

Do Educators in the Free State Province of South Africa Engage Learners Via Outcomes Based Teaching Styles?

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ABSTRACT Since the first democratic elections in 1994, education in South Africa has been characterized by an unprecedented process of transformation. Furthermore, a resurgence from the government, business, organized labor and providers of education and training emphasized the need for educational imbalances, which were prevalent in the country's rote learning/ traditional schooling system to be redressed and that equal educational opportunities should be provided for all citizens. This process signaled the introduction of Outcomes Based Education (OBE) within the National Curriculum Statement (South Africa's own unique curriculum response to OBE) which necessitated educators to be trained and teach in learner centered, activity based teaching methodologies. Through a quantitative study, administered to 344 postgraduate educators, enrolled for the course: Self concept development and Learning styles at the University of the Free State, researchers wanted to ascertain the extent to which teaching styles employed by these educators, are reflective of OBE teaching methodologies. Findings revealed that the majority of educators' are not engaging learners via OBE centred teaching styles and that they are still advocating "traditional/rote learning" teaching styles. Furthermore, we conclude that the National Department of Education needs to empower and capacitate educators in learner centered teaching styles.

INTRODUCTORY AND CONTEXTUAL BACKGROUND

Naicker (1999) postulates that the advent of the first democratic elections in 1994 in South Africa, saw wide-scale change and transformation taking hold throughout the country. The unification of 17 education departments into a single ministry of education was paramount to this process of change. The most significant factor that brought about this change in education was the introduction of Outcomes based education (OBE) in South Africa. The change from a predominantly rote-learning Apartheid education system which was content-based, inflexible, oppressive, fragmented and segregated in terms of race to that of Outcomes based education (OBE) in 1997, required educators to make a paradigm shift (NDE 2003). The methodological educator training approaches employed by various Apartheid institutions grounded peoples' thinking, experiences, beliefs and underlying values to a particular paradigm (Naicker 1999; University of Western Australia 2002). A fundamental shift towards the new, liberating Outcomes based education was needed, which would seemingly necessitate a change in theo-

retical frameworks, methodology and teaching practices (teaching styles, learning styles, teaching methods, etc.), the way educators teach, the teaching and learning strategies they design and apply, and the assessment approaches they use. This new approach to teaching and learning requires radical changes in the learning environment and the levels of responsibility expected of teachers in South Africa (Aldridge et al. 2006).

A question that naturally arises then is: To what extent did educators make a paradigm shift towards OBE?

Since its inception in 1994, the post-Apartheid government had to oversee the process of transformation. The imperative to transform South African society by utilizing various transformative tools stems from a need to address the legacy of Apartheid in all aspects of human activity and in education in particular (National Department of Education NDE 2003; Alexander 2004). Furthermore, a resurgence from the government, business, organized labour and providers of education and training emphasized the need for educational imbalances which were prevalent in the country's rote learning/ traditional schooling system to be redressed, and that equal educational opportunities were to be provided

for all citizens (NDE 1997a). Van der Horst and McDonald (1997) concur with the latter statement and are of the opinion that any new approach to teaching and learning within the South African context should be geared at developing critical, creative, responsible and democratic citizens. In this regard, the NDE (2002) postulates that OBE within the context of South Africa, is founded on the principles of democracy, human dignity, equality and social justice. Jansen and Christie (in Botha 2002), aptly demonstrate the latter point: 'It goes right to the heart of the ongoing process of transforming this country into a democracy and shedding the legacy of Apartheid'.

Given the historical context of the South African system, an unpacking of OBE could provide much needed clarity regarding the shift to an Outcomes-oriented approach to teaching and learning.

The aim of this study is to ascertain the extent to which teaching styles employed by educators trained in Outcomes based education (OBE), are reflective of Outcomes based teaching methodologies.

UNPACKING OUTCOMES BASED EDUCATION

Spady and Marshall (1994) Towers (1996) and Waghid (2003) postulate that OBE is a learner-centred, results-driven, collaborative, flexible, outcome-based, open-system, empowerment-orientated approach to schooling. OBE is a means of focusing and organising everything in an education system around that which learners must be able to do at the end of their learning experience, in view of achieving certain outcomes. Various scholars worldwide (Chion-Kennedy 1994; Kudlas 1994; Coetzee and Le Roux 1997; Spady and Schlebusch 1999) view OBE as an approach whereby prevailing problems in education are addressed so that success can be ensured for all learners. The following are some aspects that are fundamental to OBE: that all learners can learn and achieve success, while the rate and degree of success can differ from learner to learner; what learners should learn is clearly formulated; successful learning forms the basis of further success in learning and educators must equip students with the knowledge, skills and values necessary for success within a competitive labour market.

