

The perceived value of textbooks and supporting material in higher education in South Africa

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Abstract

The purpose of this research was to determine to what extent academics in South Africa use textbooks and supporting resources in curriculum development and teaching, as perceived by academics and students. Academics and students from all the academic institutions in South Africa participated in this survey-based research. Quadrant analysis was used to determine students' and lecturers' agreement (satisfaction) with and perceived importance of textbook characteristics. The results indicate a strong reliance on textbooks as a teaching resource, with limited differences between Unisa (the University of South Africa), as an open distance learning (ODL) institution, and the more traditional universities. The research also indicated a strong relationship between the perceptions of academics and students regarding the use and characteristics of textbooks. The results offer a number of proposals for the use and development of textbooks and supporting resources.

Keywords: curriculum development, supporting resources, textbooks, open distance learning, quadrant analysis

INTRODUCTION

Various parties such as the national government, the National Department of Education, universities, specialists and lecturers are involved in curriculum development. Sukati, Esampally and Vilakati (2007, 15) mentioned in their study, conducted in Swaziland, that quality education entails a curriculum that is relevant to the needs of the learner and to the needs of the country's economy. The courses and programmes taught have to be those that are relevant to the learners and the socioeconomic environment of the country.

Universities and researchers use various methods to develop appropriate curricula, such as secondary sources (current academic reports and established

syllabi) and empirical surveys (Beneke and Beeming 2011, 445; Martins 2012, 9; Steenkamp 2010, 30). Linked to curriculum development is universities' concerns about student retention and throughput. Considerable research on student retention and throughput has been done at residential institutions and a few studies have been undertaken in distance education contexts (Van Schoor 2010, 41). One of the initiatives on which universities worldwide embark is to investigate students' dependence on textbooks and the strengthening of professionals' and teachers' reliance on textbooks (Watt 2004, 4). Furthermore, according to Watt (2004, 51), research literature from the United States of America on the use of materials (textbooks) and their role in curricula has stressed that teachers and students depend on such materials. In South Africa, we have the additional debate on the role of the African Renaissance in curriculum development on the African continent (Higgs, Van Niekerk and Van Wyk 2010, 134).

Given all of this, the purpose of this research was to determine the role of textbooks and supporting teaching material in curriculum development, as perceived by lecturers and students at the University of South Africa (Unisa) and other South African universities.

This project was commissioned by a private publisher that provides textbooks to the further and higher education environments. The main purpose of the research was to explore ways of improving the development, integration and use of textbooks and other supporting learning materials in the learning environment. The project consisted of two surveys, one for lecturers and one for students at South African universities, the universities of technology and nursing colleges.

The author will first discuss some main points arising from a literature review on curriculum development, then explain the research methodology, followed by an overview of the results and finally discuss the results in more detail and make a number of recommendations.

METHODS OF CURRICULUM DESIGN

Oduaran (2008, 8) believes that a curriculum may be equated with a syllabus, which he compares to the exploration of the content, or the body, of knowledge that academics wish to transmit, using whatever modes. Alternatively, the curriculum may be understood to be a kind of product or an outcome derived from the successful design and implementation of a set of measurable objectives.

According to Mischke (2010, 146), underlying the curriculum is a strong social base demonstrating that the '[c]urriculum ... is not an abstract concept, which has some existence outside and prior to human experience'. A number

of universities in South Africa, such as Unisa, have formulated specific policies informing curriculum development (Mischke 2010, 145). The reason for this is the constitutional, socioeconomic, geopolitical and professional bodies' demands, with the African Renaissance and cultural forces all claiming a stake in curriculum development. According to Singh and Doherty (2004, 22), 'a curriculum needs to negotiate conflicts between different cultural groups ... as well as take account of different versions and histories of modernity in pedagogic engagements'.

The Unisa Curriculum Policy (Unisa 2010, 3) defines a curriculum as follows:

... the whole set of learning experiences constituting a particular qualification or module. Curriculum includes key aspects of teaching and learning such as

- what is to be learnt – content
- why it is to be learnt – rationale and underlying philosophy
- how it is to be learnt – process
- when it is to be learnt – structure of the learning process
- how the learning will be demonstrated in creative ways and achievement similarly assessed

On a practical level, therefore, lecturers who have to develop the curriculum have to ask themselves what resources can or should be used. The Unisa Curriculum Policy (Unisa 2010, 6) describes resources as follows:

Resources most used by departments include (but are not limited to):

- study guides
- prescribed textbooks
- prescribed articles and chapters in books
- online resources
- lecturers and tutors.

