Relationally Enhancing Teacher Education in Early Childhood Learning Environments Towards Sustainability

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ABSTRACT

Teacher education in early childhood learning environments (ECLE) is a generally neglected space in teaching and learning, more so when the focus is on relationality and sustainability. ECLE refers to the Care and Education of children between 2-4 years of age. The focus of this paper is on ECLE from a post-humanist perspective, which goes in tandem with UNESCO's 17 Sustainable Development Goals. Emphasis is on inclusive economic development through environmentally sustainable social inclusion for all. Relationality has been chosen because of its power to advance the deconstruction of the hitherto taken for granted canons of humanism and enlightenment that promote hierarchies in knowledge and its production. These hierarchies disregard the voices of the vulnerable and the excluded, in terms of social class and other markers like age, but most importantly their erroneously assumed lack of knowledge. To date, the voices of the aspirant teachers in ECLE, as well as those of the children and parents, are non-existent when teacher education programmes are designed and implemented. This paper reveals that including the voices of these beneficiary communities enhances the quality of the discourse, theorisation and praxis in the provision of ECLE, as well as in the crafting of relevant teacher education programmes. Thus, the design and delivery of a programme is better based on the relationalities among humans, animals and plants; and between them and inanimate entities like infrastructure and resources. The relationality among all of these in the crafting of the beyond human is enhanced using advanced digital technologies. A relational approach recognises our entanglement with our entire universe in a manner that does not centre on identity. Quality therefore is about the ever-increasing complexity of diffractions of multi-layered and multi-perspective engagements across borders.

KEYWORDS

Relationality; post-humanism; early child education care and education; sustainable learning environments; diffraction

INTRODUCTION AND BACKGROUND

This paper uses the post-humanist notion of relationality to demonstrate how teacher education in Early Childhood Care and Education (ECCE) can be strengthened towards greater sustainability. The long shadows of apartheid's banusic education still refuse to recede into the background, even after 28 years of a democratic dispensation in South Africa (Resane, 2022). ECCE, and the entire education of generations of African and Black people, bear testimony to the roots of neglect and disregard for the education of people within ECCE. This has led to so many deleterious effects that the country and the nation are not able to extricate themselves from the effects of the neglect (Harrison, 2020). For example, the now cliché of the huge gap that exists between the poor and the rich is nowhere greater in the world than in South Africa (Sarkodie & Adams, 2020). High rates of poverty and unemployment are recorded among the African and Black people in South Africa, ranging between 30% to 64% in some localities (Knutsson, 2020). Inequality in the levels of education, wealth and status is vividly marked between those who got a deliberate push and an early start in life through an effective ECCE, versus those who relied solely on fate to get ahead in life. This has been confirmed in various research findings across the globe (Moses, 2021). Self-respecting nations are engaged in focused efforts to secure the best ECCE experiences for their young, ensuring their future with an educated and contributing citizenry (Spiteri, 2021). Research has also warned that this engagement is the second chance in life for the oppressed people in countries like South Africa. Such countries missed the boat of ECCE the first time around (Shaik, 2022).

The sorry state of ECCE in SA implies that young children between 0 and 4/5 years old have no qualified or trained learning mediators in their lives (Buckley et al., 2020). They wander in the wilderness without a guiding compass; with many of them falling by the wayside even before they reach any level of bloom (Hussain, 2019). They are lost to their generation, and the entire nation, because they are confronted with huge challenges in life - without anybody to interpret and design their learning programmes. Indeed, they have no materials to suit their learning styles, or their orientation towards knowledge and its acquisition (Shaik, 2022). They are on their own, without leaders and administrators to structure their learning opportunities. Almost everything they learn is by chance, rarely deliberate. The role models who they pick up are random persons who themselves are not guided by any moral considerations or any principles of justness and uprightness (Hussain, 2019). They have no teachers who are scholars and researchers – persons who would lead them from the front on the complex journey of just being. They are forced to become lifelong 'by chance' learners. The probability of them making the same mistakes repeatedly is increased exponentially. Everything they learn is by trial and error (Diale & Sewagegn, 2021). There is nobody who has gone through the journey before them to warn, guide and advise them. They consistently reinvent the wheel, yet they are expected to compete with everybody else for limited opportunities within a short space of time. There is literally nobody to provide them with community, citizenship, and pastoral role modelling in a deliberate and planned manner (Tefera, 2018). They are pushed from one pillar to the next by

