

## DOCUMENT RESUME

ED 477 541

UD 035 720

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TITLE School-Level Environment and the Implementation of Outcomes-Based Education in South Africa.

PUB DATE 2003-04-00

NOTE 20p.; Paper presented at the Annual Meeting of the American Educational Research Association (Chicago, IL, April 21-25, 2003).

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE EDRS Price MF01/PC01 Plus Postage.

DESCRIPTORS Cultural Relevance; \*Educational Environment; Educational Innovation ; Foreign Countries; \*Outcome Based Education; Parent Participation; Poverty; Rural Schools; Secondary Education; Secondary School Teachers; Teacher Attitudes; Teaching Conditions; Test Construction

IDENTIFIERS \*South Africa; Student Support Services

## ABSTRACT

This study examined secondary school teachers' perceptions of their school-level environment and its influence on implementation of outcomes-based education (OBE). Participating schools were in South Africa's Limpopo Province (one of its poorest rural provinces) and were implementing Curriculum 2005, a new outcomes-based approach to teaching and learning. This report examines the initial phase of the study, during which a questionnaire was designed to assess school-level factors likely to influence OBE implementation. A total of 403 teachers in 54 schools completed a modified version of the School-Level Environment Questionnaire. Modification included adding two scales relevant to the South African context (OBE Familiarity and Parental Involvement). Data analysis resulted in the acceptance of a seven-scale factor structure: OBE familiarity, resource adequacy, work pressure, student support, parental involvement, collegiality, and innovation. Each scale exhibited comparatively high internal consistency reliability and an ability to differentiate between the perceptions of teachers in different schools. There was a statistically significant difference between teachers' perceptions of their actual school environments and the environment they would prefer. Teachers preferred less work pressure and more of the other factors. OBE teachers experienced significantly more OBE familiarity and work pressure than teachers not involved in OBE. The teacher survey is appended. (Contains 30 references.) (SM)

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## School-Level Environment and the Implementation of Outcome-Based Education in South Africa

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## INTRODUCTION

For many years, South Africa went through a system of apartheid, which was designed to undermine the majority of the people in the country. Along with the introduction of a democratic political dispensation in 1994, South Africa has overhauled the existing education system by gradually phasing in an Outcomes-Based Education (OBE) approach. This bold step was taken to be in line with international trends – moving away from the content-driven curriculum emphasising examination results, and moving towards an emphasis on facilitating life-long learning (Department of Education, 1997).

In 1995, South Africa set itself a period during which an outcomes-based curriculum ought to be phased in. According to this initial time frame, OBE would have been phased in by 2004. The year 2005 was set aside for reviewing the implementation of the new curriculum. Based on this time frame, the new curriculum was called *Curriculum 2005* (C2005). Past research indicates that difficulties in implementing the new curriculum could be the result of under-resourced schools and inadequately trained teachers (Chisholm et al., 2000). The present research, conducted in the Limpopo Province (one of the poorest provinces in South Africa), was initiated to establish the extent to which school-level factors (such as resources and principal support) impact on the implementation of the new curriculum. This paper reports the initial phase of the study, during which a questionnaire was designed to assess school-level factors likely to influence the implementation of OBE and describes its modification and validation for the South African context.

## OBJECTIVES

- (1) To develop and validate a questionnaire to assess teachers' perceptions of the school-level environment as a measure of readiness to implement and support Outcomes-Based Education in South Africa.
- (2) To examine teachers' perceptions of the actual and preferred school-level environment in high schools in South Africa.
- (3) To investigate whether teachers involved in OBE perceived the learning environment differently from teachers not involved in OBE.

## BACKGROUND AND THEORETICAL FRAMEWORK

The present study examined teachers' perceptions of their school-level environment and its influence on the implementation of Outcomes-Based Education (OBE). The environment or climate is widely acknowledged as a vital aspect of the life of an organisation or school (Fraser, 1998). As early as 1936, Kurt Lewin (1936) recognised that the environment is a determinant of human behaviour. Following Lewin's work, Murray (1938) proposed a Needs-Press Model in which situational variables found in the environment account for a degree of behavioural variance.

Following the work of Lewin and Murray, two research programs focused on developing instruments that could be used to assess the classroom learning environment. Herbert Walberg's *Learning Environment Inventory* (Anderson & Walberg, 1968) and Rudolf Moos's *Classroom Environment Scale* (Moos & Trickett, 1974) were the first instruments developed to assess students' perceptions of their learning environment. Since this time, the influence of the learning environment on the education process has received a great deal of attention, and there has been much development in the conceptualisation and assessment of learning environments (Fraser, 1994, 1998). Whilst different approaches, qualitative and quantitative, have been used in conducting

research in the field of learning environments, the use of questionnaires to assess students' perceptions has been the predominant method.

Historically, schools have been viewed as organisations, operating similarly to other social groups in that they have their own goals, rules and regulations, roles, hierarchies of authority, forms of compliance, and communication patterns (Dorman, 1998; Dorman, Fraser & McRobbie, 1997). These aspects constitute the school environment, which brings a range of contributory factors that are considered pivotal to the successful implementation of new curricula. To date, however, little research has been carried out to help teachers to assess and improve the environments of their own schools. Research conducted by Brookover, Schweiter, Schneider, Beady, Flood and Wisenbaker (1978) and Vyskocil and Goens (1979) has shown that the school-level environment influences student cognitive outcomes, student values and personal growth and satisfaction. It was with this in mind that the research reported in this paper sought to examine the influence of teachers' perceptions of the school-level environment on the implementation of OBE.