Outcomes based education (OBE) as a method

of teaching focuses on what learners can actually do once they have been taught. All curriculum and teaching decisions are made based on how best to facilitate the desired outcome. This leads to planning in reverse of traditional educational planning. The desired outcomes are selected first and the curriculum is created to support the intended outcomes (Lorenzen 2004). Spady and Marshall (1994) contend:

Outcomes are clear, observable demonstrations of student learning that occur after a significant set of learning experiences. They are not values, attitudes, feelings, beliefs, activities, assignments goals, scores, grades, or averages, as many people believe.

Outcomes based education (OBE) is further perceived as an approach that juxtaposes traditional teaching. The latter is where teaching is conceived as a process of imparting knowledge or subject content to the learners. Teaching styles and methods therefore seem to be expository, and assessment opportunities are characterised by uncritical regurgitation of content and knowledge. This necessitates that the educator, as far as possible, has to ensure that the needs of each and every learner are accommodated through a variety of teaching methods and assessment techniques. OBE is a learner-centred learning philosophy that focuses on measuring learner performances/academic achievements, called *outcomes*. OBE was a popular term in the United States during the 1980s and 1990s. It is also called *standards-based education reform*, *mastery education* or *performance-based education*. Outcomes based teaching styles have been adopted in significant ways in the US, Australia, South Africa, Hong Kong, and other countries (Cretchley and Castle 2001; Sibubashe 2005; Wikipedia 2009).

Several insinuations to the failure of Outcomes based education (OBE) in South Africa have been advanced. Some researchers argue that it is the implementation of OBE that is flawed and not the approach itself. In this regard the National Minister of Education, Naledi Pandor (2008) echoed the following sentiment:

The National Outcomes-based Curriculum has been roundly criticized by many learned commentators. It will continue to be criticized largely for our failings in implementation and interpretation, and not because it is a bad curriculum.

Evident from the above statement, it may be

assumed that several challenges do inhibit the paradigm shift of educators in South Africa. According to Gultig (1998), Du Plooy (1998) and Glatthorn (1993), aspects like the incapacity of educators to translate OBE policy and methodology; insufficient and inadequate training in OBE classroom practices; the lack of physical and human resources; big class sizes and overcrowded classes; outdated and the non-availability of educational media; the lack of knowledge regarding learning and teaching styles; the shortage of learning and teaching support material are among the challenges impeding the effective implementation of OBE. These developments in themselves may serve as adequate motivation for educators who are still applying traditional rote-learning teaching and learning practices in outcomes-based classrooms.

OUTCOMES BASED TEACHING STYLES

Grasha (1996) describes a teaching style as a set of certain characteristics that plays an important role in several aspects of our teaching. He further indicates that teaching style represents those enduring personal qualities and behaviour that appear in how educators conduct their classes. Thus, teaching styles define educators, guide and direct their instructional processes, and also influence learners' ability to learn. Grasha (1996), Hoyt and Lee (2002) Jacobs et al. (2004) argue that a teaching style refers to the way various teaching approaches are combined to produce an optimal outcome in learning. This idea implies that teaching strategies (teaching methods, media, learning content and learner activities) and approaches are all elements of teaching styles and are used differently across the spectrum of teaching styles.

The selection of appropriate teaching styles is another aspect crucial to improving the effectiveness of teaching and instructional experiences (Winnick 1990). Learners, who are taught in a manner incompatible with the way they learn, learn less and express less satisfaction with the effectiveness of the educator, while learners experience success in learning when teaching styles are compatible with their learning styles (Ndaqala 1994; Ford and Chen 2001; Isemonger and Sheppard 2003; Dasari 2006).

Grasha (1996) claims that these styles tend to cluster into four different groups/patterns (Expert/ Formal Authority; Personal Model/

Expert/ Formal Authority; Facilitator/ Personal Model/ Expert and the Delegator/ Facilitative/ Expert Personal Model) and subsequently also influence educators' use of various instructional methods. He also suggests that these groupings differ depending on which student learning styles they best support. Other factors which might influence the appropriateness of a given style cluster grouping include learners' capabilities to handle course demands; learners' need for the educator to directly control classroom tasks, and the educator's and learners' willingness to build or maintain relationships.

