# Exploring the priorities of Teacher education related policies: An Education for Sustainable Development perspective

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## Abstract

*Education for Sustainable Development (ESD) for many is considered to be a 'quality education' in its own right. There also exist many debates around the semantics and implications of such an education, however this study acknowledges the greater intentions of ESD and thus deems it necessary to analyze to what degree teacher education related policies promote ESD. The study carried out a content analysis of the major policies that guide teacher education and teacher education development in South Africa. An ESD analytical framework which was developed from an analysis of pivotal ESD literature was used. The analyses vary from a subtle to a very potent operationalization of the developed framework due to the varying policy structures. Direct and indirect applications of ESD principles were identified across policies revealing major inefficiencies with regards to meaningful ESD address. The main findings of the study refer to policy inefficiencies with regards to: (1) the promotion of ESD teaching and learning approaches; (2) the connection of ESD skills and values to ESD issues/knowledge content; (3) understanding the complexities of the interactions between the three pillars of sustainability (economy, society and nature) in covering sustainability issues/concepts; and finally (4) the policy focus on societal and economic development. These findings reveal that although policy documents guiding teacher education and development do not actively prevent teachers and teacher education from focusing on ESD, they at the same rate do not provide sufficient objectives or guidelines towards its realization and implementation.*

**Keywords:** Education for Sustainable Development, sustainability, quality education, teacher education related policy

# 1. Introduction

South Africa has a thirty decade history of racial violence and social inequality that has contributed most significantly to South Africa's challenges today. South Africa as a democratic state is only 19 years in the making and faces the harsh challenges of remedying the legacies of the past. One of these legacies includes the effects of the apartheid education system. The low quality 'black education' and high quality 'white education' systems of the Apartheid times, have engraved society with issues of unequal access and distribution of resources. The sustainability issues most pertinent to South Africa today include: food security, water scarcity, HIV/AIDS, and poverty, which mostly affect the previously disadvantaged population.

According to the United Nations Educational, Scientific and Cultural Organization [UNESCO] (2010)

> In Africa, the re-orientation of education towards sustainable development requires the strengthening and boosting of the quality and efficiency of capacity development initiatives (education, training, community development and public awareness programmes) to address the relevance of education to development and poverty alleviation objectives. (p.5)

We add that these capacity development initiatives also need to be supported by ESD oriented policies that guide teacher education. "ESD affects all components of education: legislation, policy, finance, curriculum, instruction, learning, assessment, etc" (UNESCO, 2012, para. 2) Teacher Education related policies should highlight the complexity of the interrelatedness of all the pillars of sustainable development. Pigozzi (2010) reveals the interrelatedness of the pillars of sustainability, for example a country with a high HIV rate requires increased funds from the Government budgets as the reduced labor force population further impacts the greater economy of the country. A reduced economy results in fewer resources, such as those relating to food, health and water.

South Africa's education system has undergone numerous curriculum changes since 1994, however throughout those changes each curriculum has attempted to pay attention to pressing sustainability issues and principles to some degree. One can only imagine that this has been spurred by both the Tbilisi Declaration and Agenda 21 which place a certain amount of responsibility for the social, economic and biophysical environment on the shoulders of educators. As a result two major programs were developed to assist in realizing this

responsibility in education. The National Environmental Education Program (2001) which looked at building teachers' capacity to implement sustainability principles into education and the South African Eco-Schools project which focused on creating sustainable schools that reoriented all aspects of schooling towards an environmental focus. However it has been noticed recently that these two programmes "have not been able to provide for a sustainable system of teacher professional development (or Teacher Education and Development/TED) for environment and sustainability education/ESD in South Africa." (Association for the Development of Education in Africa [ADEA], 2012, p.9)

ADEA currently carries out a national case study looking at Teacher Professional Development with an ESD focus. The case study reviews the history and development of environmental education and ESD in South Africa and uses this review to visualize a different approach to realizing ESD considering the new school and higher education policy environments. The study's main purpose is to develop a national network, curriculum framework and resources for teacher education, with focus on inclusion of ESD, within this new curriculum policy environment. This is a relevant and much needed study. The point of view adopted here is that in addition to this, one need also review what aspects of teacher education policies contradict the ESD cause. The ADEA report uses policies such as Education White Paper 3 and the new 'Integrated strategic planning framework for Teacher Education and Development in South Africa' (Department of Higher Education and Training [DHET] & Department of Basic Education [DBE], 2011) to motivate for their study and thus as a point for departure. Our study however reviews those two policies as policies that guide teacher education and development in the country and thus aims to reveal their priorities, commenting on how this aligns/misaligns with the realization of ESD. The policy content analyses that this paper engages with, not only aims to identify exactly where and how the policies are/are not oriented towards an ESD focus, it also highlights the ways in which these policies contradict the greater plight for ESD implementation. The paper uses a methodological tool (Bentham, 2013) as a technique for reviewing the ESD relevance of policies and curricula.

Teacher education institutions in South Africa are guided by national school curriculum statements as well as by higher education policy and more specifically teacher education and development policy. Although teacher education institutions display a degree of autonomy, there

are fundamental policies and reports that ensure that all graduating teachers are adequately prepared for the teaching and learning environment. Understanding policy priorities can be attained through an analysis of the policy language and general discourse. The focus of this paper is to determine: 'What are the main priorities of Teacher Education related policy texts and how do these align/misalign with Education for Sustainable Development priorities?' When identifying whether ESD priorities have been implemented in policy it is necessary to note that this may occur in a direct and indirect manner. Direct implementation refers to examples where the ESD principles are written overtly in the language of the policy as clear objectives. Indirect implementation refers to examples where carrying out certain objectives of the policy may or could lead to the satisfaction of ESD principles. Now ESD itself as a construct is deemed necessary to explore, as this meaning provides the foundation for the analytical framework used during the document analysis process of this study.

## 2. Education for Sustainable Development and Policy

Understanding what is meant by sustainability and its related issues can be an intricate matter as the social, economic and ecological aspects are tightly interwoven making linear causal predictions less possible (Sleurs, 2008). The need to strike a balance between the three pillars of sustainability is stressed by UNESCO (2010) as this insight offers an in depth and complex understanding of the causes, effects and possible actions that need to take place when addressing issues such as climate change for example. Policy, as a fourth pillar, cuts across all three pillars, and serves as the analytical substance of this study.

The mere definition of an Education for Sustainable Development is met with much contention. However there is general agreement that ESD is a model of education that attempts to offer an avenue for empowerment, encouraging people to take responsibility for their role in achieving sustainable development (Rwanda Environment Management Authority [REMA], 2010). It can be said that by considering the environment, society and the economy during the pursuit of development and quality living, sustainable development will be achieved (REMA, 2010). Besides the long standing concern regarding its ambiguity of definition and its challenging implications for adequate implementation, there exists an entirely separate yet fundamental issue regarding implementation of ESD. According to Jickling (1994) any education should promote empowerment whereby learners can 'think for themselves'. In Jicklings' (1994) opinion an

Education for Sustainable Development or 'for' anything is one that threatens indoctrination thus undermining the greater aim of a quality education. Perhaps an over-simplified response to such criticism would be to say that surely any education involves an educating for something, whether it is for empowerment or for a chosen curriculum. Perhaps the intention is what should speak loudest and not so much the semantic arguments. However there is great possibility that ESD might be delivered in a manner that ignores relevant accompaniment of empowering ESD pedagogy and for this Jickling's criticism should be considered seriously. A more specific concern expressed by Jickling (1994) refers to the danger of obscuring the "understanding of the economic, political, philosophical and epistemological roots of environmental issues, and adequate examinations of social alternatives." (p.2). Such a concern manifested itself 18 years later in the National case study conducted by the Association for the Development of Education in Africa (ADEA, 2012) whose specific aim was to report on the practical implementation of ESD in the South African teacher education system. A major critique of the many observed programs was the "over-emphasis on activities, projects and experiential learning, an under-emphasis on quality environmental content and concepts, and a failure to make links between issues and concepts". (ADEA, 2012, p.18)

