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Non-compliant reading at one South African university: views of students and lecturers

Abstract

Reading is crucial in the undergraduate context. Yet, it seems that students do not comply with prescribed reading of their academic textbooks. The purpose of this mixed method study was to investigate students' and lecturers' views on students' non-compliance with prescribed textbook reading. This study was conducted at one South African university and involved students and lecturers from seven faculties. The qualitative data collection methods included semi-structured interviews, focus group interviews and document analyses, and the quantitative data collection method involved students' reading rates determined by a software programme. The results

point to a misalignment between the learning outcomes, textbooks, notes or slides and the assessment activities within modules in the different faculties. Recommendations include moving away from a student deficit perspective, and lecturers receiving professional development to improve the instructional design of their modules so that they can better align the aspects addressed in the study.

Keywords: first year students; prescribed academic reading; reading comprehension; non-compliance; textbook.

Introduction

Students do not comply with prescribed textbook reading (Pretorius, 2005; Birkerts, 2006; Brost & Bradley, 2006; Joliffe & Harl, 2008; Cressman, 2018). This is a worrying fact for lecturers as textbooks are considered valuable across disciplines. They play a crucial role in defining credible content in a study programme (Brown, 2008). They also act as “source(s) of student learning alongside lectures and modulework” (Pecorari, Shaw, Irvine, Malmström & Mežek, 2012: 235). To elaborate, Littlejohn (2011: 190) describes textbooks as “powerful tools” for the transmission of ideas. Furthermore, a number of researchers stipulate that they are archways through which to enter into specific disciplines (Francis & Simpson, 2009; Berry, Cook, Hill & Stevens, 2010; Aagaard, Conner & Skidmore, 2014; Berndt, Petzer, & Wayland, 2014). The entering of a discipline commences in a student’s first year of study and this is but one of the reasons why it is essential that first year undergraduates take reading seriously in their coursework. At universities many modules are organised around a textbook and course information in study guides convey to students that they are expected to engage in substantial reading. The idiom, you can lead a horse to water, but you cannot make him drink, comes to mind in this context. Leading students to relevant textbooks is a straightforward task, but getting them to read the textbook, seems to be a problem to which there is no straightforward solution (Starcher & Proffitt, 2011; Del Principe & Ihara, 2016).

Cressman (2018: 218) states that when lecturers face their students who did not read, they are tempted to abandon assigned reading altogether, or duplicate the contents in a lecture. We are of the opinion that such actions will be detrimental, as reading is learning in the higher education context and it is inconceivable to remove prescribed textbooks from tertiary modules. Thus, the aim of the study was to investigate students’ and lecturers’ views on students’ non-compliance with prescribed textbook reading within a university context.

Literature review

Reading is a complex study field to which researchers have contributed over a number of decades. According to the RAND Reading Study Group (2002), the complexity of this field is partly due to sizable gaps in the knowledge base of various reading frameworks. In an attempt to address the gaps in the reading knowledge base, this study group developed a reading comprehension framework. The essence of this framework is that the text alone cannot be the determinant of reading comprehension and that comprehension can be conceptualised as the combination of reading variables, namely “(t)he reader who is doing the comprehending, the text that is to be comprehended and the activity in which comprehension is a part.” These three variables occur within a socio-cultural context that influences and is influenced by the three variables (RAND Reading Study Group, 2002: 11).

The value of this theoretical framework is that it clearly indicates that reading comprehension is the product of interaction and that each of these variables, both individually and in combination with each other, has implications for reading (Woolley, 2011: 21). This framework was chosen to theoretically ground this study due to its simple representation of a complex process and, in the words of Catts and Kamhi (2017: 74), its “fluidness”. This fluidness refers to the applicability of the framework in different contexts, such as reading in a higher education context. The three variables are clearly distinguishable in the first year university students’ context. Firstly, from a constructivist viewpoint, without the students, or readers, there would be no reading. Secondly, in the university context reading is learning, and prescribed academic texts such as textbooks feature in each module. Thirdly, within each module students are expected to complete a number of assignments such as tests, essays and presentations; these are the activities. The different faculties, study programmes and modules with all their role players form the socio-cultural context.

As set out in the framework (RAND Reading Study Group, 2002), the academic text is one of the variables which influences reading. The focus of this paper is the textbook as an example of an academic text. In the first year context, lecturers and programme coordinators choose a textbook which they deem suitable for the module content and their students. Academic texts are “packed with concepts and technical vocabulary that they (students) need to understand fully” (Francis & Simpson, 2009: 97). Moreover, Hermida (2009: 24) emphasises that the authors of academic texts assume that their readers are familiar with “concepts, principles and debates of the discipline”, which is not always the case. These statements indicate some of the reasons behind the assumption that academic texts are difficult.