The policy goes on to focus on the role of textbooks in the development of a curriculum: prescribed textbooks, chapters and articles follow on from the design of the curriculum process and do not dictate it. The curriculum of modules cannot

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be determined or prescribed by available textbooks in the field/discourse. This is in line with the definition of curriculum by theorist Schwab (1983, in Dillon 2009), who stipulated the following conception of curriculum:

Curriculum is what is successfully conveyed to differing degrees to different students, by committed teachers using appropriate materials and actions, of legitimated bodies of knowledge, skill, taste, and propensity to act and react, which are chosen for instruction after serious reflection and communal decision by representatives of those involved in the teaching of a specified group of students who are known to the decision makers.

The academic or lecturer (curriculum developer) is thus influenced by a number of factors, such as the complex globalised world, higher education frameworks (Higher Education Qualification Framework, South African Qualifications Authority), the university's own curriculum policies, economic forces, educational reform in South Africa and professional bodies such as the Health Professions Council of South Africa (HPCSA) and the South African Institute of Chartered Accountants (SAICA), which have their own requirements relating to their specific professions.

Hassan (2011, 476) describes the modern world as not just complex, but as super complex, which has seen the rise to an age of super complexity marked by new accounts of the world, new images, technologies, texts, discourses and forms of professional life. South Africa, which is now regarded as one of the emerging markets along with China, India and Brazil, is seeking to become an international competitor. The factors mentioned above place an increased burden on academics to ensure that their academic offerings meet not only national criteria but also international standards. The higher education frameworks of the South African government play a major role in transforming education. Hassan's (2011, 477) personal experience as a staff developer and academic has shown that the complexity and sophistication of educational transformation are, arguably, incomprehensible to many academics who are barely able to implement traditional methods of teaching and learning, let alone apply major innovations in higher education.

According to Kim-Prieto and D'Oriano (2011, 458), creating a new course from scratch can be time-consuming. Developing the syllabus, choosing articles or textbooks, and creating exercises and assignments in addition to developing lecture materials all take considerable time, in spite of access to high quality resources and examples. Furthermore, in addition to the time required to create a course, the academic may also have to gain the approval of curriculum committees overseeing the development of new courses. Given the complexity of the modern

world and the workload of lecturers, the task of developing resources to support a curriculum can be daunting.

In many instances, it appears that only senior academics are involved in curriculum development. A study by Lianli (2007, 107) indicated that lecturers involved in teaching English language classes at university are quite happy to hand over the responsibility for programme content and design to the textbook. Another aspect of concern is that it appears textbooks are not always selected according to the theoretical basis supporting the contents. Hassan's (2011, 481) research at the University of Limpopo indicates that academics are familiar with outcomes-based education (OBE) terminology, but have faltered at the level of implementing OBE. This research aligns with statements in the literature that many educators lack the expertise to write courses in an outcomes-based format and have difficulty implementing OBE effectively (Hassan 2011, 481).

The above discussion gives a snapshot of the complex world of curriculum development and the difficult role of the academic. As articulated earlier, the main purpose of the research was to explore ways of improving the development, integration and use of textbooks and other supporting learning materials in the learning environment. The publisher who sponsored the project was interested not only in the use of textbooks but also in aspects such as

finding out from academics

- the reasons for selecting and prescribing a particular textbook
- the use of prescribed textbooks in the classroom
- typical issues with textbooks in the school or department that academics need to take into consideration when prescribing a textbook
- students' reading skills and their impact on the use and selection of prescribed books
- the portion of the curriculum focused on the content or structure of the textbook
- characteristics of the textbook used currently which are important to academics

and finding out from students

- if lecturers actually use a large percentage of the prescribed textbooks
- for what purposes students mainly use textbooks
- if students have attended a reading course at their university

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- which textbook characteristics make it easier for students to study
- what other textbook resources would be beneficial to students

In addition, the question was asked if there were any differences between the perceptions of students and those of academics and between the traditional universities and Unisa as a distance learning university.

RESEARCH METHODOLOGY

The aim of the research was to include both academics and students from all the South African universities, universities of technology and nursing colleges in the study. The survey methodology was used for this research. The publishing company supplied a list of contact details for all the academics at the various institutions to the researcher. All these academics were contacted via e-mail and asked to complete the lecturer questionnaire online.

A two-pronged approach was used to obtain information from students. First, at all the publisher's branches throughout South Africa, briefed staff approached students to complete the student questionnaire. Upon completion each student received a pen for their time and input. Secondly, the publisher contacted key people at the education institutions who agreed to distribute questionnaires to their students and then post them back. Copies of the questionnaire, detailed instructions and a pen for each participant were posted to the relevant lecturers. The purpose was to obtain a broad and representative sample of both students and lecturers at all the institutions.

