Honours Long Essay

EAL624

Diagnosing for design:

Aligning assessment and language instruction

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Abstract

The Test of Academic Literacy for Postgraduate Students (TALPS) has been a reliable resource for ascertaining the language proficiency levels of students entering into postgraduate study. This is the first step in a procedure that raises an important question: are students who have been identified as being at risk truly helped when they are required to enrol for postgraduate academic literacy courses? What information can a test like TALPS yield about areas in their academic literacy development that most need instructional care and attention? The aim of this study is to conduct a diagnostic analysis of the results of TALPS in order to identify the areas pertaining to language proficiency in which students in general are lacking. Once these specific areas have been identified, several activities will be suggested and designed with a view to develop students' ability to handle academic discourse in such a way that they can overcome these inadequacies.

Keywords: academic literacy, course design, diagnostics, language testing, TALPS, test validity

1. Background and rationale

The academic environment of universities in South Africa constitutes a unique context in that many students study in their second or third language. For this reason, there is presently much concern about the language proficiency levels of students entering tertiary institutions in South Africa (Van Dyk & Weideman, 2004a:1). Van Rensburg and Weideman (2002:155) state that there is a "correlation between language proficiency and academic performance." One can therefore conclude that many students who lack the necessary ability to handle the lingual challenges of academic discourse will most probably struggle to achieve their academic objectives.

Although it is reasonable to expect that students wishing to pursue postgraduate study would display high levels of language proficiency, a study conducted by Butler (2007) has shown that this is not the case. It was discovered that many postgraduate students struggle with understanding

academic texts and with academic writing in particular. In light of these findings, a Test of Academic Literacy for Postgraduate Students (TALPS) was designed in order to assess the academic literacy levels of students wishing to engage in postgraduate study.

TALPS is based on the Test of Academic Literacy Levels (TALL), which was developed by academic members of staff at the Unit for Academic Literacy (UAL) (part of the University of Pretoria) and their colleagues at North-West University and Stellenbosch University. TALL was designed in order to test the language proficiency levels of first year students (Butler, 2009:293). Motivated by the success of TALL, the test developers decided to base the construct of TALPS on that of TALL (Rambiritch, 2012:35). Both TALL and TALPS are designed to test the academic literacy levels of students; the only critical difference is that they are aimed at different target groups: first year students as opposed to postgraduate students (Rambiritch, 2012:35-36).

TALPS, which is South Africa's only test for measuring the academic literacy levels of postgraduate students, can either be used for access or placement purposes. The results are graded in terms of five categories which calculate the measure of risk, from 1 (very high risk) to 5 (little or no risk), and not as a 'pass' or 'fail' mark (Van der Slik & Weideman, 2005:33). If TALPS is used for access purposes, then, as Hay (2010) states, the results have to be handled with care, as language cannot solely predict a student's potential for academic success. She therefore recommends that the results of the test be weighted at 15%, while previous academic performance is given a 60% weighting (Hay, 2010). The other 25% can, for example, consist of a letter of motivation and biographical information. If certain students are identified as being at risk, they are required to enrol for specific postgraduate academic literacy courses available at the relevant tertiary institution. However, if a student's score indicates an extremely low level of language proficiency, Hay (2010) states that it "raises ethical questions about allowing those in who so obviously fall short of requirements that they will waste their time and resources on a hopeless venture."

2. Literature review

Selection and development of construct

According to Van Dyk & Weideman (2004b:17), the construct of a test has to be aligned with the task types that are used in order for a test to be valid. A test *construct* is "the specific definition of an ability that provides the basis for a given test or test task and for interpreting scores derived from this task" (Bachman & Palmer, 1996:21). In other words, the test construct "defines the knowledge or abilities to be measured by that specific test" and is "usually articulated in terms of a theory" (Van Dyk & Weideman, 2004a:7). In the case of TALL and TALPS, the construct is articulated as a "theory of language, and more specifically, a theory of academic literacy" (Van Dyk & Weideman, 2004a:7).

The formation of the test construct for TALL involved a process in which a definition of academic literacy was developed and then put forward at several seminars and conferences, including being discussed subsequently with "trans-disciplinary panels of academics" (Weideman, 2003b:61). The feedback received was highly positive and TALL itself has proven to be a success – thus, the developers of TALPS "were more than justified in using a blueprint that had already proved successful" (Rambiritch, 2012:36). The test construct for TALPS is based upon a definition first used in the Alternative Admissions Research Project (AARP) of the University of Cape Town in and for their Placement Test of English for Educational Purposes (PTEEP). It was subsequently refined and streamlined in Weideman's (2007a:xi-xii) articulation of this definition of academic literacy, which is described as the ability to:

- understand a range of academic vocabulary in context;
- interpret the use of metaphor and idiom in academic usage, and perceive connotation, word play and ambiguity
- understand relations between different parts of a text, be aware of the logical development of an academic text, via introductions to conclusions, and know how to use language that serves to make the different parts of a text hang together;

- interpret different kinds of text type (genre), and have a sensitivity for the meaning they convey, as well as the audience they are aimed at;

- interpret, use and produce information presented in graphic or visual format;

- distinguish between essential and non-essential information, fact and opinion, propositions and arguments, cause and effect, and classify, categorise and handle data that make comparisons;

- see sequence and order, and do simple numerical estimations and computations that are relevant to academic information, that allow comparisons to be made, and can be applied for the purposes of an argument;

- know what counts as evidence for an argument, extrapolate from information by making inferences, and apply the information or its implications to other cases than the one at hand;

- understand the communicative function of various ways of expression in academic language (such as defining, providing examples, arguing); and

- make meaning (e.g. of an academic text) beyond the level of the sentence (Weideman, 2007a:xi-xii).

This definition of academic literacy constitutes a breakdown of the components of the kinds of language abilities that are necessary for successfully handling the academic discourse demands at a tertiary institution.

The test construct was then aligned with the specification of task types (Rambiritch, 2012:36). Fulcher and Davidson (2007:52; also 2009:128) state that test specifications (often called blueprints or 'specs') are "generative explanatory documents for the creation of test tasks." They go on to state that:

> Specs tell us the nuts and bolts of how to phrase the test items, how to structure the test layout, how to locate the passages, and how to make a host of difficult choices as we prepare test materials. More importantly, they tell us the rationale behind the various choices that we make (Fulcher & Davidson, 2007:52).

The designers of TALPS drew from TALL in the alignment of the construct with the specification of task types:

Specification (component of construct):	Task type(s) measuring / potentially measuring this component:
Vocabulary comprehension	Vocabulary knowledge Longer reading passages Dictionary definitions Text editing (Cloze procedure)
Understanding metaphor, idiom, connotation, word play, & ambiguity	Longer reading passages
Text relations (grammar & cohesion)	Scrambled text Text editing (Cloze) (perhaps) Register and text types Longer reading passages Academic writing tasks
Understanding text types (genre sensitivity)	Register and text types Scrambled text Text editing (Cloze) Longer reading passages Academic writing tasks
Understanding graphic & visual information	Interpreting and understanding visual & graphic information (potentially) Longer reading passages
Distinguishing between essential & non-essential information; fact and opinion; propositions and arguments; cause and effect; classify, categorize & handle data that make comparisons	Longer reading passages Interpreting and understanding visual & graphic information Academic writing tasks (perhaps) Text types
Sequence & order; numerical computations	Interpreting and understanding visual & graphic information Longer reading passages
Extrapolation, making inferences, and application	Longer reading passages Academic writing tasks (potentially) Interpreting and understanding visual & graphic information
Communicative function (defining, arguing, etc.)	Longer reading passages (possibly also) Text editing (Cloze), Scrambled text
Making meaning beyond the level of the	Longer reading passages

sentence	Register and text types Scrambled text Interpreting and understanding visual & graphic information

Table 1: Test specifications and task types (Van Dyk & Weideman, 2004b:18-19).

Thus, by using this blueprint for the specification of task types, the test designers were able to decide on what might profitably be included in TALPS (Rambiritch, 2012:37).

The developers of TALL opted for a multiple-choice format because of the number of students taking the test and the urgent need for a quick release of the results (Van Dyk & Weideman, 2004b:15). The designers of TALPS retained the multiple-choice format for the first seven sections of the test for the reasons stated above. However, since writing is a crucial component of postgraduate study, a section on argumentative writing and text editing was included in TALPS. The TALPS test consists of 76 items within 8 sections (100 marks) and students have 120 minutes to complete the test:

Section 1: Items 1-5	Scrambled text
Section 2: Items 6-15	Interpreting graphs and visual information
Section 3: Items 16-25	Academic vocabulary
Section 4: Items 26-30	Text types
Section 5: Items 31-51	Understanding texts
Section 6: Items 52-66	Grammar and text relations
Section 7: Items 67-76	Text editing
Section 8:	Academic writing

Table 2: TALPS: Sections and subtests

Section 8 requires students to write an argumentative essay of approximately 300 words. They are encouraged to make use of the information available in the test itself, and in doing so, students are required to reference the sources used according to the Harvard method of referencing. The different sections and subtests of TALPS reflect the definition of academic literacy stated above and are thus aligned with the test construct.

Validity

Broadly speaking, the concept of test *validity* can be encompassed by the question, "does this test truly measure that which it was designed to measure?" Bachman and Palmer (1996:21) refer to *construct validity* as "the extent to which we can interpret a given test score as an indicator of the ability(ies), or construct(s), we want to measure." There is a large ongoing debate regarding validity that originates with Messick (cf. 1980, 1981, 1988, 1989), who claims that all other types of validity can be included under the overarching notion of construct validity. This view has been contested by various scholars such as Weideman (2009), Rambiritch (2012) and Van Dyk (2013). Key elements of this debate appear to be the discussions relating to what overarching criterion, if any, should be used, as well as whether one cannot profitably distinguish between the *subjective* process of validation, and the *objective* validity (effect) of the measuring instrument (Weideman, 2009:242-243). In-depth studies conducted by Butler (2009) and Rambiritch (2012), in which the validity of TALPS was investigated, have concluded that TALPS is indeed a valid and reliable test.

Diagnostics

Bachman and Palmer (1996:98) state that "diagnosis involves identifying specific areas of strength or weakness in language ability so as to assign students to specific courses or learning activities." Thus, an empirically grounded and responsible diagnostic analysis of the available results of TALPS should reveal specific areas pertaining to academic literacy that postgraduate students generally struggle with. The emphasis is placed upon *responsibility* in the interpretation of test results because, as no test is completely reliable, there will always be the possibility of misdiagnosis (cf. Weideman, 2011). What is more, a responsible interpretation of test results for diagnostic purposes will also acknowledge that there is never perfect alignment between the identification of what needs to be taught and what actually gets learned. Therefore, not only does the use of an assessment instrument, even one as highly reliable as TALPS, call for humility, but one should also not have inflated expectations of the kinds of solutions that can be proposed, as I shall note in the next section.

Course design

There is a misconception pertaining to the nature of language teaching that assumes that "the solution to the language teaching problem ... is relatively simple: the more we teach our students to handle linguistic distinctions, the more competent they will become in the language" (Weideman, 2003a:27). Language courses that are based on this belief usually place much emphasis on grammar: if students can identify parts of speech, for example, then it is assumed that they will know how to use them correctly in their own writing (Weideman, 2003a:27). As Weideman (2003a:28) observes, "knowing *about* cannot be equated with knowing *how*." Consequently, in designing a course with the objective of addressing specific language problems, a responsible justification for the design needs to be provided (Weideman, 2003a:28). In other words, the reasons for the selection of the proposed solution (in the form of a course) need to be articulated. In addition, the methods and techniques that are used need to be in line with "one's beliefs about language learning" so that integrity and responsibility are upheld by the course designer (Weideman, 2003a:29).

Communicative Language Teaching (CLT), which originated in the late 1960s and early 1970s, is a well-known approach that has been adopted throughout the world (Richards & Rodgers, 2001:172). The ultimate goal of teachers who use the CLT approach is to "enable students to communicate in the target language" (Larsen-Freeman & Anderson, 2011:122). In order to communicate effectively, students need to know how to handle linguistic forms, meanings and functions. However, "communication is a process; knowledge of the forms of language is insufficient" (Larsen-Freeman & Anderson, 2011:122). Berns (1990:104) summarises the principles of CLT as follows:

1. Language teaching is based on a view of language as communication, that is, language is seen as a social tool which speakers use to make meaning; speakers communicate about something to someone for some purpose, either orally or in writing.
2. Diversity is recognized and accepted as part of language development and use in second language learners and users as it is with first language users.

