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EDUCATORS' APPROACHES TO CURRICULUM DEVELOPMENT

David P. Ngidi

Faculty of Humanities, Central University of Technology

[dngidi@cut.ac.za](mailto:dngidi@cut.ac.za)

Abstract

*This study investigated educators' approaches to curriculum development. A quantitative research approach was used in a survey of a sample of 304 randomly selected participants. To this end, the Curriculum Orientation Profile (COP) was used. The findings indicated that educators differ significantly in their approaches to curriculum as the development of cognitive processes, technology, self-actualisation, social reconstruction, and academic rationalisation. The findings also indicated that teaching phase has a significant influence on educators' approach to curriculum as technology. The findings further indicated that development of cognitive processes; self-actualisation, technology and academic rationalisation are significant predictors of educators' approach to curriculum development. Suggestion for further similar research so that more light can be shed on the findings was made.*

**Keywords:** educators, teachers, approaches, orientations, curriculum development

INTRODUCTION

Up until the early 1990s, South Africa's curriculum development practices and procedures were characterised by a process whereby curricula were normally designed at central level then disseminated or distributed in a "top down" manner to the level of implementation (Carl, 2002: 25). This practice was informed by the educational ideologies of the pre-apartheid South Africa.

Initiatives such as the White Paper on Education and Training (1995) and The South African Qualifications Authority Act (1995) transformed education, which led to the implementation of the outcomes-based approach in school education. This transformation of education dispensation has vital implications for teacher implementation of curriculum development as the teacher has to play the role of a curriculum agent and developer rather than simply being someone who conveys information (Carl, 2002: 28).

The post-apartheid curriculum sought to emphasise outcomes, rather than the content-heavy syllabus of the past and the assumption was that the content of the intended curriculum should not be centrally prescribed but developed by teachers against centrally prescribed outcomes (Hoadley & Jansen, 2009: 156). Therefore, educators have particular responsibilities and have to be actively involved especially in learning area or subject curriculum development. In their new role educators have to understand different approaches (orientations) to curriculum development in order to be able to determine what their main approach (orientation) to curriculum development is. This is more crucial because curriculum developers have different approaches to curriculum development.

Eisner and Vallance (1974) give a description of particular approaches to curriculum development, called conceptual framework (Carl, 2002: 64-65; Connelly, Duckacz & Quinlan, 1980:14-16; Eisner, 2009: 276-286). These approaches are:

- Development of cognitive processes: stresses 'how' the learner learns, rather than what he/she learns. The learning process is most important and for this reason the development of thinking skills is strongly accentuated. The accent is on the development of cognitive skills.
- Curriculum as technology: the process of planning and instructional methods is important. A particular end goal or learning outcome is set and detailed planning is done to achieve that goal or learning outcome. An input is made and it is expected that the learner will deliver an output in the form of a certain achievement.
- Self-actualisation of the child/Personal relevance: comprises the school offering specific positive learning experiences for the child. Opportunities for self-discovery and development must be created. Curriculum development must be relevant and topical so that this self-actualisation can take place.
- Social reconstruction: requires that learners become oriented with regard to social questions. The needs of the community are strongly accentuated and receive preference. The schools must co-operate in changing the community. Schools must equip learners so that they will be able to maintain themselves in changing communities and, as citizens, will be critical in regard to social changes.
- Academic rationalism: learners must master selected contents as offered in the traditional subjects. Stress is also placed on the acquisition of knowledge through research. Mastering contents stresses the development and changes in ideas.

According to Eisner (2009:286), these orientations are intended to function as tools for the analysis of existing school programmes, and as foundation for sharpening discourse about the planning of new programmes. In the same breadth, he contends that what we find is that the dominant framework for viewing curriculum has consequences for practical operation at schools; each orientation harbours an implicit conception of educational virtue. Furthermore, each orientation serves both to legitimise certain educational practices and to sanction others negatively.

Some of the already described approaches link up with those of other authors such as Development of cognitive processes (Miller, 1982), Technology (McNeil, 1977; Walters, 1984), Academic approach (McNeil, 1977; Walters, 1984) and Social reconstruction (McNeil, 1977; Schiro, 1978). Other approaches by McNeil (1977), Schiro (1978), Ornstein (1982), Miller (1983), Walters (1984), and Eraut (1990) discussed in Carl (2002: 55-68) are different and are not the focus of this study.