their own uninformed choices and preferences, resulting in bad decisions and keeping the wrong company. Given all of the above, they do not get constructive feedback on anything that they say and do. They have to rely on their gut feeling, as there is no deliberate and informed feedback (Buckley et al., 2020). Their learning is not guided, hence the possibilities of being misguided are real. There are no learning areas that are properly designed for them to learn and acquire skill, competence, knowledge, and attitude. Everything is just fluid (Tefera, 2018). Given the advanced requirements of the 21st Century and the Fourth Industrial Revolution, among other demands, these children remain without a rudder, without focus – merely wandering in the wilderness of life! The need for collaboration, communication, compassion, critical think and creative living do not touch them. They may know all about these concepts, but their knowledge is not enriched enough to consider what the 21st Century demands from us all. It is therefore considered that a trained teacher seems to hold the key to unlock what most of these children tacitly have - hence this study (Diale & Sewagegn, 2021).

ECCE in South Africa is currently not healthy at all. Valiant concerted efforts are now being made by the UNESCO Chair at UNISA, the ETDP SETA through COMBER at the North-West University and the collective efforts of many NGOs and CBOs across the country to give it another lease of life, but it remains in a state of paralysis (Bipath et al., 2021). There is now a growing concern that if ECCE does not receive the same attention as higher education, or formal schooling, the future of millions of children remains bleak. The solution to reverse this sorry situation seems to be teacher education, which holds a lot of promise for this sector and for the country (Diale & Sewagegn, 2021). Statistics show that many of the teachers within ECCE do not have any requisite teaching qualification (Harrison, 2020). In many instances, they are just some conscientious mothers in the community, who out of their own volition feel that they cannot neglect these children. Current nomenclature does not recognise such careers as real teachers, instead they are referred to as practitioners (Shaik, 2022). Their role is not seen as that of providing education or pedagogy per se, but that of providing care and safety to these 0- to 5-year-old children while the parents are away at work (Moses, 2021). They are basically nannies, or just, baby-sitters.

The lack of pedagogy, or teaching and learning at ECCE centres, is exacerbated by the fact that ECCE has been under the control of the Department of Social Development (DSD) - which did not emphasise its critical role in society (Aina & Bipath, 2022). It is only now in 2022 that efforts are being made to emphasise teaching and learning at the ECCEs - starting with their migration to the Department of Basic Education, where they rightfully belong (Aina & Bipath, 2022). The DBE now provides control, a tailored curriculum, teaching and learning infrastructure, educational resources, and adequate training of practitioners/teachers.

The presence of a properly qualified teaching corps is a *conditio sine qua non* (an indispensable condition) for young children to learn properly at this stage because so much can go wrong if proper nurturing is not provided (Ulferts, Wolf, & Anders, 2019). Children at the ECCE can find themselves on the wrong side of the law if proper support and care are not