The activity is also a variable which influences reading comprehension. “Reading does not occur in a vacuum. A reading activity involves one or more purposes, some operations to process the text at hand, and the consequences of performing the activity” (RAND Reading Study Group, 2002: 15). In the context of this study, assignments are used to calculate students’ participation marks. At the specific university, participation mark refers to the total percentage calculated by combining all the marks for assignments done during the semester. At the specific university, the students need to achieve a minimum of 40% for participation before they are granted permission to write the exam in a module. The final mark for a module is a combination of the participation mark and the mark achieved in the exam at the end of a semester. The weighting of the participation and exam mark differs from module to module and is determined by the faculty.

In layman’s terms, the socio-cultural context refers to “...everything going on outside the classroom which might impact upon learning outcomes” (Haggis, 2009: 380). In the Higher Education context, lecturers, programme leaders and faculty directors are role players within the socio-cultural context and their decisions and actions have an influence on the reading process (RAND Reading Study Group, 2002: xvi, 16). To reiterate, Brost and Bradley (2006: 101) emphasise that “how lecturers conceive, integrate and utilise assigned reading... affect how students respond and take responsibility for practice.”

To uncover some of the reasons why students are not reading, Joliffe and Harl (2008) analysed a two-week reading diary of twenty four randomly selected students. Students commented that their prescribed reading was “uninspiring, dull and painfully required.” Birkerts (2006) observed something similar. When his students had to read academic texts, he described their reactions as “ill-tempered apathy”. Berry et al. (2010) came to the conclusion that students knew it was important to read, they knew their lecturer expected them to read and also knew reading would positively impact their marks, yet most students did not do the required textbook reading. Participants noted that a lack of time was the main reason why they did not read their textbooks. As they did not spend enough time reading, reading comprehension was adversely affected.

From literature it seems that there is a vicious cycle of non-compliance with prescribed reading. Because students are not reading, they miss out on opportunities to improve their reading abilities (Brost & Bradley, 2006: 102). When lecturers realise that students are not reading the textbook, they find ways of teaching “around” the text, as they feel responsible to make sure students receive the needed content (Del Principe & Ihara, 2016: 230; Schoenbach, Greenleaf & Murphy, 2012: 9). As a result the students miss out on opportunities to engage with academic text, and this makes them even less likely to complete assigned reading in the future (Schoenbach et al., 2012: 5).

Situating this study of non-compliance within the RAND reading framework (RAND Reading Study Group, 2002), guided the researchers to look at how the readers themselves, the text, the task as well as the socio-cultural context might influence students’ and lecturers’ views on non-compliance.

Method of research

Design

This research was conducted from a pragmatic position and a mixed method research design was used. This design ensured that findings were not a single reflection of a specific method and enabled the achievement of broader and more in-depth results to avoid insubstantial evidence (Denzin & Lincoln, 2005: 722).

Participants

Firstly, this study obtained the necessary ethical clearance from the ethics committee of the university. The researchers used a combination of purposive sampling and key informant sampling (non-probability sampling) as well as stratified random sampling (probability sampling) to identify the lecturers and groups of students from seven different faculties who they invited to participate in this study. For more detail on this sampling procedure, refer to Andrianatos (2018). Fourteen lecturers and 558 (N=558)

first year students voluntarily agreed to participate. Table 1 lists the number of students and lecturers who participated, per faculty. The students of a faculty were all enrolled in a single programme and the lecturers who participated were teaching a first year module within that selected programme (e.g., Bed programme). This enabled the researchers to compare responses of lecturers and students.

Table 1: Participants per faculty

Faculty	Student participants	Lecturer participants
Humanities	76	2
Natural Sciences	47	2
Education Sciences	88	2
Economic and Management Sciences (EMS)	18	2
Engineering	147	2
Health Sciences	108	2
Law	74	2
Total participants:	N=558	N=14

Quantitative data

Data collection method, procedure and analysis

Numeric data about “how well” students read was included in this study. The purpose was to gain deeper insight into students’ and lecturers’ views about whether or not students’ meet the university’s reading requirements. At the specific university, the compulsory academic literacy first year module has a reading component. This component stipulates that a student must read 220 words per minute with 80% comprehension as set out in the study guide of the academic literacy module. This requirement is based on the work of Taylor (1965). He compiled a table of grade-level norms of the various components of oculo-motor activity during reading, one of which was words read per minute with comprehension. If a reader understands 70% of what was read, comprehension can be assumed (Taylor, 1965). Table 2 presents Taylor’s grade levels with the corresponding words read per minute assuming 70% comprehension (Taylor, 1965: 193).

