

Distributed Leadership: A Potential Agency for Traversing Power Relations as
Impediments to Curriculum Transformation and Implementation of
Environmental Education

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Abstract

Decades after the 1972 United Nations Conference on the Human Environment held in Stockholm declared environmental education (EE) an essential tool to mitigate environmental challenges, the implementation of EE still faces many obstacles. Accordingly, innovative, and solution-oriented approaches remain vital to enable environment-driven pedagogy in formal and non-formal education settings. This paper, which is located within the context of a case study that was conducted with the aim to investigate the application of distributed leadership in the teaching of EE in South Africa, reports on hierarchical power relations as impediments to curriculum transformation and implementation and, by extension, a hindrance to the infusion of EE in pedagogy. The results of this study suggest that hierarchical power relations in the schooling system hamper the involvement and participation of various stakeholders in key decision-making responsibilities, particularly, curriculum management. Accordingly, processes such as curriculum modification which are essential to enable the implementation of EE are impeded. The researchers of the current study argue that, based on its marked successes in various spaces, especially in the realm of education; distributed leadership could be one of the viable agencies to enable EE implementation.

Keywords: Distributed Leadership, Environmental Education, Power Relations, Transformation

INTRODUCTION

Leadership, alongside its usual accompaniment, management, is an important component of any organisation, formal or informal. Various styles of leadership have been tried and tested and a handful have been found to be effective in enabling organisations to realize their ideals. Distributed leadership (DL) has been found to be one of the most effective leadership styles in various organisations especially in the corporate world. Of significance to this paper is that, in recent times, this leadership style has also been implemented with some measure of success in the realm of formal education, hence it is receiving attention in education research. However, the literature reviewed for this study suggests that although DL is receiving attention in education research much still needs to be done, notably in environmental education (EE) pedagogy where there is a paucity of research on the interplay between EE and DL (Grant 2017; Harris 2008).

Applied effectively, DL can be conceived as a vehicle for educational transformation (Qadach et al., 2020; Trammell, 2016). Distribution leadership is transformative in that it advances a progressive and transformation-driven agenda where the decision-making processes that seek to

facilitate the attainment of organisational goals are not limited to one or few specific individual(s) who are appointed to manage an organisation (Grant 2017; Spillane et al. 2008). This leadership approach encourages, inter alia, consultation, joint decision-making and shared leadership between the leader and the followers in the context of an organisation. Goksoy (2016) suggests that, unlike the leadership styles where the leader has the sole prerogative of taking organisational decisions and enforcing their implementation, DL tends to be effective and efficient in enabling the attainment of organisational goals. Accordingly, DL could be considered transformative in that, inter alia, it promotes joint participation in decision-making, encourages on-going learning, boosts workforce confidence, and invigorates respect among colleagues (Bamford-Wade & Moss 2010).

Just like DL, EE and its concomitant, Education for Sustainable Development (ESD), is considered a tool for the modernisation of educational structures across the spectrum (Leal Filho et al. 2018) as it advocates for educational transformation. As this paper elucidates, there are numerous studies that underscore the role played by EE in education transformation. The transformational role of EE is realised in

several ways, however, only a few are mentioned in this paper.

Since EE is presented across different subjects, it fosters interdisciplinary pedagogical approaches. These educational approaches, *inter alia*, encourage the generation of and reflection on various problem-solving strategies, advocate sustainable living (Leal Filho et al. 2018), and encourage collaboration between education professionals, learners, and local communities in a quest to investigate and find meaningful and lasting solutions to environmental challenges (Reddy 2021). Also, EE “allows learners (pupils and adults alike) to understand their situatedness within the broader set of relationships that constitute the environmental issues they are addressing” (Räthzel & Uzzell 2009, p. 267). Furthermore, EE engenders innovation as it advocates for the use of creative pedagogical strategies including, “inquiry-based learning, service-learning and project-based learning all of which are forms of transformational education” (Glavič 2020, p. 10). These and other pertinent strategies are key to educational transformation in that they introduce learners to research and networking skills and co-production of innovative knowledge from an early age in their lives (Reddy 2021). Accordingly, Glavič

(2020, p. 2) aptly avers that EE “is one of the most effective ways to achieve social transformation, increase environmental awareness and economic de-growth transition” (p.2). It is the view of the current authors that if pedagogy is to be considered relevant and current, then it should advance social transformation because “social change leads to transformation in thinking which, in turn, influences behavior patterns in society” (Sharma & Monteiro 2016, p. 72).

Therefore, education practitioners should endeavor to induce innovative and transformation-driven approaches to pedagogy because “transformative or transformational teaching changes people by altering, fundamentally, the way learners understand themselves and others, the way they engage in and contribute to their larger world” (Glavič 2020, p. 10). Accordingly, by its nature, EE encourages transformative pedagogy which inculcates and engenders continuous reflection on issues and stimulates critical thinking and thereby enhance (potential) change in beliefs and assumptions about the environment (Manni et al. 2017; Johnston 2009). The changes in individuals’ or groups’ perspectives on environmental challenges is essential to enable environmental action and social change. This view echoes the call by Guattari

(1992), who advocated for an ‘ecosophy’ that enjoins society to work collectively towards generating innovative and lasting solutions to environmental challenges. According to Guattari (1992), this ‘ecosophy’ should be articulated by the societal collectives with the ‘mental ecology’ to enable them to comprehend and, thus, expressly enunciate environmental challenges and generate practical and lasting solutions to those challenges. Such individuals require transformed ‘ecological mentality’ and EE as a vehicle for transformation provides an empowerment impetus towards this end.