3. A learner's competence is considered in relative, not in absolute, terms of correctness.
4. More than one variety of a language is recognized as a viable model for learning and teaching.
5. Culture is recognized as playing an instrumental role in shaping speakers' communicative competence, both in their first and subsequent languages.
6. No single methodology or fixed set of techniques is prescribed.
7. Language use is recognized as serving the ideational, the interpersonal, and the textual functions and is related to the development of learners' competence in each.
8. It is essential that learners be engaged in doing things with language, that is, that they use language for a variety of purposes in all phases of learning.

Furthermore, scholars such as Larsen-Freeman and Anderson (2011), Richards and Rodgers (2001), Brown (2000), and Williams (1995) believe that communicative lessons are task-oriented, needs-based, learning-centred, contextualized, authentic, and recursive (Razmjoo & Riazi, 2006:146). The most important CLT techniques include the use of authentic texts, the information gap technique, scrambled sentences, role-play, language games, discussions, and picture strip stories (cf. Larsen-Freeman & Anderson, 2011; Weideman, 2003a).

Task-based Language Teaching (TBLT), which was heavily influenced by CLT, refers to an approach "based on the use of tasks as the core unit of planning and instruction in language teaching" (Richards & Rodgers, 2001:223). Furthermore, TBLT is

> based on the principle that language learning will progress most successfully if teaching aims simply to create contexts in which the learner's natural language learning capacity can be nurtured rather than making a systematic attempt to teach the language bit by bit (Ellis, 2009:222).

As Larsen-Freeman and Anderson (2011:150) state, TBLT provides an environment in which "students acquire the language they need when they need

it in order to accomplish the task that has been set before them." Task-based Language Teaching is based on the following principles, many of which correspond with CLT principles and practices:

- A needs-based approach to content selection.
- An emphasis on learning to communicate through interaction in the target language.
- The introduction of authentic texts into the learning situation.
- The provision of opportunities for learners to focus not only on language but also on the learning process itself.
- An enhancement of the learner's own personal experiences as important contributing elements to classroom learning.
- The linking of classroom language learning with language use outside the classroom.
  (Nunan, 2004:1).

Ellis (2009:241) states that in order for TBLT to be successful, the teacher not only needs to have a clear understanding of what a task is, but should also be involved in the designing of task materials for use in the classroom. In order for a language-teaching activity to be identified as a task, the following criteria need to be met:

- The primary focus should be on 'meaning' (by which is meant that learners should be mainly concerned with processing the semantic and pragmatic meaning of utterances).
- There should be some kind of 'gap' (i.e. a need to convey information, to express an opinion or to infer meaning).
- Learners should largely have to rely on their own resources (linguistic and non-linguistic) in order to complete the activity.
- There is a clearly defined outcome other than the use of language (i.e. the language serves as the means for achieving the outcome, not as an end in its own right) (Ellis, 2009:223).

TBLT techniques include the use of information-gap tasks, opinion-gap tasks and reasoning-gap tasks (Prabhu, 1987:46-47). According to Ellis (2009), tasks can be focused or unfocused, as well as input-providing or output-prompting.

The CLT and TBLT approaches are both appropriate for the designing of language tasks that aim to develop the academic literacy levels of postgraduate students, since communication (especially written communication) is of utmost importance at postgraduate level. In addition, the objective will not be to teach *language*, but rather to design tasks that create opportunities for language proficiency to be nurtured and developed, which is once again in accordance with the objectives of CLT and TBLT.

3. Research problem and objectives

Academic writing is often acknowledged as being critically important, particularly with regard to postgraduate study. It can therefore be regarded as the ultimate proof of students' academic language ability. The aim of this study is to conduct a diagnostic analysis of the results of TALPS, as administered to students at the University of the Free State over the past few years. Although TALPS can easily be mistaken for a test of reading ability, this study will not assume as starting point the existence of discrete skills such as 'reading', 'writing', 'listening' and 'speaking' (Kumaravadivelu, 2003:225-226). Rather, it will attempt to demonstrate that an analysis of the *subtests* of TALPS can also provide substantial information regarding how well students can write. Once specific areas that students consistently struggle with have been identified, a number of activities will be suggested and designed with a view of rectifying these specific language problems. The following questions will form the basis of this study:

- What can a diagnostic analysis of TALPS tell us about *specific* areas pertaining to academic literacy that future or current postgraduate students are lacking in?
- How can the identified areas of poor language ability be developed? What kind of activities can be designed in order to assist students in the development of their language proficiency in academic discourse?

In addition, throughout the investigation of the above questions, the following issue must be taken into consideration:

- Can what is diagnosed truly be *taught* to students? And in teaching, can one be confident that students are *learning* that which is taught?

Responsible designs, be they of tests or of courses, should seek alignment, not only of test and language course, but also of the offered language instruction and learning. The findings of researchers such as Lightbown and Spada (2006) have demonstrated just how difficult that alignment is. It should nonetheless be sought because such designs affect large numbers of people in need. Thus, by responsibly designing theoretically and socially defensible solutions to the identified language problems, I ultimately wish to alleviate some of the pain, suffering, poverty, and injustice in our world (Weideman, 2007b:29).

4. Research design and methodology

This study, which will be empirically based and argument-driven, will use a mixed-method approach where both quantitative and qualitative data will be collected and analysed. A statistical analysis of the results of 652 TALPS tests (written in 2011 at the University of the Free State) will be conducted and then examined in terms of the research objectives. TiaPlus and Iteman, two software programs for test and item analysis, will be used in order to provide an empirical basis for part of the diagnostic analysis. In addition to providing the overall statistics of the test, these programs also analyse each subtest and test item, giving an indication of how students perform on each of these. Once the analysis of the test results has been conducted, the data will be sorted by item according to the average percentage attained by the students on each item. In this way, it is hoped that specific areas will be highlighted, illustrating a particular lack in the ability to handle the challenges of academic discourse. Subsequently, the table in section five below (Table 3) will be used as a means of pinpointing the exact components of academic literacy in which students are lacking.

Along with the diagnostic analysis, questionnaires will be distributed to language experts as well as lecturers and supervisors from other fields. The questionnaire will be centred on the construct of TALPS by making enquiries

and receiving feedback as to its validity and relevance as a tool for the diagnosis of certain problems. In doing so, the content, construct and face validity of TALPS will be attended to and confirmed.

In suggesting and designing a series of activities that will address the problem areas identified by the diagnostic analysis, Weideman's (2009:244-245) five-stage process of course design (itself based on Schuurman's (1972:404) three-stage process), will be followed in part (see Figure 1 below):
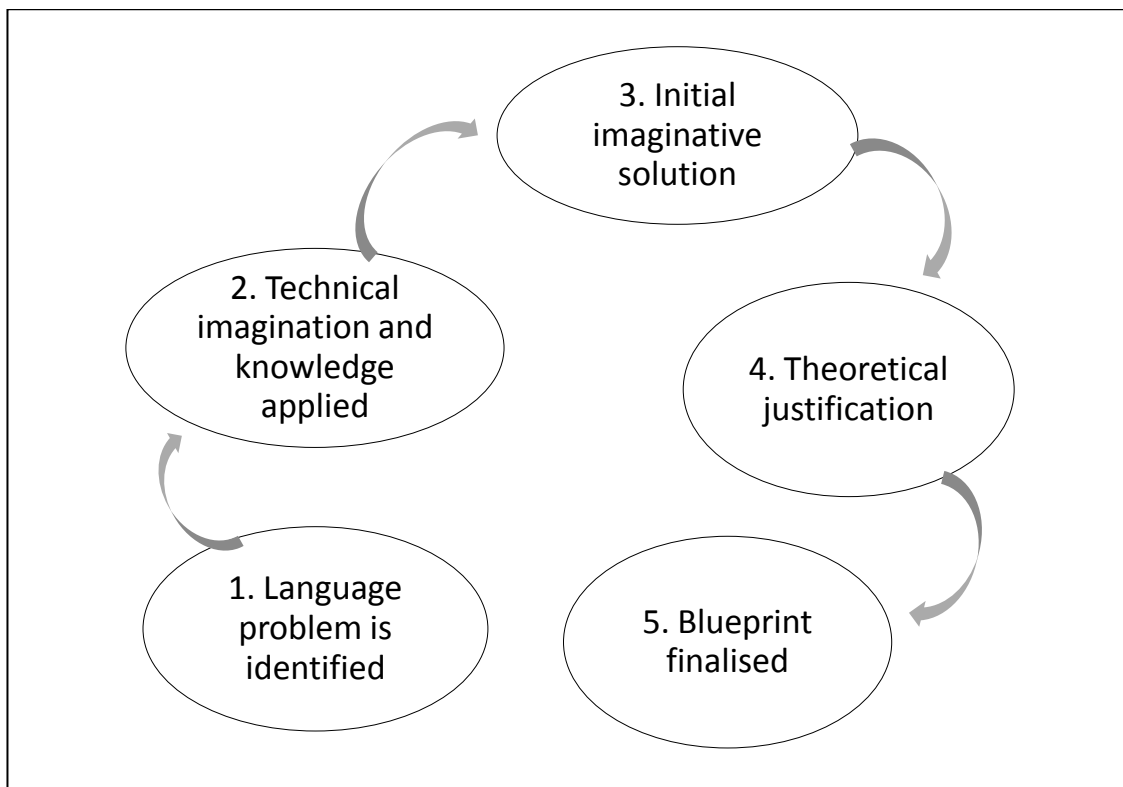

Figure 1: Five phases of applied linguistic designs (Weideman, 2009:244).

In the first stage, a specific language problem is identified – there is nothing 'scientific' about this phase. In the following stage, there is a merging of the designer's technical imagination and knowledge in order to arrive at a preliminary imaginative solution to the problem (third stage) which may also entail some experimentation. In the fourth stage, the proposed solution is theoretically justified while it is still in the development phase. Finally, the design is further refined, redesigned and adjusted according to the findings during the piloting and trial runs of the test or course, until the blueprint is eventually finalised (Weideman, 2009:244-245). Thus, by following this five-

stage process, the end result aimed for is a course which has been responsibly designed. The Communicative Language Teaching (CLT) and Task-based Language Teaching (TBLT) approaches will be adopted for the designing of the academic literacy course. Techniques such as information-gap tasks, opinion-gap tasks and reasoning-gap tasks are likely to be used in order to create a course designed to develop the specific inadequacies that were highlighted during the diagnostic analysis.

5. Analysis and findings

Weideman's (2007a:xi-xii) definition of academic literacy forms the basis of the test construct of TALPS and is therefore a vital aspect of this study. The following table provides an illustration of the relation of each test item to the components of the construct (adapted and expanded from Van Dyk & Weideman, 2004b:18-19):

Components of academic literacy:	Task types:	Item(s) testing component(s) of academic literacy:
Vocabulary comprehension	Vocabulary knowledge Longer reading passages Grammar & text relations Text editing	Main items: 16-25; 36 Secondary items: 33; 54-56; 57-66; 67-76
Understanding metaphor, idiom, connotation, word play, & ambiguity	Longer reading passages	Main item: 33 (perhaps): 36
Text relations (grammar & cohesion)	Scrambled text Grammar & text relations Text editing (Cloze) (perhaps) Register and text types Longer reading passages Academic writing tasks	Main items: 1-5; 52-53; 54-56; 57-66; 67-76 Secondary items: 44; 47; 49; section 8 (perhaps): 26-30; 36; 37
Understanding text types (genre sensitivity)	Register and text types Scrambled text Grammar & text relations Longer reading passages Academic writing tasks	Main items: 26-30 Secondary items: 1-5; section 8
Understanding graphic &	Interpreting and	Main items: 6-15

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visual information	understanding visual & graphic information (potentially) Longer reading passages	Secondary items: 50-51
Distinguishing between essential & non-essential information; fact and opinion; propositions and arguments; cause and effect; classify, categorize & handle data that make comparisons	Longer reading passages Interpreting and understanding visual & graphic information Academic writing tasks (perhaps) Register & text types	Main items: 31; 34; 35; 38; 45; 46; 48 Secondary items: 6-15; 32; 50-51; Section 8 (perhaps): 26-30
Sequence & order; numerical computations	Interpreting and understanding visual & graphic information Longer reading passages	Main items: 32; 39-43 Secondary items: 6-15
Extrapolation, making inferences, and application	Longer reading passages Academic writing tasks (potentially) Interpreting and understanding visual & graphic information	Main items: 44; 45; 46; 48; 49; 50-51 Secondary items: 1-5; 26-30; 32; 33; 35; 36; 37; 38; 39-43; Section 8 (perhaps): 6-15
Communicative function (defining, arguing, etc)	Longer reading passages (possibly also) Grammar & text relations Scrambled text	Main item: 37 (perhaps): 1-5
Making meaning beyond the level of the sentence	Longer reading passages Register and text types Scrambled text Interpreting and understanding visual & graphic information	Main items: 37; 47 Secondary items: 1-5; 26-30 (perhaps): 6-15; 48

Table 3: The relation of each test item to the components of the construct of TALPS

The TALPS items have been categorised as "main item(s)" and "secondary item(s)" because, even though many items test more than one component of academic literacy, it is preferable (for ease of reference as well as for other reasons) to focus on the one *main* component that is being tested by each item. Furthermore, the diagnostic implications of an item need to be weighted: it is probably more practical to identify the primary, secondary and additional focuses of the task that is tested by the item when you are designing an instructional task aimed at providing an opportunity for learning and developing a particular component of academic literacy. The diagnostic analysis

will identify particular items on which students, on average, do not perform well. In an initial prediction, it is to be expected that students will consistently struggle with the handling of academic discourse. Just which components of that ability need attention most is crucial for the design of a subsequent instructional intervention. Thereafter, the question once again arises, can what has been diagnosed be taught; and if it can, is it in fact learnable? One of the objectives of this study is to shed some light on this problematic and unremitting aspect of language teaching.