Table 2: Taylor’s grade levels and reading rates

Grade level	1	2	3	4	5	6	7	8	9	10	11	12	Col.
RwC	80	115	138	158	173	185	195	204	214	224	237	250	280

Key

Col: College

RwC: Rate with comprehension (words per minute with 70% comprehension)

According to this benchmark, first year university students should be able to read 280 words per minute and understand 70% of what they read. Although quite dated, no other reading benchmarks have been defined in the South African higher education context and so the reading requirements at the university was based on Taylor’s (1965) grade levels and reading rates. A reading support committee adapted these values to the specific university’s context given the fact that data over a five year period indicated that first year students on average, were not able to read more than 240 words per minute. In order to ensure that the reading component did not become an obstacle to students passing the compulsory module, the benchmark has been adapted for this university’s students.

With regard to the reading component, all first year students have to complete a computerised reading test¹ when they commence their first year of study. Based on the test’s result, a student can receive a code of “sufficient” for reading. This means that the student can read a minimum of 220 words per minute with 80% comprehension. Students who do not receive the “sufficient” code, have to return to the reading laboratory multiple times, where they complete a number of on-screen reading comprehension activities in an effort to improve their reading so that they will achieve the “sufficient” code at the end of the semester, needed as a component of the academic literacy module.

The Readers are Leaders software programme is the “assessment tool” used for reading at the university. While similar software exists, the reading office was of the opinion that none of them are standardised and suitable for the South African higher education context. Readers are Leaders contains a number of graded texts about various topics with questions on each, it has a time measuring function and it keeps track of students’ progress. However, the educational software company, Four Blind Mice could not supply the researchers with any proof that the Readers are Leaders software programme has undergone a rigorous analysis process to determine its validity and reliability.

The testing procedure is as follows: Students are given a text to read on-screen, and continue to answer multiple choice questions. The students’ words read per minute is then determined by calculating the time it takes the students from opening the text document they are going to read, until they start to answer the questions. The programme also determines if questions were answered correctly and based on the number of correct

1 It is important to note that the results of the reading test is used as an “indicator” only, very much like a thermometer. It merely indicates that there is a problem and cannot make a “diagnosis”.

answers it calculates a comprehension percentage. It is possible that a student might not read the full text before starting to answer the questions. This will result in the calculation of an incorrect time that it took the student to read. For example, a student reads at 800 words per minute with 50% comprehension. This indicates that the student probably guessed half of the answers correctly without reading the text. Thus, the values might not be a true reflection of the number of words a reader can read in a minute and his/her ability to understand what was read. For this reason an additional calculation is used to determine if a student meets the reading requirements.

An article by Cousin and Vinckenbosch (2015) presents a mechanism for calculating reading efficiency. In simple terms, the words read per minute is multiplied by the 70% comprehension as noted by Taylor (1965). By plotting the words per minute with 70% comprehension on Taylor’s benchmarks (Table 1), it is possible to assign a grade level to reading efficiency. This mechanism has not been scientifically researched but it does give an additional parameter to interpret the Readers are Leaders results as a grade level score. Reading efficiency was included in this study as it is used by the university to help determine if a student’s reading is “sufficient”, and if students need additional reading support. The results of the reading tests are also distributed to the different faculties so that they can further support their first year students. Table 3 presents the reading efficiency values, words read per minute and corresponding grade level. This table was used in this study to indicate a grade level corresponding to the reading efficiency.

Table 3: Grade level, reading speed and reading efficiency values

Gr	1	2	3	4	5	6	7	8	9	10	11	12	13 Univ
wpm	80	115	138	158	173	185	195	204	214	224	237	250	280
EFF (wpmx70)	5600	8050	9660	11060	12110	12950	13650	14280	14980	15680	16590	17500	19600

Key

- Gr: Grade
- Univ: University level
- wpm: words per minute
- EFF: reading efficiency

Five hundred and fifty of the five hundred and fifty eight students who participated in this study completed the compulsory reading test at the reading laboratory on the campus.

Assigning a numerical value to “how well students read” is precarious ground. At the university, the reading scores are used by the faculty as a guideline in terms of additional disciplinary support that should be provided to first year students who may be at risk of not successfully completing their reading requirements in the modules and also completing their studies in a timely fashion.

Qualitative data

Data collection methods

Three qualitative data collection methods were used in this study namely semi-structured interviews, focus group interviews and document analyses.