Over the years, the implementation of EE has been derailed and hampered by a myriad of hindrances. Evidence suggests that most of these impediments are universal and timeless. Since these have been articulated by many studies over the years, only a few are mentioned in this paper. It is necessary to mention some of these challenges because, as it is highlighted later in this paper, the current study ‘unearthed’ a set of impediments to EE implementation.

Empirical evidence from previous studies suggests that hindrances to the integration of EE in pedagogy include, teachers’ complete absence or limited awareness of EE and related issues (Shabalala 2019; Mwendwa 2017;

Green & Somerville 2015), the absence of or insufficient learning and teaching support resources, lack of or inadequacy of funding and lack of professional support by education managers and leaders (Shabalala 2019; Hebe 2015). Likewise, other researchers found that the implementation of EE is also impeded by the notion held by certain education professionals that EE is the responsibility of a select few pedagogues across different levels within the education spectrum (Avisar et al. 2017; Maharajh, et al., 2016; Kethoilwe 2003). Significantly, these impediments to the integration of EE in pedagogy echo the research findings by Ham and Sewing (1988) and earlier studies.

Undoubtedly, the preceding issues are just some among a myriad of barriers to EE implementation that appear very often in literature. However, based on the literature reviewed for this paper, there are some hindrances to EE implementation that do not receive attention. One of these impediments is the role played by power relations in education settings. Accordingly, informed by the results of a study conducted by the authors, this paper highlights how power relations in formal educational settings were found to impede curriculum implementation and, by extension, the integration of EE in

pedagogy. Accordingly, this study is significant because it seeks to contribute to literature by focusing on an area that is underreached, namely, power relations as impediments to curriculum implementation and innovation. However, before presenting the results and findings, it is essential to briefly reflect on two aspects which have a bearing on the findings reported on this paper, namely, the evidence on the successful implementation of DL and the nature of power relations in formal education settings.

Distributed leadership is one of “the relatively new models” (Aypay & Akyürek, 2021, p. 1) applied in various fields and has “increasing currency, both within and beyond the field of education” (Woods, et al. 2004, p. 439). DL is premised on the notion that, to optimise effectiveness and efficiency within an organisation, leadership roles should be shared among various stakeholders. The ‘leader-plus’ element is considered key in enabling organisational success as it is centered around transformative collective leadership. According to Spillane et al. (2008, p. 189), within the realm of education as in other spaces, “the leader-plus aspect recognizes that leading and managing schools can involve multiple individuals”. Significantly, DL has been applied with some level of success in

numerous fields, including the realm of education. For the purposes of this discussion, a few highlights are essential.

For example, Grenda (2011) conducted a multiple-case study in three middle schools in Illinois to investigate how three successful principals went about doing things in their institutions. He found that one of the key reasons for the success of the schools was the application of DL. Grenda (2011) noted that the successful application of DL in the selected research sites could be attributed to, *inter alia*: school-wide, ongoing engagement with stakeholders in decision-making and staff development processes, the principals encouraged and made provision for several chances for participation by stakeholders (teachers) in decision making and active involvement in managerial activities and extensive collaboration and, that the school heads used interdisciplinary teams and groups to foster participation in school governance. In another study conducted by Avissar et al. (2017) at the Green Urban College in Israel to investigate the application of DL in fostering sustainability, the findings point to the effectiveness of this leadership style. This study, which drew participants from three groups, *viz.* the students, academics, and administrative staff; the

researchers found DL to be effective in, among other things, altering internal structures of the institution and thereby enable the mainstreaming of sustainability, in inspiring cooperation among various units, departments, and stakeholders to promotion sustainability and, in galvanising a multi-way flow of information and ideas across the campus to promote sustainability.

Furthermore, in a study conducted in China, by Zheng et al. (2019) to determine the impact of DL on job satisfaction and the confidence that the teachers have on their school principals; the researchers found that DL has an impact, albeit indirectly, on teacher self-efficacy. This could be attributed to job satisfaction and the confidence the teachers had in their principal (Zheng et al. 2019). Likewise, in another study conducted in Pakistan by Nawab and Asad (2020), with a focus on the role of school leadership, the researchers found that DL encourages a culture of trust and opportunities for engagement and collaboration among teachers (Nawab & Asad 2020).

Although there is substantial empirical evidence, as indicated above, DL and its effectiveness in education remains under researched (Spillane et al. 2008). Hence, inquiries like the current study are essential. Before proceeding to the details of the current study, it is

essential to refer to another significant aspect that has a bearing on the current study, namely, power relations in education practice.

Courpasson & Golsorkhi (2011, p. 1) assert that ‘power’ is central to the functioning of organisations and, generally, all social interactions; accordingly, they write that “power is to be found at the heart of all social relationships and forms a leitmotiv for social action”. Power serves to, inexorably and inadvertently, delineate human relations into two spheres where one party is dominant and the other is subservient. The dominant is powerful and determines the direction of the relationship between the ‘self’ and the dominated ‘other’ and, indeed, the behavior of the subservient ‘other’ within the specific social context which brings the two together is determined by the dominant ‘self’. Accordingly, Ladkin (2017) argues that “the word power is often associated with one’s ability to influence another less dominant individual’s opinion, behavior and values” (p. 38). Flaherty (2018) concurs by asserting that in social settings power “affords an individual to have an influence on agenda setting and decisions” (p. 24).

