# ASSESSING LEARNING MATERIAL FOR DISTANCE EDUCATION: A CASE STUDY

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#### ABSTRACT

The question that directs this article is 'How appropriate is the new study material in this case study as means of tuition within a new learning paradigm?' In order to determine the appropriateness of learning material for distance education, eight assessment criteria were proposed during July 2000 at the annual conference of the International Association of Schools and Institutes of Administration, and have been published recently in a scholarly journal. This article, by applying these criteria in a case study, assesses the appropriateness of tuition in Public Administration for first-year students at Unisa. The assessment shows, inter alia, that the study guide is adequately accessible to the learners enrolled for the course, that the language of the study guide is perceived as understandable and appropriate to the specific learner profile, that the learning material succeeds in promoting what are regarded as critical cross-field outcomes generic to all fields of learning, and that it facilitates contextualised understanding of the nature, content and scope of public administration. The study guide is shown to be engaged in an effort to shift control of the learning process over to the learners. The research shows that learners appear to be ready for learning material which enhances their competencies to learn and to think independently. This is enhanced by indications that the study guide provides learners with the opportunity to think for themselves and to prepare themselves as knowledge workers. These results lead to the conclusion that Study guide 1 for the course PAD100-X (currently the only study guide for the module PUB101-8) is appropriate as a means of tuition within a paradigm of lifelong learning.

#### INTRODUCTION

A cursory overview of the literature on education, training and learning published in the last decade of the 20th century shows that fundamental changes have occurred in the views on and theories in the field of higher education: a shift from the traditional instruction paradigm toward a participatory learning paradigm. These changes in the general learning environment are also visible in the specific environment of Public Administration teaching in various countries (cf Wessels 2000). Indications are that this paradigm shift in teaching at higher education institutions is moreover interacting with efforts to increase the quality of life of especially the poorer populations of this world by means of human capacity building.

Various departments and schools of Public Administration are undertaking a continuous process of amending their curricula in order to meet the challenges of an ever changing environment. Learning material and teaching methods, specifically at an institution for distance education such as the University of South Africa (Unisa), can be regarded as core elements of a Public Administration curriculum. It is, however, not always clear whether existing, amended or brand new learning material and teaching methods are appropriate and efficient at all.

The Department of Public Administration at the University of South Africa (Unisa) embarked on a curriculum development process in 1995 which not only led to the approval of a new curriculum in 1996, but also to the development of new learning material (Clapper & Wessels 1996). Study guide 1 for the course PAD100-X, *Introduction to Public Administration: The nature, content and scope of public administration* (currently the only study guide for the module PUB101-8) is the first study guide in a series of newly developed learning material for Public Administration. This study guide, aimed at learners in their first year, was introduced for the first time in 1998.

The question is how appropriate this and other new study material have been as means of tuition within a new learning paradigm? In order to determine the appropriateness of learning material for distance education, eight assessment criteria were recently proposed at the annual conference of the International Association of Schools and Institutes of Administration (Wessels 2001). These criteria have been developed mainly through an analysis of the implications of the paradigm shifts in the international and South African learning environments. This article, by applying these criteria as a case study to Study guide 1 for PAD100-X (also referred to as 'the study guide'), will assess the appropriateness of tuition in Public Administration for first-year students at Unisa.

## 1 METHODOLOGY

The assessment criteria which were developed and published (Wessels 2001) will serve as analytical framework for this case study, as well as structure for this article. Quantitative data obtained from a survey of the PAD100-X students during 1998 will be used together with data obtained from a more qualitative assessment of the learning material by eight external evaluators during 1998 and 1999. With all these data and the assessment criteria in mind, the study guide will also be read attentively in order to gauge its full meaning (De Beer 1999:436–463).

## 1.1 Development of assessment criteria

Analysis and evaluation of the major trends in the international learning environment through a study of recent literature in the field show that major shifts have occurred in the field of knowledge and higher education worldwide. Some researchers already regard these movements as paradigm shifts while others are recognising and describing the existence of two distinguishable modes of knowledge. All these changes have more or less similar sociopolitical, knowledge and teaching implications for the materials and methods which are applied in teaching Public Administration at higher education institutions (Barr & Tagg 1995; Dahlin 1999; Gibbons 1998; Killen & Spady 1999; Levinger 1996; Marzano, Pickering & McTighe 1993; Schön 1995; Vermunt 1996; Zuber-Skerritt 1993, 1995; Wessels 2001).

It is against this background that eight criteria for the assessment of learning material and implied teaching methods were developed and proposed during July 2000 at the annual conference of the International Association of Schools and Institutes of Administration. The proposals were published recently in a scholarly journal (Wessels 2001). These assessment criteria have implications for, inter alia, the following aspects of tuition in general and the learning material in particular:

- accessibility
- language of tuition
- intended outcome
- relevancy
- societal responsiveness
- the quality of learning
- respect and tolerance for otherness
- assessment strategies

## 1.2 Survey of students in 1998

Study guide 1 for PAD100-X, *Introduction to Public Administration: The nature, content and scope of public administration*, was introduced for the first time during 1998. In order to make the necessary improvements to the study guide, a questionnaire was developed to get feedback from the learners. During the construction of the questionnaire, the aims and objectives which directed the development of the new material were kept in mind and were embedded in the various questions.

The questionnaire was mailed as part of Assignment 6 to all enrolled students (numbering some 1 873) of which 1 001 responded. Before the process of data analysis started, the records of those students who did not sit the exams in November 1998 and January 1999 were removed, with the result that the official universe for this survey contains 1 659 records. The data set of 1001 respondent records contained some faulty student numbers with the result that only 956 records could be used in the process of analysis: a response of 57,6 percent of the official universe. The survey data were supplemented with the respondents' biographical data as well as data on their performance in the examination. These additional data were obtained from the university's official database on all learners enrolled for the specific course. The biographical composition of the data set obtained from responding learners was compared to the data set of the survey universe. The comparison showed a correspondence of nearly 100 percent between the two data sets, which allows for valid generalisations to be made to the survey universe (all the first-year students of Public Administration for 1998 who were admitted to the examinations of November 1998 and January 1999). 1

# 1.3 Assessment by panel of external evaluators in 1998/1999

As part of the process of developing new study material, each study guide is evaluated by a panel of external evaluators during the first year of implementation. This particular study guide has been evaluated by means of a questionnaire, compiled by a member of Unisa's Department of Public Administration. A panel of eight people participated in the evaluation process, namely a student enrolled for his Masters degree, a second-year student, a tutor, two students repeating the first-year course, one Honours student, and one person who is an editor and language specialist. An emeritus professor in Public Administration voluntarily gave his comments on the study guide in writing, without making use of the questionnaire. Members of the Department of Public Administration also had the opportunity to add their views to the report containing the views of the eight external evaluators. References to this report will be indicated as **Panel 1999**.