In carrying out this selection, Grasha (1996) cautions that it should not be based on personal whim or how the subject was previously taught, but should be based on a consistent philosophy of teaching that helps to inform educators about which teaching styles to adopt. Additionally, the selection of teaching styles should be applied regarding the course content, number and maturity levels of learners, physical environment, while also considering the learning styles that are predominant in the class. Fraser and Niemann (1996) and Grasha (1996) add more factors that should be considered when selecting teaching styles, namely: class size, time allocation, and subject matter.

Knowing various teaching styles and an ability to move deliberately from style to style as the objectives change from one teaching episode to another is important for effective teaching (Mosston and Ashworth 1990; Winnick 1990; Grosser 2007). Conti and Welborn (1986) concur with the latter statement and are of the opinion that more learning takes place when learner-centered methods are followed. These methods include activities that make learners take responsibility for their own learning, linking learning experiences with personal experiences, involving the learner actively in the teaching process and promoting adaptability in the classroom. The selection of an appropriate teaching style could therefore be crucial to successful instructional experiences in Outcomes-based classrooms.

OBE-oriented educators consider the individual needs of each learner and provide opportunities for each learner to achieve at a variety of levels. This is made possible, according to Lam (2006), by clarifying the understanding and articulation of intended learning outcomes, facilitating the design of an effective curriculum

and appropriate assessments techniques and assisting in planning the learning process for individual learners. According to Kulinna and Cothran (2003) the increasing importance of educators' mastery of various teaching styles is related to a number of developments in education. The contemporary constructivist nature of learning suggests traditional educator-centred styles are less likely to optimize learning. Whether viewed from a socio-cultural or individually focused constructivist theory, a learner's engagement is essential to learning likely promoted via a variety of teaching styles. Secondly, the increasing diversity of learners and educators' improved understanding of how to meet the learners' wide variety of learning needs. Furthermore, learners vary in learning styles (Curry 1999), intelligence (Armstrong 1994), as well as self-regulation (Zimmerman 1990). Hongsfeld (Kulinna and Cothran 2003) suggests that by using more teaching styles, educators can increase learners' academic achievement and thus meet increasingly higher standards as mandated by education reform initiatives such as OBE. The authors divided the teaching styles of the educators into 2 broad clusters, namely the facilitative cluster in which the educator utilizes the principles of the OBE methodology versus the formal authoritative teaching style which utilizes the characteristics of the traditional rote-learning approach. This could also be viewed as learner centered approach versus educator centered approach.

METHODOLOGY

Sample

This study used an explanatory research approach in order to determine what teaching styles educators were using in their classrooms. The study was conducted among Free State post graduate educators enrolled for a course in self concept development and learning styles at the University of the Free State to determine to what extent they employ teaching styles that are reflective of OBE in their classrooms. Educators were purposively sampled. In 2008 there were 434 educators enrolled for this course and each person was given a questionnaire to complete during one of the contact sessions. There were 343 (79%) fully completed and returned questionnaires and these were used for analysis. According to Sekaran (2000), a sample of 205 is

needed if there is a universe of 440, and our sample of 343 respondents, far exceeds this. This then renders our study a high degree of validity.

Instruments

The Grasha-Reichmann teaching style inventory was administered to the educators. Biographical information of the educators, such as their gender, years of teaching experience, their teaching qualifications and the subjects they teach, were also included in the questionnaire. The teaching style inventory consists of 40 items, scored on a 5 - point Likert scale.

RESULTS

The statistical analysis was conducted in the Statistical Package for the Social Sciences (SPSS 11 for windows 2003). Chi-square analyses were conducted since the data was nominal. Cronbach's alpha coefficient was used to determine the internal consistency of the Grasha-Reichmann teaching style inventory. This was found to be 0.9484, which showed a high internal consistency.

The female educators made up the bulk of the sample with 74.6% whilst the male educators represented 22.2% of the sample. Three percent (3%) of the educators did not indicate their gender. The educators' ages ranged from 23 to 59, with the mean age of the sample being 36.5 years. The mean number of years teaching in school for the sample was 16.9 years. Age and teaching experience variables were collapsed into 4 categories. The results showed that 83.1% of the educators indicated that they use the formal authority model and 16.9% of the educators indicating they use the facilitative method in their classrooms. This is an interesting result since it appears that the educators are not implementing the principles of the OBE methodology in their classrooms. The characteristics of the sample are displayed in table 1.