The reliability of TALPS as a measuring instrument

The results of the 2011 TALPS test were analysed using TiaPlus and Iteman, two software programs for test and item analysis. The results of the analyses performed by TiaPlus and Iteman slightly differ for the reason that one can add the weightings of the test items when using TiaPlus, but this was not done with Iteman. The analyses firstly confirm the consistency and stability of TALPS as a measuring instrument, since it has a reliability of 0.92 (TiaPlus) and 0.931 (Iteman) (Cronbach's alpha) and 0.97 (GLB), far above the acceptable benchmark of 0.7 (Weideman, 2011:105). A factor analysis is used to "determine whether the items in the test actually do measure just one construct or ability, in this case academic literacy" (Rambiritch, 2012:99). The outlying items (see items 39-43 in Figure 2 below) show that sequencing seems to be less closely associated with the rest of the test items. This is still acceptable because academic literacy is a "richly varied and potentially complex" ability (Weideman, 2009:237). Overall, the test is consistent in that nearly all of the items display a high measure of association with one another, which means that a homogenous construct is being tested (Weideman, 2011:105-106).
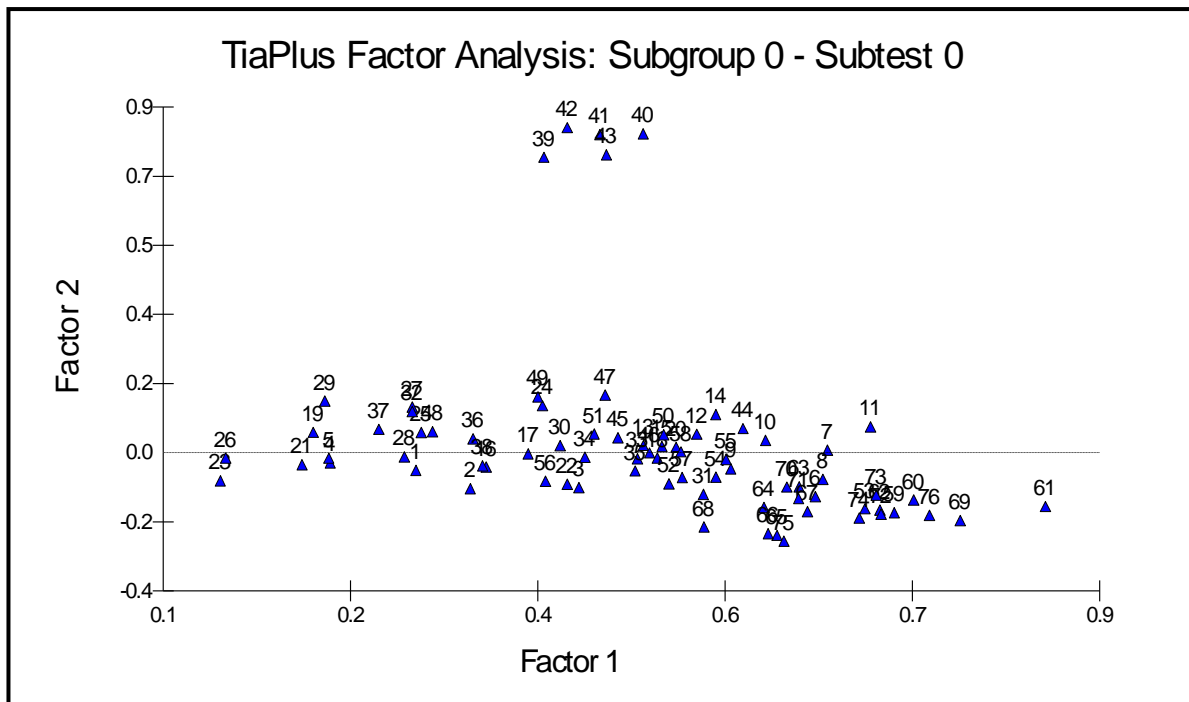
Figure 2: Factor analysis of TALPS 2011 (UFS)

TiaPlus and Iteman analyses

The TiaPlus and Iteman analyses provide an indication of how students performed on each of the seven *subtests*. The results are given in Table 4 below, which has been arranged from the lowest subtest average to the highest:

Subtests:	Number of items:	Mean:	P-value:
All items	76	Iteman: 48.679 TiaPlus: 51.43	Iteman: 0.641 TiaPlus: 64.29
Scrambled text (ST)	5	Iteman: 2.305 TiaPlus: 2.31	Iteman: **0.461** TiaPlus: 46.10
Text types (TT)	5	Iteman: 2.436 TiaPlus: 2.44	Iteman: **0.487** TiaPlus: 48.71
Grammar and text relations (GTR)	15	Iteman: 8.549 TiaPlus: 8.55	Iteman: **0.570** TiaPlus: 56.99
Interpreting graphs and visual information (IGVI)	10	Iteman: 6.275 TiaPlus: 6.27	Iteman: **0.627** TiaPlus: 62.75

Understanding texts (UT)	21	Iteman: 14.678 TiaPlus: 17.43	Iteman: **0.699** TiaPlus: 69.73
Academic vocabulary (AV)	10	Iteman: 7.086 TiaPlus: 7.09	Iteman: **0.709** TiaPlus: 70.86
Text editing (TE)	10	Iteman: 7.351 TiaPlus: 7.35	Iteman: **0.735** TiaPlus: 73.51

Table 4: Subtests: average score

These results show that students, on average, struggled the most with the scrambled text and text types subtests and performed the best on the academic vocabulary and text editing subtests. This serves as an initial prediction as to what the final analyses will reveal.

The TiaPlus and Iteman item-by-item analyses provide the average scores for each of the 76 items. The items were sorted by the average percentage attained on each item, from the lowest to the highest in order to obtain a weighted average, or index.

Item	Sub test	P-value/mean	Item	Sub test	P-value/mean	Item	Sub test	P-value/mean
29.	TT	Iteman: 0.308 TiaPlus: 0.31	**14.**	IGVI	Iteman: 0.572 TiaPlus: 0.57	**20.**	AV	Iteman: 0.738 TiaPlus: 0.74
5.	ST	Iteman: 0.325 TiaPlus: 0.33	**64.**	GTR	Iteman: 0.577 TiaPlus: 0.58	**46.**	UT	Iteman: 0.738 TiaPlus: 1.48 (= 0.74)
35.	UT	Iteman: 0.376 TiaPlus: 0.38	**65.**	GTR	Iteman: 0.584 TiaPlus: 0.58	**41.**	UT	Iteman: 0.739 TiaPlus: 0.74
38.	UT	Iteman: 0.393 TiaPlus: 0.39	**59.**	GTR	Iteman: 0.587 TiaPlus: 0.59	**40.**	UT	Iteman: 0.753 TiaPlus: 0.75
4.	ST	Iteman: 0.402 TiaPlus: 0.40	**25.**	AV	Iteman: 0.597 TiaPlus: 0.60	**70.**	TE	Iteman: 0.773 TiaPlus: 0.77

58.	GTR	Iteman: 0.402 TiaPlus: 0.40	**10.**	IGVI	Iteman: 0.606 TiaPlus: 0.61	**7.**	IGVI	Iteman: 0.773 TiaPlus: 0.77
28.	TT	Iteman: 0.423 TiaPlus: 0.42	**8.**	IGVI	Iteman: 0.613 TiaPlus: 0.61	**75.**	TE	Iteman: 0.775 TiaPlus: 0.77
61.	GTR	Iteman: 0.437 TiaPlus: 0.44	**23.**	AV	Iteman: 0.627 TiaPlus: 0.63	**49.**	UT	Iteman: 0.793 TiaPlus: 0.79
26.	TT	Iteman: 0.457 TiaPlus: 0.46	**53.**	GTR	Iteman: 0.627 TiaPlus: 0.63	**16.**	AV	Iteman: 0.796 TiaPlus:0.80
57.	GTR	Iteman: 0.465 TiaPlus: 0.46	**24.**	AV	Iteman: 0.632 TiaPlus: 0.63	**34.**	UT	Iteman: 0.796 TiaPlus: 0.80
3.	ST	Iteman: 0.468 TiaPlus: 0.47	**54.**	GTR	Iteman: 0.632 TiaPlus: 0.63	**12.**	IGVI	Iteman: 0.799 TiaPlus: 0.80
68.	TE	Iteman: 0.471 TiaPlus: 0.47	**55.**	GTR	Iteman: 0.641 TiaPlus: 0.64	**44.**	UT	Iteman: 0.805 TiaPlus: 0.81
33.	UT	Iteman: 0.503 TiaPlus: 0.50	**11.**	IGVI	Iteman: 0.647 TiaPlus: 0.65	**76.**	TE	Iteman: 0.805 TiaPlus: 0.81
63.	GTR	Iteman: 0.503 TiaPlus: 0.50	**37.**	UT	Iteman: 0.647 TiaPlus: 1.29 (= 0.65)	**31.**	UT	Iteman: 0.822 TiaPlus: 0.82
45.	UT	Iteman: 0.506 TiaPlus: 1.01 (= 0.51)	**21.**	AV	Iteman: 0.650 TiaPlus: 0.65	**39.**	UT	Iteman: 0.824 TiaPlus: 0.82
27.	TT	Iteman: 0.512 TiaPlus: 0.51	**13.**	IGVI	Iteman: 0.658 TiaPlus: 0.66	**50.**	UT	Iteman: 0.825 TiaPlus: 0.83
51.	UT	Iteman: 0.515 TiaPlus: 0.52	**71.**	TE	Iteman: 0.681 TiaPlus: 0.68	**19.**	AV	Iteman: 0.833 TiaPlus: 0.83
15.	IGVI	Iteman: 0.517 TiaPlus: 0.52	**66.**	GTR	Iteman: 0.684 TiaPlus: 0.68	**36.**	UT	Iteman: 0.836 TiaPlus: 0.84

22.	AV	Iteman: 0.525 TiaPlus: 0.52	**67.**	TE	Iteman: 0.693 TiaPlus: 0.69	**47.**	UT	Iteman: 0.836 TiaPlus: 0.84
6.	IGVI	Iteman: 0.529 TiaPlus: 0.53	**42.**	UT	Iteman: 0.702 TiaPlus: 0.70	**17.**	AV	Iteman: 0.842 TiaPlus: 0.84
2.	ST	Iteman: 0.541 TiaPlus: 0.54	**43.**	UT	Iteman: 0.702 TiaPlus: 0.70	**18.**	AV	Iteman: 0.847 TiaPlus: 0.85
9.	IGVI	Iteman: 0.560 TiaPlus: 0.56	**32.**	UT	Iteman: 0.702 TiaPlus: 0.70	**73.**	TE	Iteman: 0.850 TiaPlus: 0.85
62.	GTR	Iteman: 0.561 TiaPlus: 0.56	**56.**	GTR	Iteman: 0.713 TiaPlus: 0.71	**74.**	TE	Iteman: 0.854 TiaPlus: 0.85
52.	GTR	Iteman: 0.564 TiaPlus: 0.56	**72.**	TE	Iteman: 0.724 TiaPlus: 0.72	**48.**	UT	Iteman: 0.863 TiaPlus: 1.73 (= 0.86)
1.	ST	Iteman: 0.569 TiaPlus: 0.57	**69.**	TE	Iteman: 0.725 TiaPlus: 0.73			
60.	GTR	Iteman: 0.571 TiaPlus: 0.57	**30.**	TT	Iteman: 0.735 TiaPlus: 0.73			