#### 2 DISCUSSION OF RESULTS OF ASSESSMENT

How appropriate is the learning material used by the first-year students of Public Administration at Unisa? An analysis of the results of the above-mentioned survey and the report of the external evaluation panel, together with a rereading of the learning material under assessment, will be discussed in terms of the:

- biographical profile of the learners,
- accessibility of learning material,
- language of tuition,
- intended outcome of the learning process,
- enhancement of the civic wellbeing of society,
- improvement of quality of learning,
- respect and tolerance for otherness, and
- assessment strategies.

### 2.1 A typical biographical profile of the learners of this course

A major consequence of the paradigm shift in the field of education and learning is that it has moved the learner into a central position in the learning process. One of the important findings of the research on learning styles by Vermunt (1996:46) is that learners' experiences and levels of skill have implications for regulating the learning process provided. It seems that self-directed learning, which according to Dahlin (1999) forms the basis of 'deep learning', is likely to be the learning style of mature learners. The level of maturity will most probably be related to the age of learners and their previous qualifications or prior learning. Deep learning also appears to be associated with the relevancy of the learning experience for the learner, in other words, whether the learning experience is related to the learner's various *life roles* (eg *occupational* role, *civic* role and role as *lifelong learner*). However, what remains decisive in any learning (whether it is superficial learning or deep learning) is the accessibility of the learning process. In other words, do the offerings of learning reach the potential learners, and if so, do the learners understand the language of tuition? Bearing that in mind, as well as the various criteria for effective learning material deduced from the international and national learning environments, the question that arises is: What does the learner and his or her context look like?

The biographical composition of the respondents for the 1998 survey is summarised in table 1:

Table 1 Biographical composition of the respondents for the 1998-survey

Biographical category	Subcategory	Percentage
Language of tuition	Mother tongue Second or third language	16,7% 83,3%
Race	Asian or Chinese Black Coloured White	6,5% 83% 3,5% 7%
Gender	Female Male	67,9% 32,1%
Age group <sup>2</sup>	Younger than 20 years Between 20 and 29 years Between 30 and 39 years Between 40 and 49 years 50 years and older	2,6% 37% 42,7% 15,8% 1,9%
Type of matric <sup>3</sup>	Full exemption No exemption Conditional exemption Two conditions Other	52% 4,3% 36,9% 4,6% 2,2%
Occupations <sup>4</sup>	Unemployed or full-time student Administrative or clerical Education Nursing Other	22,8% 15,7% 11,4% 31,8% 16,3%

To summarise: A typical learner for this course is a full-time employed black female between 20 and 40 years of age, with full or at least conditional university exemption, studying in her second or third language.

## 2.2 Accessibility of material

The South African Qualifications Authority Act (1995, section 2) indicates that the National Qualifications Framework (NQF) requires learning material to be accessible to learners, and to make provision for learner mobility and progression. As this course is at first-year level, it also admits learners who have no previous university qualifications and prepares them for the second year of study. The question is how accessible this learning material is to its learners. Is it too difficult or too easy for the specific group of learners? In order to answer this question, the following indicators were used to establish the accessibility of the learning material: existing qualifications and racial group in combination with performance in the examination.

It is necessary to know what the learners' existing qualifications are. In other words, whether learners have full university exemption (the highest form of pre-university qualification) or any other form of conditional exemption which is considered to be of a lesser standard than full university exemption. This information will give an indication of the academic standard of learners entering a learning programme in Public Administration. It will most probably give some answers to the question whether the course is not accessible or perhaps too accessible to learners.

In the past, different racial groups passed through different school education systems. As it is generally accepted that the school education system for black people was not always of the same standard as schools for the white, Indian and coloured groups (Pauw 1999:189–190), one can use the racial profile of the learners to establish how accessible this learning material is to learners coming from what are regarded as disadvantaged communities. When using the racial profile of the learners as a basis for comparing learners' examination results, the learning material seems to be less accessible to black learners than to learners from the Asian, coloured and white groups. The average marks for learners in the various groups for 1998 are as follows:

Asian and Chinese:	74,34%
Black:	61,96%
Coloured:	74,21%
White:	74,81%

Do black learners perceive the material to be more difficult than do the other learners? The responses of learners by racial group to questions 26, 27 and 28 (Survey 1998) are summarised in table 2. Table 2 shows that, although the majority of learners regard the learning material as easy, rather than too difficult or too easy, in comparison with Asian, white and coloured learners, a higher percentage of black learners perceive the material as too easy or too difficult.

Table 2 Difficulty of learning material

	Racial group				Qualifi- cation	% of
Questions	Asian & Chinese	Black	Coloured	White	No exemp- tion	Total
26 The leap from my present level of education to this study package was too easy	9,84%	29,1%	18,8%	10,8%	50%	26,3%
27 The leap from my present level of education to this study package was easy	35%	51,4%	50%	77,4%	74%	52%
28 The leap from my present level of education to this study package was too difficult	16,7%	23,1%	13,3%	4,8%	18%	21%

An analysis of the existing qualifications of the group of learners who find the material to be easy shows that only 52 percent of the learners have full university exemption. Does this make a difference to the accessibility of the learning material? Table 2 shows that those students with no exemption generally experience the study package as easier than their colleagues with full or conditional exemption. However, students with no exemption scored on average the lowest during the exams: 47 percent in comparison to 67,5 percent by those with full exemption.

The evaluation panel (1999) is unanimous in their opinion that the study guide makes 'balanced provision for entry level students who are prepared for post-matric education'. Nevertheless, two members of the panel hold the opinion that the material does not make balanced provision for those entry level students who

are **well** prepared for a post-matric education because advanced matter and references as well as technical terms are lacking.