Foucault (1982) goes beyond the notion of ‘influence’ in power relations. He argues that power enables the

dominant, the elite and those in positions of authority to 'convert' the less dominant into their subjects. According to Foucault (1982), "there are two meanings of the word "subject": subject to someone else by control and dependence" (p. 781). Therefore, because of this control and dependence, the dominated 'other' is expected to conform to the rules, directives and agenda set by the powerful elite. For this reason, Foucault (1982, p. 782) asserts that power "subjugates" and converts the less dominant into submissive role players who are subjected to the whims of the powerful. The polarities between the dominant powerful elite and subservient other derive, largely, from bureaucracy.

Various scholars underscore the role played by bureaucracy as a tool to enforce power and domination (Coetzee 2019; Ladkin 2017). Courpasson & Golsorkhi (2011, p. 10) argue that "bureaucracy emerged as a control solution to problems of resistance" during the era of industrialisation. Although, at face value, it was meant to attain optimal organisational efficiency, bureaucracy seeks to ensure that 'subjects' conform to authorities. Accordingly, Pitsoe and Letseka (2012) write that "outstandingly, bureaucracy is an instrument of power, a social system to effect it (power), and a tool of political

hegemony" (p. 26). The preceding assertions are also pertinent to the realm of education.

Because, by its nature, bureaucracy has the centralisation of power as one of its key characteristics; power within bureaucratic and hierarchical organisations such as education institutions tends to be asymmetrical. In such institutions, coercive power, which can be overt or covert, is forced down from the upper, central authorities to the subordinates who are expected to conform without questioning orders and directives (Hoy & Sweetland 2000; Palmer & De Klerk 2012; Coetzee 2019) even if they do not agree with them. Accordingly, Ladkin (2017) writes that, "power within current educational context represents the struggle between unequally positioned individuals, which renders one individual as powerful and the other as powerless". This assertion is supported by Palmer and De Klerk (2012) who argue that "education institutions...remain sites where powerlessness is rife and social communication discourse reinforce the notion of perpetual disempowerment" (p. 63).

According to Coetzee (2019), in post-apartheid South Africa, where this study was conducted, the use of school inspectors, which was a key apartheid

tool for the enforcement of hierarchical conformity within the school systems, was replaced by managerial professionalism. This neoliberal form of hierarchical control was introduced and, ultimately, cemented as a quasi-consultative strategy wherein key stakeholders were ‘consulted’ to buy-into the professionalisation of education through a myriad of regulations (Coetzee 2019). Various stakeholders such as teachers, parents and education authorities participated in the development of what promised to be progressive tools that would give substantial power to all relevant role players to direct the course of education (Palmer & De Klerk 2012; Coetzee 2019). However, evidence suggests that this has not happened as bureaucrats, through managerial professionalism, which calls upon subordinates to be ‘professional’ in their conduct and conform to directives from superiors; have maintained the subordination of the ‘other’ role players through asymmetrical power relations within the education system. Accordingly, Coetzee (2019) writes that managerial professionalism “represents a centralised, strictly hierarchical form of direct control and applied to the sphere of education, expects that role players

must comply or face disciplinary measures” (p. 29).

Accordingly, based on the preceding points, the purpose of this paper is to report and reflect on the findings which suggest, inter alia, that asymmetrical hierarchical power relations do prevail in the sphere of school education. Additionally, these powers impede curriculum transformation and the implementation of EE in the school setting.

The aim of the bigger study, from which this paper derives, was to investigate whether secondary schools in South Africa implement distributed leadership to enable the implementation of EE. However, this paper focuses on one of the objectives of the study which was to identify the challenges and opportunities that School Management Teams (viz. school principals, deputy principals and departmental heads), teachers and subject advisors (also known as Senior Education Specialists) encountered in the application of distributed leadership to facilitate EE in the curriculum. The current researchers identified power relations as one of the key impediments to curriculum development and, by extension, EE implementation. Accordingly, this paper focuses on this aspect.

METHOD

The current study employed a constructivist research paradigm because the researchers sought to ensure that the points of view of the participants were understood distinctly from the perspectives held by the researchers, respectively, concerning the issues under investigation (Sobh & Perry 2006). To understand the events that occur in natural environments in the real-world, the researchers made use of the qualitative research approach (Leedy & Ormord 2013). Furthermore, to allow for a detailed analysis into more recent developments regarding real-life phenomena, a descriptive case study design was adopted for this research (Yin 2014).

Participants

In qualitative research, the population is described as the group of people or organisation(s) that the investigation is focused on (Strydom & Venter 2002). The sample was drawn from the Ugu Education District which falls under the governance of the KwaZulu-Natal Provincial Department of Education in the Republic of South Africa. The respondents were sampled purposively (Crossman 2018), and the criteria used in the selection of participants were based on the probability that they (the participants) had significant data to enable the

researchers fulfil the aims and objectives of the study (Creswell, 2015).