provided at this very impressionable age. Many of the ills in society, especially violent crime, and gender-based violence, can be traced to the deficit in terms of proper ECCE provision. For a start Dooyeweerd, in his seminal work in the 1980 as inspired by Van Den Bergh's Metabletics, formulated a theory which is still useful today. He saw a human as one being constituted by at least 15 modalities (Keene, 2016). According to Van den Bergh and Dooyeweerd, a mode or modality refers to a way of being or of existing in the world. To elaborate this theory, he pointed out that *to be is to have a body*, a corporeal, physical being that occupies space and has a presence, one that has mass (Mahlomaholo & Netshandama, 2012). It is that body that has the means for growth and development, known as the biotic and physiological modalities. Inherent within them, these modalities have the kinematic mode that enables one to move, over and above growing physiologically (Keene, 2016). The next important mode of being is the psychological, which enables one to feel and have emotions - based on one's experience of being in the world. The next level of operation is referred to as the socio-cultural, where one is now able to use language; to have ethics; to appreciate the aesthetics; to know the social; to be able to have capacity for what is right and wrong; to have faith and to have connection with a higher being (Chaplin, 2016). The young child goes through all these modes of being. At every turn, the mediation of the able other (the knowledgeable parent; the teacher) is crucial in crafting a mature, moral, and productive citizen of a democracy (Ulferts et al., 2019).

The point being made is that young children, just like adults, are complex beings. The modalities of the physical and corporeality referred to above connect us to the objects, and the inanimate (Delafield-Butt et al., 2021). In fact, every object that occupies space and is bound by the temporality of time evinces the same characteristics as our beings. The modalities also connect us to the animate beings, over and above the inanimate ones. The modalities also assign to us our humanity at the physiological, biotic, and kinematic levels. To illustrate, humans share the same aspect of being, with plants (Chaplin, 2016). Our being as humans is also connected to them as we, just like them, must also eat to stay alive; to grow and to satisfy our physiological needs (Kim et al., 2022). Just like animals, we also have emotions like happiness, anger, and motivation. Even though we operate at the emotional and socio-cultural levels as human beings, we cannot discount animals and other beings operating at this level as well. Other cultures, beyond those influenced by René Descartes's division between the mind and the soul, affirm that as human beings we are not and cannot claim to be the centre of the universe (Hatfield, 2017). Our inflated egos make us appropriate certain characteristics, like the socio-cultural, exclusively to ourselves. This is misplaced. We are but a cog in the huge machine of being. We experience impact in similar ways as inanimate objects; the animate plants and animals; the non-human beings; the more-than-human and the-beyond-human beings on the planet - which we are so fortunate to collectively inhabit (Birhane, 2021). Just because we cannot understand the language(s) of the animals and of the stars, among others, it does not mean that they are incapable of communication, sociality, aesthetics, ethics, or pistic experience that we enjoy. Ignorance and inability to access all forms of knowledge cannot assign to us the

'sacred space' of the anthropocentric (Kim, Russell & Sharp, 2022). In short, young children that inhabit the ECCE centres are connected to the universe just through their *being* and working with them requires heightened levels of sophistication and complexity (Hatfield, 2017). Adults have approached infants from a deficit perspective, just because we did not realise and recognise that they are as equally human as we are, and that they too are part of the universe that required multi-layered, multi-pronged, and multi-perspectival approaches. It is clear then that teachers who work with young children must be sufficiently grounded so that they can deliver as expected. This paper attempts to contribute to this discussion by delving into concepts of relationality that seem to be most relevant in this context (Birhane, 2021).

LITERATURE REVIEW AND THEORETICAL FRAMING

Western thought on raising children has created doubts about the necessity of having able others to guide the growing child. Some theories argue that there were those children with innate and inherited abilities that required very little direction from able others because, as humans, we were born with some of these propensities (Armstrong, 2019). There are also debates that language is inherent with being human and that it is not a social construction because the theorists believe that the capacity to know language is a typical human phenomenon (Brosch, 2019). A monkey may have a tongue and lips but will not know how to use them to produce a language because this trait is in-born among humans only. Notwithstanding this, it was noted that the view of the inherent and inherited abilities was getting more traction in the work of the psychologists of the 20th Century - starting with Pavlov, through to Skinner and Watson. Then it was Piaget who emphasised that, as humans, we were growing through some defined and irrefutable stages that were consistent across all the human species at a given age and period. This enabled us to all have particular orientation, cognitively and otherwise (Griffin, 2011). Concepts like stage theory, age specific classrooms and school readiness became familiar. Policies to regulate these became common place, as opposed to the idea of an isolated genius who was growing naturally without much influence from the environment or others became popular (Saracho, 2021). However, concepts like accommodation and assimilation made Piaget and many of his followers aware that the environment was as equally important as genetic inheritance - because it was from the latter that ideas such as cognition came forth. Piaget became aware that we are dependent on what we assimilate into our self-system, and that it influences us in particular ways. This shows that there were contradictions even in Piaget's genetic epistemology, where concepts like assimilation and accommodation brought some doubt regarding the isolated genius interpretation (Stewart, 2021).