Other factors that may also give an indication of the accessibility of the learning material are the layout, the tone (pleasant/unpleasant) of presentation, the understandability (confusing/elementary) of the material, and the pitch of the material (talking down or talking up). This evaluation shows that the layout has contributed to making the study material accessible to the learners as 82 percent of respondents are of the opinion that the cover of the study guide invites them 'to open it and start reading', 79 percent feel that the cover of the study guide 'complements the contents' and 84 percent experience that the layout of the study guide 'makes reading it a pleasure'. Furthermore, 92 percent of the respondents experience the study material to be 'pleasantly and lively presented'. Regarding the understandability of the learning material, 73 percent do not believe that it is 'too confusing' or 'too elementary'. Learners have indicated their satisfaction with the way in which they are treated through the material, as 81 percent feel that they are treated as adults, and only four percent feel that they are treated as if they are children.

Considering the existing qualifications of the learners, the quality of their previous education as implied by their racial groups, learners' assessment of the layout, pitch and understandability of the material, their average scores in the examinations, as well as the assessment by the external panel, the study guide can be deemed to be adequately accessible to the learners enrolled for the course.

# 2.3 Language of tuition

Without communication in some language or medium, learning would be nearly impossible. Wooldridge (2000) argues that effective communication is a prerequisite to effective learning. In order to learn effectively, it can be taken for granted that the learner must be able to understand the language of tuition and to use it skilfully. Where learners are not studying in their home language, and where the language of tuition is not as familiar to them as it is to those learners who use it as their home language, special attention needs to be paid to the comprehensibility of the language in the study material. Knowing that more than 83 percent of the first-year learners are receiving tuition in a language other than their mother tongue, and in order to enhance the accessibility of learning material and effective learning, special attention has been paid to the level of complexity of the language of tuition during the development of the material. The effort of simplifying the language of tuition is known as *foreigner talk* (Wooldridge 2000; Adler 1997).

How understandable is the language of this study guide as perceived by its readers? In the survey, an overwhelming 91 percent assess the language of the study package as understandable (Survey 1998: Question 29). Only three percent of the learners indicate that the language used in the study package is too formal

and not understandable (Survey 1998: Question 29). On the other hand, only 6 percent believe that the language is too simple (Survey 1998: Question 29). The external panel members also agree that the study guide is 'written with students in mind' (Panel 1999: Question 6.1) and that the language and vocabulary used are 'accessible to students' (Panel 1999: Question 6.3).

Does the language of tuition have a specific influence on the performance of learners in the examination? A comparison of the average examination marks of the learners who are studying in their mother tongue with those who are studying in their second or third language reveals the following:

Table 3 Average marks according to language of tuition

Language of tuition	Average marks for 1998
Learners who study in their mother tongue Learners who study in a second or third	74,47%
language	61,97%

Although a major percentage (83 percent) of the learners study in their second or third language, and although their average marks are more that 12 percent lower than those who are studying in their mother tongue, the survey shows that the language of the study guide is perceived as understandable. Therefore one may conclude that the language of this study guide is appropriate for the specific learner profile using this study guide.

# 2.4 Intended outcome of the learning process

The shift from instruction to learning does have inevitable implications for the learning or teaching of Public Administration. It has become necessary to take a closer look at the learning process. In other words, learning material and learning methods within the framework of the new learning paradigm cannot be the same as learning material and methods within the instruction paradigm. As Vermunt (1996:25) puts it: 'Instruction does not lead to learning automatically. The learning activities that students employ determine to a large extent the quality of learning outcomes they achieve.'

In evaluating the learning material, it is essential to determine whether it leads to the intended outcomes of the learning process. In South Africa, outcomesbased education (OBE) is intended to produce curricula and by implication learning material and teaching methods which are, among other considerations, guided by the intended student learning outcomes (Killen & Spady 1999:200). In the case of this particular study guide, the overall outcomes of the learning process can be summarised as follows (Wessels 1997:ix–x):

- Improved knowledge and understanding of the nature, content and scope of public administration (subdivided into fifteen constituent outcomes)
- Advanced reading, summarising and writing skills
- Examination-writing skills
- The ability to work independently
- Self-evaluation and evaluation of own progress
- The ability to apply theory to practical situations
- Critical thinking
- An open-minded spirit
- Patience and tolerance towards different views

The results of an analysis of all 42 activities and five self-evaluation (SE) sections for the presence of these outcomes have been summarised in Appendix A. Appendix A shows that activities and SE sections pay special attention to and in particular aim to promote improved —

- understanding of the nature, content and scope of public administration (46 activities or SEs)
- reading skills (40 activities or SEs)
- critical thinking (42 activities and SEs)
- ability to apply theory to practical situations (27 activities or SEs)

Each one of the 15 study units, in addition to the general outcome of improving learners' knowledge and understanding of the nature, content and scope of public administration, has its own specific learning outcomes, embedded in the review of each study unit. Nearly 96 percent of the learners believe that it helps them to determine whether they have mastered the core of each study unit (Survey: Question 53). At the end of each theme, learners are encouraged to evaluate themselves to determine the extent to which they have achieved the outcomes set out for the particular theme and study units. With regard to these self-evaluation sections, between 93 percent and 96 percent of the learners believe that it helps them to determine whether they have achieved the outcomes (facts, understanding and skills respectively) of the particular themes (Survey 1998: Questions 54, 55 & 56). Overall, about 92 percent of the respondents indicate their satisfaction with the results of the study package (Survey 1998: Questions 11 & 12) while 80 percent feel that the study package makes them eager to continue with studies in Public Administration at Unisa (Survey 1998: Question 14). Members of the external evaluation panel (Panel 1999: Question 7.1) also hold the opinion that the 'content of the guides [is] relevant to the stated aims of the course'.

In an effort to integrate the new learning content with experiences in real life, and thereby facilitating a real understanding of public administration, the study guide begins with the story 'Thulamela' which serves as an advance organiser<sup>5</sup> (Mackintosh 1999:25). Thulamela is a fictitious story about real people living in medieval times in the remote northern part of 'the area presently known as the Kruger National Park' (Theunissen 1997:iii).

