circumstances, it is reasonable to discuss it after the two, equity and access. In the process, the researchers still aim to illustrate how the ethno-epistemological view of knowledge can together with the *Ubuntu philosophy* be used as a tool to achieve quality as Thompson and Thompson (2018) suggest. The Ubuntu philosophy recognizes that it is not possible to have a healthy learning environment, an environment that reflects quality learning if there is no humility, kindness and generosity as Bangura (2009) suggests, unless if the human dignity component of all members of that learning community is embraced. For ensuring that quality teaching in education systems is achieved through the understanding of the features of *Ubuntu*, the researchers illustrate below how quality can be achieved using cultural practices found in a learner's environment.

Cultural practices found in a learner's community are embedded within the ethno-epistemological view of knowledge. In the researchers' case, they see cultural practices as loaded with discipline knowledge that can be used as tools to improve quality of teaching and learning. Quality emerges in a classroom setting if the teacher sees that his practice to teach a construct or concept becomes abstract and becomes innovative by bringing cultural practices that serve as base domain content to support the target domain content knowledge in the official curriculum. Most compelling evidence to bring about quality when such a case arises is for instance when a teacher is teaching the concept of sublimation, which is change from solid to gas directly without passing through the gaseous state. However, this becomes abstract since the school is ill equipped to conduct the practical work as there are no apparatus. There is no iodine or naphthalene balls that can be used to demonstrate this to learners. Because of the absence of these materials, the quality of teaching is poor. An innovative teacher looks into the community of the learners for cultural practices brought about by the ethno-epistemological view of knowledge. For example, at an open space where there are some people selling some refreshments; the refreshments are cold enough to quench one's thirst but the sellers are not using any refrigerators. They are cooling the refreshment using solid carbon dioxide, which sublimes. For it to sublime, it would have removed the heat energy in the refreshments and leaves them cool. This cultural practice can be good to achieve quality for those learners whose background is urban or peri-urban where this cultural practice is experienced.

For those learners whose background has not allowed them to see the above cultural activity, the teacher can bring the idea of how communities in areas where they lack water and soap remove the pungent smell of urine from a blanket. Alternatively, they can also bring a nocturnal urine chamber pot to demonstrate sublimation. The understanding of these community members is that urine sublimes like naphthalene or iodine. So when they wake up in the morning the mentioned cultural artefacts, urine spoiled blanket and nocturnal urine chamber pot are placed on a sunny place to allow the urea to sublime. When they are brought back into the house the next night they have a less pungent smell. Such an innovation of a teacher can bring about quality learning as abstract concepts become concrete when taught in such a manner.

Democracy

Democratic deficits emerge if those other goals of education such as quality, access and equity are not addressed. In such a scenario, the teacher has to look into it to establish that the dimensions of democracy, as Fraser (2007) claims, are representational; recognition and redistribution are made to emerge. Taking the cultural heritage of the child into consideration is an aspect to achieve democracy in an educational setting. So, with this view which the other goals have emphasized and also that the researchers have said that equity, access and quality are defence walls of democracy, as Thompson and Thompson (2018) view, the researchers arrive at saying the suggestions given for achieving other goals can also be used to achieve democracy.

Conclusion

The ethno-epistemological view, in achieving educational goals is important as it allows teachers and other education stakeholders to merge democracy, equity, access and quality into the education system using another view which is not Eurocentric. The fact that very few or no one had ever thought of using the *Ubuntu philosophy* to achieve educational

goals plays a pivotal role as it allows neglected knowledge to be extant. The indigenous analogy, cultural artefacts and sensitizing cultural aspects used to achieve educational goals allow education stakeholders to remain abreast of how to achieve educational goals while at the same time the process decolonize the curriculum. This approach, of addressing educational goals in a classroom setting using ethno-epistemic view of knowledge linked to Ubuntu philosophy, allows one to see that these goals have a dialectical relationship and are achieved.

References

Ajitoni, B. D. (2024). Ubuntu and the philosophy of community in African thought: An exploration of collective identity and social harmony. *Journal of African Studies and Sustainable Development, 7*(3), 1-15.

Amukugo, E. M. (1993). *Education and politics in Namibia: Past trends and future prospects.* Windhoek: Gamsberg Macmillan Publishers (Pty) Ltd.

Bangura, A. K. (2009). Federalism, economic development, science and technology for a United States of Africa: An ubuntu-clustering approach. *The Journal of Pan African Studies*, *3*(2), 33-70.

Bhabha, H. K. (1986). The other question: Difference, discrimination and the discourse of colonialism. In Barker, F, P Hulme M Iversen & D Loxley (Eds): *Literature, politics and theory*: Papers from the Essex Conference 1976-1984. London & New York: Methuen.

Celik, C. & Polat, S. (2022). The relationship between intergenerational knowledge sharing and intergenerational learning levels among teachers. *Journal of Intergenerational Relationships*, *21*(4), 427-441.