In May 2005 the secretariat of the Southern African Development Community (SADC) joined the Regional Environmental Education Programme (SADC-REEP) in outlining guidelines for the countries participation in the United Nations Decade on Education for Sustainable Development (UNDESD, 2002). The consultation report that resulted from this collaborative effort reveals the desire to promote the inclusion of environmental education and education for sustainable development into local and national education policies and structures. The SADC consultation report on the Decade of Education for Sustainable Development also revealed a major concern. Under the area of 'Knowledge, Curriculum and Pedagogy' it was found that there was a distinct lack of knowledge regarding sustainable development and sustainability issues in most educational contexts. It was suggested that teaching and learning would need to become more learner-centered and involve participatory as well as activity-based approaches to learning about these issues. Finally teachers would need to engage with different knowledge systems as they display positive and negative impacts on sustainability (SADC, 2012).

We think an analysis of supporting teacher education policy can inform future avenues towards a realization of ESD implementation. The fact that even good policy development does not ensure that the policy is in fact implemented in an adequate manner (Timmerman & Metcalfe, 2009), is not ignored here, however it is a beginning criteria for efficient ESD address.

There exists a relevant debate around the role and responsibility of policies for practice in general. In a discussion with colleagues it was asked: 'Are policy papers meant to provide support for ESD implementation, or should this be developed by the institutions as a response to the focus of the policy papers?' It was suggested that perhaps policy needs to be seen as a challenger of current practice but not in a manner that is so different form current practice that people are unable to see how they might make that shift. From this discussion it can be concluded that policy provides guidelines and direction for transformed practice and the question in actual fact becomes whether policies relevant to South African teacher education provide enough valuable direction for ESD attention and/or address? Before this discussion is entered into it is important to contextualize educational policy formulation and implementation in South Africa.

The focus of South African education policy for almost two decades since the transition from the apartheid system has been towards achieving an education system that educates South Africans in a democratic and socially equitable way (Smit, 2005). Social development is only one principle of an ESD, however significant this principle, an education system that focuses solely on this principle of ESD cannot be said to address a holistic approach to an Education for Sustainable Development and thus a quality education. This paper explores the goals and values of six major types of policies guiding teacher education and the degree to which these goals and values motivate for or support an Education for Sustainable Development.

## 2.1. Policy guiding South African Teacher Education

After a survey of many school based and higher education based policies, six policies in particular were found to be most appropriate for the content analysis for this study. These policies were deemed appropriate as they offered the most insight into the web of policies guiding teacher education and development in South Africa. These policies guide the levels of competencies that teachers and teacher educators should develop as well as the competencies

that teachers and teacher educators are expected to develop in their learners/students. The policies also elaborate on qualification levels and the type of knowledge mix that higher education programmes, such as the Bachelor of Education programme, needs to display. Table 1 identifies and briefly describes each selected policy.

**Table 1. Teacher Education related policy in South Africa**

| Policy Name | Year | Policy Audience | Policy Scope |
|---|---|---|---|
| Education White Paper 3 | 1997 | Higher Education stakeholders | A program for Higher Education Transformation. Outlines the program for change. |
| National Policy Framework for Teacher Education and Development in South Africa | 2007 | Department of Education; South African Council of Educators (SACE); Higher Education stakeholders (staff) | Describes the context of teacher education. Specifies the procedure and requirements for teacher education program recognition. Describes the conceptual and pedagogical needs of the new continuing professional teacher development system. Describes the joined responsibility of the Department of Education and South African Council of Educators in implementing the policy by providing support structures. |
| Higher Education Qualifications Framework for Teacher Education | 2011 | Higher Education stakeholders (staff and students) | Outlines the minimum requirements for teacher education qualifications, which involves the description of the different qualification types, their purposes and a set of minimum set of agreed-upon competencies. |
| Integrated Strategic Planning Framework for Teacher Education and Development in | 2011 | Initial Teacher Education stakeholders; Department of Education & all | Addresses major issues such as: (1) adequate training of teachers; (2) teacher demand, supply and utilization; (3) strengthening support structures for teacher professional development; (4) policy alignment ; (5) need |

| | | | |
|---|---|---|---|
| South Africa, 2011-2025 | | educators | for resource centers. |
| Curriculum and Assessment Policy Statement | 2011 | Teachers and Teacher Educators | Elaborates on the valued knowledge, skills and values to be developed in the curriculum and how this may be attained through suitable assessment activities. |
| UMALUSI (The general and further education and training framework) | 2012 | Teacher Educators and Teachers. | Provides the broad purposes for National Qualification levels 1-4 (Grade R-12) in the attempt to ensure quality. |

The documents listed will be elaborated further in the coming section.

*2.1.1. Education White Paper 3 reveals the 'new' South African Higher Education system*

It is stated within the basic rights of the South African Constitution that everyone has a right to a safe and protected environment that offers benefit to present and future generations (Republic of South Africa [RSA], 1996). It was from this constitutional mandate that the South African National Environmental Management Act (NEMA) was developed in 1998. NEMA integrates a legal clause that binds all governmental departments, such as the Department of Education (DoE) to implement sustainability at a policy and implementation level (RSA, 1998).

With the adoption of the new South African democratic constitution by the newly elected African National Congress (ANC), the establishment of new structures, commissions and task teams was permitted. The 1996 constitution made tertiary education a national competence and the Higher Education Act (1997) made all teacher education, and therefore colleges of education, part of the Higher education system. The Higher Education Act governs Universities in South Africa however it is Education White Paper 3 that really reveals the intended Higher Education transformation process and thus highlights the major goals and values of Higher education. This Education White Paper has assisted in shaping all Higher Education programmes, including teacher education programmes and all institutional policies today and for that reason has been deemed valuable for analysis in this study.

## 2.1.2. Three pivotal South African Teacher Education Policies

Three teacher education policies have been purposefully selected for the policy analysis process and have further been described here.

The main aim of 'National Policy Framework for Teacher Education and Development in South Africa' (2007) is to prepare the teaching profession to promote a democratic society. The policy elaborates on the recruitment of teachers, their retention and further professional development. The policy lists the principles that it is underpinned by and explores the context of teacher education in South Africa. The policy also identifies the structures of the various teacher education programs and the different avenues for obtaining these degrees.

The 'Higher Education Qualifications Framework for Teacher Education' (DHET, 2011) mainly brings the teacher education qualifications and the Higher education qualifications framework together, merging them into one policy. This policy outlines the minimum requirements for Teacher Education Qualifications. The policy amongst other things clearly describes the basic requirements for the development of acceptable learning programmes that meet the needs of South Africa and further encourages teacher educators to design curricula and implement policy. Finally the policy puts forward seven roles of a teacher that must be satisfied collectively by teachers within any particular school at any particular time.

The 'New Integrated Strategic Planning Framework for Teacher Education and Development in South Africa, 2011-2025' (DBE & DHET, 2011) is an integrated plan for teacher education and development in South Africa and responds to the list of challenges submitted at the 2009 Teacher Development Summit. Four working groups were put to task on the development of the plan and these groups covered four areas being: (1) Institutional arrangements; (2) Needs and programs; (3) Support structures; and (4) Priorities and funding. As a strategy for teacher education and development in South Africa this document is an important clue to the education departments' major priority areas concerning teacher skills and values for professional development.