Some of the activities as well as most of the SEs at the end of the various themes refer back to Thulamela in order to encourage the learner to actively integrate the new information. Nearly 91 percent of the responding learners agree that the story improves their understanding of the study material (Survey 1998: Question 49) while 87 percent agree that the story improves their understanding of certain aspects of their present circumstances (Survey 1998: Question 51).

This indicates that the learning material does promote:

- certain critical cross-field outcomes that appear to be generic to all fields of learning, as well as
- contextualised understanding of the nature, content and scope of public administration.

## 2.5 Relevancy

Implicit in lifelong learning is the need for student discovery and construction of knowledge (Barr & Tagg 1995) to be concentrated on real issues and problems in authentic conditions (Zuber-Skerritt 1993:46) in order to solve specific mutual problems. Study material and teaching methods therefore need to enhance relevant learning. According to Greenwood and Robins (1998:416) the shift to relevancy, especially vocational relevancy, reinforced the shift of the curriculum towards (business) management, away from its social origin. The main effect of that decision seems to be that by addressing crucial issues in public policy, as well as efficient and effective management, Public Administration becomes contextually relevant to these subject fields.

Purely from a learning perspective, the feeling of *personal significance* (the personal dimension of contextual relevancy) is seen as the central factor for developing understanding of learning content and for stimulating 'deep learning' (Dahlin 1999:203, 206). It is for that reason that actively engaging with the learning material and discussing it with peers, in other words doing things with the material being learnt, play such an important part in the learning process (Dahlin 1999:203).

In the process of assessing teaching or learning material and methods, one may ask whether these material and methods succeed in making the learning content relevant to the specific contexts of the learner. In other words, do they (Wessels 2001):

- make provision for learning experiences essential to successful performance in the **various life roles** of the learner?
- **connect to learners' own experiences** and reality to create personal relevancy?
- have a **problem-based** approach, instead of discipline-based approach?

#### Various life roles

According to Killen and Spady (2000:204) one can identify at least five life roles for learners, namely career, entrepreneurial, civic, personal and learner. This learning material for first-year learners has been written predominantly from a citizen perspective. That is why in most of the activities, topical issues (such as the increased incidence of Aids) are used to put the learning activities within the context of the daily civil experiences or learners. The survey of 1998 and the external evaluation (Panel 1999) focused mainly on learners' life role functions in their career (occupational relevancy) and learning affairs.

With regard to their life-role performance in an occupation, 91 percent of the respondents hold the opinion that the study package takes their 'present or future occupation into consideration' (Survey 1998: Question 23), 89 percent feel that they are equipped by the study package for their 'present or future occupation' (Survey 1998: Question 24) while 87 percent are convinced of the relevancy of the study package for their present or future occupation (Survey 1998: Question 25). With reference to aspects that are treated in the study material, 92 percent of the respondents hold the opinion that they are 'mostly applicable to life' as they experience it (Survey 1998: Question 32). The preceding examples of the relevancy of the learning material to the respondents are probably the reason why 92 percent of the respondents hold the view that the material succeeds in retaining their interest (Survey 1998: Question 33). These assessments by the students are supported by the external panellists who, with one exception, believe that the study guide is relevant to vocational, professional and social requirements (Panel 1999: Question 7.3). From the above, one can safely conclude that the learning process facilitated by this study guide is experienced by the learners as relevant to life in general and to their present or future professions or occupations in particular.

With regard to its relevancy to the learners' life roles as learners, an assessment of all 42 activities and five self-evaluation sections (SEs) reveals that:

- 40 of these, in some way or another, aim to improve learners' reading ability,
- 22 contain summary exercises, and
- 23 urge learners to write (from one-sentence paragraphs to fully-fledged essays).

These reading, summary and writing activities are directly relevant to effectively carrying out significant life-role functions as learners. These learner life-role functions are directly attended to in 19 activities or SEs. Furthermore, no less than 42 activities and SEs encourage learners to be critical thinkers. Therefore, one can safely conclude that this particular study guide does make provision for learner-specific life-role functions.

#### Personal relevancy

It has already been confirmed that no less that 64,6 percent of respondents prefer that the content of their learning material be related to their personal experiences and emotions (Survey 1998: Question 2). In other words, they want their learning material to be relevant and meaningful to their personal circumstances.

A world-wide movement in institutions for higher education from pure academic education to professional and vocational education coincides with what Zuber-Skerritt (1993:53) calls a shift from classroom to practice – in other words it seems that control over the learning process is shifting from universities as typical providers to the learners as conventional receivers. Control over the learning process is shifting from the lecturer to the learner. Learning should therefore become personally relevant to learners.

The research by Vermunt (1996:46) shows the possibility of progression within a learning style in that it often develops from external to internal regulation. The more experienced and skilled students become in a certain learning style, the more it is executed under internal control. An externally regulated reproduction-directed learning style can change into an internally regulated (self-directed) meaning-directed style. The personal commitment to learning associated with self-directed learning then forms the basis of what Dahlin (1999:206) calls 'deep learning'.

Control over the learning process is determined, among other factors, by learners' acceptance of responsibility for their own success as well as their freedom to participate in the learning process and to form their own opinions on critical issues. The survey shows that 91 percent of the learners feel coresponsible for their success in passing the course (Survey 1998: Question 15). This feeling of responsibility is reflected in the fact that nearly 74 percent do not agree that their success depends entirely on their lecturers (Survey 1998: Question

16). Furthermore, 94 percent of the learners agree that the study guide encourages student participation (Survey 1998: Question 58) and 87 percent agree that the study guide equips them to form their own opinions on issues and to defend such opinions (Survey 1998: Question 69). It is clear that, according to the learners, the study guide is engaged in an effort to shift control of the learning process over to the learners. This shift implies an increase in the level of relevancy of the learning material for individual learners personally.