Vygotsky's socio-historicism and Bronfenbrenner's eco-systemic theories added further analysis (Navarro & Tudge, 2022; Vassallo, 2015). These theories deepened the rift further and won the debate in favour of determining our identities and our performances based on that which was social and environmental. It was argued that nurture supported what we inherit from nature.

The current view of one's identity and performance has been influenced by other cultures, including the African. Jean Paul Sartre's dictum: *I think therefore, I am,* was challenged. It was now exposed that there were other more powerful ways of thinking about our identities and ourselves - that we are who we are because of the presence and being *of others* (Di-Capua, 2018). This is a recognition that even ECCE learners expose – that the role of other people is very important in helping us to craft our own mature identities. Post-humanist thinking thus comes into the discussion to remind researchers that, in crafting identity and performance, it is not about other humans only, but about everything else (Murphy, 2021). The latter includes other human beings, inanimate objects, animate animals, and plants, and more-than-humans.

Post-humanism comes with its anti-humanist baggage to help especially the marginalised learners to become aware of the humanists and their theory of enlightenment. These theories have been responsible for the misery of hierarchies, marginalization and discrimination among people and other beings (Kruger, 2021). Research shows that enlightenment and humanism believed in, and strongly advocated for, the idea that white males were paragons of perfection. Them as a category represented what everybody else had to aspire to (Haraway, 2013). They were closest to the gods in terms of their reasoning abilities, their creativeness, etc. Second to them were white females, and at the very bottom of the rank were black females, who were regarded as lazy, savage and lovers of dirt and sloth. Post-humanism was deeply concerned with this hierarchy - which resulted in the discrimination of a large section of the population (Carrington, 2020). In the name of equity, social justice and transformation, post-humanism advocated for the deconstruction of these hierarchies and the recognition that all are equal. All should thus be placed on an equal footing (Haraway, 2013). Post-humanism recognized that in learning to become any identity, all participants played a significant and equal role in equal measure - be they animals, the inanimate and beyond (Carrington, 2020).

The extended resources that should be readily available to an ECCE practitioner and learner will define him or her as an effective teacher or learner. They will also enable him/her to do many activities which would not have been possible if they were not there. For example, animals milling around and sometimes keeping company are important for him/her to reconnect with him/herself and sometimes to heal and recuperate from emotional experiences where necessary (Murphy, 2021). The still waters of the nearby meandering river or pool also bring hope to the forlorn - they are therapeutic, and their roles cannot be underestimated because they truly heal and change one's perspective about life and how one faces it (Sturm, 2020). Post-humanism does not reject the human – it instead deepens that which is human and enriches it further with the respect it brings to other factors that equally construct the human, namely the non-human and the beyond human. This view extends and reconnects with what UNESCO's 17 Sustainable Development Goals preach about ensuring the economic development of all in an environmentally sustainable manner – moving thus towards the social inclusion of all (Perry, 2021). If ECCE is conducted in line with post-humanism, it would ensure that learners respect others and the environment - *sustainably*. This would be recognition that

all, irrespective of our station in life, are entangled - integrated and inter-connected with one another. Our needs are the same as everybody else's and we must protect everybody else for us to grow in freedom and truly become ourselves (Blenkinsop, 2020). For example, young children that learn not to litter and not to pollute the environment already contribute towards the sustainability of the planet. They do this not as a favour to the planet, but because they have been made aware that the destiny of the human species is inextricably linked to that of the planet. They do not harm the planet, because they are aware that they would be harming themselves at the same time. Their action is an act of self-preservation and self-protection, more than that of altruism (Perry, 2021).