Both the paper and electronic questionnaires gave the background to the study, instructions for completing the surveys and the assurance that the questionnaires would be handled in the strictest confidence and that no student's or academic's results would be given to the participating institutions. No indication was given of the name of the publishing company. Both questionnaires were compiled by the researcher after thorough discussions with a sample of lecturers from various universities to determine their perceptions of curriculum development and what they need from lecturing resources such as textbooks, study guides, articles and online resources.

Two scales, using quadrant analysis, measuring the current satisfaction with and perceived importance of textbooks, were used to determine students' and lecturers' satisfaction with textbook characteristics as well as the perceived importance of each characteristic.

Importance-performance analysis was first applied to elements of a marketing programme by Martilla and James (1977). According to Douglas, Douglas

and Barnes (2006), 'quadrant analysis' is a graphic technique used to analyse importance and attribute ratings. It produces a grid showing which attributes are important among those that a service delivers. The analysis allows for determining whether aspects of a particular service provision are the aspects that respondents value as being important. In this study, quadrant analysis was conducted on the top two questionnaire box scores for both importance (i.e. 'very important' and 'important') and agreement ratings (i.e. 'strongly agree' and 'agree'). Thus, for every characteristic, the percentages scores of those respondents who either agreed or strongly agreed were identified as were the percentages of respondents who considered that characteristic important or very important. Once all 56 questions had been similarly analysed, the median score was determined for both the agreement and satisfaction scores. Then the distance from the median for each percentage score was calculated. This could be positive or negative. The importance scores for students and lecturers are the Y-axis scores and the agreement scores are on the X-axis, indicating student and lecturer satisfaction (Figure 1). The purpose of plotting the results on the grid has, for a number of years, typically been used to analyse student feedback data in universities in the United Kingdom (Douglas et al. 2006).

COMPILING THE QUESTIONNAIRES

The researcher had in-depth discussions with the publishing company to determine the content and scope of the two questionnaires. It was decided that the questionnaires should not only focus on the publisher's marketing needs, but also ask academics to provide insight into the value of resources they use in teaching and the value of these resources. A project team consisting of representatives from the publishing company, academics and the researcher then compiled the two questionnaires. Both questionnaires consisted of biographical questions, yes/no questions and scale-based questions using the four-point scale. Both questionnaires were piloted to determine whether students and academics would understand the terminology used and whether the length of the questionnaires was appropriate. After the pilot study, both questionnaires were finalised and distributed as discussed.

RESULTS

Due to the length, scope and depth of the two questionnaires (the student questionnaire consisted of 96 questions and the lecturer questionnaire of 112 questions), it was decided that this article would present only what had been highlighted as focus points in previous sections.

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In total, 203 academics participated in the survey. This is a 16 per cent response rate from the electronic database supplied by the publishing company. Table 1 indicates that most academic staff members were from Unisa (18,2%) and the Durban University of Technology (16,3%). Overall, 18 of the 19 South African academic institutions for higher education participated in the survey.

Table 1: Biographical information on academic participants

Universities	Frequency	%
Rhodes University	2	0,9
University of Cape Town	5	2,5
University of Fort Hare	1	0,5
University of the Free State	3	1,5
University of KwaZulu-Natal	3	1,5
University of Limpopo	4	2,0
North-West University	16	7,9
University of Pretoria	13	6,4
University of Stellenbosch	5	2,5
University of the Witwatersrand	11	2,0
Comprehensive universities		
Nelson Mandela Metropolitan University	12	5,9
Unisa	37	18,2
University of Johannesburg	5	2,5
Universities of Technology		
Central University of Technology	13	6,4
Durban University of Technology	33	16,3
Tshwane University of Technology	7	3,4
Nursing Colleges		
Anne Latsky Nursing College	17	8,4
Excelsius Nursing College	12	5,8
Vrystaat Nursing College	11	5,4
Total	203	100

A total of 501 students participated in the student survey (Table 2). The largest group of students was from Unisa (16,2%) and the University of Pretoria (14,7%). Most students were first year (26,5%) or fourth year (23,8%), females (66,5%) and full-time students (76,8%). Students from a total of 12 institutions participated in the survey.