Old as they are, Eisner and Vallance's (1974) categorisation of approaches/orientations to curriculum development are still relevant and cited in recent literature such as in Hoadley and Jansen (2009: 276-286). Although new theories and understandings of curriculum have emerged, Eisner and Vallance's approaches/orientations are still quite evident in schools (Bloom, 2006: 1). Even if an attempt is made to add new approaches/orientations to the list, it still involves some of the ideas embedded in Eisner and Vallance's approaches/orientations. For example, 'curriculum for social justice' and 'curriculum education for democracy' are related to 'social reconstruction'; 'project-based curriculum' involves some aspects of 'personal relevance' and 'cognitive processes'; 'curriculum as emergent' is associated with 'personal relevance' while 'curriculum for complex understanding and thinking' incorporate aspects of 'personal relevance', 'development of cognitive processes', 'academic rationalism', and 'social reconstruction' (Bloom, 2006: 1-2).

Eisner (2009: 276) maintains that an awareness of the various orientations to schooling expands one's options in curriculum planning and thus contributes to one's degree of professional freedom. Carl (2002: 69) advises that those interested in the curriculum should determine what their main orientation in respect of or approach to curriculum development is. This is what this study intends to do with regard to educators.

**PROBLEM STATEMENT**

Recent studies on curriculum development in South Africa were on curriculum reform (Bantwini, 2010; Chisholm & Leyendecker, 2008) and on curriculum review and revision (Chisholm, 2005). Despite the challenges facing educators in developing curriculum for their learners in South Africa, very few, if any, studies have attempted to investigate educators' approaches to curriculum development. The present study intends to do that. More specifically, the present study attempts to find answers to the following research question:

- Do educators differ in their approaches to curriculum development?
- Do educators' biographical variables (gender, teaching experience and teaching phase) have any influence on their approaches to curriculum development?
- Is/are there any particular approach/approaches that best predict (s) educators' approach to curriculum development?

**CONCEPT CLARIFICATION**

In this study, the term educator refers to a teacher. The South African Schools Act No. 84 of 1996 (Republic of South Africa, 1996:2) also refers to a teacher as an educator. The term approach refers to a person's view or orientation to curriculum development (Carl, 2002:55). The term curriculum development lends itself to different interpretations (Carl, 2002:53). For the purpose of this study, it refers to a process from design to evaluation of the curriculum.

**METHOD**

**Aims of research**

The present research aimed at achieving the following objectives:

- To determine whether educators differ in their approaches to curriculum development.
- To determine whether educators' biographical variables (gender, teaching experience and teaching phase) have any influence on their approaches to curriculum development.
- To determine which particular approach/approaches that best predict (s) educators' approach to curriculum development

**Hypotheses**

The following theoretical hypotheses were formulated:

- Educators do not differ in their approaches to curriculum development.
- Educators' biographical variable (gender, teaching experience and teaching phase) have no influence on their approaches curriculum development.
- No particular approach/approaches best predict (s) educators' approach to curriculum development.

**Participants**

A sample of educators was drawn from schools in the province of KwaZulu-Natal. In the time of investigation KwaZulu-Natal province consisted of four educational regions. These regions in their alphabetical order are: eThekweni; uKhahlamba; uMgungundlovu; and Zululand. A list of schools in each region was obtained. In order to ensure that the results are not biased, each region was sampled. Stratified random sampling was used to select equal number of schools from each of the four regions. There were four randomly selected schools from each region. Therefore, sixteen schools were selected. These sixteen schools were used for drawing a sample of educators for this study (Table 1).

TABLE 1 DISTRIBUTION OF PARTICIPANTS ACCORDING TO BIOGRAPHICAL VARIABLES (N=304)

GENDER		TEACHING EXPERIENCE:					TEACHING PHASE		
		IN YEARS					F	I	S
Male	Female	0-4	5-9	10-14	15-19	20+			
84	220	94	83	63	39	25	113	70	121

F = Foundation phase      I = Intermediate phase      S = Senior phase

Table 1 illustrates the distribution of educators who volunteered to participate in the study according to their biographical variables, namely, gender, teaching experience and teaching phase. Participants included 304 educators, exclusively from previous black

schools. Out of 400 questionnaires that were distributed, 304 were returned, which is 76 % return rate.