Past instruments used to assess the school-level environment include the College Characteristics Index (CCI; Stern, 1970) and the Organizational Climate Description Questionnaire (OCDQ; Halpin & Croft, 1963). Freiberg's (1999) book, *School Climate*, identifies numerous instruments and a range of alternative measures that can be used to assess the school-level environment. One such instrument, the School-Level Environment Questionnaire (SLEQ; Fisher & Fraser, 1990) was designed to assess school teachers' perceptions of psychosocial dimensions of the environment of the school. The SLEQ has been used successfully in two African countries, namely, Nigeria (Idiris & Fraser, 1997) and Rwanda (Earnest & Treagust, 2001, 2002). The SLEQ has also been used for a range of purposes, including school improvement (Fisher & Fraser, 1991a), examining patterns of transition during middle school (Chung, Elias, & Schneider, 1998), an investigation of teachers' perceptions of their work environment (Fisher & Grady, 1998), as an indicator of teacher morale (Young, 1998) and in comparing special education and mainstream settings (Adams & Adams, 2000). Close scrutiny of the SLEQ led the researchers to believe that it could be modified for use in South Africa.

## RESEARCH METHODS

### *Sample*

Data for the present study were collected from the Limpopo Province of South Africa, one of the most rural and poorest provinces in South Africa. Questionnaire data were collected from 403 teachers in 54 secondary schools located within a 50-kilometre radius of Polokwane—the provincial capital—with 46 schools being from rural areas, five schools from township (i.e., semi-rural) areas, and three schools from urban areas. The schools were all located within two administrative districts and represent almost half of the secondary schools of those districts.

### *Instrument Development and Validation*

The development and validation of the questionnaire involved (1) conducting a review of Department of Education policy documents and national and international literature to identify dimensions that are central to the educational philosophy of OBE and C2005, (2) conducting interviews with school management teams and teachers to ensure that the dimensions were salient, (3) ensuring consistency with Moos' (1974) three general psychosocial dimensions of Relationship, Personal Development and System Maintenance/System Change, (4) developing two new scales, pertinent to the South African situation, as well as adapting and adopting scales and items from the widely-used School Level Environment Questionnaire, (SLEQ; Fraser & Fisher, 1990, 1991b), (5)

field testing the instrument with teachers and interviewing them about their responses, and (6) refinement of scales and items.

## FINDINGS AND RESULTS

### *Modifying the SLEQ for Use in South Africa*

The SLEQ was considered to be an ideal questionnaire because its dimensions closely match central concepts identified in the literature and policy documents on OBE and C2005. In the present study, the SLEQ was modified to make it suitable for use in South Africa.

Table 1: Description of Scales in the SLEQ-SA and their Classification According to Moos' Scheme

Scale Name	Description of Scale	Sample Item	Moos's General Category
OBE Familiarity	<i>The extent to which ...</i> ... teachers have been trained to use teaching and assessment strategies associated with OBE.	I feel confident about developing OBE learning activities. (+)	Personal Development
Parental Involvement	... parents are involved in their children's education at both an individual and school level.	Parents discuss learners' performance with teachers. (+)	Relationship
Student Support	... there is a good rapport between teachers and students and students behave in a responsible self-disciplined manner.	There are many disruptive, difficult students in the school. (-)	Relationship
Affiliation	... teachers can obtain assistance, advice and encouragement and are made to feel accepted by colleagues.	I feel that I could rely on my colleagues for assistance if I should need it. (+)	Relationship
Professional Interest	... teachers discuss professional matters, show interest in their work and seek further professional development.	Teachers frequently discuss teaching methods and strategies with each other. (+)	Personal Development
Staff Freedom	... teachers are free to set rules, guidelines and procedures, and of supervision to ensure rule compliance.	I am often supervised to ensure that I follow directions correctly. (-)	System Maintenance and System Change
Innovation	... the school is in favour of planned change and experimentation, and fosters individualisation.	Teachers are encouraged to be innovative in this school. (+)	System Maintenance and System Change
Resource Adequacy	... support personnel, facilities, finance, equipment and resources are suitable and adequate.	The supply of equipment and resources is inadequate. (-)	System Maintenance and System Change
Work Pressure	... work pressure dominates the school environment.	Teachers have to work long hours to keep up with the workload. (+)	System Maintenance and System Change

Items are scored 1, 2, 3, 4 and 5, respectively, for the responses Never, Seldom, Sometimes, Often and Always. Negative items are scored in reverse.

All eight scales from the original SLEQ (developed by Fisher & Fraser, 1990) were selected for use in South Africa, namely, Staff Freedom, Participatory Decision making, Resource Adequacy, Work Pressure, Student Support, Professional Interest, Affiliation and Innovation. Two additional scales were developed for use in the present research, namely, Parental Involvement and OBE Familiarity, as they were considered to be relevant to the successful implementation of curriculum innovation in South Africa (i.e., C2005) by school management teams and teachers. A scale description, a sample item and the classification according to Moos' Scheme is provided for each scale (Table 1).

Teachers were requested to respond to items of the SLEQ-SA on a five-point scale with the alternatives of Almost Never, Seldom, Sometimes, Often and Almost Always. Historically, researchers have administered a separate actual and preferred version of questionnaires. To provide a more economical format, however, the SLEQ-SA included the use of two adjacent response scales on the one sheet (see Aldridge, Fraser, Fisher & Wood, 2002), one to record what teachers perceived as actually happening in their school and the other to record what teachers would prefer to happen in their school. A copy of the SLEQ-SA used in the present study is presented in the Appendix.