Table 2: Biographical information on students

Universities	Frequency	%
University of the Free State	17	3,4
North-West University	11	2,2
University of Pretoria	74	14,7
University of Stellenbosch	43	8,6
Comprehensive universities		
Nelson Mandela Metropolitan University	23	4,6
Unisa	81	16,2
University of Johannesburg	42	8,4
University of the Western Cape	34	6,8
Universities of Technology		
Vaal University of Technology	49	9,8
Nursing Colleges		
Ann Latsky Nursing College	33	6,6
Excelsius Nursing College	48	9,6
Vrystaat Nursing College	40	7,9
No response	6	1,2
Total	501	100
Academic year of study		
1st Year	133	26,5
2nd Year	98	19,6
3rd Year	75	15,0
4th Year	119	23,8
5th Year	13	2,6
Master's and Doctorate	15	3,0
No responses	48	9,5
Total	501	100
Gender		
Male	148	29,5
Female	333	66,5
No response	20	4,0
Total	501	100
Part time or full time		
Part time	102	20,4

Full time	385	76,8
No response	14	2,4
Total	501	100

Although not all academic institutions in South Africa participated in the two surveys, the results represent most of the universities, comprehensive institutions, universities of technology and nursing colleges. In discussing the results, the results of the Unisa academics and students are compared to those of the other universities, where applicable.

Results of survey among academics

The results indicate that the majority of academics (Unisa = 86,5%, other = 84,7%) prescribe textbooks. The methods which they use to select textbooks are

	Unisa	Other
Aligning objectives with textbook(s)	64,9%	69,5%
Reviewing publisher's catalogues	43,2%	55,2%
Contacting publishers to discuss new textbooks	29,7%	34,0%

The main method academics from both Unisa and the other participating institutions use is to align course objectives with the textbook(s) they select.

Academics mainly select and prescribe a textbook if it is relevant and up to date (Unisa 43,7%; other 47,2%), contains learning outcomes (Unisa 14,7%; other 12,7%), shows the subject field in a practical context (Unisa 20,3%; other 12,7%), is affordable (Unisa 3,8%; other 6,1%) and is an accurate reflection of South African culture (Unisa 6,3%; other 6,0%). The remaining reasons (between 11,2% and 15%) include meaningful exercises, layout, multimedia additions, lecturer's guide and an attractive and interesting design. It is interesting to note that only between 0,8 per cent (other) and 1,1 per cent (Unisa) of academics select a textbook if the design is attractive and interesting and if colour graphics are included.

Academics' use of textbooks is an important component of curriculum development and implementation. The results in Table 3 give an overview of the extent to which prescribed textbooks are used. The difference between an open distance learning university, such as Unisa, and the traditional universities is clearly indicated in this table. At the traditional universities, the textbook is mainly supported by lectures. At Unisa, the textbook is mainly supported by other material such as workbooks (study guides).

Table 3: Explanations of how prescribed textbooks are used in class (only those applicable were selected)

Use of textbooks	Other	Unisa
The textbook is supported by lectures.	74,4%	43,2%
The textbook is used as a main resource.	59,6%	45,9%
The textbook is enhanced by PowerPoint presentations.	58,1%	16,2%
The textbook is supported by other material, namely articles.	54,7%	45,9%
The textbook is supported by other material, namely workbooks.	40,4%	54,1%
Other (website info added, other recommended books, case studies, etc)	18,2%	27,0%

The majority of academics (91%) at Unisa and the other institutions also indicated that they adapt the sequence and structure of the curriculum or lecture plan to suit the textbooks. More than 70 per cent of both groups indicated the largest portion of the curriculum is focused on a textbook content or structure (see Table 4).

A research project in China (Goa 2007, 105) showed that 87 per cent of teachers teaching English based their teaching completely on their textbooks. Research in the USA indicates that teachers' and students' dependence on textbooks has been accepted in educational circles since the beginning of the 20th century (Watt 2004, 46). It appears that textbooks are mostly used in South Africa as supportive material and not as the only source. The results also show that most academics at Unisa (77,8%) and at the other institutions (87,8%) have the authority to prescribe their own textbooks. The main issue academics consider when prescribing a textbook is the cost to students (Unisa 87,9%; other 86,2%). A further 86, 5 per cent (Unisa) and 70, 4 per cent (other) take students' reading skills into consideration when prescribing textbooks. The majority of academics (Unisa 94, 6%; other 89,7%) expect their students to buy the prescribed textbooks.

To test the portion of the curriculum focusing on the content or structure of textbook, the following question was posed: 'Approximately what portion of the curriculum is focused on the content or structure of the textbook?' The results are given in Table 4, which indicates that between 61 per cent and 100 per cent of the curriculum is focused on the textbook contents or structure in more than 73,9 per cent of cases.