#### Problem based

The external panel's evaluation concentrated mainly on relevancy to Public Administration as an academic field of study. Members of the external evaluation panel hold the view that the study guide serves (adequately to well) as a sound introduction to the subject of Public Administration (Panel 1999: Question 2.1). The only exception is a student, repeating his first-year course, believing that the study guide does not serve as a sound introduction to Public Administration. However, the detailed evaluation of the study guide by the panel (Panel 1999: Questions 4.1–4.15) reveals that where the panellists respond negatively, it is mainly because they believe that the study guide should be discipline-based, instead of problem-based (see specifically the answers to Question 4.4). It seems that at least some of the panellists are concerned that the study guide does not have a sufficient theoretical base<sup>6</sup> (Panel 1999: Questions 7.5 & 7.6). However, these responses actually confirm that the study material has a more problem-based approach than a discipline-based approach.

# 2.6 Economic and civic wellbeing of society

An analysis of the 42 activities and five SEs in the study guide shows that no less than 41 activities and SEs are ultimately aimed at the context for learners' liferoles in civil affairs, eg the improvement of the economic and civic wellbeing of society. For example, it touches on topics such as crime, matric pass rates (Study guide: Activity 1.1), the condition of roads (Study guide: Activity 4.1), the use of water (Study guide: Activity 6.2), the increase in the incidence of Aids (Study guide: Activities 7.2 & 9.4), and the employment of Cuban doctors (Study guide: Activity 8.3), to mention but a few. An advantage of this approach is that it sensitises learners as future public servants to the needs of the society served by government in general and the public service in particular.

# 2.7 Improvement of quality of learning

The shift from instruction to learning does have inevitable implications for the learning or teaching of Public Administration. The fact that control over the learning process is shifting from the lecturer to the learner and that the learner is supposed to become a lifelong learner means that a closer look at the learning process has become necessary.

An empirical study on learning styles and strategies points to the importance of discouraging undirected and reproduction-directed learning styles among students and encouraging *meaning*-directed and *application*-directed styles (Vermunt 1996:47). The importance of meaning-directed and application-directed styles is supported by Swedish research on 'ways of coming to understand' which found that students who 'come to understand' through experiences and mental construction are more capable of merging such understanding with reality (Dahlin 1999:191–207). Meaning-directed and application-directed learning styles which are characterised by mostly self-regulated learning appear to be most consistent with the goals of higher education to educate people who should be able to think, decide and to be independent lifelong learners.

The above and the various literature on learning styles indicate that a major purpose of learning material is to **improve the quality of learning** of the learners by —

- equipping the learners with competencies to learn and to think independently,
- shifting the **control over learning**, from the lecturer to the **learner** in accordance with the learner's growing learning abilities, and
- **equipping learners as knowledge workers** who will be able to coherently construct, modify, configure and utilise transdisciplinary knowledge in relation to a wide range of problem-solving applications.

These three criteria will be used to determine whether Study guide 1 for the course PAD100-X has the potential to improve the quality of learning of its learners.

## Competencies to learn and to think independently

An analysis of the answers to questions 1 to 7 of the survey shows that most of the learners prefer learning material to be structured and ordered so that they can prepare themselves for the examinations (Table 4). This is clearly reproduction-directed learning. However, it seems that these learners do not regard memorising of factual information as important (Survey 1998: Questions 1, 2, 3 & 7). This is perhaps the reason why only 40 percent agree with the statement that the study guide requires too little memorising (Survey 1998: Question 71). Thus, although it seems that learners prefer an examination-oriented reproduction-directed learning style, they do not value precise instructions and facts which can be easily memorised, very highly.

**Table 4 Learner preferences** 

Question in survey	Learner preferences with regard to learning material	Percentage	
1	Structured and ordered material with clear- cut lecture aims enhancing their preparation for the examination to precise instructions and facts which can easily be memorised	83,8% 16,2%	
4	Structured and ordered material with clear- cut lecture aims enhancing their preparation for the examination to contents being related to their personal experi- ences and emotions	79,5%	
5	Structured and ordered material with clear- cut lecture aims enhancing their preparation for the examination to a holistic view and the relation of the material to the past and the future	56,7%	
3	Material that gives a <b>holistic view</b> and which can be related to the past and the future to material that gives precise instructions and facts which can easily be memorised	82,5% 17,5%	
6	Material that gives a <b>holistic view</b> and which can be related to the past and the future to material that relates the contents to their personal experiences and emotions	64,7% 35,3%	
2	Material that relates the contents to their personal experiences and emotions to material that gives precise instructions and facts which can easily be memorised	64,6% 35,4%	

The learners' preference for learning material which gives a holistic view of public administration, as well as material with contents that relate to their personal experiences and emotions, to those with precise instructions and facts, shows an openness to meaning-directed learning (Survey 1998: Question 3). In their assessment of the learning material, 65 percent of the respondents hold the opinion that the particular study guide gives a holistic view of public administration and public service delivery, and relates this to the past and the future (Survey 1998: Question 7).

Their preference for learning material with a holistic (Survey 1998: Questions 3 & 6) and to a lesser extent a personal approach (Survey 1998: Question 2) can be regarded as an indication that they are receptive to a meaning-directed learning style. Their assessment of the learning material implies that the study guide is not perceived as reproduction directed, but as strongly meaning directed (Survey 1998: Question 7). According to the research by Vermunt (1996:47) the cognitive process of meaning-directed learning is *deep processing*. The importance of this learning style is supported by Swedish research on 'ways of coming to understand' which found that students who 'come to understand' through experiences and mental construction are more capable of merging such understanding with reality (Dahlin 1999:191–207). These learning styles appear to be most consistent with the goals of higher education to educate people who should be able to think, decide and to be independent lifelong learners.

Although learners still seem to prefer a reproduction-directed learning style, their openness to meaning-directed learning shows that they are ready for learning material that enhances their competencies to learn and to think independently. The question is: does the study guide encourage these competencies?

The study guide makes use of 42 activities to facilitate the learning process. The aim of these activities is to develop, inter alia, learners' advanced reading, summarising and writing skills, their ability to collect and classify information, their ability to work independently, their ability to evaluate themselves and their own progress, and to apply theory to practical situations (Wessels 1997:x). A detailed analysis of the activities and SEs reveals that the 42 activities and SEs make some attempt to encourage learners to be critical thinkers (Table 5).