Since the data was ordinal in nature, non-parametric statistics were conducted. The Chi square statistic is used to examine the differences between the respondents and the teaching style that they prefer. None of the independent variables yielded significant results. The results showed that gender did not play a role in using a specific teaching style ($\chi^2 = 1.574$, $df = 2$, $p = .455$). A study conducted by Soliven (2003) to determine the teaching styles of physics educators, found

Table 1: Characteristics of the sample (n = 343)

<i>Characteristics</i>	<i>Facilitative/ delegator N (%)</i>	<i>Formal authority N (%)</i>
<i>Gender</i>		
Female	40 (12.0)	61 (18.4)
Male	15 (4.5)	216 (65.1)
<i>Age Groups</i>		
20-29	5 (1.5)	47 (14.2)
30-39	32 (9.7)	108 (32.6)
40-49	11 (3.3)	102 (30.8)
50-59	6 (1.8)	20 (6.0)
<i>Teaching Experience</i>		
0-10 years	24 (7.4)	108 (33.1)
11-20 years	22 (6.7)	126 (38.7)
21-30 years	9 (2.8)	32 (9.8)
31+ years	1 (0.3)	4 (1.2)
<i>REQV</i>		
13	1 (0.3)	14 (4.1)
14	49 (14.3)	216 (63.0)
15	3 (0.9)	26 (7.6)
<i>Subject</i>		
Languages	5 (1.9)	34 (12.6)
Life orientation	4 (1.5)	14 (5.2)
Mathematics	9 (3.3)	40 (14.9)
Economic management	5 (1.9)	19 (7.1)
Social sciences	3 (1.1)	19 (7.1)
Natural and life sciences	4 (1.5)	21 (7.8)
Technology	4 (1.5)	13 (4.8)
Arts and culture	1 (0.4)	10 (3.7)
Literacy, numeracy	5 (1.9)	14 (5.2)
All subjects in foundation phase	4 (1.5)	35 (13.0)
Intermediate subjects	-	1 (0.4)
Support teaching	-	5 (1.9)
<i>Phase of Teaching</i>		
Foundation phase	16 (4.7)	80 (23.7)
Intermediate phase	15 (4.5)	57 (16.9)
Senior phase	17 (5.0)	52 (15.4)
FET phase	6 (1.8)	44 (13.1)
Inter and senior phase	2 (0.6)	25 (7.4)
Senior and FET	-	12 (3.6)
Inter and FET	-	1 (0.3)
Foundation and intermediate phase	-	4 (1.2)
Other	2 (0.6)	4 (1.2)

% were only calculated on actual responses, non responses were not taken into account

that female educators afforded the learners more interaction than their male counterparts. Another study employed by Aypay (2009), to ascertain teachers' evaluation of their pre-service teacher training, showed no significant difference was found amongst teaching styles when experimenting with different learning styles. Overwhelming support for the importance of different teaching styles exists. It also of utmost importance for educators to understand which styles are currently being used and how various styles

meet different educational outcomes (Kulinna and Cothran 2003).

The ages of the educator ranged from 22 – 59 years ($M = 36.5$; $sd = 10.63$).

Age was the only factor that yielded a significant result ($\chi^2 = 10.553$, $df = 3$, $p = .014$). It is understandable that older educators would prefer the formal authority teaching method, whereas the younger educators would prefer teaching styles that are reflective of Outcomes based education. The authors hypothesized that educators who were trained in the last 10 years would have employed outcomes based teaching style in their classrooms. Of the educators who had between 0-10 years of teaching experience, 81.8% of them used the formal authority teaching style in their classrooms, which means only 18.2% are using the facilitative teaching style in their classrooms. This is disconcerting since these are educators who recently underwent training and who are qualified in Outcomes based education. They should be the ones implementing teaching styles that are reflective of Outcomes based education. Seventy-two percent (72%) of the educators with teaching experience of 0 - 20 years preferred the formal authority teaching style. Only 18% of the educators preferred the facilitative teaching style. Zhang (2007a) indicates that older teachers were also more conservative in their teaching styles than were younger teachers.