Table 4: Proportion of curriculum focused on textbook content or structure

Proportion	Frequency	% Other	% Unisa
0-20%	5	2,5	2,7
21-40%	6	3,0	2,7
41-60%	38	18,7	16,2
61- 80%	79	38,9	51,4
81-100%	71	35,0	27,0
No response	4	2,0	0

From the above results, it appears that in South African institutions the textbook does play an important role in curriculum development and its implementation. Academics from Unisa and the other institutions do not appear to differ substantially from one another regarding curriculum development. To further explore the role of the textbook in curriculum development, a number of questions were asked to determine those textbook characteristics which academics believe make it easier for students to study.

The ten most important and the six lowest ranked important textbook characteristics are listed in tables 5 and 6 respectively. Significantly, the most important characteristic (for Unisa and other institutions) considered in selecting textbooks is whether the content is relevant to the course. Similar results were obtained for the characteristic of it being easy to find information in the textbook. Another key characteristic which emerged was that activities in the textbook should promote analytical and critical thinking. All Unisa participants consider this characteristic important. Another two important characteristics were content and language that is easy to understand. In a study by Dlomo, Jansen, Moses and Yu (2011) on the success of first-year South African economics students, they found that only 59,1 per cent of students indicated their home language as English. This research emphasises the importance of students being able to understand the text and selecting the appropriate textbooks.

It is interesting to note the characteristics which the academics rank least important (as listed in Table 6). The results in this table indicate an important difference between Unisa and the other institutions, namely that Unisa academics are not very interested in textbooks promoting activities to help students to collaborate with one another.

Table 5: Academics' agreement on ten most important textbook characteristics making studying easier

Characteristic	% Agree/ Strongly agree - Other	% Agree/ Strongly agree - Unisa
• The content is relevant to the course.	96,4	100,0
• It is easy to find information in the textbook.	96,4	97,2
• The textbook has clear headings and subheadings.	94,4	97,2
• The activities promote analytical and critical thinking.	92,8	100,
• Practical, real-life examples are used.	92,3	97,1
• It is easy to understand the content.	90,4	91,7
• The language is easy to understand.	89,4	86,5
• The textbook includes tables and flow charts.	87,5	88,8
• A summary is included at the end of a chapter.	87,1	88,6
• The textbook is interesting - students enjoy reading it.	86,9	94,3

Table 6: Academics' agreement on the six lowest ranked important textbook characteristics making studying easier

Characteristic	% Agree/Strongly agree - Other	% Agree/ Strongly agree - Unisa
• The textbook makes use of icons throughout – these are a useful road map.	61,9	72,2
• The content is written in a conversational style.	63,6	57,1
• Various ethnic groups are represented as part of the examples, case studies and illustrations in the book.	67,7	77,1
• The activities help students to collaborate with other students.	71,7	58,3
• The cover of the book is appealing.	72,0	75,0
• The activities are interactive.	74,5	69,4

Results of survey among students

The main purpose of the survey of students was to find out whether their perceptions are similar to or different from those of the academics.

According to 82 per cent of students at all institutions, lecturers use prescribed textbooks and thus most of them (88%) purchase the prescribed textbooks.

A research project in China among English teachers, policymakers and administrators, showed that more than 90 per cent of their content comes from the textbook (Goa 2007, 106). The main purposes for which students use textbooks are as a learning or study material source (Unisa 48,1%; other 62,5%) or as a source of information (Unisa 39,5%; other 27,1%). It was interesting to note that many students (Unisa 69,1%; other 60,4%) are willing to buy a workbook (self-evaluation questions and answers) and a further 72,8 per cent (Unisa) and 63,9 per cent (other) a CD (with additional information) supplementing the textbooks. Students also indicated that if a website or an e-learning tool supplementing the textbook is provided, they will use it. The Unisa students were more willing to use a website or e-learning tool than students from other institutions (76,5% versus 67,7%). The additional information they expected to be on a CD, website or e-learning tool are learning objectives, brief overviews of topics, discussion questions, suggested answers and self-assessment exercises. It appears that the textbooks and lecturers do not provide students from the various institutions with all the learning support they require.

The ten characteristics of textbooks which students perceive make it easier for them to study are listed in Table 7.

Table 7: Students' agreement on ten textbook characteristics making studying easier

Characteristic	% Agree/ strongly agree - Other	% Agree/ strongly agree - Unisa
• When the language is easy to understand.	93,8	93,3
• When practical, real-life examples are used.	93,8	95,8
• When using the textbook helps me to perform better in tests and exams.	93,4	94,6
• When it is easy to understand the content.	93,3	93,8
• When the content is relevant to the course.	92,9	96,0

• When the activities promote analytical and critical thinking.	92,2	95,9
• When it is easy to find information in the textbook.	91,4	94,5
• When a summary is included at the end of the chapter.	91,4	93,1
• When the main ideas are summarised at the beginning of the chapter.	91,4	91,8
• When the textbook includes self-evaluation questions or exercises, and provides model answers for these.	91,2	88,7

Two characteristics that were also highly rated in the academic survey are language that is easy to understand (over 85% agreement) and content that is easy to understand (over 90% agreement). Students also agreed (Unisa 96%; other 92,9%) that the content must be relevant to the course. Academics ranked this characteristic as the most important. Both students and academics placed a high value on activities promoting analytical and critical thinking (over 90% for all groups).