### *Validating the SLEQ for Use in South Africa*

Analyses of the data collected from 403 teachers in 54 school provided evidence for the validity and reliability of the SLEQ-SA, using the conventionally-accepted minimum value of 0.30 for a factor loading to be meaningful. Principal components factor analysis resulted in the acceptance of a revised version of the SLEQ-SA comprising 51 items in seven scales (OBE Familiarity, Resource Adequacy, Work Pressure, Student Support, Parental Involvement, Professional Interest and Affiliation and Innovation) (Table 2). Two scales, Staff Freedom and Participatory Decision Making, were lost. For all other scales, the items loaded on their own scale and no other scale (with the exception of the Professional Interest and Affiliation scales that came together to form one scale, that was renamed Collegiality). Interviews with teachers indicated that they confused the two issues and responded to items in similar ways that would suggest that teachers were referring to the degree of collegiality amongst the staff.

Table 2 shows the factor loadings for the SLEQ-SA for the sample of 403 teachers using the individual teacher as the unit of analysis, along with the percentage of variance for each scale. The percentage of variance varies from 4.5 to 13.6 for different scales, with the total variance accounted for being 45.8%. Of the 371 possible loadings in Table 2 (53 items x 7 scales = 371), there is only one item for which the seven-factor modified structure is not replicated. Item 80 has a loading of more than 0.30 with the OBE Familiarity scale as well as with its own scale (namely, Innovation). For six of the seven environment scales, namely, OBE Familiarity, Resource Adequacy, Work Pressure, Student Support, Parental Involvement and Collegiality, the seven-factor structure is supported perfectly for the 51-item solution.

Due to difficulties experienced in past studies in collecting an adequate sample size to perform a factor analysis, this study is one of the first to provide a satisfactory factor structure for a school-level environment questionnaire.

To provide further support to the reliability and validity of the SLEQ-SA, the internal consistency reliability, discriminant validity for both the actual and preferred forms of the questionnaire and ability to differentiate between schools were calculated for the actual form (reported in Table 3). The internal consistency (Cronbach alpha reliability coefficient) for each scale of the actual form of the SLEQ-SA ranged from 0.69 to 0.92 when using the individual as the unit of analysis and from 0.76 to 0.94 when using the school mean as the unit of analysis. For the preferred form, the internal consistency reliability ranged from 0.57 to 0.93 for individual as the unit of analysis and from 0.71

to 0.94 for the school mean as the unit of analysis. For each scale, for the actual and preferred form, the internal consistency reliability can be considered acceptable, thereby supporting the reliability of the SLEQ-SA.

Table 2. Factor Loadings for a Modified Version of Actual Form of SLEQ-SA in South Africa

Item No	Factor Loading						
	OBE Familiarity	Resource Adequacy	Work Pressure	Student Support	Parental Involvement	Collegiality	Innovation
1	0.65						
3	0.79						
4	0.84						
5	0.73						
7	0.63						
8	0.54						
11		0.46					
12		0.65					
13		0.73					
14		0.74					
15		0.45					
16		0.53					
17			0.67				
18			0.70				
19			0.59				
20			0.50				
22			0.36				
23			0.52				
24			0.56				
25				0.60			
26				0.65			
27				0.67			
28				0.52			
29				0.68			
32				0.37			
33					0.71		
34					0.76		
35					0.60		
36					0.64		
37					0.62		
38					0.72		
41						0.71	
42						0.67	
43						0.65	
44						0.74	
45						0.73	
46						0.69	
47						0.84	
48						0.71	
49						0.66	
50						0.31	
51						0.51	
53						0.58	
54						0.70	
55						0.74	
74							0.51
76							0.38
77							0.68
78							0.63
79							0.56
80	0.35						0.45
% Variance	13.6	7.0	6.3	4.9	4.8	4.7	4.5

Factor loadings smaller than 0.30 have been omitted.

The sample consisted of 403 teachers in 54 schools in South Africa.

As a convenient index, the mean correlation of a scale with other scales was calculated to provide an indication of the degree to which the scales are unique in what they assess. The discriminant validity (mean correlation of a scale with other scales) for scales in the actual version of the SLEQ-SA range from 0.04 and 0.22 with the individual teacher as the unit of analysis and between 0.16 and 0.40 with the school mean as the unit of analysis. For the preferred version of the SLEQ-SA, the mean correlation of a scale with other scales range from 0.21 and 0.47 for the individual as the unit of analysis and between 0.13 and 0.47 for the school mean as the unit of analysis. These results, reported in Table 3, suggest a degree of overlap between the dimensions that each scale assesses. However, the factor analysis results attest to the independence of factor scores on the SLEQ-SA.