- i) *Interviews*: In this study, semi-structured interviews were held with fourteen willing lecturers from seven different faculties. These lecturers were all responsible for a first year module’s outcomes and content in a specific programme in the faculty. During the interviews questions were asked about the reading compliance of the students, prescribed texts and assignments. All interviews were recorded for transcription purposes.
- ii) *Focus group interviews*: One focus group interview was held with a group of students from each of the seven faculties. The participants of each of the focus groups were all enrolled in the same programme. The groups ranged from five to nine participants. The questions asked during the focus group discussions were similar to the questions asked to the lecturers during the semi-structured interviews. Information was gathered about the students’ reading compliance, prescribed texts they had to read as well as the assignments they had to complete. The focus group interviews were also recorded.
- iii) *Document analysis*: As the 14 participating lecturers were each responsible for one first year module within a programme of study, they identified one assignment which, in their opinion, linked closely to the prescribed textbook. The assignment documentation was gathered during the interviews. The document analyses also involved a 200-word excerpt² of the prescribed textbook for each of the 14 modules.

Data collection procedures

- i) *Semi-structured interviews*: Fourteen semi-structured interviews took place in the offices of the lecturers at a time that suited both the researcher and the lecturer.

2 Software was used for these analyses whereby a maximum of 200 words are needed to come to conclusions about the surface difficulty of the excerpt (cf. Andrianatos, 2018).

- ii) *Focus group interviews:* Seven focus group interviews were held. Students from the selected group in each faculty were invited to take part. The time and venue were also given and the students who voluntarily arrived, took part in the focus groups. The size of the focus groups ranged from five to eight participants which is appropriate for a focus group (Leedy & Ormrod, 2005: 146).
- iii) *Document analysis:* Copies of assignment documentation such as tests, task instructions and rubrics were collected during the interviews. A chapter excerpt from the prescribed textbook was also collected in order to gain insight into the characteristics of the textbooks such as surface difficulty.

Data analysis

- i) *Semi-structured and focus group interviews:* The analyses of the narrative data were done by means of content analysis. Coding is an important part of this process whereby data is divided into meaningful units or codes. In this study all comments were firstly sorted into three categories or codes namely, the students' reading challenges, the textbook and assessment. These codes aided the discovery of embedded themes.
- ii) *Document analysis: Textbooks:* The 200-word excerpt of each textbook was analysed with the Coh-Metrix Common Core Text Ease and Readability Assessor (T.E.R.A.). This is an online tool designed to analyse the "easability" and readability of texts (Graesser, McNamara, & Kulikowich, 2011: 223). This tool is available on the internet for research purposes (www.cohmetrix.com). The T.E.R.A is suitable for the document analysis of this study as it does not solely focus on the surface difficulty of sentences and words. According to Graesser et al. (2011: 224), it "... was developed to analyse texts on multiple characteristics and levels of language-discourse".

T.E.R.A. analyses text on the following five components:

Narrativity: The more story-like the easier the text.

- *Syntactic simplicity:* Syntactic simplicity is measured through several indices such as average number of clauses per sentence, the number of words per sentence, and the number of words before the main verb of the main clause.
- *Word concreteness:* Concrete words are words that refer to things you can see, hear, taste, touch, feel, or smell. Abstract words cannot easily be seen, heard, touched, felt or smelled. A text with relatively high numbers of concrete words is easier to read and will have a high word concreteness mark.

- *Referential cohesion*: Referential cohesion is the overlap between words, word stems, or concepts from one sentence to another. When sentences and paragraphs have similar words or conceptual ideas, it is easier for the reader to make connections between those ideas.
- *Deep cohesion*: Deep cohesion measures how well the events, ideas and information of the text are tied together. T.E.R.A. does this by measuring the different types of words that connect different parts of a text. Examples of these connectors are after, earlier, before, during, while, later (McNamara, Graesser, McCarthy, & Cai, 2014: 85).

Once an excerpt of a text is inserted into T.E.R.A, each of the above mentioned components is given an “ease” mark.

- iii) *Document analyses: Assignments*: The assignments were analysed by making use of Bloom’s taxonomy. According to the taxonomy, there are six hierarchical categories with which questions can be organised, namely knowledge, comprehension, application, analysis, synthesis and evaluation (Bloom, 1956: 17). This taxonomy was useful for the analyses of the assignments to determine the level of cognitive demand needed for each activity or question.

According to Maree (2007: 80), engaging in multiple methods of data collection improves trustworthiness of a study. The trustworthiness of this study was therefore, enhanced by the inclusion of semi-structured interviews, focus group interviews and document analysis. The trustworthiness were also enhanced by including verbatim responses to reflect the statements made by the participants. Furthermore, the researchers repeatedly engaged with the transcribed interviews and focus group interviews to make sure that the interpretations of the findings were grounded in the gathered data. All paper trails, such as the informed consent forms of lecturers and students, hard-copy excerpts from texts as well as task instructions were meticulously filed as suggested by Creswell (2003: 196).