The sample selected in this research involved subject advisors, school management teams (i.e., school principals and departmental heads) and teachers. The participants were based at the district office and two secondary schools, which are referred to as Schools X and Y, respectively, in this study. From School X, the participants were the grade 8-9 natural sciences and grade 10-12 life sciences teacher (Mr Mkhungo), the school principal (Mrs Sydney), head of the sciences department (Mr Kim). Likewise, from School Y, the participants were the principal (Mrs Mkhize), a deputy principal (Mr Knowles) and grade 8-9 natural sciences teacher (Ms Khumalo). The two subject advisors were Mr Mofolo (responsible for grade 8 - 12 physical & natural sciences) and Ms Nkosi (grade 7- 9 technology subject advisor).

Data collection

This research used individual semi-structured interviews to collect data from participants in their natural work settings (Check & Schutt 2012; Ajayi 2017). Semi-structured interviews were conducted with all the participants mentioned above, and all the interviews were audio-recorded, with consent from each interviewee. The researchers chose semi-structured interviews because they

allowed the researchers to probe for a more specific data that could provide insight into the research while being guided by the interview schedule.

Data analysis

In this research, a thematic analysis was used to interpret the data from interviews (Alhojailan 2012). The researchers familiarized themselves with the data collected and used coding to categorise data whereupon data were organized into codes from the transcriptions.

Additionally, all audio recordings of interviews were transcribed, and interviews that were conducted in languages other than English were translated.

Thereafter, data were organized into three themes and categories to ease the interpretation of the interviews (Vaismoradi & Snelgrove 2019). The analysis was validated by all the researchers by comparing the transcription with the voice recordings of participants as a form of ensuring credibility and trustworthiness. To confirm that the transcriptions accurately reflected what the participants said, the respondents were also given the chance to read the transcripts.

Trustworthiness

To ensure trustworthiness, all information and responses were audio-recorded after getting permission from participants (Hammersley & Traianou

2012). Credibility, transferability, dependability, confirmability, and triangulation are some of the scholarly approved methods the researchers used to assure rigor and trustworthiness of the findings (Anney 2014).

Ethical considerations

In conducting this research, the researchers adhered to requisite ethical considerations as per the norms associated with qualitative research. Prior to data collection, the researchers applied for and obtained ethical clearance from the institution of affiliation to conduct the research. Thereafter, the researchers met with the participants to discuss the purpose of the study and obtain informed consent for their participation in the study. The participants were made aware that their participation was voluntary and that they could withdraw from the study anytime, if they so wished, without any consequences. Furthermore, the participants were given the assurance of confidentiality and their identities were concealed by using pseudonyms.

RESULTS AND DISCUSSION

The analysis of data generated from one-on-one interviews with respondents suggests that power relations play a prominent role in, inter alia, the design and management of school curriculum in the sites selected for this study. This impacts negatively on curriculum innovation and, by extension, Shabalala, et al

the implementation of environment-inclined pedagogy. For the purposes of this paper, the researchers reveal and elaborate on only a few examples under one of the themes emerging from the thematic data analysis processes conducted in the study, viz. *power relations, curriculum development and management*.

Power relations as impediment to curriculum development and management

Curriculum development, which entails among other things the planning, design, implementation, and evaluation of the curriculum (Erjavec 2021; Koskei 2015), is a key component of formal organisations that offer education programmes. It is an intense and rigorous process which requires consultation, careful and on-going revisions that can meet ever-changing socio-economic and political needs. Accordingly, various authors have accentuated the importance of involving stakeholders from both the internal and external environments of educational organisations (Erjavec 2021; Alsubaie 2016; Koskei 2015) in curriculum development. Nevertheless, it seems that external stakeholders are often left out of the process hence Fagrell et al. (2020) assert that “the voices of external stakeholders are rarely heard” (p. 3). This is because in some countries the process of curriculum development is left in the hands of experts with knowledge of

curriculum issues to do all the work while other stakeholders are minimally or not involved at all (Koskei 2015).

In post-1994 South Africa, the curriculum development process has been characterised by vigorous on-going reforms, largely, necessitated by the imbalances that prevailed during the era of apartheid. Inevitably, to accommodate the needs of diverse groups, the process has had to involve various stakeholders so that informed curriculum development processes that are in line with the constitution of the country and the needs of citizens are accommodated (Department of Basic Education 1995). Nevertheless, it is worth noting that, normally, the curriculum development process in South Africa is handled by a task team of curriculum experts who are appointed by the minister of education; with minimal consultation of other stakeholders (Obi & Rembe 2017). Ordinarily, the other stakeholders (mainly the public), are invited to make their inputs via a green paper within three months of the release of the gazetted green paper (Department of Social Development 2021; Department of Home Affairs 2016).

Stakeholder involvement in curriculum development

Based on the finding of the current study, ostensibly some stakeholders are of the view that, even though they are key

stakeholders in education, their inputs regarding curriculum development issues are overlooked. This is discernible from the following comments by Mr. Mofolo, a Subject Advisor, to a question on his participation in the curriculum development process:

“...in terms of the curriculum development, even I do not participate because it is done at national level, so curriculum is given to us. We do not have a say.... sometimes they would ask for suggestions, that is how people participate; this comes in the form of what they call a green paper, something like that, where they invite suggestions”.