Table 3. Internal Consistency Reliability (Cronbach Alpha Coefficient), Discriminant Validity (Mean Correlation With Other Scales) and Ability to Differentiate Between Classrooms (ANOVA Results) for Two Units of Analysis for the Modified Version of SLEQ-SA

Scale	Unit of Analysis	No. of Items	Alpha Reliability		Mean Correlation with other Scales		ANOVA Eta <sup>2</sup>
			Actual	Preferred	Actual	Preferred	Actual
OBE Familiarity	Individual	8	0.77	0.81	0.18	0.38	0.30**
	School Mean		0.83	0.76	0.30	0.39	
Resource Adequacy	Individual	6	0.77	0.93	0.12	0.47	0.47**
	School Mean		0.85	0.94	0.16	0.47	
Work Pressure	Individual	7	0.69	0.80	0.04	0.21	0.21**
	School Mean		0.79	0.77	0.31	0.13	
Student Support	Individual	6	0.75	0.57	0.19	0.36	0.34**
	School Mean		0.88	0.71	0.33	0.32	
Parental Involvement	Individual	6	0.86	0.91	0.21	0.46	0.36**
	School Mean		0.92	0.91	0.40	0.45	
Collegiality	Individual	14	0.92	0.86	0.18	0.38	0.25**
	School Mean		0.94	0.88	0.33	0.44	
Innovation	Individual	6	0.77	0.82	0.22	0.37	0.18
	School Mean		0.76	0.85	0.34	0.43	

\*\*  $p < 0.01$

The sample consisted of 403 teachers from 54 schools in South Africa

The eta<sup>2</sup> statistic (which is the ratio of 'between' to 'total' sums of squares) represents the proportion of variance explained by class membership.

To ascertain whether the actual version of each SLEQ-SA scale is able to differentiate between the perceptions of teachers in different schools, an analysis of variance (ANOVA) was calculated for each scale. The results are reported in Table 3. The ANOVA results indicated that, with the exception of Innovation, each SLEQ-SA scale was able to differentiate significantly ( $p < 0.01$ ) between the perceptions of teachers in different South African high schools. Overall, the results of the analysis suggest satisfactory reliability and validity for the South African version of the SLEQ.

To examine the usefulness of the SLEQ-SA in describing the school-level environment of schools in South Africa, the questionnaire was used to examine, first, whether teachers' perceptions of the school-level environment differ from that which they would prefer and, second, whether teachers involved in implementing the new, outcomes-based curriculum perceive factors within the school-level environment differently from teachers who are not involved.



## Teachers' Perceptions of the Actual and Preferred School-Level Environment

To examine whether the SLEQ-SA could be used to describe the school-level environment of schools in the Limpopo Province in terms of teachers' perceptions of their actual and preferred environment, descriptive analyses were used. MANOVA for repeated measures revealed a statistically significant ( $p < 0.01$ ) difference between teacher perceptions of their actual school environment and the one that they would prefer for all seven SLEQ dimensions. Because the multivariate test (Wilks' Lambda) revealed significant actual-preferred differences overall, the ANOVA for repeated measures was interpreted for each individual SLEQ-SA scale (see Table 4). The results indicate that, for all scales, teachers would prefer a more favourable level of each SLEQ dimension than is currently perceived to be present (i.e. less Work Pressure and more of all other dimensions). These results replicate Templeton and Jensen's (cited in Dorman, Fraser and McRobbie, 1997) study, which found that exemplary teachers perceive their school environments as having less work pressure, more freedom and greater professional interaction. Fraser (1999), in his article *Using Learning Environment Assessments to Improve Classroom and School Climates*, reports that teachers identified Resource Adequacy and Work Pressure as key areas that need improvement.

Table 4. Average Item Mean, Average Item Standard Deviation and Differences (Effect Size and MANOVA for Repeated Measures) for Differences between Actual and Preferred Perceptions on the SLEQ-SA Using the School Mean as the Unit of Analysis

Scale	Average Item Mean <sup>a</sup>		Average Item Standard Deviation		Difference	
	Actual	Preferred	Actual	Preferred	Effect Size	F
OBE Familiarity	2.72	4.38	0.53	0.30	4.00	5.03**
Resources Adequacy	2.11	4.49	0.70	0.38	4.41	4.82**
Work Pressure	3.49	2.65	0.39	0.43	2.05	3.40**
Student Support	3.37	4.23	0.43	0.38	2.12	3.52**
Parental Involvement	2.36	4.58	0.54	0.35	4.99	4.99**
Collegiality	3.77	4.46	0.40	0.26	2.09	3.62**
Innovation	3.10	4.28	0.36	0.34	4.00	4.61**

\*\* $p < 0.01$

The sample consisted of 403 teachers in 54 schools

<sup>a</sup> As the number of items in each scale differed, the average item mean, or scale score divided by the number of items in that scale, was used to provide a meaningful comparison between scales

To examine the magnitudes of these differences, as well as their statistical significance (as recommended by Thompson, 1998a, 1998b), effect sizes were calculated in terms of the differences in means divided by the pooled standard deviation. The effect sizes range between two standard deviations and almost 5 standard deviations (4.91). These results suggest very large differences between teachers' perceptions of the actual school-level environment and that which they would prefer. Figure 1 provides a graphical profile of teachers' actual and preferred perceptions of their school-level environment in the Limpopo Province.