Results and discussion

This section firstly presents the results and discussion of the quantitative reading data, followed by the qualitative data.

Analyses and interpretation of quantitative data

The reading data of the participants was obtained from the reading office. Table 4 presents their words per minute, comprehension percentage and reading efficiency.

Table 4: Words per minute, comprehension rate and reading efficiency

	Minimum	Maximum	Mean	SD
Words per minute	37	506	186.40	64.80
Comprehension %	17	100	73	20.20
EFF	629	50600	13694	6417.20

Key

EFF: reading efficiency

SD: Standard deviation

The average words per minute is 186.40 with a standard deviation of 64.80. The average comprehension is 73% with a standard deviation of 20.20. As the standard deviation of words per minute is high, the scores are spread out over a wide range of values. However, it is an indication that participants, on average, did not meet the university reading requirements of 220 words per minute with 80% comprehension. The reading efficiency of the participants averaged 13694 with a standard deviation of 6417.20. According to Table 3, the average reading efficiency of the participants places them on reading grade level 7. As first year students, their reading grade level should be closer to 12 or university level. Therefore, a reading grade level of 7 is a further indication that on average, students at the specific campus of the university would experience challenges when reading academic texts. They might find it difficult to cope with the reading volume within the undergraduate environment. If they do not read 220 words per minute, it can be challenging to read through the prescribed section of the textbooks within each module. Comprehending what they read might also pose a challenge as academic textbook are often densely packed with information (cf. section 3.5.2).

Analyses and interpretation of qualitative data

The qualitative results are presented in two sections namely the views of the students and the views of the lecturers. The emanating themes are included as subheadings.

Students' views

i) Students viewed textbooks as difficult primary texts

The opening questions in all the focus groups were, “Do you read your textbooks? Why, or why not?” In the discussions that followed the majority of the participants stated at the outset that in their view an assignment was a prerequisite for reading. The following comments illustrate this point:

- I only read when I hear the words test or exam. (Participant Humanities)

- I wait for the word “test” before I read or prepare anything. (Participant Law)

Initially, it seemed as though an assessment kindled the reading of the textbook, but as the participants were probed to elaborate, it came to the fore that the majority of students found reading their textbooks challenging:

- Because like, with the chapter, ...when I read it, I get confused. (Participant Humanities)
- It takes long to read, reread and try to make sense of everything. (Participant Natural Sciences)
- ... I read and read, and I still don't understand. (Participant Education)
- I find the textbook difficult (because) (i)t is not student friendly. (Participant EMS)
- The textbook takes too long (to read). (Participant Engineering)
- ...the words and terms are difficult to understand. (Participant Health)
- ...the textbooks are difficult to read. They are written in formal language with a lot of terminology we have to look up. (Participant Law)

Thus, it was apparent that students are frustrated by their reading and they seem to grapple for strategies such as re-reading, which seem to have little effect. The quantitative reading data provides support for their views that reading textbooks is “difficult”, as students, on average did not meet the reading requirements of the university (cf. section 3.5.1). When students are not able to read at the pace of 220 words per minute while understanding 80% of what they read, they will possibly struggle to cope with the content of the textbooks. Understanding 80% of an academic textbook is no easy task as the document analyses of the textbooks’ excerpts indicated. Due to space limitations the result of the Coh-metrix document analyses of one of the textbooks within Humanities are presented as an example.

The following excerpt from the textbook (Thornhill, Van Dijk, & Ile, 2014:27) was entered into T.E.R.A to analyse the “easability” and readability:

The significant relevance of a political undertaking, formulated almost a century ago by two heads of state, resonate modestly in twenty-first century democratic, developmental states. Even though ‘freedom from fear’ and ‘freedom from want’ represent the primal character of a democracy and that of a developmental state respectively, these remain considerably complex political assurances offered to citizens within contemporary democratic developmental states.

The primary attribution of contemporary governments and therefore government officials within democratic developmental states is to determine, acknowledge and prioritise the developmental needs of a society within an inclusive democratic context and to ensure that those needs are addressed in the most efficient, effective and economic manner. A government therefore becomes a critical role player within a specific landscape that can be recognised as the State. It is within the landscape of the State that public officials execute second public management practices within a firm system of public administration.

The software generated the following graph to summarise the findings. In Figure 1, the higher the scores of the components, the easier and more readable the text.