## 2.1.3. National schools related policy – CAPS and UMALUSI

In 1997 Outcomes Based Education (OBE) was introduced to South Africa to address the divisions affected by the apartheid government and those that lay within curricula. The

implementation of OBE prompted a review of the education curriculum in 2000 and this review resulted in the 2002 Revised National Curriculum Statement Grades R-9 and the National Curriculum Statement Grades 10-12. The challenges experienced in trying to implement these two policies further prompted a 2009 review which resulted in the formulation of the Curriculum and Assessment Policy Statement (DBE, 2011a, 2011b). The Curriculum and Assessment Policy Statements (CAPS) are comprehensive documents that have been developed for each subject and address the weaknesses of knowledge and quality present in the previous curriculum policies. The CAPS elaborates on the valued knowledge, skills and values to be developed in the curriculum and how this may be attained through suitable assessment activities. The school curriculum policy documents are the focus of all courses within the teacher education programme and so teacher educators are strongly guided by these documents. The CAPS documents for the Natural Sciences and Technology integrated subject Grades 4-6 and Natural Sciences Grade 7-9 will serve as the sample policies to be analyzed under this section as this covers the Sciences from Grades 4-9. The Sciences was chosen as the subject for analysis as it may be considered one of the subject areas that lends itself most favorably to the inclusion of sustainable development issues and thus all the skills and values that may be developed through the engagement with these topics. It is thought here that an analysis of the Science related CAPS documents would provide the best indication about the degree to which the national curriculum addresses or guides teachers to implement an ESD.

The Council for Quality Assurance in General and Further Education and Training, UMALUSI exists as an independent quality council that was mandated by parliament in 2001. It is the General and Further Education and Training Qualifications Framework (2013) drafted by UMALUSI that is up for scrutiny here, along with the two selected complimentary CAPS policies.

## 3. An ESD analytical Framework

In order to analyze the different policies and/strategies relevant to South African Teacher Education in a conceptually sound manner, an adequate exploration must also be made of ESD related literature and policy. The analysis is summarized to display a justification for the analytical framework adopted and used in the policy analysis process. The *double lens analysis tool* that was used to assist the policy analysis process is presented and justified. However first it

is necessary to explore the socio-political discussions that support the need for a sustainable development focus.

## 3.1. Turning from capitalism towards eco-socialism

In a democratic South Africa, social development is dependent upon job creation and therefore economic development. This often occurs at the cost of the environment, e.g. development and destruction of crucial habitats and wetlands. The important connection between social and economic development is not enough to make a sustainable difference if ecological development is ignored. Kovel (2013) also reflects on this phenomenon common to South Africa, whereby economic development booms in response to cries of poverty, simultaneously drowning out the need for environmental consideration.

Harvey (1998) concerns himself with metaphors presented by environmentalists, which often refer to the limits of the environment and consequently its collapse. Harvey (1998) finds these metaphors theoretically suspicious because they are socially determined and not scientifically measured, for there is no evidence only speculation of what the long term effects will be. Harvey (1998)  refers to the 'web of life' metaphor (which acknowledges more observable, local and short term effects of human action) whereby every individual, as an inhabitant of the world affects the living processes around them and are in turn affected by these processes. "we need to recognize how our actions filter through the web of interconnections that make up the living world with all manner of unintended consequences." (Harvey, 1998, Metaphors of Crisis, Collapse and "The End of Nature", para. 6)

The quantitative shifts in knowledge, technological advances, production, generation of waste, trade, population expansion and acquisition of resources, all indicate there is a need to respond by considering a complimentary qualitative shift in our thinking about the environmental repercussions (Harvey, 1998). Environmentalists have played a vital role in alerting the public to the idea that environmental issues involve a lot more than just the probability that population expansion will lead to resource depletion, ultimately threatening the survival of all species (Harvey, 1998). To Harvey, the argument that there are many examples that display the unintended impacts of development on the environment, is far more persuasive than the argument that our actions will bring about the entire collapse of our world.

Such insight offered by Harvey (1998) resonates with the South African case whereby capitalist economic structures, although they make promises to diffuse poverty and uplift society through a boosting of the economy, they in fact offer no resolution to the socio-ecological (E.g. excavation of crucial habitats such as wetlands and sand dunes, poisoning of fresh water, deforestation and flooding) impacts that such development has incurred.

According to Marx (1977), we are in a metabolic relationship with our environment for as we change our environment so our environment changes. Harvey (1998) adds that every species has their niche in evolution, ours being the ability to create social structures, build on previous knowledge to guide future decisions, and the ability to reflect on and learn from history (beyond our small individual lives) to inform future investments. Harvey (1998) admits that this view of the world as species centred is very anthropocentric, but that it is honest in recognising ourselves for what we are: individuals who strive to assert their identity and aim to always further their abilities. Harvey (1998) challenges socialist thinking by adding that individuals exist in a world with other individuals of the same and differing species and so they should consider their own identity in relation to others. "If respect and love of others it vital to respect and love of self, then socialists should surely approach all others, including that of nature, in exactly such a spirit. Concern of our environment is concern for ourselves." (*ibid*, Towards a Basic Formulation, para. 3)

Harvey takes on a socialist and anthropocentric view of the value of environmental concern and the plight for sustainable development for the human race. This implies that the selfish plight of capitalist thinking is not a starting point for the resolution of environmental issues. The fight for social transformation and social justice can therefore be seen to be hypocritical if eco-justice is ignored.

Kovel (2013) refers to the term 'ecosocialism', which considers ecological crises from an existential perspective, placing oneself within the ecosystem as a connection, linking to other species in the system. Kovel (2013) comments that we have removed ourselves from nature and see ourselves as above it, owing it nothing, proceeding to extract from it.

The capitalist system has a tendency towards the promotion of unlimited growth (Marx, 1977). Kovel (2013) thus proposes the need to develop a different method of production to that of

capitalism, a method that does not promote the idea of limitless production without environmental consideration. This notion is shared by the United Nations, who promoted the concept Sustainable Development. Ecosocialism offers an avenue, for much like ESD, it promotes the idea of individuals as agents of change, who originate from communities, schools and organizations, identifying and targeting environmental and social issues.

Kovel (2011; 2013) and Harvey (1998) argue that if nature has no rights then humans, as part of the ecosystem, also have no rights. Acknowledging the importance of nature and our ecosystems is not noble it is fundamental in defining our identity within the system. If a 'conscience' is what sets us apart as human beings, then Kovel (2013) argues we should exercise this asset for the intrinsic good of nature.

We are alerted by Kovel (2013) that the challenge of any leftist movement is that it is named such due to its inability to transcend capitalist thought and it is too easily satisfied with sensationalist ideas of social democracy and token greening. ESD challenges this sensationalism and tokenism by striking at the heart of transformational education and activism.

## 3.2. The conversation between ESD literature and policy

ESD aims to develop sustainably literate citizens, in the words of Parkin, Johnston, Brookes, Buckland & White (2004, p.20):

> A sustainability literate person is able to: understand the need to change to a more sustainable way of doing things; have sufficient knowledge and skills to decide and act in a way that favours sustainable development; and recognise and reward other people's decisions and actions that favour sustainable development.