### Measures

A questionnaire was used as a research instrument for collecting data. The questionnaire was appropriate for eliciting and rating responses as well as for quantitative analysis of data. It consisted of two sections covering the aims of the study. The first section consisted of respondents' biographical information (gender, teaching experience and teaching phase). The second section consisted of the Curriculum Orientation Profile (COP). The 'Curriculum Orientation Profile' is a useful instrument with which one may determine what his/her main orientation in respect of or approach to curriculum development possibly may be (Carl, 2002:69).

#### *Curriculum Orientation Profile (COP)*

The present study adapted/or modified the fifty seven statements from the list developed by Babin, (1981) and reproduced by Carl, 2002:70-72). These statements are classified into five approaches (orientations), namely, development of cognitive processes, technology, self-actualisation, social reconstruction and academic rationalism. These statements represent a set of value signposts which may help one to discover his/her orientation towards the content, goals and organisation of the curriculum (Carl, 2002:69). The original instrument was modified by shortening those items with long double-barrel sentences and by dropping those which were either overlapping with more than one approach or complicated for possible understanding by the respondents. Fifty items, ten from each approach, were eventually retained. Respondents were asked to indicate whether they agree or disagree with each statement. The ratings were Agree (1) and Disagree (0). The internal consistency reliability estimates for the Curriculum Orientation Profile (COP) in this study, using Cronbach's alpha coefficient, is 0.84. The reliability estimate of 0.70 and above represents acceptable reliability (Muijs, 2004; Nunnally & Bernstein, 1994). Therefore, this instrument is regarded as satisfactory.

Since each approach consists of 10 items, the lowest possible score on each approach is  $10 \times 0 = 0$  and the highest possible score is  $10 \times 1 = 10$ . This continuum of 0-10 was arbitrarily divided into two categories, namely: 0-5 indicating a low approach level (LAL) and 6-10 showing a high approach level (HAL). Thus the respondent's summated score on each approach was classified accordingly into one of these two categories. This procedure yielded data to fulfil the first aim. Data obtained through this procedure were

also used together with those of educators' biographical data in order to meet the second aim of the present study.

### Procedures

The researcher personally administered the research instruments to the participants. The administration was preceded by an explanation of the nature of the instruments and the purpose of the investigation. Participants' consent to participate in the study was sought and they were assured of their confidentiality in reporting the findings.

In order to achieve the aims of this study, various inferential statistical procedures were followed. The chi-square one sample test was used to determine whether educators differ in their approaches to curriculum development (aim number one). The chi-square test of independence was used to determine whether educators' biographical variables (gender, teaching experience and teaching phase) have any influence on their approaches to curriculum development (aim number two). The chi-square test is appropriate for categorical data (Orlich, 1978; Borg & Gall, 1983; Behr, 1988; Bless & Kathura, 1993; Babbie & Mouton, 2001; Goddard & Mellville, 2001).

The third aim of this study was to determine which particular approach/approaches best predict (s) educators' approach to curriculum development. To this end, a stepwise regression analysis was used. Stepwise regression analysis is typically used to determine the independent variables that are useful in predicting the dependent variable. The computer program (SPSS 16.0 for Windows) searches for the order in which the best predictor variables (independent variables) are to be entered into the regression analysis. Hence, in regression there are several variables on one side of the equation and one variable on the other side (Borg & Gall, 1983; Tabachnick & Fidell, 1989; Pieterse & Maree, 2007). In this study, the total of the COP was used as the dependent variable whilst Development of cognitive processes approach, Technology approach, Self-actualisation approach, Social reconstruction approach, and Academic rationalisation approach were used as predictor variables (independent variables).

RESULTS

Results for aim number one are presented in Tables 2 to 6.