The authors expected that subjects such as Life Orientation and Arts and Culture would require the educator to employ a facilitative role and that learners be active participants within the classroom. The results however did not show this. It appears that the subject which the educators teach does not necessarily influence the educators' choice of teaching style. In table 2 the results indicate this ($\chi^2 = 6.213$, $df = 12$, $p = .905$). There is no relationship between the subjects taught by educators and their preference of teaching style. This is contrary to a study by

Table 2: Chi square statistics and biographical variables

<i>Independent variables</i>	<i>Pearson chi-square (χ^2)</i>	<i>Df</i>	<i>p</i>	<i>ES Effective size</i>
Gender	1.574	2	0.455	0.068
Age	10.553	3	.014*	0.176
Subject	6.213	12	0.905	0.134
Teaching exp	1.355	3	0.721	0.063
Teaching phase	12.151	9	0.205	0.188
REQV	2.599	3	0.458	0.007

Zhang (2007b), which showed that science teachers tended to be more conservative than did humanities teachers. No significant result was obtained for the education phase of teaching and the preference for teaching style.

Academic teaching qualifications in South Africa are referred to as the Relative Education Qualification Value (REQV). AREQV 13 is a grade 12, a 2 year teaching qualification and a National professional diploma in education. To obtain a REQV 14 a person needs a national professional diploma in education (NPDE) and an advanced certificate in education (ACE). In order to qualify for a REQV 15, the person requires a bachelor's degree and a postgraduate certificate in education. In this study there was no significant result regarding the educational level of the educators and their preference for a particular teaching style ($= 2.599, df=3, p=.458$). According to Hojat and Xu (2004), effect size is an index to indicate the practical importance of the research. The effect size for chi square can be calculated either by directly using the statistic or it can be calculated by using the coefficient of contingency C .

In the coefficient of contingency C is used to determine the association between discrete measures in contingency tables such as in our study. Negligible practical importance was found, as reported in table 2. According to Cohen (1987), the following serves as a guideline for determining the practical importance of the results:

(SMALL, negligible practical importance)

(moderate practical importance)

(large, crucial practical importance)

The results of this study were surprising. Although Outcomes based education has been around for 11 years, educators still prefer the formal authority/personal model. This is in contrast to Outcomes based education in which South African education policy has been striving towards.

DISCUSSION

The current study intended to ascertain whether educators in the Free State province of South engage learners via outcomes based teaching styles. The findings revealed that educators have a preference to traditional rote-learning teaching styles. This is in contrast considering the fact that the OBE approach has been introduced into the South African education system since 1997. The findings are hardly

surprising. The United States of America is one of the countries that use OBE in their education system (in their case known as *mastery education or performance-based education*). Yet, according to Conti (2004), the dominant teaching style approach still used in American schools is teacher centred or the traditional rote-learning approach. Liu et al. (2007) concurs with the latter statement and holds the view that rote-learning teaching styles are practiced to a great extent in higher learning institutions despite functioning within a performance based education system.

Five factors (gender, teaching experience, level of teaching, academic qualification and subject taught) did not yield a significant result. Age was the only factor that yielded a significant result regarding preference for a particular teaching style. A study conducted by Cohen and Amidon (2004) found that age and gender were significant with regard to the teaching style of the educators. The practical significance of the results also showed that the findings were insignificant or negligible. The results of this study raise concerns with regards to the application of facilitative/delegatory teaching styles, synonymous with the outcomes based teaching methodology. One of the overwhelming reasons why educators are still using the traditional rote-learning approach in their classrooms is that OBE has not been successfully implemented in schools and classrooms (c.f. Speech of National Minister of Education, Naledi Pandor 2008). The lack of resources in historically black schools further impedes the effective implementation of OBE in schools. The fragmentation of the education system by the Apartheid government and the marginalisation of black race groups also contributed to the discrepancies in teacher training and human and physical resource allocation and infrastructural school development (James et al. 2008). According to Liu et al. (2007) and Naicker (1999) a paradigm shift is required by educators in order to make the transition to outcomes based teaching methodologies.

CONCLUSION AND RECOMMENDATIONS

The authors conclude that the National Department of Education needs to empower and capacitate educators in learner centred teaching styles. Educator training institutions should prioritise and realign their existing programmes to the policy mandate and initiatives of the appli-

cable education system. It has been noted that teachers are more likely to teach in the manner in which they themselves were taught. Teachers need to be aware that learners learn differently and have their different ways of processing information (Zhang 2007a; Zhang and Sternberg 2006). Findings of this study have implications for both in-service and pre-service teacher training and development. Initial teacher training programmes need to be aligned in such a manner that it addresses outcomes based teaching styles. Workshops and seminars as well as empowerment opportunities for serving teachers would be appropriate. The importance of teaching styles cannot be overemphasised. Opdenakker and Van Damme (2006) regards teaching styles as effectiveness enhancing factors of classroom practice. Effective teachers teach creatively (Zhang 2009).

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