The term sustainability and sustainable development for that matter bares a particular degree of ambiguity and subjective meaning as it is merely an ideal that cannot possibly be identical for all (Pittman, 2002). Barsan, Nastasescu and Barsan (2011) attempt to describe the "Strong model of Sustainable Development." (p.284). This strong model highlights the dependency of the economy on society and society on the environment. It reveals that not all societal activities are concerned with economy however all societal activities are dependent on at least one aspect of the environment.
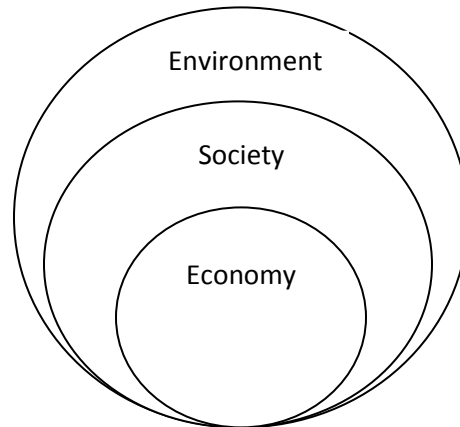
**Figure 1.** Strong Model of Sustainable Development

(Barsan et al., 2011, p.284)

This strong model of Sustainable Development features in two documents crucial to ESD, Agenda 21 (United Nations Conference on Environment and Development [UNCED], 1992) and the United Nations Decade of Education for Sustainable Development (UN, 2002). Agenda 21 was informed by the recommendations of the Tbilisi Declaration. In analyzing the Tbilisi Declaration (1978) main competencies for an Education oriented towards sustainability are stipulated. These competencies include the understanding that nature is a complex system that involves the interdependence of the physical, social economic and cultural spheres; a realization that local decision making has global impacts; and socio-economic growth directly influences the biophysical environment. Skill competencies include the demonstration of agency towards solving environmental problems, using critical thinking and problem solving skills. Value and attitudinal competencies involve those related to environmental agency. The Tbilisi Declaration was more ecologically focused supporting the then named 'Environmental Education'. Years later and a more 'development' focused 'Education for Sustainable Development' was described.

Chapter 36 of Agenda 21, like in the Tbilisi Declaration, mentions educator and learner competencies. The knowledge competencies include the understanding that all disciplines should address the biological, socio-economic and human development needs; as well as support the integration of environment and development into all disciplines, addressing local issues. Skill

competencies include critical and creative thinking as teachers and learners become agents of change who solve environmental and development problems. Value and attitudinal competencies involve social agency and considering Alternate Knowledge Systems when addressing human development issues.

In 2002 at the World Summit for Sustainable Development (WSSD) it was recommended that a Decade of Education for Sustainable Development (DESD) be developed and implemented. The Decade was developed in 2005. The Decade (UNESCO, 2005) offers a long list of ESD principles, with the acknowledgement that educators in each context will interpret the principles slightly differently according to the values, needs and priorities of their unique context.

Education for sustainable development:
- is based on the principles and values that underlie sustainable development;
- deals with the wellbeing of all three realms of sustainability – environment, society and economy;
- promotes life-long learning;
- is locally relevant and culturally appropriate;
- is based on local needs, perceptions and conditions, but acknowledges that fulfilling local needs often has international effects and consequences; engages formal, non-formal and informal education;
- accommodates the evolving nature of the concept of sustainability;
- addresses content, taking into account context, global issues and local priorities;
- builds civil capacity for community-based decision-making, social tolerance, environmental stewardship, adaptable workforce and quality of life;
- is interdisciplinary. No one discipline can claim ESD for its own, but all disciplines can contribute to ESD;
- uses a variety of pedagogical techniques that promote participatory learning and higher-order thinking skills [critical and creative thinking].

(*ibid*, p.30-31)

A brief background of policy and literature assists in making meaning of the ESD analytical framework used to analyze policies.

### 3.3. A double-lens ESD analytical framework

A double lens analytical framework was developed to assist the analysis of policies that varied in purpose and style. The first lens of analysis searches to highlight the main goals and values (also known as the 'policy priorities') of each policy document. Once these are lifted and thus the essence of each policy is lifted, the second lens of analysis is applied. The second lens, elaborated in Table 2, scrutinizes the findings from the first lens analysis and aims to identify the degree to which these policy priorities address any of the ESD principles. The following figure represents a simplistic model of the double lens process of analysis.
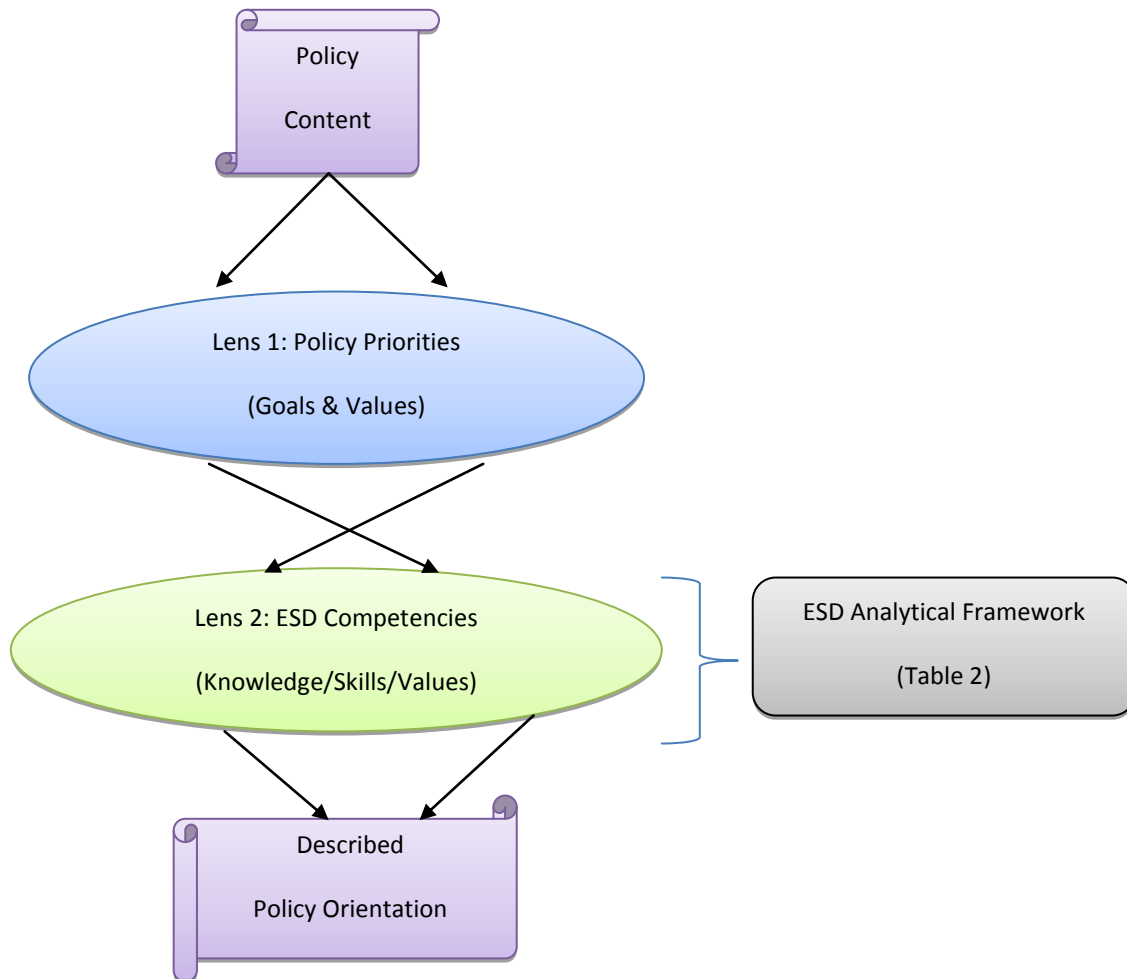
Policy Content

Lens 1: Policy Priorities

(Goals & Values)

Lens 2: ESD Competencies

(Knowledge/Skills/Values)

ESD Analytical Framework

(Table 2)

Described

Policy Orientation

**Figure 2. Double lens analytical process.**

Table 2, which lists the ESD principles, has been developed through an analysis of literature and major policies on Education for Sustainable Development (Bentham, 2013). These principles support learning in, about and for the environment, as they list knowledge, skill and value competencies.