Table 5: Item-by-item analysis

Diagnostic analysis of TALPS 2011

Along with Table 5 above, Table 3 was then used as a means of calculating how the students performed on each component of academic literacy, with a view to highlighting specific areas that students are lacking in. As is illustrated in Table 3, the item(s) testing each component of academic literacy were divided into "main item(s)", "secondary item(s)" and "(perhaps) item(s)." For this diagnostic analysis, the "main item(s)" were given a weighting of three, the "secondary item(s)" a weighting of two, and the "(perhaps) item(s)" were given a weighting of one. In this way, it is hoped that the diagnostic analysis will fairly reflect what is measured by TALPS. The main, secondary, and (perhaps) items were added up and then divided by the number of items in order to get the average

score of all the items testing each component of academic literacy. Table 6 below constitutes an example of how the diagnostic analyses were carried out:

Component of academic literacy:	Main items:	Secondary items:	(perhaps):
Distinguishing between essential & non-essential information; fact and opinion; propositions and arguments; cause and effect; classify, categorize & handle data that make comparisons	31: 0.822 34: 0.796 35: 0.376 38: 0.393 45: 0.506 46: 0.738 48: 0.863 Total: 4.494 x3 = 13.482	6: 0.529 7: 0.773 8: 0.613 9: 0.560 10: 0.606 11: 0.647 12: 0.799 13: 0.658 14: 0.572 15: 0.517 32: 0.702 50: 0.825 51: 0.515 Total: 8.316 x2 = 16.632	26: 0.457 27: 0.512 28: 0.423 29: 0.308 30: 0.735 Total: 2.435 x1 = 2.435
	13.482 + 16.632 + 2.435 = 32.549 32.549/52 = **0.6259** = **63%**		

Table 6: An example of how the diagnostic analyses were carried out

In this way, an index of the average level of difficulty (or weighted average) of each component of academic literacy was calculated. The following table constitutes the final results of the diagnostic analysis:

Components of academic literacy:	Task types:	Item(s) testing component(s) of academic literacy:	Index of average difficulty:
Vocabulary comprehension	Vocabulary knowledge Longer reading passages Grammar & text relations Text editing	Main items: 16-25; 36 Secondary items: 33; 54-56; 57-66; 67-76	**67%**
Understanding metaphor, idiom, connotation, word play, & ambiguity	Longer reading passages	Main item: 33 (perhaps): 36	**59%**

Text relations (grammar & cohesion)	Scrambled text Grammar & text relations Text editing (Cloze) (perhaps) Register and text types Longer reading passages Academic writing tasks	Main items: 1-5; 52-53; 54-56; 57-66; 67-76 Secondary items: 44; 47; 49 (perhaps): 26-30; 36; 37	**62%**
Understanding text types (genre sensitivity)	Register and text types Scrambled text Grammar & text relations Longer reading passages Academic writing tasks	Main items: 26-30 Secondary items: 1-5	**48%**
Understanding graphic & visual information	Interpreting and understanding visual & graphic information (potentially) Longer reading passages	Main items: 6-15 Secondary items: 50-51	**63%**
Distinguishing between essential & non-essential information; fact and opinion; propositions and arguments; cause and effect; classify, categorize & handle data that make comparisons	Longer reading passages Interpreting and understanding visual & graphic information Academic writing tasks (perhaps) Register & text types	Main items: 31; 34; 35; 38; 45; 46; 48 Secondary items: 6-15; 32; 50-51 (perhaps): 26-30	**63%**
Sequence & order; numerical computations	Interpreting and understanding visual & graphic information Longer reading passages	Main items: 32; 39-43 Secondary items: 6-15	**68%**
Extrapolation, making inferences, and application	Longer reading passages Academic writing tasks (potentially) Interpreting and understanding visual & graphic information	Main items: 44; 45; 46; 48; 49; 50-51 Secondary items: 1-5; 26-30; 32; 33; 35; 36; 37; 38; 39-43 (perhaps): 6-15	**62%**
Communicative function (defining, arguing, etc)	Longer reading passages (possibly also) Grammar & text relations Scrambled text	Main item: 37 (perhaps): 1-5	**53%**
Making meaning beyond the level of the sentence	Longer reading passages Register and text types Scrambled text Interpreting and understanding visual & graphic information	Main items: 37; 47 Secondary items: 1-5; 26-30 (perhaps): 6-15; 48	**57%**

Table 7: Final results of diagnostic analysis

The diagnostic analysis thus reveals that in general postgraduate students who wrote TALPS in 2011 had difficulty with the following components of academic literacy: understanding metaphor, idiom, connotation, word play, and ambiguity; understanding text types (genre sensitivity); communicative function (defining, arguing, etc.); and making meaning beyond the level of the sentence. This confirms the results of the subtest analyses presented in Table 4, which predicted that the scrambled text and text types tasks were the most difficult for these students. However, the fact that there are only a few items that test the understanding of metaphor, idiom, connotation, word play, and ambiguity, genre sensitivity, and communicative function must be taken into consideration. Thus, there may not be enough evidence to suggest that students struggle with these specific components of academic literacy. In addition, there may be alternative ways of calculating and identifying where students are at risk, since this is an exploratory first attempt at doing so.

6. Questionnaire results

The questionnaire (which relies heavily on Butler's (2007) questionnaire on supervisors' perceptions of the academic literacy requirements of postgraduate students in terms of producing written academic texts) was centred on the construct of TALPS and gauged postgraduate supervisors' perceptions of what abilities are necessary for acquiring academic literacy, as well as which academic literacy abilities their students struggle with the most[1]. The questionnaire was developed using SurveyMonkey (an online survey creation tool) and was sent via e-mail to approximately 120 postgraduate supervisors, who were given ample time to complete the survey. In the end, 35 supervisors (approximately 30%) completed the questionnaire. The respondents were widely varied, originating from 14 universities (including international institutions), 4 faculties, and 14 departments, with the highest number of responses coming from the University of the Free State and the Faculty of the Humanities (or as it is sometimes called, the Faculty of Arts). Forty percent of participants are experts in the fields of language education, English, linguistics,

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[1] See Appendix A for a complete copy of the questionnaire

applied linguistics, and academic literacy. Thus, there was a good combination of language experts as well as supervisors from other fields.

Supervisors were firstly asked about the language use of their postgraduate students. A large percentage of their students are second (or additional) language speakers or evenly spread between mother-tongue and second (or additional) language speakers of the language of study (65.7% and 25.7% respectively) (see Figure 3 below). The potential size of the challenge is evident when one notes that supervisors indicate that only 8.6% of their students are mother-tongue speakers of the language of instruction.
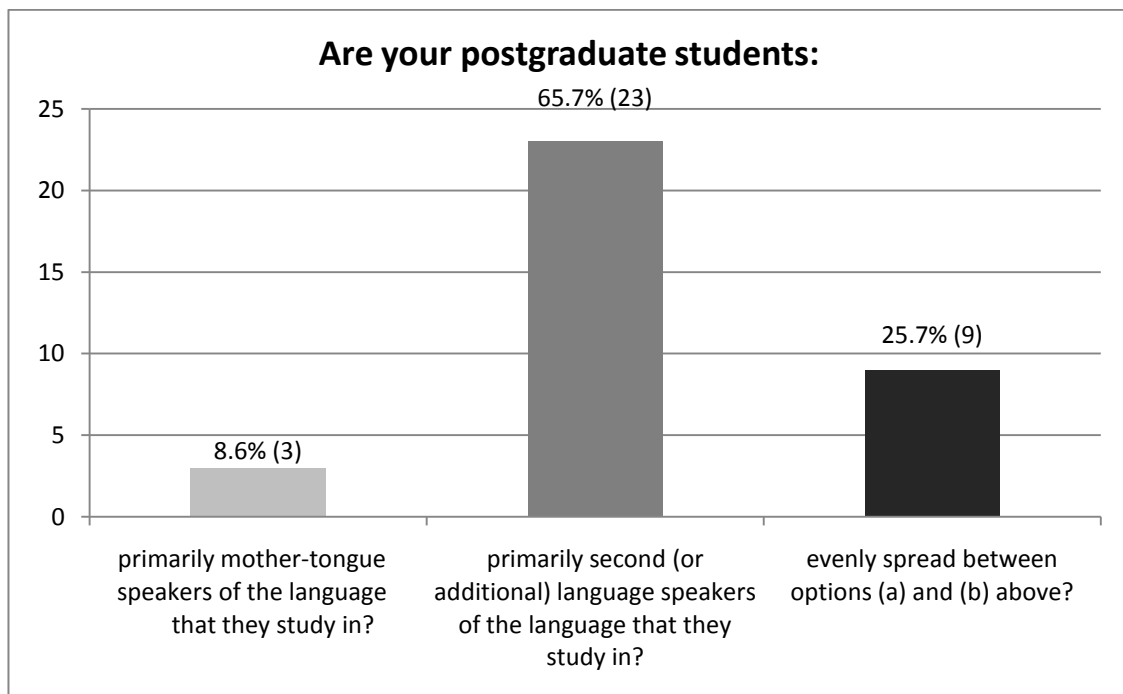
Figure 3: Postgraduate students' home language in relation to the language of study.

An overwhelming majority of supervisors (97.1%) agree that postgraduate students' level of academic literacy in the language in which they study plays a significant role in the successful completion of their studies (see Figure 4 below). One participant (2.9%) states that this is only true in some cases.
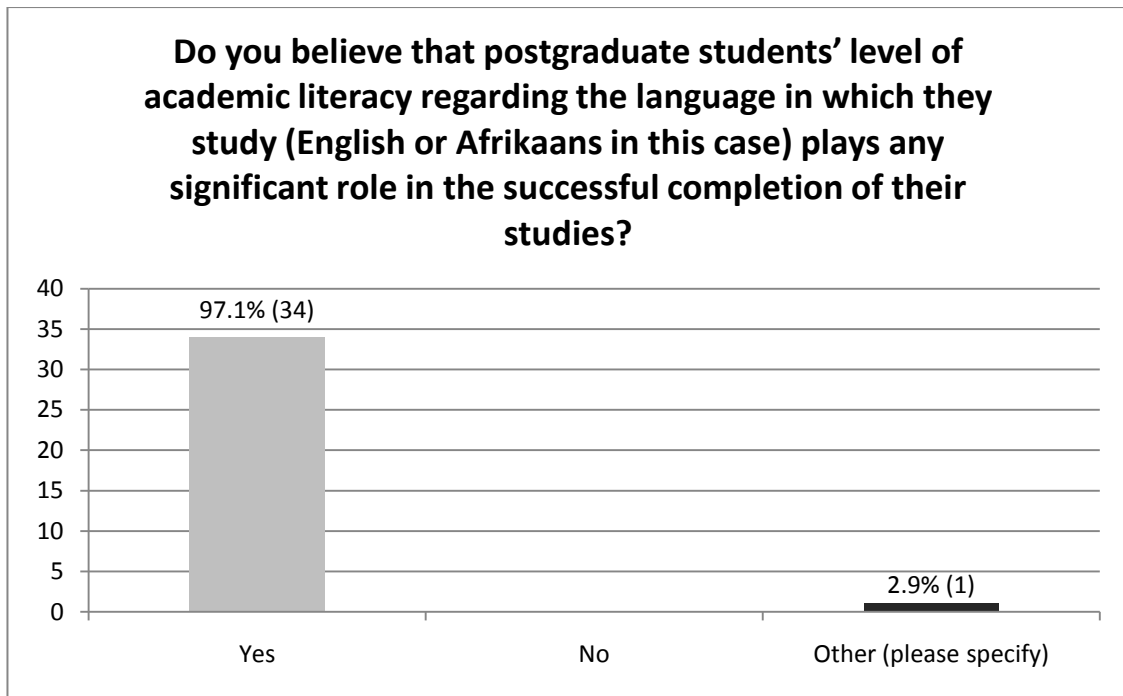
Figure 4: The importance of academic literacy in determining the successful completion of studies

A Likert scale was used in order to elicit responses regarding the academic literacy and writing ability of postgraduate students. On a scale of 1-7, with 1 described as poor and 7 as excellent, 77% of supervisors indicate that the academic literacy of their postgraduate students ranges between 4 and 5 (average to good), while 71% state that the writing ability of their postgraduate students ranges between 3 and 4 (less than average to average) (see Table 8 below). A very small percentage (2.9%) of supervisors rate the academic literacy levels and writing ability of their postgraduate students as excellent.