The evaluating panel is unanimous in their view that the study guide teaches 'by encouraging active doing rather than by merely explaining' (Panel 1999: Question 8.1). However, one member of the panel believes that the 'number of activities is quite overwhelming. The way in which they also interrupt the flow of information in a study unit is also irritating' (Panel 1999:25). Although 89 percent of the students like the activities (Survey 1998: Question 38), the use of activities still seems to be unfamiliar to them as 62 percent of the students are of the opinion that there are too many activities (Survey 1998: Question 37). However, 94 percent of them are of the opinion that the activities improve their understanding of the specific parts in the study guide (Survey 1998: Question 41).

An analysis of the activities and SEs collectively actually confirms that 46 of these, in some way, attempt to improve learners' understanding of the subject matter. The feedback after each activity is regarded by 81 percent of the learners as adequate (Survey 1998: Question 46). All the above serves as confirmation that the study guide has not been developed to facilitate reproductive learning, but to engage learners by means of the various activities to be active learners by applying a meaning-directed learning style.

Table 5 Number of activities and self-evaluation (SE) sections that addresses the various outcomes

Outcomes	Theme 1	Theme 2	Theme 3	Theme 4	Theme 5	Total
Improved knowledge (k) and understanding (u) of the nature, content and scope of public administration	u = 8 k = 6	u = 9 k = 2	u = 11 k = 4	u = 11 k = 6	u=7 k=1	u = 46 k = 19
Advanced reading (r), summarising (s) and writing (w) skills	r = 6 $s = 4$ $w = 5$	r = 8 s = 6 w = 3	r = 10 $s = 6$ $w = 5$	r = 10 $s = 5$ $w = 7$	r = 6 $s = 1$ $w = 3$	r = 40 $s = 22$ $w = 23$
Examination writing skills	0	1	3	3	2	9
The ability to work independently	9	9	11	11	7	47
Self-evaluation of own progress	1	1	4	6	3	15
The ability to apply theory to practical situations	2	3	8	7	7	27
Critical thinking	8	8	9	10	7	42
An open-minded spirit	0	3	0	0	0	3
Patience and tolerance towards different views	0	3	0	2	0	5
Life roles: entrepreneurial affairs, civil affairs (1), personal affairs (2), learning affairs (3) and their careers (4)	1 = 7 3 = 3	1 = 5 3 = 5	1 = 11 3 = 3 4 = 2	1 = 11 3 = 5 4 = 6	1 = 7 3 = 3 4 = 7	1 = 41 3 = 19 4 = 15

To determine learners' ability to apply theory to practical situations, two questions have been asked (Survey 1998: Questions 42 & 43). The answers show that 88 percent of the learners want to be presented with the theory in a study unit first, before they practice applying such theory with the help of the activities (Survey 1998: Question 42), whereas the same percentage believes that the activities in the study guide help them to discover the theory in the study units (Survey 1998: Question 43). The response to question 42 confirms the fact that learners are still used to a reproductive learning environment. They expect to first receive the theory and then apply it to practical issues. However, their responses to question 43 indicate that they experience the activities as a means of acquiring theoretical knowledge. Furthermore, no less that 90 percent of the respondents are of the opinion that the activities enable them to put their thoughts about the study material in writing (Survey 1998: Question 45). In other words, it enables them to formulate their own thoughts on the subject matter – a characteristic of meaning-directed learning.

An analysis of the activities and SEs shows that at least 27 of these assist learners to apply theory to practical situations. In this regard, one can conclude that, although the learners' need for theoretical knowledge can be explained as a result of their conditioning to a reproductive learning style, the activities meet their need for acquiring theoretical knowledge and attach their own meaning to it.

All the above-mentioned aims of the activities are in essence directed at independent thinking as a fundamental outcome of the learning process. The evaluation panel was not unanimous in their opinions of whether the learning material encourages learners to think independently (Panel 1999: Questions 9.3, 9.4 & 9.5). Their main concern in this regard is that the learning material does not teach learners how to do assignments! They are concerned that the activities do not make provision for 'self-expression' by means of essays. However, nearly 93 percent of the 965 respondents believe that the study guide gives them the opportunity to think for themselves (Survey 1998: Question 63) while 87 percent believe that the study guide equips them to form their own opinions on issues and to defend their opinions (Survey 1998: Question 69).

An analysis of the 42 activities in the study guide reveals that learners are openly encouraged in 22 of the activities to give their own opinions on issues. In nine activities and three self-evaluation exercises they are asked to write down their thoughts in either a paragraph or an essay. It seems, therefore, that the concerns of the panel in this regard have no real substance.

From the above one can conclude that although learners seem to prefer a reproduction-directed learning style, their receptiveness to meaning-directed learning shows that they are ready for learning material that enhances the competencies to learn and to think independently. Furthermore, the learners are of the opinion that the study guide does give them the opportunity to think for themselves – an opinion which is supported by the above analysis of the activities in the study guide.

#### Equipping learners as knowledge workers

Knowledge production is traditionally regarded as a self-contained, disciplinary activity that takes place in self-sufficient institutions (Gibbons 1998:16, 38). The main change imposed by the paradigm of lifelong learning is that knowledge production and dissemination are no longer self-contained activities carried out in relative institutional isolation, but take place in a transdisciplinary environment and across the boundaries of self-sufficient institutions (Gibbons 1998:i, 6, 16). The challenge is therefore to equip learners as knowledge workers who will be able to configure transdisciplinary knowledge that may have been produced anywhere in the world to a wide range of problem-solving applications (Gibbons 1998:61).

As this specific study guide is aimed at first-year learners, and as it represents their first encounter with Public Administration as a subject, it contains no specific references to the various disciplines from which existing knowledge originates. However, the study guide does make use of knowledge, concepts and disciplinary skills originating in subjects other than Public Administration, eg Political Sciences (Study units 2, 3, 11, 12 & 13), Philosophy (Study unit 6), Historiography (the narrative) (Study units 8 & 11), Sociology (Study unit 9), Medicine (Study unit 9) and Demography (eg Study unit 10). Through the various activities the learners are facilitated to reflect on these concepts, bits of knowledge and skills in order to apply these in their study and understanding of the nature and scope of public administration. For example, no less that 27 activities enhance learners' ability to apply theory to practical situations.

To conclude: the above shows that the study guide prepares the field for equipping learners as knowledge workers by applying knowledge and theories from various disciplines to explain phenomena in their day-to-day lives.