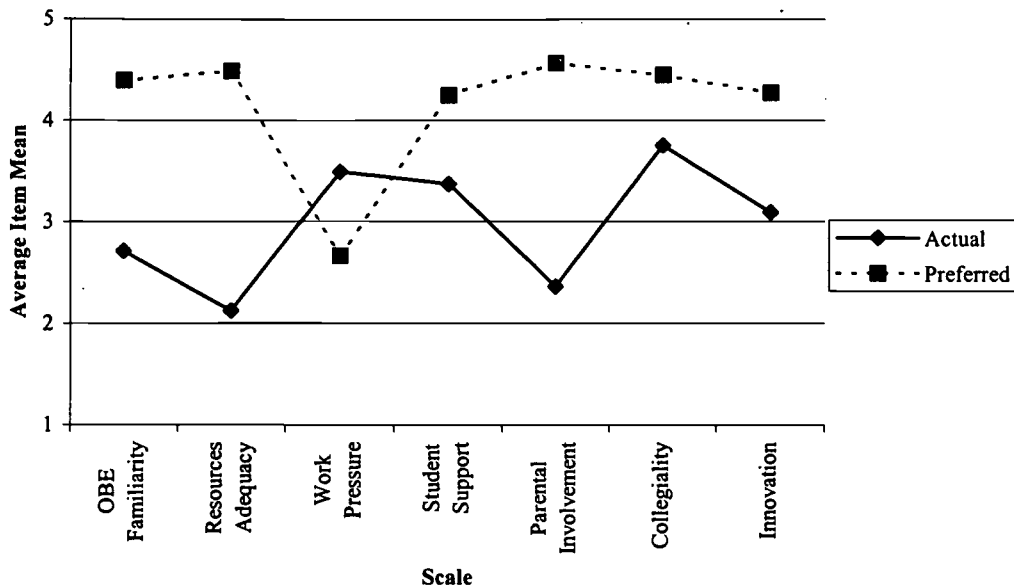


Figure 1. Difference Between Teachers' Perceptions on the Actual and Preferred Versions of the Modified SLEQ

### *Examining Differences Between Teachers Involved and Not Involved in OBE*

As teachers involved in OBE and those who are not involved are not found in equal numbers in every school, the within-school mean was chosen as the unit of analysis to provide a matched pair of means – one within-school mean for teachers involved in implementing OBE and one within-school mean for those who were not involved in implementing OBE. This reduces confounding in that, for each group of teachers involved in OBE within a particular school, there is a corresponding group of teachers not involved in OBE in the same school.

MANOVA for repeated measures revealed a statistically significant ( $p < 0.01$ ) difference between teacher perceptions of their actual school environment and the one that they would prefer for all seven SLEQ dimensions. Because the multivariate test produced statistically significant results using Wilks' lambda criterion, the univariate ANOVA for repeated measures was interpreted for each individual WIHIC scale to investigate whether teachers involved in OBE and those who were not had different perceptions of their school-level environment.

The results, reported in Table 6, revealed statistically significant differences for the actual form for two of the seven school-level environment scales, with teachers involved with OBE perceiving significantly more OBE Familiarity and Work Pressure than teachers who were not involved in OBE. The results also indicate that there were no significant differences between the types of school-level environment preferred by teachers involved in OBE and who were not. The effect size for the two scales of the SLEQ-SA that had significant differences was approximately one standard deviation (0.93) for OBE Familiarity and approximately two thirds of a standard deviation for Work Pressure. These results indicate important differences in perceptions for these two scales.

Figure 2 provides a graphical profile representing teachers scores on the SLEQ-SA for their actual and preferred scores on the SLEQ-SA. Based on the similarity of scores on scales of the SLEQ-SA, teachers involved in OBE and teachers not involved in this approach to teaching and learning have similar perceptions of their school-level environment, both with respect to all preferred and most actual scales. In the latter case, teachers involved in OBE experience significantly greater OBE Familiarity and Work Pressure in comparison to non-OBE teachers. This finding is not unexpected, as it would be anomalous if teachers involved in OBE do not also exhibit greater familiarity with

OBE approaches to teaching and learning than colleagues not involved in OBE. OBE approaches do, however, require more frequent formative assessment tasks which—given the very large grade classes experienced in the Limpopo Province with an average of more than 55 students per class—may well translate into increased work pressure on the part of OBE teachers in comparison to their non-OBE colleagues.

Table 6. Average Item Mean, Average Item Standard Deviation and Difference (Effect Size and MANOVA for Repeated Measures) Between OBE and Non-OBE Teachers on the Actual and Preferred Versions of the SLEQ-SA Using the Within-School Mean as the Unit of Analysis

Scale	Form	Average Item Mean		Average Item Standard Deviation		Difference	
		OBE	Non-OBE	OBE	Non-OBE	Effect Size	F
OBE Familiarity	Actual	2.67	2.02	0.41	0.92	0.98	4.86*
	Preferred	4.39	4.17	0.30	0.63	0.47	1.23
Resource Adequacy	Actual	2.08	2.27	0.64	0.74	0.28	0.29
	Preferred	4.56	4.37	0.29	0.69	0.39	0.55
Work Pressure	Actual	3.67	3.29	0.33	0.63	0.79	5.87**
	Preferred	2.67	2.52	0.38	0.62	0.30	2.56
Student Support	Actual	3.29	3.33	0.60	0.45	0.08	0.04
	Preferred	4.19	4.44	0.37	0.56	0.54	2.52
Parental Involvement	Actual	2.38	2.50	0.61	0.96	0.15	0.12
	Preferred	4.63	4.43	0.32	0.65	0.41	0.94
Collegiality	Actual	3.80	3.66	0.51	0.54	0.27	0.50
	Preferred	4.53	4.49	0.21	0.43	0.13	1.14
Innovation	Actual	3.01	3.25	0.50	0.74	0.39	0.57
	Preferred	4.32	4.24	0.35	0.52	0.18	0.45

\* $p < 0.05$  \*\* $p < 0.01$

The sample consisted of 49 matched pairs of within-school means for OBE and non-OBE teachers.