How would you rate the general level of...							
	Poor	**2**	**3**	**4**	**5**	**6**	**Excellent**
the academic literacy of your postgraduate students?	2.9% (1)	8.6% (3)	5.7% (2)	**40.0% (14)**	**37.1% (13)**	2.9% (1)	2.9% (1)
the writing ability of your postgraduate students?	5.7% (2)	5.7% (2)	**28.6% (10)**	**42.9% (15)**	14.3% (5)	0.0% (0)	2.9% (1)

Table 8: Levels of academic literacy and writing ability of postgraduate students

Significantly, supervisors do not equate good marks with academic literacy (see Figure 5 below). A high percentage of supervisors (65.7%) feel that students who achieved relatively high marks (above 60%) in their previous degree are not necessarily academically literate enough in the language of instruction to cope with the demands of postgraduate degrees. The implication is that such students will be restricted simply because of their inability to handle the challenges of academic language and not because of any intellectual inabilities, especially since many students are second (or additional) language speakers of the language of learning. A good 17.1% of respondents feel that students with marks of above 60% for their previous degree will be academically literate, while 17.1% claim that this is not a good indicator of academic success.
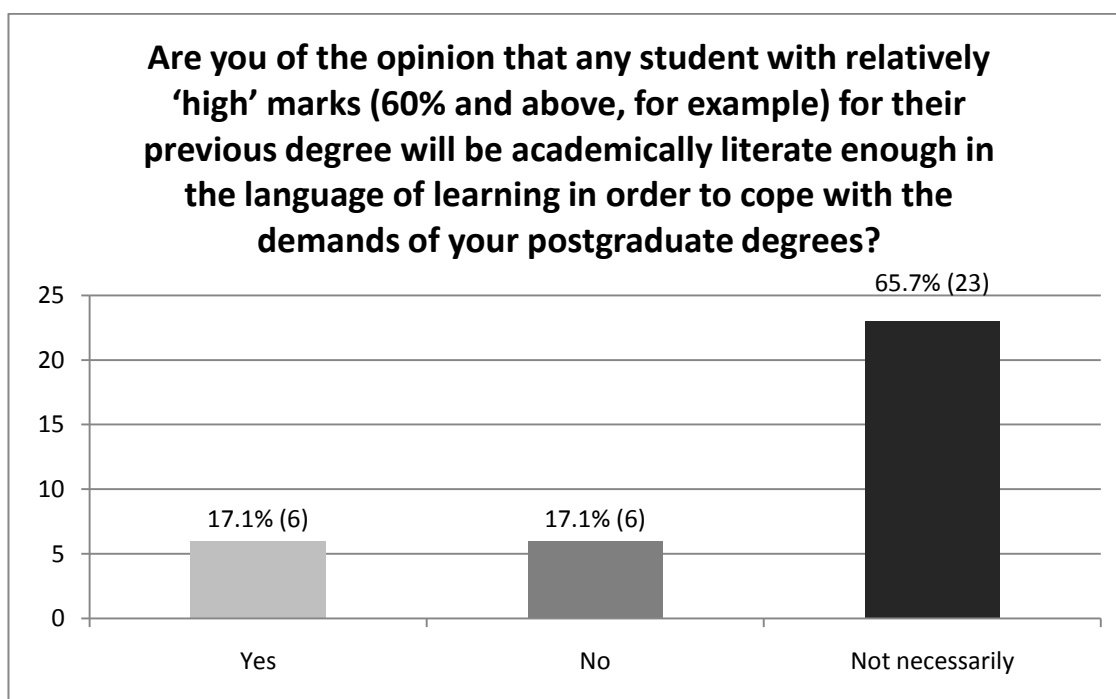
Figure 5: Correlation between relatively high marks and academic literacy

Supervisors were asked to rate the importance of a list of abilities for the development of academic literacy using a Likert scale rating of 1-7. They rated the following abilities as the most important:

- Understanding relations between different parts of a text, being aware of the logical development of an academic text, via introductions to conclusions, and knowing how to use language that serves to make the different parts of a text hang together;

- Understanding how to argue, make claims, contend, question, and disagree;
- Knowing what counts as evidence for an argument;
- Distinguishing between fact and opinion;
- Understanding how to clarify, explain, elaborate, justify, and defend;
- Understanding how to contradict and criticise;
- Applying the information or its implications to other cases than the one at hand; and
- Processing information by synthesizing.

Supervisors rated the following abilities as least important:
- Tabulating information;
- Interpreting the use of metaphor and idiom in academic usage, and perceiving connotation, word play, and ambiguity;
- Processing information by discussing it with others before modifying the analyses;
- Interpreting, using, and producing information presented in graphic or visual format;
- Seeing sequence and order, and doing simple numerical estimations and computations that are relevant to academic information, that allow comparisons to be made, and can be applied for the purposes of an argument;
- Interpreting different kinds of text type (genre), and having a sensitivity for the meaning they convey, as well as the audience they are aimed at; and
- Distinguishing between cause and effect.

The fact that "interpreting the use of metaphor and idiom in academic usage, and perceiving connotation, word play, and ambiguity" and "interpreting different kinds of text type (genre), and having a sensitivity for the meaning they convey, as well as the audience they are aimed at" were rated as least important by supervisors adds to the reservations that were expressed in the above section about these particular task types.

Please rate the importance of the abilities listed below for the development of academic literacy:								
	Not important	2	3	4	5	6	Very important	N/A
Understanding a range of	0.0	0.0	0.0	0.0	11.4	28.6	**60.0**	0.0

academic vocabulary in context:	% (0)	% (0)	% (0)	% (0)	% (4)	% (10)	**% (21)**	% (0)
Interpreting the use of metaphor and idiom in academic usage, and perceiving connotation, word play and ambiguity:	0.0% (0)	0.0% (0)	5.7% (2)	14.3% (5)	22.9% (8)	**28.6% (10)**	25.7% (9)	2.9% (1)
Understanding relations between different parts of a text, being aware of the logical development of an academic text, via introductions to conclusions, and knowing how to use language that serves to make the different parts of a text hang together:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	5.7% (2)	17.1% (6)	**77.1% (27)**	0.0% (0)
Gathering academic information either by listening or reading, or, having listened and read, by writing notes:	0.0% (0)	0.0% (0)	0.0% (0)	2.9% (1)	11.4% (4)	22.9% (8)	**62.9% (22)**	0.0% (0)
Processing information gathered by analysing it, i.e. sifting main from peripheral (essential from non-essential information):	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	14.3% (5)	8.6% (3)	**74.3% (26)**	2.9% (1)
Processing information by comparing and contrasting:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	17.1% (6)	20.0% (7)	**62.9% (22)**	0.0% (0)
Processing information by synthesizing:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	11.4% (4)	14.3% (5)	**74.3% (26)**	0.0% (0)
Tabulating information:	0.0% (0)	0.0% (0)	11.4% (4)	20.0% (7)	20.0% (7)	14.3% (5)	**34.3% (12)**	0.0% (0)
Summarising information:	0.0% (0)	0.0% (0)	0.0% (0)	5.7% (2)	8.6% (3)	22.9% (8)	**60.0% (21)**	2.9% (1)
Processing information by making inferences:	0.0% (0)	0.0% (0)	0.0% (0)	2.9% (1)	11.4% (4)	25.7% (9)	**57.1% (20)**	2.9% (1)
Processing information by discussing it with others before modifying the analyses:	0.0% (0)	0.0% (0)	2.9% (1)	14.3% (5)	25.7% (9)	**31.4% (11)**	25.7% (9)	0.0% (0)
Making meaning (e.g. of an academic text) beyond the level of the sentence:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	11.4% (4)	20.0% (7)	**65.7% (23)**	2.9% (1)
Producing new information (often in writing) that captures the final opinion and has a distinct 'voice' of authority:	0.0% (0)	0.0% (0)	0.0% (0)	2.9% (1)	14.3% (5)	22.9% (8)	**60.0% (21)**	0.0% (0)
Interpreting different kinds of text type (genre), and having a sensitivity for the meaning they convey, as well as the audience they are aimed at:	0.0% (0)	2.9% (1)	2.9% (1)	8.6% (3)	17.1% (6)	31.4% (11)	**34.3% (12)**	2.9% (1)
Interpreting, using and producing information presented in graphic or visual format:	0.0% (0)	2.9% (1)	5.7% (2)	5.7% (2)	20.0% (7)	31.4% (11)	**34.3% (12)**	0.0% (0)

Distinguishing between fact and opinion:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	8.6% (3)	20.0% (7)	**71.4% (25)**	0.0% (0)
Distinguishing between propositions and arguments:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	14.3% (5)	31.4% (11)	**54.3% (19)**	0.0% (0)
Distinguishing between cause and effect:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	28.6% (10)	17.1% (6)	**54.3% (19)**	0.0% (0)
Classifying, categorising and handling data that make comparisons:	0.0% (0)	0.0% (0)	2.9% (1)	5.7% (2)	8.6% (3)	31.4% (11)	**51.4% (18)**	0.0% (0)
Seeing sequence and order, and doing simple numerical estimations and computations that are relevant to academic information, that allow comparisons to be made, and can be applied for the purposes of an argument:	0.0% (0)	0.0% (0)	5.7% (2)	8.6% (3)	20.0% (7)	22.9% (8)	**42.9% (15)**	0.0% (0)
Knowing what counts as evidence for an argument:	0.0% (0)	0.0% (0)	0.0% (0)	2.9% (1)	2.9% (1)	22.9% (8)	**71.4% (25)**	0.0% (0)
Extrapolating from information by making inferences:	0.0% (0)	0.0% (0)	0.0% (0)	2.9% (1)	8.6% (3)	25.7% (9)	**62.9% (22)**	0.0% (0)
Applying the information or its implications to other cases than the one at hand:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	8.6% (3)	34.3% (12)	**57.1% (20)**	0.0% (0)
Understanding the communicative function of various means of expression in academic language, e.g. defining/describing/illustrating/exemplifying:	0.0% (0)	0.0% (0)	0.0% (0)	5.7% (2)	17.1% (6)	25.7% (9)	**48.6% (17)**	2.9% (1)
Understanding how to provide examples, substantiate, prove and support claims:	0.0% (0)	0.0% (0)	0.0% (0)	2.9% (1)	11.4% (4)	20.0% (7)	**62.9% (22)**	2.9% (1)
Understanding how to argue, make claims, contend, question and disagree:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	2.9% (1)	17.1% (6)	**77.1% (27)**	2.9% (1)
Understanding how to clarify, explain, elaborate, justify and defend:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	5.7% (2)	22.9% (8)	**68.6% (24)**	2.9% (1)
Understanding how to agree, evaluate and interpret:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	11.4% (4)	20.0% (7)	**65.7% (23)**	2.9% (1)
Understanding how to judge, conclude and draw logical conclusions from texts:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	8.6% (3)	20.0% (7)	**68.6% (24)**	2.9% (1)
Understanding how to see implications, estimate, anticipate and predict:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	11.4% (4)	28.6% (10)	**57.1% (20)**	2.9% (1)
Understanding how to persuade,	0.0	0.0	0.0	0.0	11.4	37.1	**48.6**	2.9

suggest & recommend:	% (0)	% (0)	% (0)	% (0)	% (4)	% (13)	**%** **(17)**	% (1)
Understanding how to contemplate, assess & appreciate:	0.0% (0)	0.0% (0)	2.9% (1)	0.0% (0)	14.3% (5)	34.3% (12)	**45.7%** **(16)**	2.9% (1)
Understanding how to inform, report & assert:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	14.3% (5)	25.7% (9)	**57.1%** **(20)**	2.9% (1)
Understanding how to refute, reject & oppose:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	14.3% (5)	17.1% (6)	**65.7%** **(23)**	2.9% (1)
Understanding how to contradict & criticise:	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	5.7% (2)	31.4% (11)	**60.0%** **(21)**	2.9% (1)

Table 9: Supervisors' perceptions of the most important components of academic literacy

Participants were asked what, in their opinion, are the most important aspects of academic literacy necessary for postgraduate students to acquire. Their answers were sorted and categorised according to the various abilities that were mentioned. The following table constitutes a summary of the abilities that occurred most frequently in terms of supervisors' responses to the question regarding the most important academic literacy skills that postgraduate students need to acquire:

Component of academic literacy:	Frequency of occurrence:
Academic writing skills (including voice & register)	45.7%
Strong critical reading skills (including understanding & interpretation)	42.8%
Critical, analytical, & reflexive thinking	34.2%
Synthesizing academic literature (integrating knowledge and information from various sources)	25.7%
Ability to undertake research (including extracting information from a text, analysing, interpreting, comparing information, & drawing one's own conclusions)	22.8%
Academic vocabulary	20%
Ability to develop an argument	14.2%
Summarising & paraphrasing	11.4%

Knowledge of data-processing methods / understanding of scientific methods / choosing an appropriate methodology & relating the findings to it	8.5%
Mastery of the relevant literature	5.7%
Distinguishing fact from opinion	5.7%
Language proficiency	5.7%
Evaluation skills	5.7%

Table 10: Supervisors' own opinion of the most important components of academic literacy that postgraduate students need to acquire in order to be successful in their studies

Significantly, many of the skills mentioned above relate to or are components of polemical and argumentative writing. Other skills and abilities that supervisors mentioned include conceptual ability, effective time management skills, passion, strong work ethic, inferencing skills, ability to support claims, and creative thinking.