TABLE 2 RESPONDENTS GROUPED ACCORDING TO DEVELOPMENT OF COGNITIVE PROCESSES APPROACH LEVELS

	LAL (0-5)	HAL (6-10)
Frequencies	20	284

$\chi^2 = 229.263$        $df = 1$        $p < 0.05$

The chi-square test ( $\chi^2 = 229.263$ ;  $df=1$ ;  $p<0.05$ ) indicates that significance difference was found between the low approach level (LAL) and high approach level (HAL) groups of development of cognitive processes (Table 2). This finding shows that educators differ in their approach to curriculum as development of cognitive processes. The two groups of development of cognitive processes approach levels differ between themselves. Put differently, the existence of these two groups is not due to chance factors.

TABLE 3 RESPONDENTS GROUPED ACCORDING TO TECHNOLOGY APPROACH LEVELS

	LAL (0-5)	HAL (6-10)
Frequencies	29	275

$\chi^2 = 199.066$        $df = 1$        $p < 0.05$

The chi-square test ( $\chi^2 = 199.066$ ;  $df=1$ ;  $p<0.05$ ) reveals that significance difference was found between the low approach level (LAL) and high approach level (HAL) groups of curriculum as technology (Table 3). This finding shows that educators differ in their approach to curriculum as technology. The two groups of technology approach levels differ between themselves. Put differently, the existence of these two groups is not due to chance factors.

TABLE 4 RESPONDENTS GROUPED ACCORDING TO SELF-ACTUALISATION APPROACH LEVELS

	LAL (0-5)	HAL (6-10)
Frequencies	26	278

$\chi^2 = 208.895$        $df = 1$        $p < 0.05$

The chi-square test ( $\chi^2 = 208.895$ ;  $df=1$ ;  $p<0.05$ ) indicates that significance difference was found between the low approach level (LAL) and high approach level (HAL) groups of self-actualisation (Table 4). This finding shows that educators differ in their approach to curriculum as self-actualisation. The two groups of self-actualisation approach levels differ between themselves. Put differently, the existence of these two groups is not due to chance factors.

TABLE 5 RESPONDENTS GROUPED ACCORDING TO SOCIAL RECONSTRUCTION APPROACH LEVELS

	LAL (0-5)	HAL (6-10)
Frequencies	24	280

$\chi^2 = 215.579$        $df = 1$        $p < 0.05$

The chi-square test ( $\chi^2 = 215.579$ ;  $df=1$ ;  $p<0.05$ ) reveals that significance difference was found between the low approach level (LAL) and high approach level (HAL) groups of social reconstruction (Table 5). This finding shows that educators differ in their approach to curriculum as social reconstruction. The two groups of social reconstruction approach levels differ between themselves. Put differently, the existence of these two groups is not due to chance factors.

TABLE 6 RESPONDENTS GROUPED ACCORDING TO ACADEMIC RATIONALISATION APPROACH LEVELS

	LAL (0-5)	HAL (6-10)
Frequencies	38	266
$\chi^2 = 171.000$ $df = 1$ $p < 0.05$		

The chi-square test ( $\chi^2 = 171.000$ ;  $df=1$ ;  $p<0.05$ ) indicates that significance difference was found between the low approach level (LAL) and high approach level (HAL) groups of academic rationalisation (Table 6). This finding shows that educators differ in their approach to curriculum as academic rationalisation. The two groups of academic rationalisation approach levels differ between themselves. Put differently, the existence of these two groups is not due to chance factors.

The results of analysis for the second aim revealed that gender and teaching experience had no significant influence on educators' approaches to curriculum development. They also revealed that teaching phase had no significant influence on educators' approach to curriculum as development of cognitive processes, self-actualisation, social reconstruction, and academic rationalisation. Therefore, only significant results are presented in table 7.

TABLE 7 TEACHING PHASE AND TECHNOLOGY APPROACH LEVELS

TEACHING PHASE	LAL (0-5)	HAL (6-10)
Foundation	20	93
Intermediate	6	64
Senior	3	118
$\chi^2 = 15.784$ $df = 2$ $p < 0.05$		

Table 7 reveals that significant difference was found among Foundation phase, Intermediate phase and Senior phase with regard to curriculum as technology. This finding shows that teaching phase has an influence on educators' approach to curriculum as technology. Any teaching phase differences pertaining to technology approach levels were not due to chance factors, but statistically significant.

Table 8 illustrates the results of the analysis for the third aim.