The above view of post-humanism brings the idea of relationality sharply into focus: *I am because we are.* The 'we' includes not only other human beings, but the entire universe with its inanimate, animate, non-human, more-than-human and beyond-human others. It is an affirmation that we are constructed in relational spaces between and among all these factors. As individual entities, we do not matter as much as the relationalities that create us (Nordström, 2022).

METHODOLOGY AND DESIGN

To formalise the above discussion, data gained from empirical work in selected ECCE centres is presented. The researchers focused on three ECCE centres, where collectively they are trying to give the 2 to 5 years old learners an edge in as far as accounting is concerned. They are doing this by providing support to practitioners/teachers in the best ways of teaching mathematics as the critical element of accounting as a Subject and Learning Area. They used the principles of Participatory Action Research (PAR) to bring the practitioners, learners, and their parents together. This is what relationality dictates: that all stakeholders who can make a difference need to be included in research that aims to make a difference (Doucet et al, 2022). Permission was sought from the three Governing Boards that manage the centres, as well as from the supervisors that lead them on a day-to-day basis, to conduct an interventionist PAR at one of the three centres. Ethical clearance was applied for after the purpose and intention of the study was clarified with all participants - namely, to enhance the learners and practitioners' understanding of mathematics as a basis for learning accounting. All signed the consent forms. The parents of the children also signed the assent forms. All participants were clear about the whole project. Parents have proved very supportive. The local Education Department is providing an oversight role, participating by way of giving their support to the new way of learning where all who participate take full responsibility of what is being learned.

The Research Project has a team of 55 people working on it. There are 10 practitioners/teachers; 35 learners; 5 parents and 5 university academics. All meet quarterly and per annum to receive and interrogate the reports from the people responsible for the actual implementation of the project. Through video and audio tape, every activity is recorded. The project has two sections to it, as clarified further.

The PAR section focused on every participating person taking ownership of the project. Even the children/ learners participate; they play and take full advantage of the project to learn. They were encouraged to share with the practitioners what they had learnt. Together, the team worked on an Action plan which prioritised the following 5 points:

- Training practitioners in new methodologies of teaching the four critical concepts of mathematics, namely addition, subtraction, multiplication, and division.
- Training practitioners on the use of manipulatives, as well as the use of examples from an accounting context so that they can interest their learners in new ways of learning from the concrete to the abstract and from the simple to the complex.
- Including the voice of the learners. There is a lot of repetition from the learners, but they are fully in charge as they also have the responsibility to review each other's work.
- Encouraging the learners to sing and play around the numbers and figures used in the calculations. It was hard to introduce very simple accounting concepts at the beginning, but with time this became easier to assimilate into the teaching and learning activities.
- Encouraging the use of colouring to represent the concepts of subtraction and addition in calculations.

Generating Data

Formal lessons were prepared and presented by university researchers to the practitioners. For example, one went like this:

University Teacher Ramokgwase (pseudonym for ethical reasons): Good morning leaners, I am told that today's temperature is far lower that the temperature of the whole last week. Who can tell me what is the reason for such? (Teacher Ramokgwase is saying all these with her body firmly located on the floor so that he is the same height as his learners. There is no space between him and the class by way of showing how committed he is to the learners.)

Learner Ramokgopa: The temperature today has come down to 18 degrees Celsius

Learner Dinono: My phone shows it as 24 degrees

Learner Dihlabi: Okay we can accept it as24 degrees Celsius because at least two of our phones agree

Ramokgwase: Don't think that the two phone agree because the two learners came from the same neighbourhoods, and they had not acclimatized to the current temperature

Ramokgopa: Okay we may differ, but you have managed to count that we come from three different neighbourhoods and also show how the values of the temperature at the school. Fluctuates.