It should be evident from the above statement that, although Mr. Mofolo is a key role player in curriculum development, he does not have a say in certain critical aspects of curriculum development. This is particularly discernible from the use of the phrase, “*even I do not participate*”. Ordinarily, as a person who must advise teachers on how they should manage the process of curriculum delivery and is, arguably, well-placed to know what should be entailed in the national curriculum; he appears to have no say in this matter. Currently, the scope of the role played by subject advisors is limited to curriculum support and monitoring as well as ensuring curriculum coverage (Department of Basic Education, 2020;

Mavuso, 2016), especially in Grade 12, a class that takes centre stage in all the activities of the South African National Department of Basic Education.

Like everybody else, in the lower levels of the hierarchy, he (Mr. Mofolo) has to conform to the expectations of those above him. The exclusion of significant stakeholders like subject advisors in various curriculum development issues such as curriculum design was also confirmed by Ms. Nkosi, also a subject advisor. She mentioned numerous significant points worth noting. For example, commenting on the need to restructure teacher training and empowerment to enhance their content knowledge and pedagogical approaches as well as creating a space that enables effective teaching and learning, she stated that...

Nationally, my view would be to restructure how we teach.....First, they need to have a broad idea and restructure the curriculum mainly to bring science and its application as a focus, then while they are ready with this idea, they need to first train teachers so that they are ready in four years from now. You cannot create a new curriculum and train old teachers, because the old teachers only get a week or day's workshop.....Also provide equipment because you cannot have something exciting but with no equipment in the

school. Also have enough space in the classrooms, at least have 20 learners. Making it a learning centre than just a classroom. You need space to work and resources.

Just like her colleague, Mr. Mofolo, Ms Nkosi had no say on certain cardinal issues concerning curriculum development. This is evident from the use of the phrase, “*they need to have*”, which precedes an intrepid and mind-provoking outline of what she thinks her seniors, in the upper echelons of the DBE hierarchy, need to do to address curriculum challenges facing South African schools. She accentuates numerous, arguably, intelligible points on the actions needed to be taken by education authorities to “*restructure the curriculum mainly to bring science and its application to focus*” [**authors’ emphasis**]. Her arguments underline the need to rethink the current, arguably, narrow roles of subject advisors who are key stakeholders in the South African education system.

Currently, as the preceding evidence suggests, despite their significant strategic position on curriculum issues, apparently subject advisors have little to no role in terms of contributing to curriculum planning and design. This assertion confirms recent findings, which suggest that the role of subject advisors is to monitor the

coverage of the syllabus prescribed by the national department of basic education and to providing support to teachers on the implementation of the curriculum (Obi & Rembe 2017; Mavuso 2016). Even a recent study commissioned by the national minister of basic education to probe the role of subject advisors corroborates this point:

The central role of a Subject Advisor is to monitor and support curriculum delivery in order to ensure that quality teaching and learning takes place in school.....this is clearly articulated in various policy documents, and existing research demonstrates that advisors have a clear understanding of their role and responsibilities. The interview data further support this; all interviewed advisors, and their superiors, clearly understood that advisors’ chief function is to monitor and support the implementation of the curriculum (DBE 2020, p. 52).

The limited and, rather, confining role bestowed upon subject advisors and numerous other stakeholders in the education system is an affirmation of the assertions by Ladkin (2017) regarding the structural hierarchy and power relations and the negative impact these have on the education systems, globally. Ladkin (2017) avers that “power within the current educational context represents the struggle between

unequally positioned individuals, which renders one individual as powerful and the other as powerless” (p. 38). In the context of the South African education systems, this struggle is ubiquitous, hence it permeates beyond the levels of subject advisors underscored above. The skewed power relations also filter to schools where the School Managements Teams (SMTs), led by school principals, form a hierarchical layer of power that, tacitly, contributes toward impeding effective and efficient curriculum transformation and implementation.

Power relations and curriculum management in the school context

There are numerous points that were made by several respondents in this study, which suggest that power relations constrain the roles and functioning of certain stakeholders in education. For example, it would appear that those who are tasked with the role of managing and leading within the school environment do not respect the sacrosanctity of democracy in education, which advocates consultation and decision-making (Heimans et al. 2022; Anderson & Ronson 2005), in that they tend to have the proclivity to make decisions and implement them without alerting or consulting with other stakeholders. This is evident from the points made by Mr Mkhungo, a teacher, who claimed that “*we do not know who is responsible for*

certain things. So, I would say that leadership is autocratic because things are done in a manner in which ‘someone’ thought it will be right at that time”. To amplify his assertions about autocracy and lack of consultation within the school, Mr. Mkhungo pointed out that in some days, “*while we are teaching, the bell rings and the learners go out of the classroom without me knowing as a teacher that the periods will be shortened”*.”

The preceding comments by Mr. Mkhungo give credence to Ladkin’s (2017) claims about skewed power in the realm of education. These power imbalances were also noted in statements made by numerous participants in this study. Generally, the responses by SMTs who participated in this study to the questions on how they communicated with teachers on the navigation of curriculum development issues suggest that, in the main, there was an absence of collegial communication but rather an issuance of orders or instructions from the authorities to subordinates. For example, commenting on curriculum management and the cooperation between the SMTs and teachers in her school, Mrs Sydney, stated that “*curriculum management is not easy...during briefings in the mornings, we request teachers to work with us... others you will see that they are not okay.*

But anyway, they have to conform". From this statement, it is apparent that some authorities within the school make very little effort to negotiate meaning between themselves and their 'subordinates' regarding the handling of curriculum issues. In the preceding example, the school principal does not seem to interact with the purposes of negotiating meaning but is issuing 'instructions' during 'morning briefings' and expects teachers not to negotiate and interact with 'the powers' within the school but "to conform" to the instructions. The use of coercive power discernible from the response by Mrs. Sydney was not peculiar to School X. This was picked up from the response by Ms. Khumalo, a teacher from School Y to the question concerning the handling of curriculum management issues in her school. She pointed out that in handling curriculum development issues, "the principal informs us during briefings about what needs to happen. She tells us what they have discussed with subject heads and SMTs and then she issues a circular".