The characteristics that students did not perceive as important to making studying easier for them are highlighted in Table 8. These characteristics are mostly in line with the academics' perceptions and include characteristics such as an appealing cover, visual images, content written in a conversational style, information presented in 'bite-sized' chunks, activities requiring collaboration with other students, attractive layout and representing various ethnic groups in examples, case studies and illustrations. It is also interesting to note the congruence between Unisa students and those of other institutions.

Subsequently, the results of the quadrant analysis were used to determine students' and lecturers' agreement (satisfaction) with and perceived importance of the textbook characteristics (Figure 1). The results of the quadrant analysis are summarised in tables 9 and 10.

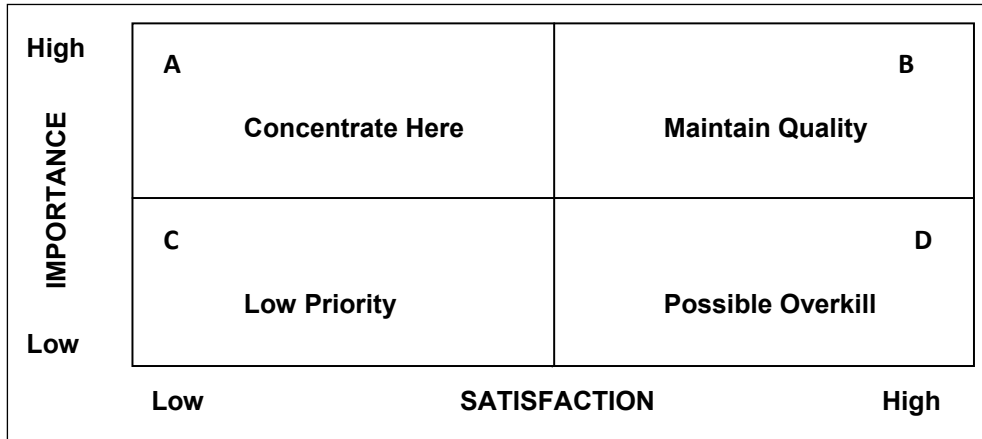


Figure 1: Quadrant analysis

Table 8: Students' agreement on the seven lowest ranked characteristics - below 75% agreement

Characteristic	% Agree/ Strongly agree- Other	% Agree/ Strongly agree - Unisa
• When the cover of the book is appealing.	51,2	52,2
• If I like the visual images.	55,3	52,8
• When the content is written in a conversational style.	59,4	61,1
• When the information is presented in 'bite-sized' chunks.	62,3	72,5
• When the activities require me to collaborate with other students.	68,7	62,9
• When the layout of the book is attractive.	70,2	80,0
• When various ethnic groups are represented as part of the examples, case studies and illustrations in the book.	71,9	74,0

The results in tables 9 and 10 portray the combined results of all participants, lecturers and students, of all institutions. The reasoning for this is that publishers might not produce textbooks for distance education institutions only. The results show that both students and lecturers perceive a number of characteristics of textbooks as being important which they are also satisfied with (quadrant B). The results, however, also indicate a number of characteristics they perceive as

of low importance and low satisfaction (quadrant C). Interestingly, the students experience 14 characteristics as of low importance and low satisfaction, while only 11 characteristics fall in this category for lecturers. Comparing the results of quadrant C for lecturers and students, it is interesting to note a number of similarities. There are nine common characteristics that are perceived as low importance and low satisfaction by both groups. The four characteristics in the students' list that are not included in quadrant C for lecturers are listed in lecturers' quadrants A and B. This indicates either high importance and low satisfaction or low importance and high satisfaction for lecturers. The results of interest and value to textbook writers and publishers are the results in quadrants D and A. Only lecturers indicated that the following characteristics are currently overkill (i.e. too much is thus done in this regard):

- difficult words are explained in the glossary
- the inclusion of tables and flowcharts
- the contemporary nature of illustrations

Lecturers also indicated that two characteristics are of high importance, but they experience low satisfaction with them:

- the textbook includes case studies
- the textbook includes self-evaluation questions or exercises, and provides model answers for these

Table 9: Importance – satisfaction grid for students

Quadrant C: Low Importance and Low Satisfaction	Quadrant B: High Importance and High Satisfaction
When the layout of the textbook is attractive.	When I can relate to the examples being used.
When the textbook makes use of icons throughout – these are a useful 'roadmap'.	When the language is easy to understand.
When the information is presented in 'bite-sized' chunks.	When it is easy to understand the content.
When the content is written in a conversational style.	When it is easy to find information in the textbook.
When the textbook includes tables and flowcharts.	When difficult words are explained in the glossary.