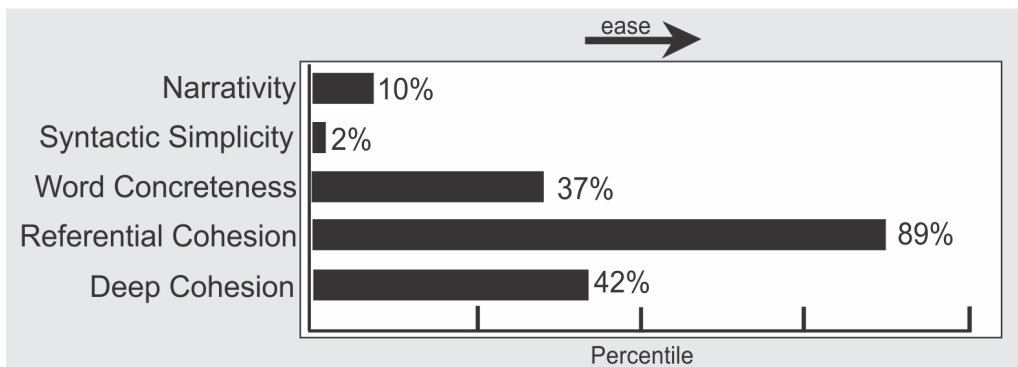


Figure 1: T.E.R.A graph: Textbook Faculty of Humanities

The excerpt was rated 10% in narrativity, which means it is not story-like and thus more difficult to understand. It scored a mere 2% in syntactic simplicity meaning that it consists almost exclusively of complex sentence structures which makes it difficult to comprehend. Word concreteness is 37% which means that many of the words in the excerpt were abstract. Referential cohesion measured high - 89%, indicating that there are many overlaps between ideas, words or sentences so the reader could ideally have made many connections. Lastly, the deep cohesion measured at 42% indicating that the majority of information in the excerpt did not tie together.

This analysed passage gives the indication that the textbook has a high difficulty level. Abstract words like “attribution” and the fact that the majority of information did not tie together would make this text difficult to comprehend for a student who did not meet the reading requirements. So, this analyses was further evidence for the students’ views that reading their textbooks is challenging.

ii) Students viewed notes and slides as easier primary texts

Focus group participants did not hesitate to explain how they overcame this problem of “too difficult” textbooks. Slides and notes were their solutions. Slides is the term generally used by students in the context of this university refer to lecturers’ PowerPoint presentations. Although they are primarily presented in class, lecturers also make them available to students before or after lectures as an additional resource. Notes refer to summarised texts compiled by a peer. It seems to be a practice at the university that students sell these module-specific notes which typically summarises a learning unit. Some students seem to use slides and notes not to supplement the textbook, but to replace the textbook. These comments support research that students use notes as their primary text (Schoenbach et al., 2012). The following comments from a participant in each of the focus groups illustrate students’ dependence on notes and slides:

- I think some of us rely more on the slides than we do on the textbook. (Participant Humanities)
- I don’t read the theory in the textbook, I only look at the slides. (Participant Natural Sciences)
- We do not open it (the textbook) a lot because the slides are very complete. (Participant Education)
- ...if you do not have the slides ...you won’t be able to find the information... (Participant EMS)
- In the beginning of the year, I really studied from that textbook. Then when the test came, I did poorly. The next time I did not open the textbook, I just studied the notes. Now I’ve learnt my lesson. (Participant Engineering)
- We do not make our own summary of the textbook, we buy someone else’s notes. (Participant Health)
- I start with the slides, and I use them as guidelines. (Participant Law)

iii) Students viewed assignments as needing a minimum reading investment

Students run a “cost-benefit analysis” when it comes to prescribed academic reading as they determine the minimum reading investment that will help them reach at least the minimum assignment requirements (Schwartz, s.a; Del Principe & Ihara, 2016). From the focus group discussions, it became clear that students run a similar reading-cost-benefit analysis but the minimum reading investment was found in the use of slides and notes. It seemed that students managed to “get by” by only reading and studying these texts. “Getting by” in this context, refers to passing assignments with the minimum requirement of 50%. This seemed to be the goal of some of the focus group participants. The document analyses of the assignments provided possible reasons why students managed to pass assignments without reading their textbooks.

Lecturers identified an assignment in their module for which the reading of the prescribed textbook, was an instructed prerequisite. Table 5 lists the assignment within the different modules, type of assignment and cognitive levels (Bloom, 1956:17), sorted by faculty. For detailed information on the different assignments, refer to Andrianatos (2018).