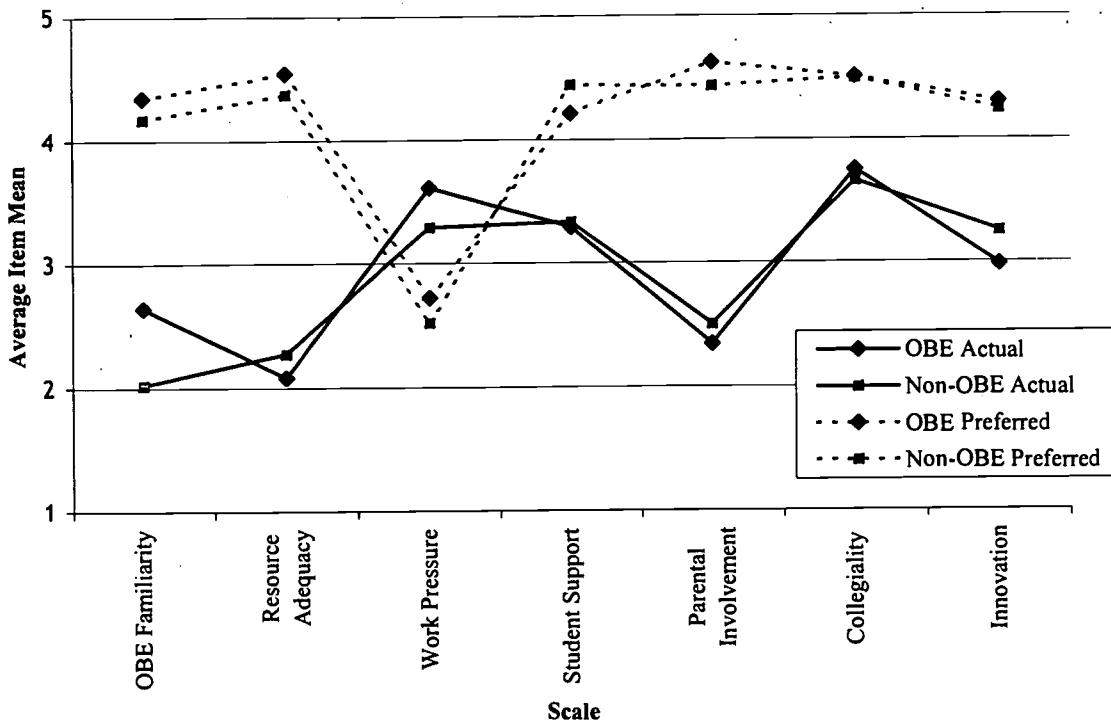


Figure 2. Difference Between OBE and Non-OBE Teachers in Actual and Preferred scores on the SLEQ-SA

## DISCUSSION AND CONCLUSIONS

The present study was undertaken to examine the school-level environment of schools in the Limpopo Province of South Africa implementing *Curriculum 2005* – a new outcomes-based approach to teaching and learning. An important contribution was the careful modification of the School-Level Environment Questionnaire (SLEQ) to make it suitable for the South African context. Modification of the SLEQ included the addition of two important scales relevant to the South African context, namely, OBE Familiarity and Parental Involvement. Analyses of the data collected from 403 teachers in 54 secondary schools resulted in the acceptance of a seven-scale factor structure (OBE Familiarity, Resource Adequacy, Work Pressure, Student Support, Parental Involvement, Collegiality and Innovation). Each of these seven scales exhibited comparatively high internal consistency reliability and an ability to differentiate between the perceptions of teachers in different schools.

MANOVA for repeated measures revealed a statistically significant ( $p < 0.01$ ) difference between teacher perceptions of their actual school environment and the one that they would prefer. The results indicate that teachers would prefer significantly more OBE Familiarity, Resource Adequacy, Students Support, Parental Involvement, Collegiality and Innovation and less Work Pressure than they are currently receiving. This pattern, in which teachers prefer a more favourable learning environment than the one perceived to be present, replicates findings of past research (Fraser, 1998).

An examination of the perceptions of teachers involved in OBE and those who are not revealed some interesting differences. MANOVA results indicated that those teachers involved in OBE are experiencing significantly more OBE Familiarity and Work Pressure than their counterparts who are not. However, OBE and non-OBE teachers appear to be similar in their preferred school environment scores and their perceptions of actual environment on the other five SLEQ scales.

This study is noteworthy in that modifying, refining, validating and using a modified version of the SLEQ has provided other researchers with a widely-applicable, parsimonious, valid and economical instrument for future use in assessing and monitoring teachers' perceptions of the school-level environment in South Africa. In this study in progress, further data collection is underway in an attempt to identify factors that contribute to variance in teachers' perceptions of their actual and preferred school level environment. It is also envisaged that, through the gathering of qualitative information, the study will explore whether it is possible to use the SLEQ-SA as a measure of readiness to implement and support Outcomes-Based Education in South Africa.

Although international research in the field of learning environments spans more than three decades (Dorman, Fraser & McRobbie, 1997), there is little evidence to date of similar research in South Africa. Our study, therefore, makes a valuable contribution to the field of learning environments by laying a foundation for future studies of learning environments in South Africa. This research is significant because a school environment instrument that includes two new scales (OBE Familiarity and Parental Involvement) has been modified and validated for use in South Africa.