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When the illustrations or graphics are of high quality.	When the textbook has clear headings and subheadings.
When the illustrations are up to date (e.g. not dated in terms of dress or hairstyles, unless a certain period is portrayed).	When the content is relevant to the course.
When various ethnic groups are represented as part of the examples, case studies and illustrations in the book.	When the activities promote analytical and critical thinking.
When the activities are interactive.	When using the textbook helps me to perform better in tests and exams.
When the activities require me to collaborate with other students.	When the main ideas are summarised in the beginning of a chapter.
When one concept at a time is introduced – I don't feel overwhelmed by the volume of information.	When practical, real-life examples are used.
When the cover of the book is appealing.	When the textbook includes case studies.
If I like the visual images.	When a summary is included at the end of the chapter.
If the text is interesting, I enjoy reading it.	When the textbook includes self-evaluation questions or exercises, and provides model answers for these.
	When sufficient examples are included to explain theoretical concepts.
Quadrant A: High Importance and Low Satisfaction	Quadrant D: Low Importance and High Satisfaction
None	None

Table 10: Importance – satisfaction grid for lecturers

Quadrant C: Low Importance and Low Satisfaction	Quadrant B: High Importance and High Satisfaction
The layout of the textbook is attractive.	The language is easy to understand.
The textbook makes use of icons throughout – these are a useful 'road map'.	It is easy to understand the content.
The information is presented in 'bite-sized' chunks.	It is easy to find information in the textbook.
The content is written in a conversational style.	The textbook has clear headings and subheadings.
The textbook includes bulleted lists.	The content is relevant to the course.

The illustrations or graphics are of high quality.	The activities promote analytical and critical thinking.
Various ethnic groups are represented as part of the examples, case studies and illustrations in the book.	Using the textbook helps students to perform better in tests and exams.
The activities are interactive.	The main ideas are summarised in the beginning of a chapter.
Sufficient examples are included to explain theoretical concepts.	Practical, real-life examples are used.
The cover of the book is appealing.	A summary is included at the end of a chapter.
Students like the visual images.	Sufficient examples are included to explain theoretical concepts.
	Once concept at a time is introduced – students do not feel overwhelmed by the volume of information.
	The text is interesting students enjoy reading it.
Quadrant A: High Importance and Low Satisfaction	Quadrant D: Low Importance and High Satisfaction
The textbook includes case studies.	Difficult words are explained in the glossary.
The textbook includes self-evaluation questions or exercises, and provides model answers for these.	The textbook includes tables and flowcharts.
	The illustrations are up to date (e.g. not dated in terms of dress or hairstyles unless a certain period is portrayed).

A question was also posed to students to determine whether they experience language problems and whether their universities offer reading courses. These courses usually aim at improving both reading speed and comprehension. Vocabulary, word recognition, grammar, memory and spelling exercises are also included.

A small percentage of students (29,6% at Unisa and 45,6% at other) indicated they have attended such reading courses but only 14,8 per cent (Unisa) and 26,7 per cent (other) indicated that they were useful. A further 56,8 per cent (Unisa) and 47,4 per cent (other) indicated they were not aware of such reading courses. A study at the University of the Western Cape (UWC) indicated that English was the home language of only 42,4 per cent of their students in 2009 (Dlomo et al. 2011). This is similar to the results obtained by Van Schoor and Potgieter

(2011, 605), who found that only 40 per cent of students who discontinue their studies had English at first language level at school. According to them, this may compromise students' ability to access study material, which is often in the form of English textbooks. The question arises whether using an English textbook has any effect on academic performance. Stephen, Welman and Jordaan (2004, 697) investigated English language proficiency as a predictor of academic success at another South African university, and found that black students performed relatively worse compared with their Indian counterparts, with the latter exhibiting higher English proficiency levels. The problems students experience with English were also highlighted by Pretorius (2005, 791) in his qualitative study of the reading abilities of first-year psychology students: '[T]hey often found it difficult to articulate where and why they had difficulty in understanding the texts. Although their spoken conversational English was relatively fluent, at times they found it difficult to express themselves in English and to reflect on the reading.'