Table 5: Summary of task types and cognitive levels per module and faculty

Faculty	Module	Type of assignment	Cognitive levels according to Bloom's taxonomy
Humanities	A	Class test	1. Conceptual knowledge 2. Comprehension
	B	Group essay	1. Conceptual knowledge 2. Comprehension 3. Application 4. Analysis and problem solving 5. Evaluation and syntheses
Natural Sciences	A	Computer programming practical	3. Application 4. Analysis and problem solving
	B	Tutorial class test	1. Conceptual knowledge 2. Comprehension 3. Application 4. Analysis and problem solving 5. Evaluation and syntheses
Education Sciences	A	Class test	1. Conceptual knowledge
	B	Design a pamphlet	1. Conceptual knowledge 2. Comprehension
Economic and Management Sciences	A	Class test	1. Conceptual knowledge 2. Comprehension 3. Application
	B	Group presentation	1. Conceptual knowledge 2. Comprehension 3. Application
Law	A	Group presentation	1. Conceptual knowledge 2. Comprehension 3. Application
	B	Class test	1. Conceptual knowledge 2. Comprehension 3. Application

Engineering	A	Class test	1. Conceptual knowledge
	B	Class test	1. Conceptual knowledge 2. Comprehension 3. Application 4. Analysis and problem solving
Health Sciences	A	Class test	1. Conceptual knowledge 2. Comprehension 3. Application
	B	Class test	1. Conceptual knowledge 2. Comprehension

The presence of the first two (lower) cognitive levels in many activities, seem to be one of the reasons why students “get by” without reading the prescribed textbook. As the last column of the table indicates, thirteen of the fourteen activities tested the cognitive level of conceptual knowledge, and the comprehension level was tested in eleven of the fourteen activities. It is possible that the summarised information on notes and slides contained sufficient content for students to answer lower level questions, especially if they are content with achieving 50% for the assignment.

The format of the assignments seem to be another cause of non-compliance. As table 4 indicates, there were only two activities which involved cognitive levels four and five. These activities were the group essay in the second module within Humanities and the tutorial test in the second module within Natural Sciences. The researchers expected that the students used their textbooks to complete these activities. Yet, the participants commented that students were able to complete the activities without reading the textbooks. In each case they had a “scape goat” causing the misalignment of text and task. In terms of the essay it was group work, which resulted in the less conscientious students’ non-compliance. Another contributing factor was that the technical aspects of the essay, such as the table of contents and reference list, had a weight of 50% and the content of the essay the other 50% of the final mark of the essay (refer to Andrianatos, 2018: 274-275 for rubric). In other words, students could reach the minimum requirements by only adhering to the technical aspects. During the tutorial test within Natural Sciences, students were allowed to discuss the questions with each other and the lecturer. Students remarked that they preferred a discussion to reading the textbook. Thus, the format of an activity seemed to influence students’ reading compliance.

In conclusion, students at the specific campus of the university seem to be non-compliant with textbook reading because they view it as a difficult task. On average, these students read too slow and/or struggle to understand what they read and furthermore, their prescribed textbooks have dense and complex language structures. As they have to “pass” their modules, students turn to notes and slides to reach the learning outcomes. Additionally many assignments included conceptual and comprehension questions,

which students seemed to be able to answer by merely reading and studying notes and slides. The format of some assignments also provided a way out of reading. It seemed that group work lead to non-compliance with reading as well as the weighting of an assignment's technical aspects.

Lecturers' views

i) Lecturers viewed students as responsible for their own reading problems

Lecturers were of the opinion that the textbooks of their modules were suitable for the context but that one of the main reasons for students' non-compliance was their "reading problems":

- I see that students struggle... (with reading the textbook). (Lecturer Humanities)
- I find that students cannot read. (Lecturer Natural Sciences)
- It is shocking that the students do not have reading skills. And, they read so slowly. (Lecturer Education)
- I pick up that students may not have good reading skills. (Lecturer EMS)
- I also think students struggle to read, they might not have the right reading skills and because it is such an effort to read, they cannot get themselves to do it.(Lecturer Law)
- Some students find the language (of the textbook) difficult (Lecturer Engineering)
- ...many times I find that students read over the important information. (Lecturer Health)

Apart from their general observations, the annually received reading results sent by the reading office could have contributed to the views of lecturers. Given the limitation of Readers are Leaders and the fact that the results are an indication of how students' read, it is problematic that lecturers view this situation from a student deficit perspective. While it was clear from the analyses of the focus groups that students were finding reading difficult and the reading results provided additional proof, it seemed as though lecturers blamed the students for their own reading deficits. This is clear in the repetition of the phrase "they don't have reading skills". Although students enter university often unprepared (Berndt *et al.*, 2014: 29), they have met certain criteria to be admitted in the first place. The fact that lectures view students' "lack of reading skills" as one of the main reason for their non-compliance, may be an indication that lecturers are unaware of other contributing factors to non-compliance such as students' dependability on notes and slides and the questions and format of assessments.

ii) Lecturers viewed notes and slides as “plan B” to be implemented

If “plan A” is that students read the textbook, “plan B” is the provision of supplementary texts. It seems that the lecturers expected “plan A”, but implemented “plan B” in any case.