Additionally, it seems that the point by Foucault (1982) about the dominant individuals exercising "uncontrolled power over" (p. 780) 'subordinates' in hierarchical institutions is pervasive at School X. This is evident from the words of Mr. Knowles, a deputy

principal of School X, in response to the question on curriculum management within the school. According to him, the following is how bureaucracy operates at Schools X, the "decisions are taken by the SMT which is made of a principal, deputy principal and Heads of Departments (HODs)". Essentially the teachers have little if any say because according to him, the "HODs communicate with staff" and, in turn, the HODs "bring matters to the deputy principal, because those are part of his duties", ultimately the deputy principal "goes and negotiates with the office". Notably, it would appear that the principal is so 'inaccessible' that she is referred to as "the office", which is reachable through negotiations via the deputy principal.

The behaviour by managers in institutions such as the ones indicated above lend credence to claims by Coetzee (2019) that managerial professionalism, a negotiated product of post-apartheid South African school education reforms, currently used as a tool for education governance perpetuates "uneven power relations and performativity framed by neoliberalism" (p. 1). This form of managerialism "represents a centralised, strictly hierarchical form of direct control" (Coetzee 2019, p. 2) where, even if they are not in agreement with instructions, the subordinates are

'coerced' into "mute compliance with the situation" (Palmer & De Klerk 2012, p. 70) imposed by the authorities.

Accordingly, based on the points mentioned above, it can be argued that evidence from the current study suggests that managerial professionalism seems to cement uneven power, somewhat limits creativity and, potentially, suppresses the emergence of leadership within the space of education. Certainly, if teachers are to be able to demonstrate leadership and creativity and, thereby, bring about essential modifications to the curriculum then they should not be subjected to micro-management and perennial, at times unessential, directives from the hierarchy within their schools.

Curriculum modification and implementation and the role of power

All these points about power relations become significant when viewed from their (potential) impact on curriculum implementation. Because of micro-management and extensive managerialism (Coetzee 2019) of subordinates such as teachers, as found in the sampled schools; there might be very limited, if any, room for genuine curriculum modification at the point of classroom curriculum implementation. Ordinarily, teachers are not just supposed to implement the curriculum whimsically in accordance with the directives of those in power, they have a responsibility to

take necessary measures to modify the curriculum to meet the needs of the diverse learners in their classrooms (Saziso & Chimhenga 2021). Evidence from this study suggests that teachers, as curriculum implementers with the responsibility to also modify the curriculum, do not have much room to manoeuvre as there are expectations imposed by those in the upper echelons of the education hierarchy.

For example, according to Kim, an HOD from School X, "*the only way to manage the curriculum is through what we are given by the department...we check, the lesson plans, curriculum coverage, written work of learners to see if they have written enough work for a week....*". This was confirmed by Mr Mkhungo who accentuated that the SMTs in his school manage the curriculum by focusing, "*mainly on the Annual Teaching Plans (ATPs)*". Additionally, Mr Mkhungo emphasised that because of the ATPs, "*we know the amount of work we need to cover*". Furthermore, it emerged through the voices of the two subject advisors who participated in the study that the department of education assigns a great deal of priority to the Grade 12 class. Ms Nkosi, the subject advisor, characterised the prioritisation of Grade 12 as "*another challenge*" which impedes curriculum implementation and modification in that

it confines teachers to focus narrowly on the expectations of the department of education. She went further to assert that, “*focussing on grade 12 results is a National short-sighted goal*” because “*even the teachers who teach grade 8 – 9, their energy goes to grade 12*”. This suggests that their innovation and modification of the curriculum at implementation level is hampered because they have to cover the curriculum as prescribed by the DBE.

Considering that environmental education is best implemented through the application of the triadic approach, namely education *about, in and for* the environment, the absence and/or scuppering of curriculum innovation and modification has serious implications for the integration of EE in pedagogy. These implications are ventilated in the next section.

Synthesis: Implication of the findings for pedagogy

As indicated above, this study found that there are skewed power relations within the South African school education system, at least in the geographical area where this study was conducted. The impact of these skewed power relations is discernible, particularly in respect of stakeholder involvement in curriculum development, management, design, and implementation. It is the contention of

the current researchers that, based on the findings of this study, the nature of these power relations has negative implications for the implementation of the curriculum, in general, and the integration of EE in particular. Furthermore, that distributed leadership is virtually non-existent in the education space and that it (DL) needs to be seriously considered if EE is to be integrated in pedagogy. Accordingly, the following points need to be underscored as findings.