CONCLUSION

The focus of this study was to determine the role of textbooks in curriculum development and to what extent textbooks are used by academics and students. The results indicate that textbooks do play an important role in curriculum development not only in South Africa, but worldwide. In South Africa, the majority of academics prescribe textbooks that they align with the course objectives.

Students emphasised the importance of textbooks. They indicated that more than 80 per cent of their lecturers use them and thus most students buy textbooks. One of the reasons for this might be that textbook publishers claim to have made changes in the format and content of their latest textbooks; however, teachers and administrators tend to have contrary opinions (Gao 2007, 109). In South Africa, we have found that, in many instances, lecturers of specific modules or courses get involved in writing textbooks, which are then prescribed. This can lead to ethical issues as the textbooks in many instances reflect the curriculum and are then prescribed by the authors who are also the lecturers. The results have indicated that most lecturers have the authority to prescribe their own textbooks. In practice, these textbooks still need to be approved by a tuition or curriculum committee at faculty or school level.

The core role that textbooks play in implementing the curriculum is further emphasised by the results, which indicate that between 61 per cent and 100 per cent of the curriculum is based on the textbook contents or structure. However,

the results indicate that the textbook is not used as the main resource in class, but is supported by lectures, PowerPoint presentations, articles and workbooks. The results also show that students still feel that the current resources available to them are not sufficient. Students are willing to buy workbooks and CDs and use e-learning tools to supplement the textbook and lectures. Unisa students are more willing to use a website or e-learning tool. It was, however, interesting to note that Unisa students were only 8,8 per cent more willing to use electronic resources given the focus on tools such as myUnisa. It appears that Unisa students still use their study guides to a large extent and rely on the input they receive during lectures. A reason why students do not use myUnisa might be that most lecturers still do not use myUnisa for teaching (Mabunda 2010).

A major issue that emerged from the study is the language problems that students experience. The main resource most students use is the textbook. This study and other research indicate, however, that only about 40 per cent of students at universities have English as their home language. This poses an important restriction on the textbook writer, namely that the language needs to be easy to understand. It is important to note that both academics and students agree that the textbook needs to be easily understandable. The main characteristics of textbooks, which both academics and students perceive as important to making studying easier, are (quadrant B) that

- the content is relevant and easy to understand
- the language is easy to understand
- practical, real-life examples are used
- activities promote analytical and critical thinking
- it is easy to find information in the textbooks
- the textbook has clear headings and subheadings
- using the textbook helps students to perform better in tests and exams.
- main ideas are summarised in the beginning of a chapter
- a summary is included at the end of a chapter

It is important to note that academics and students are not very concerned about features such as an appealing cover, attractive layout, the use of icons throughout, information presented in 'bite-sized' chunks, high-quality illustrations, a conversational style, interactive activities, and whether various ethnic groups are represented in examples, case studies and illustrations. In summary, it seems as

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though students and lecturers are not very concerned about the visual presentation of the textbook.

RECOMMENDATIONS

Given the results of this survey, a number of recommendations can be made.

Universities need to take note of the important role textbooks play in curriculum development and implementation. It would enhance student throughput if universities gave more support to lecturers who intended to write a textbook by providing specific policies on textbook development, financial support similar to that for accredited articles, and professional guidance on the layout of textbooks to support the curriculum. Universities can also play a major role in textbook compilation by supplying lecturers with information about the student profile and how this will affect the content, language, layout, and so on, of the textbook.

Another relevant point is that academics who embark on writing a textbook should take note of the textbook characteristics students and academics feel enhance learning as well as those characteristics which they feel do not. The latter are those characteristics with low importance and low satisfaction and those with low importance and high satisfaction.

It is also important that publishers take note of the research and cooperate closely with academics when planning textbooks for a specific module. Both academics and publishers should take note of the needs of students for additional resources to supplement the textbook, such as workbooks, CDs and e-learning tools.

It appears from this research that universities need to encourage students more to attend reading courses and at the same time ensure that these courses add value for students. Unisa students in particular should be encouraged to make use of such courses, which should be more readily available.

Academics at Unisa should be sensitised to the value of a blended approach to teaching, although consideration needs to be given to their workload if such an approach is adopted. One thing which appears to demotivate academics is the amount of administrative work and its impact on their tuition and research.

Authors, academics and university administrators should take note of these research results and develop textbooks and other supportive resources accordingly. The research has clearly indicated that the textbook plays a crucial role in curriculum development and implementation, but has to be supported by other teaching resources.

One of the limitations of the study was that the results did not include lecturers and students from all South African universities, universities of technology and nursing colleges. A second limitation is that not all the survey results can be reported in one article. However, these limitations create opportunities for future research and publications of the project results.

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