When probed about what the most difficult component of postgraduate studies is, a large percentage (65.7%) of respondents indicate that the most difficult aspect is writing the actual thesis, dissertation, report, or assignment (see Figure 6 below). Just over a quarter (25.7%) of supervisors feel that mastering the literature of a specific subject or discipline is the most difficult aspect for postgraduate students, while only 8.6% state that the challenge for students is to identify a suitable topic for research.
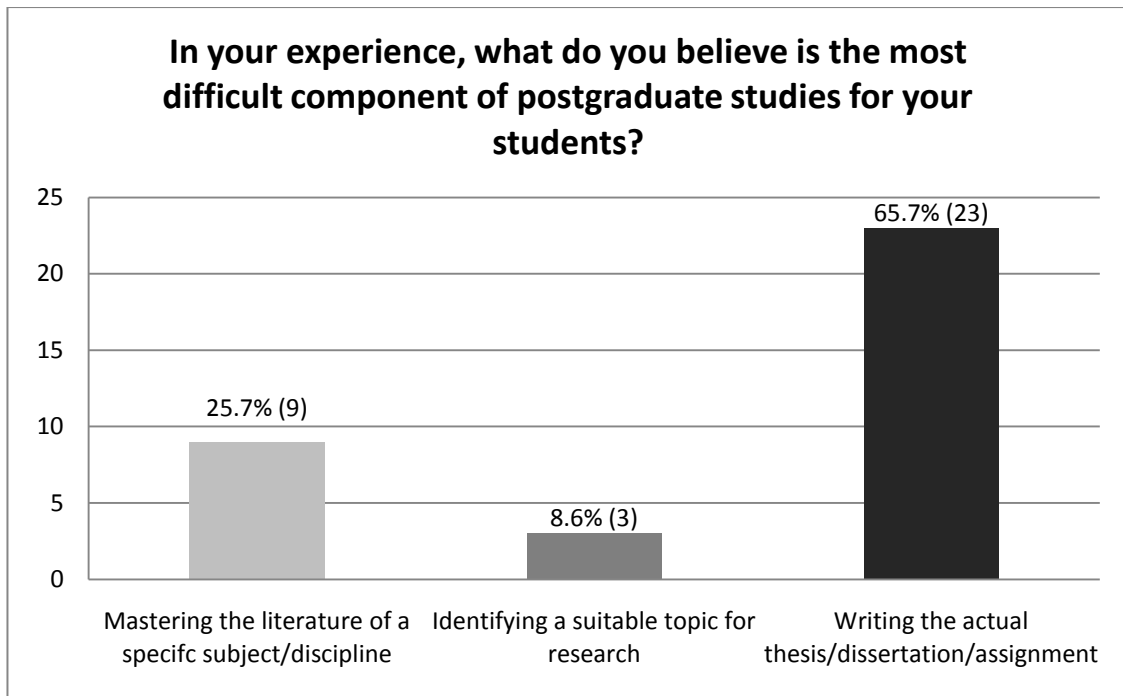
Figure 6: Supervisors' perception of the most difficult component of postgraduate studies

The questionnaire participants were given a list of abilities relating to academic literacy and were asked to rate their postgraduate students' abilities using a Likert scale rating of 1-7. According to their answers, postgraduate students struggle the most with the following components of academic literacy:

- Understanding how to judge, conclude, and draw logical conclusions from texts;
- Understanding how to see implications, estimate, anticipate, and predict;
- Understanding how to persuade, suggest, and recommend;
- Understanding how to contemplate, assess, and appreciate;
- Understanding relations between different parts of a text, being aware of the logical development of an academic text, via introductions to conclusions, and knowing how to use language that serves to make the different parts of a text hang together;
- Producing new information (often in writing) that captures their final opinion and has a distinct 'voice' of authority;
- Interpreting the use of metaphor and idiom in academic usage, and perceiving connotation, word play, and ambiguity; and
- Applying the information or its implications to other cases than the one at hand.

Significantly, there were only a few cases where supervisors rated their students' abilities as "excellent" and slightly more than a few cases where they rated their students' abilities as "poor" (see Table 11 below). It is also interesting to note that supervisors feel that students struggle to interpret the use of metaphor and idiom in academic usage, and to perceive connotation, word play, and ambiguity even though in a previous question, many supervisors indicate that this ability is not important. Supervisors are perhaps unaware of the fact that academic discourse often derives its precision from metaphor and as a result, they may thus mistakenly associate metaphorical usage with imprecision.

Please rate your students' ability to:								
	Poor	2	3	4	5	6	Excellent	N/A
Understand a range of academic vocabulary in context:	0.0% (0)	2.9% (1)	11.4% (4)	28.6% (10)	**42.9% (15)**	8.6% (3)	2.9% (1)	2.9% (1)
Interpret the use of metaphor & idiom in academic usage, & perceive connotation, word play & ambiguity:	0.0% (0)	2.9% (1)	**31.4% (11)**	**31.4% (11)**	14.3% (5)	11.4% (4)	0.0% (0)	8.6% (3)
Understand relations between different parts of a text, be aware of the logical development of an academic text, via introductions to conclusions, & know how to use language that serves to make the different parts of a text hang together:	0.0% (0)	8.6% (3)	20.0% (7)	**40.0% (14)**	17.1% (6)	11.4% (4)	0.0% (0)	2.9% (1)
Gather academic information either by listening or reading, or, having listened & read, by writing notes:	2.9% (1)	0.0% (0)	11.4% (4)	28.6% (10)	**34.3% (12)**	17.1% (6)	2.9% (1)	2.9% (1)
Process information gathered by analysing it, i.e. sifting main from peripheral (essential from non-essential information):	0.0% (0)	0.0% (0)	20.0% (7)	**37.1% (13)**	28.6% (10)	11.4% (4)	0.0% (0)	2.9% (1)
Process information by comparing & contrasting:	0.0% (0)	0.0% (0)	11.4% (4)	**40.0% (14)**	**40.0% (14)**	5.7% (2)	0.0% (0)	2.9% (1)

Process information by synthesizing:	0.0% (0)	5.7% (2)	22.9% (8)	**34.3% (12)**	31.4% (11)	2.9% (1)	0.0% (0)	2.9% (1)
Tabulate information:	2.9% (1)	8.6% (3)	11.4% (4)	**34.3% (12)**	25.7% (9)	14.3% (5)	0.0% (0)	2.9% (1)
Summarise information:	0.0% (0)	0.0% (0)	11.4% (4)	**34.3% (12)**	**34.3% (12)**	17.1% (6)	0.0% (0)	2.9% (1)
Process information by making inferences:	0.0% (0)	11.4% (4)	14.3% (5)	**37.1% (13)**	25.7% (9)	8.6% (3)	0.0% (0)	2.9% (1)
Process information by discussing it with others before modifying the analyses:	0.0% (0)	5.7% (2)	14.3% (5)	**31.4% (11)**	**31.4% (11)**	8.6% (3)	2.9% (1)	5.7% (2)
Make meaning (e.g. of an academic text) beyond the level of the sentence:	0.0% (0)	11.4% (4)	14.3% (5)	**28.6% (10)**	**28.6% (10)**	8.6% (3)	5.7% (2)	2.9% (1)
Produce new information (often in writing) that captures their final opinion & has a distinct 'voice' of authority:	8.6% (3)	14.3% (5)	14.3% (5)	28.6% (10)	**31.4% (11)**	0.0% (0)	0.0% (0)	2.9% (1)
Interpret different kinds of text type (genre), & have a sensitivity for the meaning they convey, as well as the audience they are aimed at:	2.9% (1)	5.7% (2)	22.9% (8)	**28.6% (10)**	22.9% (8)	11.4% (4)	0.0% (0)	5.7% (2)
Interpret, use & produce information presented in graphic or visual format:	0.0% (0)	5.7% (2)	14.3% (5)	**37.1% (13)**	22.9% (8)	14.3% (5)	0.0% (0)	5.7% (2)
Distinguish between fact & opinion:	0.0% (0)	0.0% (0)	20.0% (7)	**28.6% (10)**	25.7% (9)	20.0% (7)	2.9% (1)	2.9% (1)
Distinguish between propositions & arguments:	0.0% (0)	0.0% (0)	25.7% (9)	**40.0% (14)**	14.3% (5)	14.3% (5)	2.9% (1)	2.9% (1)
Distinguish between cause and effect:	0.0% (0)	0.0% (0)	20.0% (7)	**31.4% (11)**	28.6% (10)	14.3% (5)	2.9% (1)	2.9% (1)
Classify, categorize & handle data that make comparisons:	0.0% (0)	0.0% (0)	17.1% (6)	**34.3% (12)**	28.6% (10)	14.3% (5)	0.0% (0)	5.7% (2)
See sequence & order, & do simple numerical estimations & computations that are relevant to academic information, that allow comparisons to be	2.9% (1)	5.7% (2)	20.0% (7)	28.6% (10)	**31.4% (11)**	5.7% (2)	0.0% (0)	5.7% (2)

made, & can be applied for the purposes of an argument:								
Know what counts as evidence for an argument:	2.9% (1)	0.0% (0)	25.7% (9)	**28.6% (10)**	25.7% (9)	14.3% (5)	0.0% (0)	2.9% (1)
Extrapolate from information by making inferences:	2.9% (1)	8.6% (3)	22.9% (8)	**28.6% (10)**	22.9% (8)	11.4% (4)	0.0% (0)	2.9% (1)
Apply the information or its implications to other cases than the one at hand:	2.9% (1)	8.6% (3)	20.0% (7)	**34.3% (12)**	17.1% (6)	14.3% (5)	0.0% (0)	2.9% (1)
Understand the communicative function of various means of expression in academic language, e.g. defining/ describing/illustrating/ exemplifying:	0.0% (0)	2.9% (1)	22.9% (8)	**37.1% (13)**	25.7% (9)	8.6% (3)	0.0% (0)	2.9% (1)
Provide examples, substantiate, prove & support claims:	0.0% (0)	2.9% (1)	17.1% (6)	**34.3% (12)**	25.7% (9)	17.1% (6)	0.0% (0)	2.9% (1)
Argue, make claims, contend, question & disagree:	0.0% (0)	5.7% (2)	20.0% (7)	**40.0% (14)**	20.0% (7)	11.4% (4)	0.0% (0)	2.9% (1)
Clarify, explain, elaborate, justify & defend:	0.0% (0)	5.7% (2)	20.0% (7)	**40.0% (14)**	25.7% (9)	5.7% (2)	0.0% (0)	2.9% (1)
Agree, evaluate & interpret:	0.0% (0)	5.7% (2)	20.0% (7)	**40.0% (14)**	25.7% (9)	5.7% (2)	0.0% (0)	2.9% (1)
Judge, conclude & draw logical conclusions from texts:	0.0% (0)	5.7% (2)	**34.3% (12)**	**34.3% (12)**	17.1% (6)	5.7% (2)	0.0% (0)	2.9% (1)
See implications, estimate, anticipate & predict:	2.9% (1)	11.4% (4)	22.9% (8)	**34.3% (12)**	20.0% (7)	5.7% (2)	0.0% (0)	2.9% (1)
Persuade, suggest & recommend:	2.9% (1)	5.7% (2)	25.7% (9)	**37.1% (13)**	17.1% (6)	5.7% (2)	2.9% (1)	2.9% (1)
Contemplate, assess & appreciate:	2.9% (1)	8.6% (3)	20.0% (7)	**37.1% (13)**	20.0% (7)	8.6% (3)	0.0% (0)	2.9% (1)
Inform, report & assert:	0.0% (0)	2.9% (1)	14.3% (5)	**31.4% (11)**	**31.4% (11)**	14.3% (5)	2.9% (1)	2.9% (1)
Refute, reject & oppose:	0.0% (0)	5.7% (2)	25.7% (9)	**34.3% (12)**	25.7% (9)	5.7% (2)	0.0% (0)	2.9% (1)
Contradict & criticise:	0.0% (0)	11.4% (4)	**25.7% (9)**	**25.7% (9)**	22.9% (8)	11.4% (4)	0.0% (0)	2.9% (1)