**Table 2. An ESD analytical framework for Teacher Education related policy**

| Categories of ESD related themes | Sub-categories of ESD related themes |
|---|---|
| **ESD Teaching and Learning Approaches (TL)** | Development of Action Competence (AC)<br><br>1. Participation in decision making and community-based decision making (Eg. Debates and action plans)<br><br>2. Active learning approaches regarding Sustainability issues<br><br>3. Learner-centered approaches<br><br>4. Engagement in community and social development activities<br><br>5. Participatory and collaborative learning activities |
| | Alternate Knowledge Systems approach to sustainability (AK)<br><br>1. Considers different knowledge systems as an important starting point for exploring issues of sustainable development |
| **ESD Skills (S)** | Critical and Creative thinking (CC)<br><br>1. Explores ways of solving local contextually relevant problems<br><br>2. Considers society, economy and environment while problem solving<br><br>3. Carries out critical analyses of current knowledge and situations and their implications for future decisions |

| | |
|---|---|
| | Systemic thinking (ST)<br><br>1. Engage in looking for links to solve complex problems<br><br>2. Understand that systems are complex that usually involve more than the sum of their parts<br><br>3. Engaging in partnership building to address needs and solve problems |
| | Future thinking (FT)<br><br>1. Recognizing the need for change<br><br>2. Searching for a way to attain a sustainable future<br><br>3. Understanding the short and long term effects of current decisions.<br><br>4. The importance for renewing knowledge about evolving sustainability theory and models |
| **ESD Knowledge Competencies (KC)** | 1. Promotes an understanding of various sustainability issues both local and global E.g. Food security, economic and social justice, democracy, distribution and use of resources etc.<br><br>2. Promotes an understanding of how society, economy and the ecological environment play a part in these sustainability issues<br><br>3. Promotes the sustainable use of and care for natural resources<br><br>4. Promotes the understanding that all disciplines can explore ESD through their subject knowledge<br><br>5. Connects relevance of subject knowledge to society, environment and economy |
| **ESD Values (V)** | 1. Promotes an environmental stewardship<br><br>2. Promotes social tolerance and equity<br><br>3. Promotes collaboration in decision making and problem solving |

The double lens document analysis was carried out for all policies. General analytical notes were also made regarding noted patterns and/or statements within the policy that were relevant to the purpose of the study and provided added insight into the major thrusts of the policy itself.

## 4. Do Teacher Education related policies acknowledge ESD?

An analysis of teacher education and development policies and finally National school related policies is undertaken in much detail. Each policy is summarized with respect to its major focus and aim for education. Added to this insight is a more detailed analysis of the degree to which the major goals and values of each one of these policies motivates for an ESD address.

### 4.1. An analysis of Education White Paper 3

Education White Paper 3 (EWP3) demands the support of all stakeholders in Higher Education. The document looks mainly at the transformation of the higher education system in that it must be governed as a single national coordinated system to avoid the fragmentation that occurred in the past. It is important to understand that this historical document (Department of Education [DoE], 1997) set the scene for Higher Education transformation for the last 15 years and so although its' goals and values strongly reflect the change to a democratic state they have strongly determined where Higher Education is today. The discourse within the various chapters of the EWP3 is now explored.

The major challenge of the transformation process is summarized as being: "…to redress past inequalities and to transform the higher education system to serve a new social order, to meet pressing national needs, and to respond to new realities and opportunities" (DoE, 1997, p.3). Throughout the document 'national needs' are interpreted as being social and economic development needs. The major goals expressed throughout Chapter one of Education White Paper 3 serves to highlight the Challenges, Vision and Principles of the Higher Education transformation program. Chapter one of EWP3 includes: (1) the redress of past inequalities; (2) the achievement of societal transformation; (3) addressing the development needs of society; (4) the production of graduates that address the inefficiencies in the market place; (5) the development of a critical civil society that is able to compete in the global economy; (6) the ensuring of equitable access and retention of previously disadvantaged students; and (7) the

attainment of quality, institutional autonomy, academic freedom, public accountability, and democratization.

Phrases such as: social, economic, cultural, intellectual life, strengthen country's enterprises, services, infrastructure, socially responsible, contributing to national development, national growth, global competitiveness, continuous technological improvement, needs of industry and social reconstruction, all clearly show the goals and values of the HEI transformation program. Nowhere is it mentioned that the environment and the sustainable use of its resources is a focus in the social and economic development plight. The HEI transformation program is solely concerned with meeting the moral, political, social and economic demands of the new South Africa.

Chapter two of the EWP3 looks at 'Structure and Growth', chapter three 'Governance' and finally chapter four covers 'Funding' structures and procedures that support the documents main goals and vision. Throughout these remaining chapters of the EWP3, phrases such as: 'social equity', 'new social order', 'societal transformation', 'social redress', 'equity and justice', democratic society', occur no less than 60 times in the 50 page document and reflect the major goals and values of the document. Social equity and justice is a priority in the document along with economic development interests which is referred to no less than 37 times. It is not a surprise considering the fact that this document was compiled three years after the new democratic government was appointed and before 'sustainable development' became a buzz word in 2002.

Essences of ESD can be found in the language of the Education White Paper document. An example is when the document mentions supporting democracy through educational programs that promote critical and creative thinking and cultural tolerance, and contributing to the advance of knowledge in order to address diverse problems in South African contexts. Also when the document mentions ensuring a high-level research capacity, that promotes intellectual inquiry and technological and social development; develop student's social responsibility and awareness to social and economic development through community service programs; produce graduates with the qualities of lifelong learning, critical, analytical, problem-solving and communication skills as well as ability to deal with change and diversity, these are all part and parcel of ensuring sustainable development. The issue however is that sustainable development can never be

achieved if the 'environmental development' component is missing. Thus, even though there is frequent focus and mention of social development and economic development initiatives, all of that is futile if we have failed to recognize that it must exist within an environment that has limited resources. Therefore when the White Paper mentions that Curricula must be reviewed for its content, relevance, design and delivery, it is clear that the context for 'relevance' involves that of social and economic development and social equity and redress. Table 3 reveals a summarized version of the double-lens analytical process. Here the degree to which Education White Paper 3 motivates for ESD may be clearly observed.

**Table 3. A double-lens analysis of EWP3**

| Education White Paper 3 – A double-lens analysis | |
|---|---|
| **Lens 1 Analysis** | |
| *Goals* | *Values* |
| - Redress past inequalities<br>- Meet national social and economic needs<br>- Produce graduates to meet market needs<br>-Develop critical civil society to compete globally<br>-Ensure equitable access and retention of students<br>-Meet the social, moral, political and economic demands of a new SA<br>-Promote research capacity<br>-Promote students responsibility to social and economic development through community development programs | - Social development (equity and justice)<br>- Economic development<br>-Global competitiveness<br>-Democracy<br>-Social redress<br>-Quality<br>-Institutional autonomy<br>-Public accountability<br>-Academic freedom<br>-Critical and creative thinking<br>-Cultural tolerance<br>-Addressing diverse South African problems |

| **Lens 2 Analysis** | | | |
|---|---|---|---|
| *Teaching and Learning Approaches (TL)* | *ESD Skills (S)* | *ESD Knowledge Competencies (KC)* | *ESD Values (V)* |
| -Indicates desire for students to participate in community based decision making and activities(AC1 & AC 3) | -Indicates that students should be involved in locally relevant problem solving (CC1) YET only indicates social and economic related problems<br>-Indicates that lecturers involve industry collaboration (ST3) | -Indicates the importance of understanding local and global issues YET only related to social and economic development (KC1) | -Promotes social tolerance and equity (V2)<br>-Promotes collaboration in decision making and problem solving (V3) |
| **Policy Orientation (0/1/2/3)** | | | **2** |

**Policy Orientation Key**

| Level | Description |
|---|---|
| 0 | No ESD orientation described in the policy |
| 1 | Some ESD elements are described but not in a manner that will ensure ESD address/ ESD is only expressed through content OR methodology |
| 2 | Many/Most of the ESD elements are described in the policy yet the strong model of sustainable development is neglected in that the three pillars of sustainability are not all present or not conceptually interlinked |
| 3 | ESD elements are all present in a manner that recognizes the strong model of sustainable development |

The Table serves as an example of how the double-lens analytical process was applied to all policies.