TABLE 8 PROPORTION OF VARIANCE IN APPROACHES TO CURRICULUM DEVELOPMENT AS EXPLAINED BY PREDICTOR VARIABLES

VARIABLE	R <sup>2</sup>	F	P
Development of cognitive processes	0.63	522.307	0.00
Self-actualisation	0.83	714.797	0.00
Technology	0.91	1022.238	0.00
Academic rationalisation	0.96	1975.082	0.00

It shows that development of cognitive process, self-actualisation, technology and academic rationalisation emerged as significant predictors of educators' approach to curriculum development ( $F=522.307$ ;  $p<0.00$ ,  $F=714.797$ ;  $p<0.00$ ,  $F=1022.238$ ;  $p<0.00$  and  $F=1975.082$ ;  $p<0.00$  respectively). Development of cognitive process explained the largest proportion of the variance, namely 63%. Development of cognitive process and Self-actualisation explained 83% of the variance. Development of cognitive process, self-actualisation and technology explained 91% whilst development of cognitive processes, self-actualisation, technology and academic rationalisation explained 96% of the variance. Social reconstruction could not predict educators' approaches to curriculum development.

## DISCUSSION

The findings revealed that educators differ in their approach to curriculum as development of cognitive processes. A very high percentage of educators (93%) reported a high level of approach to curriculum as development of cognitive processes compared to those who reported a low level (7%) (Table 2). This means that the majority of educators view curriculum as development of cognitive processes.

The findings also revealed that educators differ in their approach to curriculum as technology. A very high percentage of educators (90%) reported a high level of approach to curriculum as technology compared to those who reported a low level (10%) (Table 3). This indicates that the majority of educators view curriculum as technology.

The findings further revealed that educators differ in their approach to curriculum as self-actualisation. A very high percentage of educators (91%) reported a high level of approach to curriculum as self-actualisation compared to those who reported a low level (9%) (Table 4). This implies that the majority of educators regard curriculum as self-actualisation.

The findings also indicated that educators differ in their approach to curriculum as social reconstruction. A very high percentage of educators (92%) reported a high level of approach to curriculum as social reconstruction compared to those who reported a low level (8%) (Table 5). This indicates that the majority of educators regard curriculum as social reconstruction.

The findings further indicated that educators differ in their approach to curriculum as academic rationalisation. A higher percentage of educators (88%) reported a high level of approach to curriculum as academic rationalisation compared to those who reported a low level (12%) (Table 6). This means that the majority of educators view curriculum as academic rationalisation.

With regard to the influence of educators' biographical variables on educators' approaches to curriculum as development of cognitive processes, technology, self-actualisation, social reconstruction, and academic rationalisation, the findings indicated that only the teaching phase has an influence on educators' approach to curriculum as technology. A relatively higher percentage of educators at Senior phase (98%) reported a high level of approach to curriculum as technology compared to those at Intermediate phase (91%) and those at Foundation phase (82%) (Table 7). The reason for this finding may be that the Foundation phase curriculum does not put much emphasis on technological instruction as it is done at the Intermediate and Senior phases.

Lastly, the findings revealed that development of cognitive processes, self-actualisation, technology and academic rationalisation emerged as significant predictors of educators' approach to curriculum development (Table 8). This implies that these are the approaches that can be used to predict educators' approach to curriculum development.

On the whole, the foregoing findings confirm Eisner' (2009: 286) assertion that "it is unlikely that any school will have only one orientation" and affirm Carl's (2002: 63) contention that "educators normally move in a continuum and do not concentrate only on one orientation". On the contrary, the findings of this study negate Carl's (2002:63) assumption that "normally there is a dominant orientation as it is seldom either one or the

other". The findings of this study revealed that the majority of educators report a high level of approach to all the five approaches/orientations to curriculum development.

## CONCLUSION

Educators differ in their approaches to curriculum development, that is, in their approaches to curriculum as development of cognitive processes, technology, self-actualisation, social reconstruction, and academic rationalisation. Educators' dominant thrust is on curriculum as development of cognitive processes (93%), social reconstruction (92%), self-actualisation (91%), technology (90%) and academic rationalisation (88%) respectively. Deducing from these findings, it is concluded that educators' approaches to curriculum development is almost balanced. The findings of this study have contributed towards the understanding of educators' approaches to curriculum development, however, further similar research is proposed so that more light can be shed on the findings.

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