- I expect students to prepare for class. They should have read something before they enter my class. (Lecturer Law)

From the analyses of lecturer’s comments it was clear that lecturers realised that students were non-compliant with textbook reading as the following comment indicates:

- I think less than 3% of my students truly engage with the prescribed reading material. (Lecturer Humanities)

As lecturers were responsible for the throughput figures in their module, and they suspected that the students were not reading the textbook, they supplied students with slides and notes in an attempt to aid students in reaching the learning outcomes:

- (Students)...would be able to pass the module by only studying the slides, but they would not do very well. (Lecturer Humanities)
- I compile very complete slides... (Lecturer Education)
- ...students can buy a summary of the slides on campus. (Lecturer Engineering)

Their intention seemed to be in the interest of their students, but they did not consider the consequences. As notes and slides are more concise, students found them “easier” to read compared to the textbook. Furthermore, lecturers included conceptual and comprehension questions in many of the assignments for which the summarised information on notes and slides seemed adequate. For students aiming for the minimum requirements, these actions seemed to foster non-compliance with prescribed textbook reading. Expecting that students read the textbook is not enough. Unless lecturers “unlock” the textbook for their students by “scaffolds of support” (Cressman, 2018: 218), the practice of expecting “plan A” but implementing “plan B” will most likely continue and students will keep on missing out on valuable opportunities to engage with their textbooks.

iii) Lecturers viewed assignments and reading aligned

The lecturers viewed the assignments and reading of the textbooks as aligned:

- The purpose of the tests is to force students to work through the content (of the textbook). (Lecturer Natural Sciences)
- The reason behind this task was to try and force the students to work through the textbook. (Lecturer EMS)

The word “force” indicated that the lectures designed the assignments with the textbooks in mind. Contrastingly, the analyses of the focus group interviews indicated the opposite. Students did not view the reading of the textbook as a prerequisite for the assignment as the slides and notes provided enough information to “pass”. Including activities which involve higher cognitive levels will not instantly “fix” non-compliance, but students will most probably find it hard to complete such activities by referring to concepts shortly listed on a slide. To be able to apply, analyse and evaluate, for example, requires understanding and textbooks have been written to aid disciplinary novices in this understanding. Lecturers should also consider the possible “reading scape goats” that the marking scheme or format of an activity might cause. Collaborative learning practices such as group work or tutorial tests are important in higher education (Sambell, Brown & Graham, 2017: 93), but additional measures might be needed to curb the non-compliance of less diligent students.

To conclude, the participating lecturers seemed to view the “lacking reading skills” as the main cause of students’ non-compliance with prescribed reading. This is problematic as the RAND reading framework indicates that reading is the interaction of the reader, the text and the activity within a socio-cultural context (RAND Reading Study Group, 2002). Thus, reading problems, including reading non-compliance, cannot be isolated to either one of these aspects. The fact that students did not, on average, meet the reading requirements of the university, does point to shortcomings, but there were other contributing factors as well. Expecting students to read is not enough. They need clarity about what exactly they should look out for when reading the textbook. This is one example of a scaffold of support. Ensuring that students have the needed background knowledge before reading is another (Cressman, 2018: 218). If and when lectures make other texts available, they have to consider if these texts could be used for assignments as this might lead to the misalignment of the assignment and the text to be read.

Conclusion and recommendations

The reading of textbooks is “... a cornerstone of learning in undergraduate studies” (Howard et al., 2018: 189). Yet, this study indicated that many students on a campus of a South African university are trying to “build” their knowledge without this cornerstone. We are of the opinion that students’ non-compliance with prescribed textbook reading is a higher education challenge which cannot be overlooked. Even though the findings of this study cannot be generalised to other campuses or universities and the “measurement” of reading by means of a software package has limitations, we hope to contribute to this area of research by making the following recommendations.

Lecturers are in a position where they can take action against students' non-compliance, but they need to adapt the instructional design of their modules. Professional development is key in this adaptation. Content knowledge is not sufficient to teach in higher education. Especially in terms of fostering reading compliance, pedagogical knowledge of how to guide students in disciplinary reading practises, is important. The results seemed to indicate that students want more clarity, feedback and flexibility, whereas lecturers provided very little modelling and scaffolding of disciplinary content reading. Instructional design will require lecturers to be aware of how to create inclusive classrooms that does not merely focus on textbook or content "coverage". Instructional design, specifically backward design, which aligns learning outcomes, slides, the textbook and assessment, can possibly lead to students who realise that they need to make an effort to read their textbooks as they are powerful learning tools.

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