## 4.2. An analysis of three teacher education related policies in South Africa

The policies were read carefully using the double lens analysis tool, however any statement that also (1) indirectly suggested an element of ESD; (2) revealed an obligation to realize an ESD related principle; or (3) presented an opportunity for ESD orientation, was acknowledged. Any silences and/or fragmented sustainable development perspectives have been highlighted and discussed. The table indicating the summarized analysis for the three teacher education related policies can be viewed in Appendix I.

### 4.2.1. The National Policy Framework for Teacher Education and Development in South Africa

An analysis revealed that some ESD elements are described but not in a manner that will ensure holistic ESD address. The National policy orients teacher professional development to focus on equipping teachers to address social inequities and to develop social tolerance. Although the policy often referred to a quality education, the policy never defined the term nor did it provide any useful elaboration. The policy reinforces self-directed and continuing professional development, even though it does not indicate which specific areas this development may focus upon. More detail of the analysis may be viewed in Appendix I.

### 4.2.2. The Higher Education Qualifications Framework for Teacher Education

The analysis of this policy revealed that many ESD elements are described in the policy yet the strong model of sustainable development is neglected in that the three pillars of sustainability are not conceptually interlinked. The policy outlines the minimum requirements for teacher education qualifications in terms of the minimum set of competencies and the knowledge mix (disciplinary, pedagogical, practical, fundamental, situational) that should be developed. It is emphasized that educators need to be able to deal with social diversity and equity, whilst being researchers and curriculum developers. The framework encourages the development of critical and creative thinking and the solving of contextually relevant problems, which are described as social issues. Teachers are encouraged to incorporate alternate knowledge systems and to manage social diversity in their teaching. Teachers are also encouraged to engage in learner

relevant teaching and learning approaches as well as develop a critical understanding of community and environmental development issues. Teachers are not encouraged to engage in the complexity of the interrelationship of social, economic and environmental issues and they are not encouraged to actively engage in addressing environmental issues which connect to the social and economic pillars.

### 4.2.3. The Integrated Strategic Planning Framework for Teacher Education and Development in South Africa (2011-2025)

An analysis revealed that some ESD elements are described but not in a manner that will ensure ESD address. The policy focuses on the sustainable quality improvement of teaching and learning through continuing professional development opportunities. The need to improve teacher knowledge, competence and professionalism is emphasized. The policy promotes the idea of developing professional learning communities (PLC's), placing the responsibility of professional development on the shoulders of teachers. However as indicated in the analyses of the CAPS document, ESD is not effectively indicated. Therefore the likelihood for PLC's to effectively develop ESD, is slim. Finally the policy places a strong emphasis on 'Social tolerance and equity': via the Education for All initiative (which aims to improve Early Childhood Development with regards to literacy and numeracy especially for learners in rural areas).

### 4.2.4. A broad analysis of three teacher education related policies

Reflecting more generally on the Teacher education and development policies it is found that referrals to a 'quality education' and 'higher order thinking skills' are often left undefined. The *National Policy Framework for Teacher Education and Development in South Africa* tasks teachers with the responsibility of self-directed professional development, in identifying the areas in which they themselves need to develop. One has to ask: if ESD is not a national focus and thus not a convincing curriculum focus, in what way can we hope for teachers to identify this area as a shortfall in their practice, thus qualifying a need for further development?

The *Higher Education Qualifications Framework for Teacher Education* represents the first time environmental development and sustainability is mentioned in the policy analysis process. The framework advises that the 'knowledge mix' (disciplinary, pedagogical, practical, fundamental, situational) be used to design learning programmes. It is suggested here that ESD offers a

functional way of applying the knowledge mix concept to any module and teacher education programme. What was noted to be missing from this policy in order to realize a conscious ESD focus was the integration of ESD knowledge, skills and values into this 'knowledge mix'.

The *Integrated Strategic Planning Framework for Teacher Education and Development in South Africa (2011-2025)* much like the National Policy Framework places the responsibility of professional development largely on the practitioners' shoulders, by suggesting the forming of Professional Learning Communities (PLCs). It can be expected then that teacher professional development will be concerned with the understanding and implementation of the curriculum. It seems then that PLCs focusing on ESD implementation will only begin to establish themselves once the prioritizing of an ESD orientation in the curriculum itself takes place. Time and again, throughout the policy analysis process, reference to social tolerance and equity is fore grounded, however the complex interrelationship between society and the environment is never addressed. Education seems to be more about human development and less about sustainable development which is concerning.

## 4.3. An analysis of UMALUSI and CAPS

The following section looks at the National Qualification Framework (NQF) levels 1-4 that covers Grades R till 12. The UMALUSI qualifications framework which provides insight into the purpose of these NQF levels, are explored for evidences of direct and/or indirect support or guidance for an ESD. The CAPS documents which are based at the practical school level are also explored for more direct principles of ESD such as those indicated by the developed ESD framework.

### 4.3.1. UMALUSI

An analysis of UMALUSI policy revealed that not all aspects of ESD are engaged in a meaningful and interlinked manner. Social and economic development is the focus of this policy even though goals do indicate a focus on being critical and active citizens who are environmentally respectful. However the strong focus is on equipping learners with discipline-related knowledge and skills and preparing learners for general citizenship and the workforce. Education for All is another major focus of the policy. Education for All is a program that aims to improve literacy and numeracy especially amongst individuals who have been denied access

to a 'quality education'. Although environment is referred to, it is not reiterated and emphasized throughout the policy discourse.

### 4.3.2. Curriculum Assessment Policy Statement

An analysis of the CAPS document showed an orientation towards providing educators with a set of guidelines about the subject, its main teaching and learning objectives, an explanation of how the curriculum is organized into its content and a list of the skills that should be developed. A deeper analysis of this guiding document revealed that: (1) learner centered approaches were advocated in the goals, however these approaches were seldom supported throughout the document; (2) active learning approaches and community involvement was not supported; (3) the covering of indigenous knowledge systems barely featured in the description of the content to be covered; (4) even though the document did acknowledge the idea that systems are complex and involve more than the sum of their parts, very little attention was paid to how society, economy and environment should be considered during problem solving; (5) futures thinking by reflecting on the long and short term effect of decisions was recognized. However the major emphasis was the development of knowledge competencies. The content coverage did promote the sustainable use of resources in various instances as well as the consideration of one or two of the pillars of SD when attempting to understand local and global sustainability issues. However an understanding of how all pillars tightly interlink when exploring SD issues was not promoted.

Very well presented in the doc was: the connecting of subject knowledge to society, economy and environment, to show its relevance (KC5) -All three values were presented: the promotion of environmental stewardship, promotion of social tolerance and equity and the promotion of collaboration in decision making and problem solving (V1-3), HOWEVER environmental stewardship was the most highlighted yet the least supported by activities. A lack of action competence development and activities showed the lip service nature of the mentioned value.