# 2.8 Respect and tolerance for otherness

Why is the learners' racial and gender profiles important at all? From a South African perspective, there are three major reasons. The first one relates to the quality of prior learning or the matric offered by schools that previously catered for black pupils (Pauw 1999:189–190). The second reason is of a sociopolitical nature, namely to determine whether the learning programmes are successful in including more learners from the previously disadvantaged racial and gender groups (Muthien 1999:209). A third reason, and perhaps the only one of the three related to learning material, is the need to be sensitive to race and gender issues in order not to offend people from the various groups.

At Unisa, there seems to be an increase in the numbers of learners from these groups who have enrolled for modules in Public Administration. For example, the percentage of black students grew from 63,5 percent of the total in 1990 to 79,7 percent in 1995 and 86,2 percent in 2000 (Clapper & Wessels 1996:47; Unisa

2000). In addition, the number of women enrolled for the first-year courses or modules in Public Administration has increased from 52,9 percent in 1990, to 66 percent in 1995 and 70,1 percent in 2000 (Clapper & Wessels 1996:47; Unisa 2000).

Bearing that in mind, it is significant that the learning material is perceived:

- by only 16 percent of the respondents as having been predominantly written from a white/Afrikaans/European perspective (Survey 1998: Question 17),
- by 45 percent of the respondents as having been predominantly written from an African perspective (Survey 1998: Question 18),
- by 58 percent of the respondents as sensitive to and objective about cultural issues (Survey 1998: Question 19),
- by 8,5 percent of the respondents as having been written from a strongly male perspective (Survey 1998: Question 20),
- by 10,4 percent of the respondents as having been written from a strongly female perspective (Survey 1998: Question 21),
- by 87 percent of the respondents as treating the various sexes in an equal and objective way (Survey 1998: Question 22), and
- by 55 percent of the respondents as sensitive to language issues (Survey 1998: Ouestion 31).

Although the results on questions 17 and 18 indicate a small cultural bias in favour of the African perspective, it seems that the learning material is overall perceived by learners as relatively unbiased with regard to race, culture, gender and language issues.

# 2.9 Assessment strategies

The new paradigms with regard to learning imply that new approaches to assessment are needed to satisfactorily assess students' ability to meet lifelong learning standards (Marzano, Pickering & McTighe 1993:11). It goes without saying that, as assessment provides the necessary feedback for effective learning, it directly affects learning. Changing learning strategies necessitate new assessment strategies such as tasks and situations in which learners are given opportunities to 'demonstrate their understanding and to thoughtfully apply knowledge, skills, and habits of mind in a variety of contexts' (Marzano, Pickering & McTighe 1993:13).

The assessment techniques that are applied as part of this learning process consist of a review at the end of each study unit, the self-evaluation at the end of each theme, multiple-choice assignments, an essay assessed by lecturers, an self-evaluated essay, the mock exam, and the examination. As much as 96 percent of the respondents indicate that the review helps them to determine whether they have mastered the core of each study unit (Survey 1998: Question 53). More or

less the same percentage of learners are of the opinion that the self-evaluation at the end of each theme helps them to determine whether they know and understand the most important facts (Survey 1998: Questions 54 & 55) and can apply the skills they have acquired in the particular theme (Survey 1998: Question 56).

With regard to the assignments, 97 percent of the respondents believe that the multiple-choice assignment (assignment 02) helped them to improve their knowledge and insights into themes 1 and 2 in particular (Survey 1998: Question 81). According to 90 percent of respondents, assignment 03, a self-evaluation and essay-type assignment, helped them to apply the knowledge they gained from the study guide to their own field of experience (Survey 1998: Question 82). The assignments also include a mock exam for self-evaluation, which 98 percent of the respondents completed as an exercise with the examinations in view (Survey 1998: Question 87). During the first year of implementation of the particular study material, the learners needed to do eight assignments during the year, of which three were self-evaluation assignments. The evaluation panel holds the opinion that there is adequate opportunity for self-assessment throughout the material (Panel 1999: Question 8.9). Although the total number of assignments may seem to be too great, 60 percent of the learners do not believe this to be the case (Survey 1998: Question 88).

It therefore seems that the learning material does make adequate provision for strategies to assess whether learners meet the outcomes of the learning process.

## **CONCLUSION**

The question which directs this article is 'How appropriate is this new study material as means of tuition within a new learning paradigm?' By asking this, we have a specific learner in mind, namely a black female between 20 and 40 years of age in full-time employment, with full or at least conditional university exemption, studying in her second or third language. At other institutions of higher learning the typical learner will most likely present a different profile.

Considering the existing qualifications of the learners, the quality of their previous education as implied by their racial groups, learners' assessment of the layout, pitch and understandability of the material, their average scores in the examinations, as well as the assessment by the external panel, the study guide is shown to be adequately accessible to the learners enrolled for the course. In addition, bearing in mind that a major percentage of the learners study in their second or third language, the language of the study guide is perceived as understandable and may therefore be regarded as appropriate to the specific profile of learners using this study guide.

Despite the divergent academic, occupational and social backgrounds of learners, the learning material succeeds in promoting what are regarded as critical cross-field outcomes that appear to be generic to all fields of learning, as

well as a contextualised understanding of the nature, content and scope of public administration. The contextualised nature of the study guide is perhaps why so many learners experience the learning process facilitated by this study guide as relevant to life in general and to their present or future professions or occupations in particular. In fact, it seems that this study guide does make provision for the learners' various life-role functions. The study guide has taken into account the context for learners' life roles in civil affairs, for example the improvement of the economic and civic wellbeing of society, by touching on topics such as crime, matric pass rates, the condition of roads, the use of water, the increase in the incidence of Aids, and the employment of Cuban doctors, to mention a few.

As part of providing for learners' various life-role functions, the study guide endeavours to transfer control of the learning process to the learners, in other words to place special emphasis on their life-role functions as learners. This shift implies an increase in the degree of relevancy of the learning material for individual learners personally as well as a more problem-based approach rather than a discipline-based approach.

Although learners seem to prefer a reproduction-directed learning style, their receptiveness to meaning-directed learning shows that they are ready for learning material which enhances their competencies to learn and to think independently. Furthermore, it seems that the learners are of the opinion that the study guide does provide them with the opportunity to think for themselves — an opinion which is supported by the analysis of the activities in the study guide. The study guide moreover does make an effort to prepare the field for equipping learners as knowledge workers by applying knowledge and theories from various disciplines to explain phenomena in day-to-day life.