Even though the South African white paper on education (DBE 1995) advocates for the involvement of various key stakeholders in education matters, including curriculum development issues, this study found that some key stakeholders are left behind when certain decisions are taken. Key stakeholders such as subject advisors who participated in this study lamented that they are not included in curriculum development. Although they are, arguably, strategically positioned in the education space in that they interact directly with teachers who are curriculum implementers; they are not given the opportunities they deserve to contribute towards shaping the development, design, and implementation of the curriculum. This assertion corroborates the findings by Obi and Rembe (2017) who found that, generally, when the department of education embarks on the process of

curriculum development at national, provincial and/or district level; only a select few subject specialists are involved in the process. These are, mainly, the Chief Education Specialists (CESs) and Deputy Chief Education Specialist (DCEs). Significantly, the subject advisors are, mostly, left out of these processes. According to Obi and Rembe (2017) their roles become important only in curriculum implementation at classroom level.

It is the contention of these researchers that there needs to be an improvement in terms of deciding who gets involved, and to what extent among the various stakeholders in matters of curriculum development. Because subject advisors, like teachers, are more hands-on in curriculum implementation at classroom level, they need to be granted a bigger role in the hierarchy of power, as they might be able to make a better and more informed contribution on how curriculum needs to run.

The current study also found that power relations within selected schools were not ideal to enable free flowing communication, collegiality and, arguably, the emergence of leadership and creativity among the teachers. This is because the SMTs seem, for want of a better phrase, to be putting teachers on a leash. Apparently, teachers are not consulted when it comes to curriculum

issues. In their quest to fulfil a particular ‘mandate,’ the SMTs ensure that teachers have little, if any room, to modify the curriculum for better implementation. Of course, these SMTs are, themselves, subjected to whims of education authorities who are more concerned about ensuring that the pedagogical project is structured to ultimately produce ‘good’ grade 12 results. In essence, teaching is no longer about the entire human capital development and for life (Mahmood 2012) but, rather teaching is done for testing purposes (Jennings & Bearak 2014; Volante 2004). Teachers are expected to adhere to annual teaching plans developed by senior departmental officials. Accordingly, curriculum implementation is expected to follow the structure determined by those who are distant from the classroom. The preceding points have serious implications for the implementation of environmental education and, arguably, distributed leadership could be harnessed to help circumvent some of the already highlighted challenges to the potential benefit of EE curriculum implementation.

Distributed leadership: a potential agency for environmental education

Over the years, scholars have consistently and unequivocally argued that the successful implementation of EE is predicated on integration into existing

curricular (Marques & Xavier 2020; Annan-Diab & Molinari 2017; Gürsoy & Sağlam 2011), by accommodating and presenting environmental learning in various school subjects. Accordingly, many voices have called for an interdisciplinary approach to EE-inclined pedagogy as the way to go if the ideals of education for a sustainable environment are to be realised (Annan-Diab & Molinari 2017; Luppi, 2011). However, there is a myriad of challenges and practical impediments that go with an interdisciplinary approach to pedagogy, in general. These include a lack of understanding on how the integration of various themes needs to be done, lack of time, EE being ideological rather than being simply educational, absence of learning and teaching support materials and etcetera (Marques & Xavier 2020; Annan-Diab & Molinari 2017; Jones 2009). Studies suggest that, owing to these challenges, the integration of environment-inclined pedagogy is a prerogative that is limited to a select few teachers (Benjamin & Adu 2019).

Therefore, in the context of this study, notwithstanding the preceding and many other shortcomings; the challenge of EE implementation being the prerogative of few teachers is worth noting as it has numerous implications. However, for the purposes of this discussion, two points need to be

underscored. These relate to the points already mentioned elsewhere in this discussion, i.e., the suggestion that pedagogy in South African public schools (and possibly elsewhere in the world) is driven by ATPs and the importance of curriculum modification in pedagogy.

Evidence from this study suggests that teachers are expected to focus their pedagogical activities on the attainment of the goals entailed in the ATPs. Teachers are monitored, stringently, to ensure non-deviance from the ATPs, hence one respondent asserted that because of these ATPs “*we know the amount of work we need to cover*”. This suggests that if teachers wished to accommodate EE in the curriculum, they would be stifled due to the obligation to adhere to the ‘mandate’ entailed in the ATPs. Accordingly, even teachers with the ability to initiate certain educational innovations such as curriculum modification, a privilege ostensibly reserved for the upper echelons of the education department hierarchy; the confines of the ATPs would impede this possibility.

Arguably, teachers with the ability to modify curriculum without relying on authorities could be able to offset the challenge imposed by skewed power relations that drive initiatives such as the use of educationally confining ATPs.

These are the teachers who, if they have commitment towards and knowledge of EE, could 'weave' through the impediments imposed by the ATPs and integrate EE in pedagogy. The implementation of EE is predicated, inter alia, on the ability and commitment towards curriculum modification (Permanasari et. al 2021; Maryono 2015). Therefore, in educationally 'restrictive' environments such as the ATPs-driven spaces initiative, innovation and fearlessness are required to enable curriculum modification. This is when the flexibility and drive to promote inclusiveness associated with curriculum modification (Jurado-de-los-Santos et al. 2021) become key elements of pedagogy. Therefore, it is only through curriculum modification that improved access to curriculum (Saziso & Chimhenga 2021), in this instance access to EE curriculum as envisaged by the department of education (DBE 2011), could be attainable. However, this ideal could be realisable if the upper echelons of education managements hierarchies were to abandon their confining and restrictive practices and create enabling spaces through progressive initiatives. Arguably, such initiatives include the accommodation of empowering leadership approaches such as distributive leadership.