### 4.3.3. A broad analysis of UMALUSI and CAPS

The National School related policies namely *UMALUSI* and *CAPS* provided elaboration for all higher education and teacher education and development policies, providing the meat for what was referred to as 'quality education' and 'higher order thinking skills'. The limitations of the

content analysis of the national school curriculum policies is that only two national curriculum statements (Science and Technology for Grades 4-6 and Natural Science Grades 7-9) have been analyzed. When the UMALUSI quality framework refers to creating a holistic citizen, one that is socially responsible, compassionate and environmentally respectful, it may be argued that this intended purpose and outcome for level 1 of the NQF can only be achieved through the holistic education system, and not within one specific discipline or subject within a particular grade. A counter argument proposed here, is that if the natural sciences and technology learning areas do not promote this focus in a convincing manner, to what degree can we expect other learning areas and subjects (less traditionally linked to issues of sustainable development) to develop attributes of an ESD?

UMALUSI referred to supplementary goals which showed relevance to some of the ESD principles. Although these goals did not allude to the important interaction with SD issues and the three pillars of Sustainability, the goals did indicate emphasis on being critical and active citizens who are environmentally respectful. The responsibility of addressing these goals is given to each teacher regardless of the discipline.

The CAPS analysis revealed that in most instances when ESD principles were indicated in the policy, these were done in a general sense and not with specific reference to sustainable development issues. A curriculum that achieves this will always narrowly yet crucially fall short of an adequate ESD. A particular finding revealed that authentic problem-solving was never mentioned in the content and assessment tables in Section 3. Rather contrived scientific and technological problems were more popular, thus removing the elements of active agency and critical thinking. Another observation made within the Science and Technology CAPS was the almost complete neglect of ESD address in both Grades 4 and 5, the fundamental years for the development of ESD Skills and Values.

## 5. Conclusion

Teaching and learning needs to become more learner-centered and involve participatory and activity-based approaches to learning about sustainable development issues (SADC, 2005) Policy guiding teaching and learning in South Africa has attempted to make education more meaningful and relevant yet in more valuable ways it falls short of accomplishing this. Findings

reveal that concerns regarding the over-simplification of sustainable development issues and inability to grasp and engage the interrelationship of the three pillars of sustainability (Jickling, 2004) are persistent in all policy documents, especially the CAPS where content fails to "focus on core concepts necessary to understand the issues, and social innovations that provide ways forward and 'out of' or 'in response to' the issues presented..." (ADEA, 2012, p.27-28)

Reflecting on the Teacher education and development policies, referrals to a 'quality education' and 'higher order thinking skills' are often left undefined, leaving much open to interpretation. Both the National Policy Framework for Teacher Education and Development in South Africa and the Integrated Strategic Planning Framework for Teacher Education and Development place professional development on the shoulders of practitioners. To restate the concern from earlier regarding self-directed professional development, one has to ask: if ESD is not a national focus and thus not a convincing curriculum focus, in what way can we even hope for teachers to identify this area as a shortfall in their practice, thus qualifying further teacher development?

Throughout the policy analysis process, reference to social tolerance and equity is fore-grounded. The complex interrelationship between society, environment and the economy and this relationships' role in considering an Education for Sustainable Development is, however, not being highlighted or discussed. Education seems to be more about human development (focusing on the social and economic pillars) and less about holistic sustainable development. This is contradictory to what UNESCO (2010) describes as the crucial dimensions to understanding the reality and complexity of sustainable development;

> …the international community needs to understand green economies as sustainable societies, creating a balance between environmental, societal, cultural and economic considerations in the pursuit of an enhanced quality of life. A key advantage of the concept of sustainable development is that, through its social, economic and environmental pillars as well as its cultural and ethical dimensions, global challenges are understood in all their complexity. (p.5)

Analyzing the major foci of each policy revealed that the policies in some instances weekly address the environmental pillar, yet strongly address the social and economic pillars. A casual look at the policy may create the illusion that all three pillars are being addressed. However, the drastic imbalance results in a more human development focus, and less of human-environmental development equilibrium. It is not enough to design and implement an ESD oriented program

when the very policies that guide teaching and learning in South Africa are contrary to a holistic realization of South Africa's current sustainable development issues. An ESD program becomes sustainable within an education system when it has complimentary supporting educational structures. South Africa has learnt from Outcomes Based Education days that if aspects such as the training and retraining of teachers, design of new learning resources, opportunities for teacher dialogue, new forms of assessment, parent involvement, school buy-in etc., do not support the innovation, then it's implementation cannot be successful (Jansen & Christie, 1999) For a reorientation of a curriculum focus, comes the need for a reorientation of the education system, meaning its fundamental supporting policies.

Education White Paper 3 revealed a strong emphasis on social and economic development and equity, neglecting to realize that both social and economic development exists in an environment that has limited resources. The National Policy Framework for Teacher Education and Development in South Africa focused on teacher professional development that equips teachers to address social inequities, manage diversity and provide a quality education. Quality education remained undefined within the policy. The Higher Education Qualifications Framework for Teacher Education focused on developing critical and creative thinking to solve social problems; promotion of social equity and tolerance to deal with diversity and respect others; implementation of learner relevant teaching and learning approaches that considers learners knowledge systems. The policy also mentioned briefly about the development of a critical understanding of community and environmental issues. However when it came to defining the Knowledge mix that the teacher education program was expected to have there was no mention of the integration of any ESD related knowledge, skills and values. The Integrated Strategic Planning Framework for Teacher Education and Development in South Africa (2011-2025) solely emphasized social tolerance and equity and never the interrelationship between society, economy and the environment and the associated issues. The constant emphasis on social equity and economic development is not surprising considering South Africa's harsh Apartheid History and high rate of HIV/AIDS and poverty. Even more reason for an Education that spends time understanding and addressing the complexity of such issues. The lack of ecological discourse in policies is an indicator of its lack of priority and status in the implemented environment. The ecological pillar needs to support and be supported by the social and economic pillars within policy discourse.

When the UMALUSI quality framework refers to creating a holistic citizen, one that is socially responsible, compassionate and environmentally respectful, it may be argued that this intended purpose and outcome for level 1 of the NQF can only be achieved through the holistic education system, and not within one specific discipline or subject within a particular grade. A counter argument proposed here, is that if the natural sciences and technology learning areas do not promote this focus in a convincing manner, to what degree can we expect other learning areas and subjects (less traditionally linked to issues of sustainable development) to develop attributes of an ESD? According to UNESCO (2010) ESD is an education that requires cross-disciplinary attention and implementation and if teachers insist ESD to be the focus of disciplines other than their own, then the ESD focus is lost before it had a chance.

The CAPS analysis revealed that in most instances when ESD principles were indicated in the policy text, these were done in a general sense and not with specific reference to sustainable development issues. A curriculum that makes no direct connection between discipline knowledge, skills and values and the address of sustainable development issues, more often than not will narrowly yet crucially fall short of an adequate ESD. A particular finding revealed that authentic problem-solving was never mentioned in a single case in the exploration of the content and assessment tables in Section 3 but rather contrived scientific and technological problems were more popular. Another alarming observation occurred within the Science and Technology CAPS which was the almost complete neglect of ESD address in both Grades 4 and 5, the fundamental early years for the development of ESD Skills and Values. It would seem that although significant attention is given within the content outline (Section 3), to SD issues address, a lack of policy support with regards to defining and emphasizing complimentary Teaching and Learning Approaches and ESD skills is provided. The NS CAPS document is more likely to support an education 'about' SD and not so much an education 'for' SD.

The neglect of active competence in the selection of teaching and learning approaches does not provide good opportunities for citizens to apply their learning to a variety of contexts; solve relevant problems and engage in collaborative decision making. A common phenomenon persists as Tilbury (2002) states that educators do not see ESD as a process of learning as they mostly reduce it to content that must be incorporated into relevant subject specializations. Therefore it can be said that curriculum policy that also fails to support ESD as a process of learning, makes

the realization of an adequate ESD more challenging. In conjunction with this, the neglect of how each discipline needs to acknowledge the three pillars of sustainability is to deny the development of citizens who are able to understand the complex implications of decisions and the need for change in a way that is both socially and environmentally responsible.