### ACKNOWLEDGEMENTS

This material is based upon work supported by the (South African) National Research Foundation under Grant Number 2047068 and 2050468. Any opinion, findings and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Research Foundation.

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## Teacher Questionnaire

### INSTRUCTIONS

Kindly answer the following six background questions:

1. Name of your school: \_\_\_\_\_
2. Male  Female  (Please tick [✓] appropriate box)
3. How many years teaching experience do you have? 

--
4. How many years are you teaching at this school? 

--
5. Are you involved in OBE teaching? Yes  No  (Please tick [✓] appropriate box)
6. Subjects (and grades) that you teach: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The rest of the questionnaire (pages 2-5) contains statements about practices that could take place at your school. You will be asked how often each practice takes place.

There are no 'right' or 'wrong' answers—your opinion is what is wanted! Your responses will be confidential.

The 'Actual' column is to be used to describe how often each practice actually takes place in your school. The 'Preferred' column is to be used to describe how often you would like each practice to take place (a wish list).

Please read each item carefully and circle the number that best represents your response under the Actual and Preferred column.



OBE Familiarity	ACTUAL To be used to describe how often each practice actually takes place in your school.					PREFERRED To be used to describe how often you <u>would</u> like each practice to take place (a wish list).				
	Never	Seldom	Some times	Often	Always	Never	Seldom	Some times	Often	Always
1. I have sufficient knowledge about OBE to be able to deal with OBE-related issues in my teaching.	1	2	3	4	5	1	2	3	4	5
2. Curriculum advisors visit the school to support teachers on OBE issues.	1	2	3	4	5	1	2	3	4	5
3. I feel confident about facilitating learning in an OBE class.	1	2	3	4	5	1	2	3	4	5
4. I feel confident about developing OBE learning activities.	1	2	3	4	5	1	2	3	4	5
5. I feel confident about developing OBE assessment tasks.	1	2	3	4	5	1	2	3	4	5
6. I find it difficult to use the OBE approach when teaching.	1	2	3	4	5	1	2	3	4	5
7. I am able to interpret OBE learning materials used.	1	2	3	4	5	1	2	3	4	5
8. I feel confident in recording and reporting learner performance.	1	2	3	4	5	1	2	3	4	5
<b>Resource Adequacy</b>	Never	Seldom	Some times	Often	Always	Never	Seldom	Some times	Often	Always
<i>At this school...</i>										
9. An adequate selection of books and periodicals are available.	1	2	3	4	5	1	2	3	4	5
10. The supply of equipment and resources is sufficient.	1	2	3	4	5	1	2	3	4	5
11. Facilities are adequate for a variety of classroom activities.	1	2	3	4	5	1	2	3	4	5
12. There is sufficient space for learners to engage in group activities in the classrooms.	1	2	3	4	5	1	2	3	4	5
13. There are enough classrooms for all learners.	1	2	3	4	5	1	2	3	4	5
14. Classrooms have sufficient seating or desks.	1	2	3	4	5	1	2	3	4	5
15. Learners have access to a laboratory.	1	2	3	4	5	1	2	3	4	5
16. The supply of learner support material is sufficient.	1	2	3	4	5	1	2	3	4	5
<b>Work Pressure</b>	Never	Seldom	Some times	Often	Always	Never	Seldom	Some times	Often	Always
<i>At this school ...</i>										
17. I am under pressure.	1	2	3	4	5	1	2	3	4	5
18. I have to work long hours to complete my work.	1	2	3	4	5	1	2	3	4	5
19. I have to work very hard.	1	2	3	4	5	1	2	3	4	5
20. I have no time to relax.	1	2	3	4	5	1	2	3	4	5
21. I can "take it easy" and still get the school work done.	1	2	3	4	5	1	2	3	4	5
22. We are understaffed.	1	2	3	4	5	1	2	3	4	5
23. It is hard for me to keep up with my workload.	1	2	3	4	5	1	2	3	4	5
24. I have to work at home to get all of my work done.	1	2	3	4	5	1	2	3	4	5

	ACTUAL To be used to describe how often each practice <u>actually</u> takes place in your school.					PREFERRED To be used to describe how often you <u>would</u> like each practice to take place (a wish list).				
	Never	Seldom	Some times	Often	Always	Never	Seldom	Some times	Often	Always
<b>Student Support</b>										
<i>At this school...</i>										
25. There are disruptive and difficult students.	1	2	3	4	5	1	2	3	4	5
26. Students are helpful and co-operative to teachers.	1	2	3	4	5	1	2	3	4	5
27. Students are pleasant and friendly to teachers.	1	2	3	4	5	1	2	3	4	5
28. There are noisy, badly behaved students.	1	2	3	4	5	1	2	3	4	5
29. Students get along well with teachers.	1	2	3	4	5	1	2	3	4	5
30. Students are well-mannered and respectful to the school staff.	1	2	3	4	5	1	2	3	4	5
31. Strict discipline is needed to control students.	1	2	3	4	5	1	2	3	4	5
32. The rate of absenteeism is low.	1	2	3	4	5	1	2	3	4	5
<b>Parental Involvement</b>										
<i>At this school...</i>										
33. Parents show interest in what is happening.	1	2	3	4	5	1	2	3	4	5
34. Parents get involved in school activities.	1	2	3	4	5	1	2	3	4	5
35. There is communication between parents and teachers.	1	2	3	4	5	1	2	3	4	5
36. Parents attend school meetings when invited.	1	2	3	4	5	1	2	3	4	5
37. Parents help learners in doing assignments and projects.	1	2	3	4	5	1	2	3	4	5
38. Parents make valuable contributions to the running of the school.	1	2	3	4	5	1	2	3	4	5
39. Parents discuss learners' performance with teachers.	1	2	3	4	5	1	2	3	4	5
40. The School Governing Body is consulted when major decisions are taken.	1	2	3	4	5	1	2	3	4	5
<b>Affiliation</b>										
<i>At this school ...</i>										
41. I receive encouragement from colleagues.	1	2	3	4	5	1	2	3	4	5
42. I feel accepted by other teachers.	1	2	3	4	5	1	2	3	4	5
43. I feel that I can rely on my colleagues for assistance if I need it.	1	2	3	4	5	1	2	3	4	5
44. My colleagues take notice of my professional views.	1	2	3	4	5	1	2	3	4	5
45. I feel that I have friends among my colleagues.	1	2	3	4	5	1	2	3	4	5
46. I feel that there is good communication between staff members.	1	2	3	4	5	1	2	3	4	5
47. I receive support from my colleagues.	1	2	3	4	5	1	2	3	4	5
48. I discuss teaching methods with other teachers.	1	2	3	4	5	1	2	3	4	5