This study noted skewed power relations as one of the key impediments to the implementation of EE. As this paper tried to demonstrate, these power relation challenges, generally, impede curriculum management and derail the potential implementation of EE. Accordingly, as highlighted earlier in this paper, distributed leadership has been successfully implemented elsewhere, globally, to help improve education processes within the school system. The current researchers are of the view that DL could be adopted as one of the many strategies suggested by other scholars (Shabalala 2019; Mwendwa 2017) to enhance the possibility of implementing EE. Informed by the findings of this research two suggestions are worthy of consideration.

Skewed power relations that characterise the hierarchical control of systems brought by managerial professionalism, which seek to advance conformity while tacitly derailing innovation, in the education system need a reviewal by those in positions of power. In the context of South Africa, the education system might do better with an improved communication, expanded consultation and the application of power for empowerment rather than control. For example, from this study it emerged that despite their proximity to and close co-operation with teachers, subject advisors

are assigned rather limited and confining roles. Therefore, their 'powers' to contribute towards the restructuring, modification, and implementation of the curriculum rather than solely monitoring need to be expanded. This suggestion is in line with one of the key findings by studies on distributed leadership. For example, distributed leadership encourages consultation, participation of various stakeholders, improves collegiality and helps bring about notable change in learner attainment (Goksoy 2016; Trammell 2016) without taking away the burden of power from authorities (Grenda 2011). Therefore, by improving on these aspects, more ideas would be generated on, *inter alia*, how best to modify the curriculum to enable the accommodation of EE as well as on the potential best practices to equip teachers in their quest to adopt environmentally inclined pedagogies.

The strategy worth considering, which is also central to the application of distributed leadership, has to do with empowering teachers to become leaders rather than mere followers and curriculum implementers. Studies on teacher leadership increasingly acknowledge the importance and need to expand the role of teachers to include participation in policy-decision making, strategic planning, and providing leadership beyond the boundaries of their

individual classrooms as mere policy implementers (Kamaruzaman et. al 2020; Cosenza 2015; Wattleton 2000). Teachers need to be enabled to play the role of leaders within and beyond the classroom, to lead school education transformation. This could be achieved through relaxing the regulations imposed by the hierarchical bureaucratic education management currently in existence in education. Teachers should be viewed as colleagues rather than subservient entities with no say on issues of curriculum modification as it seems to be the case in institutions such as the ones which participated in the current study. In such institutions teachers seem to have no room to modify the curriculum as they have to, unwaveringly, adhere to ATPs developed elsewhere within the education hierarchy. These ATPs seem rather confining and serve the purpose of teaching to the test rather than to help develop the learners in totality.

It is the view of the current researchers that education authorities need to empower teachers to become leaders rather than implementers of the curriculum. In this respect, teachers need to have a role in the designing and modification of the curriculum so that vital curriculum elements such as environmentally inclined pedagogy are accommodated. Distributed leadership, therefore, could come in handy as it can

help in teacher leadership development. This point is accentuated by Kamaruzaman et al. (2020), who write that “in teacher leadership with distributed leadership, every teacher has the ability and opportunity to contribute to the school’s growth and change” (p. 577).

There is a need for the relaxation of control measures to enable teacher leadership, which includes autonomy, independent decision-making, collaboration with other stakeholder to contribute to classroom instructional practice and capacity building beyond the classroom and etcetera, to emerge. Accordingly, without any fear of losing power and control, education authorities have to allow power to be devolved from the upper echelons and shift to all relevant stakeholders to enable empowerment. This is essential because “it is mythical to believe that leadership is found only at the highest levels of an organization” (Cosenza, 2015, p. 80). To achieve curriculum transformation, which is embodied in environmental education, relevant stakeholders need to be empowered to contribute towards meaningful curriculum management. This could be done, in part, by expanding intellectual capital through leadership development, skills empowerment, providing necessary skills empowerment and “opportunities to practice those

skills” (Cosenza, 2015, p. 81). As ventilated throughout various sections of this text, distributed leadership provides opportunities for the realisation of these ideals.

CONCLUSION

Owing to the complex, perennially evolving, and multiplying problems facing the environment; creative solutions and collective efforts are essential to help offset the negative impact of these challenges on environmental sustainability. Central to any attempts to address environmental challenges is education that is guided by, inter alia, future-oriented, and solution-driven curricular approaches that encompass transformation and collective efforts. Accordingly, hierarchical approaches such as the neoliberal professional management employed in the realm of education in South Africa and elsewhere in the world require a rethink and replacement with progressive approaches that pivot on transformation, cooperation, and teamwork. These should epitomise and go beyond what was described by Mr. Mkhungo, one of the respondents in the current study who stated that:

Here at school, we have a committee that we call the “Change Team” those are people who bring change into the school. Those people are found from all stakeholders, it is made of

teachers, SMTs, non-teaching staff and gateman, all people responsible for changing the school.

Accordingly, various stakeholders need to be brought on board to help contribute towards the improvement of the education system and those already within the spectrum of education need to redefine their roles to have an impetus in the transformation of education. This would constitute distributed leadership, a transformative, future-oriented, inclusive, and visionary leadership. The kind of leadership that is essential to offset a myriad of current curriculum challenges by, inter alia, enabling the accommodation of environment-inclined pedagogy in the classroom; an ingredient that could contribute towards ameliorating the impact of environmental challenges facing the world.

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