Much essence within policy documents may be lost in translation between the intended and enacted curriculum. It is realized that there does exist a gap between the rhetorical and implemented policy (Smit, 2005) and that just because certain principles of ESD are not present or convincingly evident in educational policy, does not mean that these principles are not in fact implemented. However for ESD principles not to be considered consciously and/or even considered indirectly in educational policy is to crush the seed before it has been planted. This would mean denying ESD any opportunity to manifest itself in a way that is sustainably supported by policy structures.

Where some may argue that indirect application of some of these ESD principles is sufficient in order to claim that ESD is being addressed, this paper has argued otherwise. Rather ESD is an all or nothing type of education, relying on the realization of each of its principles in order to realize a holistic education. That is to say that relying more heavily on some of its principles than others, such as displayed in the policies analyzed here, is just as crippling.

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# Appendix 1

**Table 4.** An analysis of Three Teacher Education related policies in South Africa

| *4.2.1. The National Policy Framework for Teacher Education and Development in South Africa* | |
|---|---|
| **Policy Foci** | **Particular Alignment/misalignment to ESD** |
| <ul><li>Enhancing teacher professional competence and performance</li><li>Social equity issues</li><li>Teacher demand and supply issues</li><li>Procedure and requirements for teacher education program recognition</li><li>Conceptual and Pedagogical needs</li><li>Management and Quality assurance of the new continuing professional teacher development system</li><li>Supporting policy by providing teacher support structures</li><li>Teachers responsible for self-directed professional development</li></ul> | <ul><li>Teacher professional development should equip teachers to address social inequities and tolerance.</li><li>"Diversity management"</li><li>No elaboration or definition of what was ever meant by a 'quality education'</li></ul> |
| Score: Some ESD elements are described but not in a manner that will ensure ESD address/ ESD is only expressed through content OR methodology | **1** |
| *4.2.2. The Higher Education Qualifications Framework for Teacher Education* | |
| **Policy Foci** | **Particular Alignment/misalignment to ESD** |
| <ul><li>Outlines the minimum requirements for teacher education qualifications</li><li>Describes the knowledge mix (disciplinary, pedagogical, practical, fundamental, situational) needed in teacher qualifications</li><li>Defines of a minimum set of agreed-upon competencies for Initial teacher education programs</li></ul> | <ul><li>Develop critical and creative thinking that explores ways of solving locally contextually relevant problems (said in context of social problems)</li><li>Alternate knowledge systems incorporated into learning: "incorporating situational and contextual elements"</li><li>Promotes social tolerance and equity by</li></ul> |

| | enabling teachers "to deal with diversity and transformation" |
|---|---|
| • Educators as curriculum designers, implementers and researchers. <br> • Address poor content and conceptual knowledge found amongst teachers <br> • Develop competencies that enable teachers to deal with diversity and transformation <br> • Satisfy the 7 roles of an educator | • Learner relevant teaching and learning approaches <br> • Developing a sense of respect and responsibility towards others. <br> • Develop critical understanding of community and environmental development issues <br> • Acknowledging that knowledge systems are complex and interlining |

| **Score:** Many/Most of the ESD elements are described in the policy yet the strong model of sustainable development is neglected in that the three pillars of sustainability are not all present or not conceptually interlinked | **2** |
|---|---|

### 4.2.3. *The Integrated Strategic Planning Framework for Teacher Education and Development in South Africa (2011-2025)*

| **Policy Foci** | **Particular Alignment/misalignment to ESD** |
|---|---|
| • Sustainable quality improvement of teaching and learning <br> • Provision of Teacher education to people of all races <br> • Improvement of teacher knowledge, competence and professionalism <br> • Teacher demand, supply and utilization in South Africa <br> • Policy alignment <br> • Need for Early Childhood Development practitioner development <br> • Need for Education Resource Centres | • Professional Learning communities are proposed putting responsibility on the practitioner – yet the CAPS curriculum does not indicate ESD effectively (see Table 4) <br> • Strong focus on 'Social tolerance and equity': via the Education for All initiative (which aims to improve Early Childhood Development with regards to literacy and numeracy especially for learners in rural areas). |

| **Score:** Some ESD elements are described but not in a manner that will ensure ESD address/ ESD is only expressed through content OR methodology | **1** |
|---|---|

**Table 5.** An analysis of UMALUSI and CAPS school based policy

| 4.3.1. *UMALUSI* | |
|---|---|
| **Policy Foci** | **Particular Alignment/misalignment to ESD** |
| <ul><li>Quality assurance for Grades R -12</li><li>"..the development of a single yet diverse general and further education and training sector that serves the needs of the individual, South African society and the economy" (2012, p.9)</li><li>Equip learners with discipline-related knowledge and skills and prepare learners for general citizenship and the workforce</li><li>Teacher to develop supplementary goals such as confidence, passion, multi-skilled, environmentally responsible, independent etc.</li></ul> | <ul><li>Social and Economic development focus</li><li>Supplementary goals are relevant to some of the ESD principles discussed yet do not allude to the important interaction with SD issues and the three pillars of Sustainability</li><li>However, goals do indicate emphasis on being critical and active citizens who are environmentally respectful.</li><li>Education for All – improve literacy and numeracy. 'Social tolerance and equity'</li></ul> |

| Score: Some ESD elements are described but not in a manner that will ensure ESD address/ ESD is only expressed through content and not methodology/ESD is only mentioned through methodology and not conceptually | **1** |
|---|---|

| 4.3.2. *Curriculum Assessment Policy Statements* | |
|---|---|
| **Policy Foci** | **Particular Alignment/misalignment to ESD** |
| <ul><li>Provides the general and specific aims of South African Curriculum, as a guideline for Educators.</li><li>Provides educators with: a definition of the subject; the main teaching and learning objectives for the subject; an explanation of how the subjects curriculum is organized into content and concepts; the time allocated for each area of the curriculum; the subjects specific aims; and a list of all the process skills that need to be developed</li></ul> | <ul><li>Learner centered approaches were mostly advocated (AC3). Other categories were very poorly supported in the body of the document even though mentioned in the goals of the first two chapters.</li><li>Active learning approaches and community involvement (problem solving and decision making) were not supported.</li><li>Indigenous knowledge systems barely featured in the covering of content.</li><li>Did not pay significant attention to how society, economy and environment should be considered</li></ul> |

|  | during problem solving |
|  | • Did consider analyzing current knowledge and situations and their implication for the future (CC3) |
|  | • Addressed the idea that systems are complex and involve more than the sum of parts (ST2) |
|  | • Placed much emphasis on observing the short and long term affects of current decisions (FT3) |
|  | • Knowledge competencies were the most thoroughly covered. |
|  | • Promoted an understanding of local and global sustainability issues, but not always using all three pillars and never looking at the interrelationship (KC1) |
|  | • Promoted an understanding of how society, economy and environment play a part in SD issues. Did not reveal all three pillars and the interlinking though (KC2) |
|  | • Promoted the sustainable use of resources (KC3) |
|  | • Very well presented in the doc was: the connecting of subject knowledge to society, economy and environment, to show its relevance (KC5) -All three values were presented: the promotion of environmental stewardship, promotion of social tolerance and equity and the promotion of collaboration in decision making and problem solving (V1-3), HOWEVER environmental stewardship was the most highlighted yet the least supported by activities. A lack of action competence development and activities showed the lip service nature of the mentioned value. |

| Score: Many/Most of the ESD elements are described in the policy yet the strong model of sustainable development is neglected in that the three pillars of sustainability are not all present or not conceptually interlinked | 2 |
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