Through a short a short exercise the University teacher was able to help the class to know what the difference between three and one was and how to calculate it. They were also saw how the different climatic conditions differed in terms of temperature

Dipolelo: Do I understand properly that during summer the temperature goes up and during winder they go down sir? So if that is the case, why do we consistently experience low temperatures even during summer? There other day, out of nowhere we saw the cloud billowing a giving us one of the coldest cloudburst teachers, what was that?

Zingithwa: Can you not remember that Mrs Radibapi explained that we were living during the era of the Anthropocene, where there were very erratic climatic changes as a result of extreme weather due to pollution.

Ramokgwase: Yes, for every loose paper and pollution you cause to the river and the environment you are likely to get an equally fierce climatic response. Nature is like any being. Nature is capable of anger and revenge. That is why when we count the cost in accounting, we also include the cost to the environment that might be cause inadvertently.

FINDINGS

The Workshop section focused on providing support to the practitioners/ teachers. Five workshops were conducted. Each teacher was given an opportunity to talk about their own best practices in teaching the four operations mentioned. Each teacher was assisted in preparing and presenting ideas on the infusion of accounting specific calculations in the teaching of mathematics to peers and leamers. Their practices were benchmarked against best approaches to teaching and learning internationally, specifically from Sweden and Kenya. Teachers learned much from videos of children playing in a structured environment – one where the concepts of sustainability were integrated. They were exposed to how talking about the concepts of subtraction and addition could be done in relation to environmental sustainability. Each teacher had to prepare a report analysing the discussions that ensued after every presentation. Their reports focused on how to use multiple methods to reach learners between 2-5 years from as many angles as possible. The example above showed the use of discussion method but two other lessons demonstrated teachers using the laboratory to teach conservation and zero pollution. The lessons video-taped herein focused on the accounting calculation of cost. They however did not go in to detail as the learners were still knew to the subject content.

The lessons referred to above, exemplified in the one captured herein, showed how cell phones and watches won by teachers and learners in the classroom could be used as manipulatives in order to count.

While the workshops focused on the teachers, the parents and other stakeholders were allowed to participate and share their views on what would constitute best practice to enhance the learners' understanding and comprehension. Many wonderful ideas were shared on how to practically involve the learners in the actual show and tell activities. This enabled learners to demonstrate their understanding and gain the support of peers as they took control of their own learning. The learners, under the captaincy of their respective teachers, were divided into teams that competed on getting the correct answers to a set of questions posed to the entire

team. The learners were allowed to consult with whoever was present to discover the answers themselves. Towards the end of the workshop, teachers were addressed by university academics on what the Anthropocene was all about, and how the teaching of mathematics could also be used to teach concepts of sustainability in a direct and focused manner.

CONCLUSİON

The research project is still in progress. At this stage, it can be reported that the level of activity has increased considerably at the centre. Teaching and learning are more animated because the teachers have gained new knowledge and strategies to enhance their interaction with the learners. Most of the teachers have a Grade 12/Matric Certificate, and they are now planning on improving their teaching qualifications because of the excitement that the project has inspired in them.

Some of the positive outcomes noted is that teachers now plan and research for their teaching. As they do so, they work with their peers and able others from among the stakeholders at the centre. The centre is in the process of formulating a new Strategic Plan that will guide teaching and learning. This plan promises to institutionalise the notion of sustainability as conceptualised in UNESCO's 17 Sustainable Development Goals, with a clear focus on environmental sustainability. It will include the concept of children having to promote actions that prevent pollution of everything within the environment – including rivers, the oceans, the ozone layer, etc. Children will be constantly sensitised to what pollution would cost society; the earth; and its impact on economic development and sustainability. Teachers have taken the lead in creating projects in mathematics where learners are taught to calculate the costs of pollution. This is not at a sophisticated Green Accounting level, but learners do the four operations of costs sometimes in monetary terms. At other times, they do them as mere mathematical abstractions. The teachers reinforce these concepts with very interesting activities. For example, children are encouraged to bring photos to class about instances of environmental or any form of pollution that they come across. Discussions then ensue on how to calculate the cost of pollution to life and to the environment.