Table 11: Supervisors' ratings of their students' abilities

Finally, supervisors were asked to elaborate on whether a students' ability or inability to perform the above skills has any influence on their writing skills. A high percentage (94%) of participants indicate that the above-mentioned abilities do indeed have an effect on students' writing skills. Answers regarding these effects range from the fact that it takes students longer to hand in work or to complete their degrees to high levels of plagiarism because of the "inability to synthesize information." Many respondents indicate that without the ability to perform the above components of academic literacy, students will "merely repeat results" and they will not be able to express themselves in writing or "build an argument." One respondent notes that "if [students] find it hard to contradict, ciriticise [sic], refute, reject, oppose, persuade etc. their writing remains at the descriptive level, whereas at PG level argumentative writing is crucial." Another supervisor states that "if they do not understand the function of different communicative expressions, they are less likely to express exactly what they would like to express in the way that they want to express it. This can impair the whole academic writing process." Furthermore, as one respondent observes, "if they can't think, make meaning (in all the ways categorised above), they can't write. Some can think but not write well (e.g. register, idiom) - these we may be able to teach, with practice. But the mental abilities (as above) are a sine qua non." Finally, it is important to note that the above components of academic literacy are interdependent: "...these aspects may influence each other. It is rarely (if ever) the case that only one of these aspects need to be dealt with in a text. For example, if a student is able to argue or make a claim, he or she is probably also able to clarify, explain and elaborate in order to defend that claim."

The above responses once again emphasise the importance of polemical and argumentative writing (see also Table 10 above). This congruence serves to indicate that learning to construct arguments is regarded as critical by supervisors. This could have an influence on the kinds of tasks that will be designed as part of an academic literacy course for postgraduate students. The results of the questionnaire attest to the validity and relevance of TALPS as a tool for the diagnosis of certain problems relating to academic literacy, since it was centred on the kinds of abilities that TALPS measures (the test construct of

TALPS) and most supervisors agree that these abilities are most important. In order to gain more insight into what postgraduate students struggle with the most in terms of academic literacy, a larger number of supervisors would need to be questioned, as this could influence the kinds of tasks that would be included in an extensive postgraduate academic literacy course. In addition, it would seem that supervisors tend to veer towards an assumed mean (this is clearly the case in Table 11), thus either a larger sample or a modified questionnaire would need to be used in order to achieve more relevant results.

7. Example activities

In designing the following activities, only the first three stages of Weideman's (2009:244-245) five-stage process of course design have been followed. When an extensive course for postgraduate students is designed and developed, it is envisaged that every step will be closely adhered to in this process. The following activities (which are not sequential) serve as examples of exercises that develop students' sensitivity to communicative functions and genre. These are the kinds of tasks that can be designed in order to develop the inadequacies identified by the diagnostic analysis above.

Task 1:

The functional purpose of the literature review section of an assignment is to acknowledge previous authorities on the subject. The point is to use these sources as a foundation for your specific (and unique) area of research. A (brief) example would be[2]:

Language and the South African education system
Within the broad discussion of the "failure" of the South African education system, there are various views about the role of language. It is widely accepted that language is a contributing factor to success or failure in education (Van Rensburg & Weideman, 2002:153), but there are clear differences of opinion about the importance of language as a cause for educational failure in South Africa and a variety of potential solutions are proposed by participants in the debate. One cluster of commentators focus on issues related to the use of the mother tongue in education. They argue that the use of the mother tongue especially in early

[2] This example was adapted from an article by Van Dyk and Coetzee-Van Rooy (2012).

education is paramount and that our failures to use the mother tongue effectively in this domain cause education failure in a broad sense (cf. Alexander and Bloch, 2004; Alexander, 2005; Bloch, 2006). Another cluster of commentators argue that in a global society, a bi- or multilingual approach is best and they propose the use of the mother tongue especially in early education, while English is added as a language to be used as medium of instruction in later education, especially higher education (Altbach, 2004:3; Altbach & Knight, 2007:297). Heugh (2000:5-6) aptly qualifies the debate about the role of language in educational failure in South Africa aptly when she states:

> …should the role of language continue to be shrouded in a confusion of ill-informed myths, it would eventually become the most important factor, which determines the failure of the majority and success for a tiny minority [in education in South Africa].

The aim of this essay is to find a framework from which recommendations about the language issue in education can be proposed in order to assist practitioners in constructively moving to at least testing viable solutions to ascertain which are the most appropriate for different levels of education and different contexts. This essay is consequently an attempt at balancing our views of possible ways to address the "language across the curriculum" notion by investigating the usefulness of a particular view from the past (the language across the curriculum initiative in the UK in the 1970s). This may perhaps serve as an instrument to deepen our understanding of a similar issue (the "language issue") in South African higher education today, while keeping the adjustments required by differences in contexts in the equation.

Now, using one of your assignments as a basis for this task, use the phrases (or variations thereof) below in order to write your own literature review. Remember, the function of the literature review section is to *review* the relevant literature on the topic, not to simply *reproduce* it!

First paragraph:

1. In investigating the problem at hand, (give an expert's statement of the findings) _____

_____

2. However,   scholars   such   as   _____   have   suggested   that

_____
_____

3. Finally, _____ argue that _____

_____

Second paragraph:

The aim of this assignment is to investigate_____

In this assignment, _____

Task 2:

Look at the following example of notes that were made by a student during a lecture[3]:

<u>Anatomy of a techno-myth</u>

Debate over safety of mobile phones = little to do with science

Q = Do mobile phones cause explosions at petrol stations? → more to do with sociological factors than scientific evidence...

Q = investigated by sociologist Dr Adam Burgess:

<u>Urban myth</u> propagated by official sources but no less a myth!

MPs became widespread in 1980's when oil industry = middle of safety campaign → response to Piper Alpha disaster (1988 – 167 ppl

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[3] This example was adapted from *The Economist*, 26 March 2005, pp. 79-80

died in explosion)

Safety drive → no one questioned the precautionary ban on MPs & PSs. Worry = electrical spark might ignite explosive fumes...

Late 1990's → Phonemakers → own research → discovered there's no danger...but too late, myth already taken hold.

Problem = No. of PS fires increased just as the no. of MPs were increasing - 243 fires (worldwide) – 1993-2004 – but sparks = result of static electricity not electrical equipment

Most drivers have experienced a mild electric shock @ PS = result of friction btwn driver and seat → both end up electronically charged → driver touches metal frame of car = SPARK!

Further complication = rise of internet & hoax msgs (claiming to originate from oil co.s) warning ppl about the danger

– e.g. fictitious email RE explosions = supposedly sent by Shell → found its way to an internal website @ Exxon = treated as authoritative by employees

Memos explain static fires accurately but attrib them to MPs...official denials simply enflamed conspiracy theorists

Despite lack of evidence, bans remain (ww-Brit/Can/Aus/Sao Paulo = introduced ban in 2004) although rules vary...

Connecticut's senate proposed implementation of a fine for using MPs @ PS → $250!

Dr Burgess states: these concerns = part of broader unease about MPs → become indispensible and thought to be dangerous

Many students use abbreviations when they are rapidly taking notes. See if you can figure out the meanings of the abbreviations used in the above example:

Abbreviation:	Explanation:
=	
Q	
→	
MP/MP(s)	
ppl	
btwn	
PS/Ps(s)	
@	
msg(s)	
&	
co.s	
e.g.	
RE	
+	
Ww	
Brit	
Can	
Aus	

Task 3:

Rewrite the students' notes on the *Anatomy of a techno-myth* as though you are writing a short essay. In this case, you may not use any abbreviations and you need to make sure that your grammar and language usage are correct.

Task 4:

Note to teacher: *The following task requires students to work in pairs in order to develop their knowledge about and ability to use different communicative*

functions. The example below can be varied in different ways to include as many functions as desired. Teachers should provide students with appropriate words, since the words used below are merely examples. Remind students that they may not use the given word in their definition, description, evaluation, examples, explanation, etc.

Sit back to back with a partner. One of you will receive card from your teacher with a word and a specific instruction written on it. The person with the card must follow the given instructions **without** using the given word in order to help your partner guess the word. You should take turns being the one to guess the mystery word. The following are examples of how the activity works:

<table>
<tr>
<td>
Provide your partner with a **definition** of the following word.

PROTOCOL
</td>
<td>
Describe this word to your partner.

CURRENCY
</td>
</tr>
</table>

Help your partner guess this word by providing him/her with as many **examples** of it as possible.

TRANSPORT

Task 5:

Your teacher will give you another set of cards, and this time, together with your partner, you will look at the card and decide who will be for or against the statement written on the card. Then, you will debate with each other, trying to convince the other that your view is the correct one.

The death penalty should be implemented in South Africa.	Credit cards are more harmful than beneficial.

Social networking has a negative impact on society.

Note to teacher: Topics for debate can be selected according to students' areas of study, culture, or events that are relevant to their daily lives. The activity can be extended by giving students time to write down their arguments or to do research on the topic.

8. Value of study and recommendations for further research

Many students enter postgraduate study without possessing the required level of academic literacy necessary for their future academic success. As a result, many students are at risk of being unsuccessful in their further studies. This study is a first step in both attempting to identify areas regarding academic literacy that postgraduate students are lacking in and suggesting ways of addressing the identified shortcomings. By conducting a diagnostic analysis of the results of TALPS, I have identified certain areas that students generally seem to struggle with. In addition, by means of a questionnaire, the awareness and knowledge that supervisors and lecturers have regarding the specific academic problems facing their students has been confirmed and discussed. However, as I have already noted, the diagnostic analysis can be fine-tuned by

investigating other methods of calculating which components need most attention or by questioning a larger number of postgraduate supervisors. A further consideration for research is the designing of an extensive postgraduate academic literacy course based on the results of the diagnostic analysis, which time and space constraints hinder me from designing for this particular study. Ultimately, the aim of this study is to help postgraduate students develop their ability to handle the material lingual sphere of academic discourse by enabling them to develop adequately the means to do so.

Reference list

Bachman, L.F. & Palmer, A.S. 1996. *Language testing in practice: Designing and developing useful language tests*. Oxford: Oxford University Press.

Berns, M. S. 1990. *Contexts of competence: Social and cultural considerations in communicative language teaching*. New York: Plenum Press.

Brown, H.D. 2000. *Principles of language learning and teaching*. 4th edition. New York: Pearson Education.

Butler, H.G. 2007. A framework for course design in academic writing for tertiary education. Unpublished doctoral dissertation. Pretoria: Unit for Academic Literacy, University of Pretoria.

Butler, H.G. 2009. The design of a postgraduate test of academic literacy: Accommodating student and supervisor perceptions. *South African Linguistics and Applied Language Studies,* 27(3):291-300.

Economist, The. 2005. Anatomy of a techno-myth: The debate over the safety of mobile phones has little to do with science. pp. 79-80.

Ellis, R. 2009. Task-based language teaching: Sorting out the misunderstandings. *International Journal of Applied Linguistics,* 19(3):221-246.