Chakma, D. (2022). *Democratic education: Characteristics and role of democratic education.* Retrieved February 11, 2025, from https://onlinenotebank.wordpress.Com/2022/12/02/democracy-and-education-2/

Chimbi, G. T. & Jita, L. C. (2022). Ubuntu: The pursuit of an indigenous curriculum reform policy in post-colonial Lesotho, Zimbabwe and South Africa. *Towards the Next Epoch of Education*, 20, 137-144.

Dewey, J. (1966). *Democracy and education. An introduction to the philosophy of education*. London: The Free Press.

Dewey, J. (1900). *School and society. The child and the curriculum*. Chicago: University of Chicago Press.

Fraser, (2007). Feminist politics in the age of recognition: A two dimensional approach to gender justice. *Studies in Social Justice*, *1*(1), 23-35.

Freire, P. (1970). *Pedagogy of the oppressed*. New York, NY: Continuum

Gibbons, M. & Neuman, M. (1985). *Creating a curriculum for the global future*. Retrieved March 26, 2025, from https://files.ascd.org/staticfiles/ascd/pdf/journals/ed_lead/el_198512_gibbons.pdf

Grosfoguel, R. (2007), "The epistemic decolonial turn", *Cultural Studies*, *2*(3), 211-223.

Han, M. & Li, Y. (2019). Research on the evolution of discipline knowledge based on concept flows. *Advances in Social Science, Education and Humanities Research*, 369, 632-640.

Hale. E. (2013). From inert knowledge to activated knowledge: Practical ideas for improving student learning. *Philosophy Study, 3*(4), 312-323.

Higgs, P. (2011). The African philosophy and the decolonization of education in Africa: Some critical reflections. *Educational Philosophy and Theory*, *44* (2), 37-55.

Irikefe, P. (2023). *African epistemology*. Retrieved April 17, 2025, from https://philarchive.org/rec/IRIAEL-2

Israel, R. (2000). *Education and democracy a compendium of lessons learned, analytic tools, and resource listings.* Retrieved April 26, 2025, from https://pdf.usaid.gov/pdf_docs/PNACK337.pdf

Liu, H. H. (2022). Effective teaching strategies for primary school mathematics based on deep learning. *Quality Education in the West*, *8*(17), 193-195.

Matear, A. (2007). Tensions between state and policy in Chile: Educational policy and culture. *European Review of Latin American and Caribbean Studies*, 83, 61-82.

Ministry of Education, Arts and Culture, (2016). *The national curriculum for basic education.* Okahandja: NIED.

Mosweunyane, D. (2013). The African educational evolution: From traditional

training to formal education. *Higher Education Studies*, *3*(4), 50-60.

Muchenje, F., Goronga, P. & Gora, R. (2021). Teachers' views on the utility of indigenous knowledge systems in the teaching of agriculture in selected schools in Zvimba District, Zimbabwe, *Journal for Studies in Humanities and Social Sciences*, *1*(2), 58-81.

Murove, M. F. (2014). Ubuntu. Diogenes, *59*(3-4), 36-47.

Mujal-Leon, E. (1988). *The Cuban university under the revolution*. Transaction Publishers.

Odora-Hoppers, C. A. (2002). *Indigenous knowledge and the integration of knowledge systems: Towards a philosophy of articulation*. Claremont: New Africa Books.

Piaget, J. (1950). *The psychology of intelligence*. London, UK: Routledge and Kegan Paul.

Rogacheva, Y. (2016). The reception of John Dewey's democratic concept of school in different countries of the world. *Espacio, Tiempo y Educación*, *3*(2), 65-87.

Thompson, D. L., & Thompson, S. (2018). Educational Equity and Quality in K-12 Schools: Meeting the Needs of All Students. *Journal for the Advancement of Educational Research International*, *12*(1), 34-46.

Tyagi, P. N. (1991). *Education for all: A graphic presentation*, NIEPA, New Delhi.

Tylor, E. B. (1871). *Primitive culture: researches into the development of mythology, philosophy, religion, art, and custom* (Vol. 2). J. Murray.

Zambrano, I., & Greenfield, P. (2004). Ethno-epistemologies at Home and at School. In R. J. Sternberg & E. L. Grigorenko (Eds.), *Culture and competence: Contexts of life success* (pp. 251–272). American Psychological Association.

Zambia Ministry of Education. (2013). Zambia education curriculum framework – 2013. Lusaka: Curriculum Development Centre.

Zeigler, H. (1970). Education and status quo. *Comparative Education*, *6*(1), 19-36.

Zimbabwe Ministry of Primary and Secondary Education, (2015-2022). Curriculum framework for primary and secondary Retrieved December 11, 2024, from https://mopse.co.zw/sites/default/files/public/downloads/Zim_Curriculum_Framework.pdf