Teachers have designed new content, and are experimenting with a variety of strategies on how to teach the four operations while concurrently infusing issues of sustainability in accounting as a Subject and Learning Area. Weekly meetings have now been established with some local business people who support the centre. These sponsors have been invited to host individual competitions where learners have to compete on calculations based on issues of sustainability. Detailed preparations for the competitions take place during the week, with Friday lunch time being when the events are held. The centre has clearly become a hive of learning activity. Every parent with a child at the centre has taken a keen interest in the competition concept, which has inadvertently pulled all the PAR stakeholders together. The business community contributes as best as they can with incentives and education media resources specifically for mathematics learning. There are plans by the members of the

university research team to secure wifi connectivity for the centre, as well as the provision of electronic items that will enable teachers and learners to collaborate more. All involved in the teaching and learning activities are visibly expanding their compassion and communication skills, as well as enhancing their creativity and critical thinking skills. Children, as the learners at the centre, are respected for who they are. They are recognised as part of the larger community that learns from one another as they support one another. They are, after all, South Africa's greatest asset. Our future depends on them, and what happens at every ECCE.

REFERENCES

Aina, A. Y. & Bipath, K. (2022). Availability and use of infrastructural resources in promoting quality early childhood care and education in registered early childhood development centres. *South African Journal of Childhood Education*, *12*(1), 1-11.

Armstrong, A. (Ed.). (2019). *Spinoza and relational autonomy: Being with others*. Edinburgh University Press.

Blenkinsop, S. (2020). Teaching towards the post-human: The courage to entangle. *Studies in Philosophy and Education*, *39*(4), 453-457.

Bipath, K., Tebekana, J., & Venketsamy, R. (2021). Leadership in Implementing Inclusive Education Policy in Early Childhood Education and Care Playrooms in South Africa. *Education Sciences*, *11*(12), 815.

Birhane, A. (2021). Algorithmic injustice: a relational ethics approach. *Patterns*, *2*(2), 100205.

Buckley, L., Martin, S., & Curtin, M. (2020). A multidisciplinary community level approach to improving quality in early years' settings. *Journal of Early Childhood Research*, *18*(4), 433-447.

Brosch, R. (2019). Relational Minds: Reconceptualizing Identity in Theory and Fiction. *Anglistik*, *30*(1), 131-150.

Carrington, B. (2020). Cosmopolitan Olympism, humanism and the spectacle of 'race'. In *Post-Olympism?* (pp. 81-97). Routledge.

Chaplin, J. (2016). *Herman Dooyeweerd: Christian philosopher of state and civil society*. University of Notre Dame Press.

Delafield-Butt, J., Dunbar, P., & Trevarthen, C. (2021). Disruption to embodiment in autism, and its repair. In *Emerging Programs for Autism Spectrum Disorder* (pp. 69-96). Academic Press.

Diale, B. M., & Sewagegn, A. A. (2021). Early childhood care and education in Ethiopia: A quest for quality. *Journal of Early Childhood Research*, *19*(4), 516-529.

Di-Capua, Y. (2018). *No Exit: Arab Existentialism, Jean-Paul Sartre, and Decolonization*. University of Chicago Press.

Doucet, M., Pratt, H., Dzhenganin, M., & Read, J. (2022). Nothing About Us Without Us: Using Participatory Action Research (PAR) and arts-based methods as empowerment and

social justice tools in doing research with youth 'aging out' of care. *Child Abuse & Neglect*, *130*, 105358.

Griffin, M. (2011). Developing deliberative minds-Piaget, Vygotsky and the deliberative democratic citizen. *Journal of Public Deliberation*, *7*(1), https://doi.org/10.16997/jdd.113

Haraway, D. (2013). Ecce homo, ain't (ar'n't) I a woman, and inappropriate/d others: The human in a post-humanist landscape. In *Feminists theorize the political* (pp. 104-118). Routledge.