Concerning the biographical profile of learners in public administration, it is a positive sign that the learning material overall is perceived by learners as relatively unbiased with regard to race, culture, gender and language issues.

The various review and self-evaluation sections as well as the variety of assignments make adequate provision for self-assessment strategies for learners to determine whether or not they have met the outcomes of the learning process.

From the above one can conclude that Study guide 1 for PAD100-X (the only study guide for module PUB101-8) is appropriate as a means of tuition within a paradigm of lifelong learning.

#### **ENDNOTES**

- 1 This article would not have been possible without the assistance of Mr O V Kilpert of the Bureau for University Teaching at the University of South Africa with the statistical analysis of the survey data.
- 2 The average age for this group of respondents is 33 years. This constitutes a slight drop from the average age of 34 in 1995 but a sharper drop from the average age of 39 in 1990.

- 3 The profile of learners with regard to their prior qualifications is confined to their type of matric only. It is accepted that some of the learners, especially the almost 32 percent who are occupied in the nursing profession, will already have other post-matric qualifications. However, the fact that more than 40 percent of learners are conditionally admitted to university studies can be partly explained by the fact that more that 60 percent of the learners are 30 years and older.
- 4 The occupational profile of first-year learners in Public Administration is constantly changing. It is especially evident in the growth of the component of learners who are classified as unemployed or full-time students. This component grew from 7,2 percent of the total in 1990, to 22,8 percent in 1998.
- 5 An advance organiser (Mackintosh 1999:25):
  - should encourage the learner to actively integrate the new information,
  - should be sequenced before the new material to be read,
  - is designed to promote meaningful and not rote learning, and
  - has a positive effect on applying new knowledge to new situations.
- 6 See comments such as: 'Many classic texts are missing from the references. Gaps are left in the subject matter ... this new approach is excellent but lacks theoretical base. I think the guides dealt more about [sic!] public administration as a course not a discipline.'

#### REFERENCES

- Adler, N J. 1997. *International dimensions of organizational behavior*. Cincinnati, Ohio: South-Western College Publishing.
- Barr, R B & Tagg, J. 1995. From teaching to learning: a new paradigm for undergraduate education. *Change: The Magazine of Higher Learning*, 27(6), (November/December).
- Clapper, V A & Wessels, J S. 1996. Transforming the curriculum for Public Administration at Unisa. *SAIPA Journal of Public Administration*, 32(1).
- Dahlin, B. 1999. Ways of coming to understand: metacognitive awareness among first-year university students. *Scandinavian Journal of Educational Research*, 43(2).
- De Beer, C S. 1999. Reading texts and understanding meaning. In *Reflective Public Administration: views from the South*, edited by J S Wessels and J C Pauw. Cape Town: Oxford University Press.
- Gibbons, M. 1998. *Higher education relevance in the 21st century*. The World Bank Education.
- Greenwood, J & Robins, L. 1998. Public administration curriculum development

- in Britain: outsider or insider influence? *International Review of Administrative Sciences*, 64(3).
- Killen, R & Spady, W. 1999. Using the SAQA critical outcomes to inform curriculum planning in higher education in South Africa. South African Journal of Higher Education, 13(2).
- Levinger, B. 1996. *Critical transitions: human capacity development across the lifespan.*Newton, USA: Education Development Centre. Available online at URL:http://www.edc.org/INT/HCD/crittrans.htm.
- Mackintosh, W.G. 1999. 'In the beginning': advance organisers as preinstructional strategy for ODL textual design. *Progressio*, 21(1).
- Marzano, R J, Pickering, D & McTighe, J. 1993. Assessing student outcomes: performance assessment using the dimensions of learning model. Alexandria, Virginia: ASCD.
- Muthien, Y. 1999. Race and gender inequalities in public administration. In *Reflective Public Administration: views from the South,* edited by J S Wessels and J C Pauw. Cape Town: Oxford University Press.
- Panel. 1999. Results of a qualitative/quantitative assessment of Study guide 1 of PAD100-X. Department of Public Administration. Pretoria: Unisa.
- Pauw, J C. 1999. Ethics and budgets. In *Reflective Public Administration: views from the South*, edited by J S Wessels and J C Pauw. Cape Town: Oxford University Press.
- Schön, D.A. 1995. The new scholarship requires a new epistemology: knowing-in-action. *Change: The Magazine of Higher Learning*, 27(6), (November/December).
- South Africa. 1995. South African Qualifications Authority Act, 58 of 1995.
- Survey. 1998. Results of a survey of students enrolled during 1998 for the course PAD100-X at the University of South Africa.
- Theunissen, C A. 1997. Thulamela. Advance organiser in *Introduction to Public Administration: the nature, content and scope of public administration,* authored by J S Wessels. Study guide 1 for PAD100-X. Pretoria: University of South Africa.
- Unisa. 2000. Bureau for Management Information. Student statistics.
- Vermunt, J D. 1996. Metacognitive, cognitive and affective aspects of learning styles and strategies: a phenomenographic analysis. *Higher Education*, 31.
- Wessels, J S. 2000. Equipping public officials for the challenges of responsible governance: a South African perspective on lifelong learning. *International Review of Administrative Sciences*, 66(2).
- Wessels, J S. 2001. Criteria for assessing learning material for distance education. *South African Journal of Higher Education*, 15(1).
- Wessels, J S. 1997. *Introduction to Public Administration: the nature, content and scope of public administration*. Study guide 1 for PAD100-X. Pretoria: University of South Africa.
- Wooldridge, B. 2000. Foreigner talk: an important element in cross-cultural

- management education and training. Paper read at the annual conference of the International Association of Schools and Institutes of Administration. 10–13 July 2000. Beijing, China.
- Zuber-Skerritt, O. 1993. Improving learning and teaching through action learning and action research. *Higher Education Research and Development*, 12(1).
- Zuber-Skerritt, O. 1995. Models for action research. In S Pinchen & R Passfield (eds) *Moving on: creative applications of action learning and action research*. Brisbane: ALARPM.