	ACTUAL To be used to describe how often each practice actually takes place in your school.					PREFERRED To be used to describe how often you <u>would</u> like each practice to take place (a wish list).				
	Never	Seldom	Some times	Often	Always	Never	Seldom	Some times	Often	Always
<b>Professional interest</b>										
<i>At this school...</i>										
49. Teachers discuss teaching methods and strategies with each other.	1	2	3	4	5	1	2	3	4	5
50. Teachers avoid talking with each other about teaching and learning.	1	2	3	4	5	1	2	3	4	5
51. Professional matters are discussed during staff meetings.	1	2	3	4	5	1	2	3	4	5
52. Teachers attend in-service and other professional development courses.	1	2	3	4	5	1	2	3	4	5
53. Teachers show interest in what is happening in other schools.	1	2	3	4	5	1	2	3	4	5
54. Teachers are keen to learn from their colleagues.	1	2	3	4	5	1	2	3	4	5
55. Teachers show interest in the professional activities of their colleagues.	1	2	3	4	5	1	2	3	4	5
56. Teachers meet to develop learning activities together.	1	2	3	4	5	1	2	3	4	5
<b>Staff Freedom</b>										
<i>At this school ...</i>										
57. I am encouraged to be innovative.	1	2	3	4	5	1	2	3	4	5
58. I am expected to incorporate a variety of teaching styles in my classroom.	1	2	3	4	5	1	2	3	4	5
59. I am able to teach topics that are not in the learning programme.	1	2	3	4	5	1	2	3	4	5
60. The rules that I am expected to follow are flexible.	1	2	3	4	5	1	2	3	4	5
61. I am free to use a variety of learning support and resource materials.	1	2	3	4	5	1	2	3	4	5
62. I am free to choose how much control I maintain in my classroom.	1	2	3	4	5	1	2	3	4	5
63. I am encouraged to implement curriculum materials in new ways.	1	2	3	4	5	1	2	3	4	5
64. I am encouraged to experiment with different teaching approaches.	1	2	3	4	5	1	2	3	4	5
<b>Participatory decision-making</b>										
<i>At this school...</i>										
65. Decisions about the running of the school are made by the principal.	1	2	3	4	5	1	2	3	4	5
66. I have to refer even small matters to a senior member of staff for a final answer.	1	2	3	4	5	1	2	3	4	5
67. I can act without gaining the approval of a senior member of staff.	1	2	3	4	5	1	2	3	4	5
68. Teachers are asked to participate in decisions concerning administrative policies and procedures.	1	2	3	4	5	1	2	3	4	5

	ACTUAL To be used to describe how often each practice <u>actually</u> takes place in your school.					PREFERRED To be used to describe how often you <u>would like</u> each practice to take place (a wish list).				
	Never	Seldom	Some times	Often	Always	Never	Seldom	Some times	Often	Always
<b>Participatory decision-making (continued)</b>										
<i>At this school...</i>										
69. I am encouraged to make decisions without reference to a senior member of staff.	1	2	3	4	5	1	2	3	4	5
70. I must ask my subject head before I do most things.	1	2	3	4	5	1	2	3	4	5
71. I have no say in the running of the school.	1	2	3	4	5	1	2	3	4	5
72. Teachers regularly hold staff meetings.	1	2	3	4	5	1	2	3	4	5
<b>Innovation</b>										
<i>At this school...</i>										
73. It is difficult to change anything.	1	2	3	4	5	1	2	3	4	5
74. Teachers are encouraged to be innovative.	1	2	3	4	5	1	2	3	4	5
75. There is a great deal of resistance to proposals for curriculum change.	1	2	3	4	5	1	2	3	4	5
76. Teachers like the idea of change.	1	2	3	4	5	1	2	3	4	5
77. New curriculum materials are implemented.	1	2	3	4	5	1	2	3	4	5
78. There is experimentation with different teaching approaches.	1	2	3	4	5	1	2	3	4	5
79. New and different ideas are being tried.	1	2	3	4	5	1	2	3	4	5
80. Teachers are excited about using the new OBE approach.	1	2	3	4	5	1	2	3	4	5

**Thank you for completing this questionnaire – your assistance is much appreciated!**

Should you wish to make any comments, please feel free to write them below or on the back of this sheet.



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