Harrison, G. D. (2020). A snapshot of early childhood care and education in South Africa: Institutional offerings, challenges and recommendations. *South African Journal of Childhood Education*, *10*(1), 1-10.

Hatfield, G. (2017). René Descartes. *The Blackwell Guide to the Modern Philosophers: From Descartes to Nietzsche*, 1-27.

Hussain, M. A. (2019). Facilitation and Pedagogy in Training Workshop of Early Childhood Education Professionals in Open and Distance Learning. *Journal of Research & Reflections in Education (JRRE)*, *13*(2).

Keene, T. (2016). Kuyper and Dooyeweerd: sphere sovereignty and modal aspects. *Transformation*, *33*(1), 65-79.

Kruger, E. (2021). Adapt or die in the time of a pandemic: Towards a grounded theory of strategic adjustments by an early childhood development training organisation. *Perspectives in Education*, *39*(1), 157-172.

Kim, R. C., Russell, Y., & Sharp, B. (Eds.). (2022). *Horizons of Difference: Rethinking Space, Place, and Identity with Irigaray*. SUNY Press.

Knutsson, B. (2020). Managing the GAP between rich and poor? Biopolitics and (ab) normalized inequality in South African education for sustainable development. *Environmental Education Research*, *26*(5), 650-665.

Mahlomaholo, S., & Netshandama, V. (2012). Post-apartheid organic intellectual and knowledge creation. In *Understanding knowledge creation* (pp. 33-54). Brill.

Moses, E. (2021). Enrolment in early childhood care and education programmes in South Africa: challenges and opportunities.

Murphy, L. (2021). *Leaning into Love and Compassionate Care in My Early Years Practice* (Doctoral dissertation, National University of Ireland, Maynooth (Ireland)).

Navarro, J. L., & Tudge, J. R. (2022). Technologizing bronfenbrenner: neo-ecological theory. *Current Psychology*, 1-17.

Nordström, A. (2022). Reimagining joy as a performative force in early childhood education. *Contemporary Issues in Early Childhood*, 14639491221089332.

Perry, M. (2021). Pluriversal literacies: Affect and relationality in vulnerable times. *Reading Research Quarterly*, *56*(2), 293-309.

Resane, K. T. (2022). Populism versus constitutionalism in South Africa: Engaging public theology through dialogue. *In die Skriflig/In Luce Verbi*, *56*(1), 9.

Sarkodie, S. A., and Adams, S. (2020). Electricity access and income inequality in South Africa: evidence from Bayesian and NARDL analyses. *Energy Strategy Reviews*, *29*, 100480.

Saracho, O. N. (2021). Theories of Child Development and Their Impact on Early Childhood Education and Care. *Early Childhood Education Journal*, 1-16.

Shaik, N. (2022). Transforming Teaching and Learning in Early Childhood Care and Education During COVID-19 in a Poor Community of the Cape Flats, South Africa. *Early Childhood Education Journal*, 1-10.

Spiteri, J. (2021). Quality early childhood education for all and the Covid-19 crisis: A viewpoint. *Prospects*, *51*(1), 143-148.

Stewart, M. (2021). Understanding learning: Theories and critique. In *University teaching in focus* (pp. 3-28). Routledge.

Sturm, S. (2020). Ceder, S. (2018). Towards a posthuman theory of educational relationality. Abingdon; New York, NY: Routledge. *Studies in Philosophy and Education*, *39*(4), 447-451.

Tefera, B. (2018). Early childhood care and education (ECCE) in Ethiopia: Developments, research, and implications. *Eastern Africa Social Science Research Review*, *34*(1), 171-206.

Ulferts, H., Wolf, K. M., & Anders, Y. (2019). Impact of process quality in early childhood education and care on academic outcomes: Longitudinal meta-analysis. *Child development*, *90*(5), 1474-1489.

Vassallo, S. (2015). Using self-regulated learning to reflect on the critical commitments in educational psychology. *Knowledge Cultures*, *3*(2).