Fulcher, G. 2010. *Practical language testing*. London: Hodder Education.

Fulcher, G. & Davidson, F. 2007. *Language testing and assessment: An advanced resource book*. London: Routledge.

Fulcher, G. & Davidson, F. 2009. Test architecture, test retrofit. *Language Testing,* 26(1):123-144.

Hay, H.R. 2010. Letter to academic staff on administration and use of TALPS. 18 August, Bloemfontein.

Kumaravadivelu, B. 2003. *Beyond methods: Macrostrategies for language teaching.* London: Yale University Press.

Larsen-Freeman, D. & Anderson, M. 2011. *Techniques & principles in language teaching.* 3rd edition. Oxford: Oxford University Press.

Lightbown, P.M. & Spada, N. 2006. *How languages are learned.* 3rd edition. Oxford: Oxford University Press.

Messick, S. 1980. Test validity and the ethics of assessment. *American Psychologist*, 35(11):1012-1027.

Messick, S. 1981. Evidence and ethics in the evaluation of tests. *Educational Researcher*, 10(9):9-20.

Messick, S. 1988. The once and future issues of validity: Assessing the meaning and consequences of measurement, in H. Wainer & I.H. Braun (eds.). *Test validity.* New Jersey: Lawrence Erlbaum Associates. pp. 33-45.

Messick, S. 1989. Validity, in R.L. Linn (ed.). *Educational measurement.* 3rd edition. New York: American Council on Education/Macmillan Publishing. pp. 13-103.

Nunan, D. 2004. *Task-based language teaching.* Cambridge: Cambridge University Press.

Prabhu, N.S. 1987. *Second language pedagogy.* Oxford: Oxford University Press.

Rambiritch, A. 2012. Transparency, accessibility and accountability as regulative conditions for a postgraduate test of academic literacy. Unpublished doctoral dissertation. Bloemfontein: University of the Free State.

Razmjoo, S.A. & Riazi, A.M. 2006. Is communicative language teaching practical in the expanding circle? A case study of teachers of Shiraz high schools and institutes. *Journal of Language and Learning,* 4(2):144-171.

Richards, J.C. & Rodgers, T.S. 2001. *Approaches and methods in language teaching.* 2nd edition. Cambridge: Cambridge University Press.

Savignon, S.J. 2007. Beyond communicative language teaching: What's ahead? *Journal of Pragmatics,* 39:207-220.

Schuurman, E. 1972. *Techniek en toekomst: Confrontatie met wijsgerige beschouwingen.* Assen: Van Gorcum.

Van der Slik, F. & Weideman, A. 2005. The refinement of a test of academic literacy. *Per Linguam,* 21(1):23-35.

Van Dyk, T. 2013. Geldigheid vanuit drie paradigmas beskou: 'n eenheid, of 'n veelheid van perspektiewe? To appear in *SAALT Journal for Language Teaching.*

Van Dyk, T. & Coetzee-Van Rooy, S. 2012. The continual conundrum of the "language across the curriculum" issue: Lessons from the Bullock report (1975) for South African higher education today. *SAALT Journal for Language Teaching,* 46(1):7-28.

Van Dyk, T. & Weideman, A. 2004a. Switching constructs: On the selection of an appropriate blueprint for academic literacy assessment. *SAALT Journal for Language Teaching*, 38(1):1-13.

Van Dyk, T. & Weideman, A. 2004b. Finding the right measure: From blueprint to specification to item type. *SAALT Journal for Language Teaching*, 38(1):15-24.

Van Rensburg, C. & Weideman, A. 2002. Language proficiency: Current strategies, future remedies. *SAALT Journal for Language Teaching*, 36(1 & 2):152-164.

Weideman, A. 2003a. Justifying course and task design in language teaching. *Acta Academica,* 35(3):26-48.

Weideman, A. 2003b. Assessing and developing academic literacy. *Per Linguam*, 19(1&2):55-56.

Weideman, A. 2007a. *Academic literacy: Prepare to learn.* 2nd edition. Pretoria: Van Schaik Publishers.

Weideman, A. 2007b. A responsible agenda for applied linguistics: Confessions of a philosopher. *Per Linguam,* 23(2):29-53.

Weideman, A. 2009. Constitutive and regulative conditions for the assessment of academic literacy. *South African Linguistics and Applied Language Studies,* 27(3):235-251.

Weideman, A. 2011. Academic literacy tests: Design, development, piloting and refinement. *SAALT Journal for Language Teaching*, 45(2):100-113.

Williams, J. 1995. Focus on form in communicative language teaching: Research findings and the classroom teacher. *TESOL Journal,* 4(4):12-16.

Appendix A

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INFORMED CONSENT TO PARTICIPATE IN RESEARCH*
Title of research: Diagnosing for design: Aligning assessment and language instruction

This questionnaire, centred on the test construct of the Test of Academic Literacy for Postgraduate Students (TALPS), forms part of a study based on the investigation and development of the test as a possible diagnostic instrument. The study aims to examine whether the results of the TALPS could give a general indication of which components of academic literacy students struggle with. The aim of this questionnaire, therefore, is to make enquiries and receive feedback from language experts, as well as from lecturers and supervisors in other fields, on the validity and relevance of the TALPS as a tool for the diagnosis of language problems.

Participation in this study is voluntary. Your contribution is, however, extremely important, as your responses will help answer questions regarding the validity of the TALPS as a diagnostic tool. Your anonymity in terms of the information that you provide is guaranteed and you are also free to withdraw from participation in the study at any time. If you should withdraw, any data collected from you will be destroyed.

Signature of participant _____ Date and place _____

University/Faculty/Department:_____

Signature of researcher _____ Date and place _____

*Please fill out this form and e-mail it back to Rebecca Patterson: PattersonRR@ufs.ac.za

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UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA

Questionnaire: Components of academic literacy at postgraduate level

1. Participant details:

Participant details: To which university, faculty and department/centre/unit do you belong?	
How many postgraduate students are you supervising at present?	

2. Are your postgraduate students:

○ primarily mother-tongue speakers of the language that they study in?

○ primarily second (or additional) language speakers of the language that they study in?

○ evenly spread between options (a) and (b) above?

3. Do you believe that postgraduate students' level of academic literacy regarding the language in which they study (English or Afrikaans in this case) plays any significant role in the successful completion of their studies?

○ Yes

○ No

○ Other (please specify)

4. How would you rate the general level of...

	Poor	2	3	4	5	6	Excellent
the academic literacy of your postgraduate students?	○	○	○	○	○	○	○
the writing ability of your postgraduate students?	○	○	○	○	○	○	○

5. Are you of the opinion that any student with relatively 'high' marks (60% and above, for example) for their previous degree will be academically literate enough in the language of learning in order to cope with the demands of your postgraduate degrees?

○ Yes

○ No

○ Not necessarily

The following question is based on the test construct of the TALPS:

6. Please rate the importance of the abilities listed below for the development of academic literacy:

	Not important	2	3	4	5	6	Very important	N/A
Understanding a range of academic vocabulary in context:	○	○	○	○	○	○	○	○
Interpreting the use of metaphor and idiom in academic usage, and perceiving connotation, word play and ambiguity:	○	○	○	○	○	○	○	○
Understanding relations between different parts of a text, being aware of the logical development of an academic text, via introductions to conclusions, and knowing how to use language that serves to make the different parts of a text hang together:	○	○	○	○	○	○	○	○
Gathering academic information either by listening or reading, or, having listened and read, by writing notes:	○	○	○	○	○	○	○	○
Processing information gathered by analysing it, i.e. sifting main from peripheral (essential from non-essential	○	○	○	○	○	○	○	○

information):								
Processing information by comparing and contrasting:	○	○	○	○	○	○	○	○
Processing information by synthesizing:	○	○	○	○	○	○	○	○
Tabulating information:	○	○	○	○	○	○	○	○
Summarising information:	○	○	○	○	○	○	○	○
Processing information by making inferences:	○	○	○	○	○	○	○	○
Processing information by discussing it with others before modifying the analyses:	○	○	○	○	○	○	○	○
Making meaning (e.g. of an academic text) beyond the level of the sentence:	○	○	○	○	○	○	○	○
Producing new information (often in writing) that captures the final opinion and has a distinct 'voice' of authority:	○	○	○	○	○	○	○	
Interpreting different kinds of text type (genre), and having a sensitivity for the meaning they convey, as well as the audience they are aimed at:	○	○	○	○	○	○	○	
Interpreting, using and producing information presented in graphic or visual format:	○	○	○	○	○	○	○	
Distinguishing between fact and opinion:	○	○	○	○	○	○	○	○
Distinguishing between propositions and arguments:	○	○	○	○	○	○	○	○
Distinguishing between cause and effect:	○	○	○	○	○	○	○	○
Classifying, categorising	○	○	○	○	○	○	○	○

and handling data that make comparisons:								
Seeing sequence and order, and doing simple numerical estimations and computations that are relevant to academic information, that allow comparisons to be made, and can be applied for the purposes of an argument:	○	○	○	○	○	○	○	○
Knowing what counts as evidence for an argument:	○	○	○	○	○	○	○	○
Extrapolating from information by making inferences:	○	○	○	○	○	○	○	○
Applying the information or its implications to other cases than the one at hand:	○	○	○	○	○	○	○	○
Understanding the communicative function of various means of expression in academic language, e.g. defining/ describing/illustrating/ exemplifying:	○	○	○	○	○	○	○	○
Understanding how to provide examples, substantiate, prove and support claims:	○	○	○	○	○	○	○	
Understanding how to argue, make claims, contend, question and disagree:	○	○	○	○	○	○	○	
Understanding how to clarify, explain, elaborate, justify and defend:	○	○	○	○	○	○	○	
Understanding how to agree, evaluate and interpret:	○	○	○	○	○	○	○	○
Understanding how to judge, conclude and	○	○	○	○	○	○	○	○

draw logical conclusions from texts:								
Understanding how to see implications, estimate, anticipate and predict:	○	○	○	○	○	○	○	○
Understanding how to persuade, suggest and recommend:	○	○	○	○	○	○	○	○
Understanding how to contemplate, assess and appreciate:	○	○	○	○	○	○	○	○
Understanding how to inform, report and assert:	○	○	○	○	○	○	○	○
Understanding how to refute, reject and oppose:	○	○	○	○	○	○	○	○
Understanding how to contradict and criticise:	○	○	○	○	○	○	○	○

7. In your opinion, what are the most important aspects of academic literacy necessary for postgraduate students to acquire?

8. In your experience, what do you believe is the most difficult component of postgraduate studies for your students?

○ Mastering the literature of a specific subject/discipline (in the case of both tutored programmes and purely research studies)

○ Identifying a suitable topic for research

○ Writing the actual thesis/dissertation/report/assignment

9. Please rate your students' ability to:

	Poor	2	3	4	5	6	Excellent	N/A
Understand a range of academic vocabulary in context:	○	○	○	○	○	○	○	○

Interpret the use of metaphor and idiom in academic usage, and perceive connotation, word play and ambiguity:	○	○	○	○	○	○	○	○
Understand relations between different parts of a text, be aware of the logical development of an academic text, via introductions to conclusions, and know how to use language that serves to make the different parts of a text hang together:	○	○	○	○	○	○	○	○
Gather academic information either by listening or reading, or, having listened and read, by writing notes:	○	○	○	○	○	○	○	○
Process information gathered by analysing it, i.e. sifting main from peripheral (essential from non-essential information):	○	○	○	○	○	○	○	○
Process information by comparing and contrasting:	○	○	○	○	○	○	○	○
Process information by synthesizing:	○	○	○	○	○	○	○	○
Tabulate information:	○	○	○	○	○	○	○	○
Summarise information:	○	○	○	○	○	○	○	○
Process information by making inferences:	○	○	○	○	○	○	○	○
Process information by discussing it with others before modifying the analyses:	○	○	○	○	○	○	○	○
Make meaning (e.g. of an academic text)	○	○	○	○	○	○	○	○

beyond the level of the sentence:								
Produce new information (often in writing) that captures their final opinion and has a distinct 'voice' of authority:	○	○	○	○	○	○	○	○
Interpret different kinds of text type (genre), and have a sensitivity for the meaning they convey, as well as the audience they are aimed at:	○	○	○	○	○	○	○	○
Interpret, use and produce information presented in graphic or visual format:	○	○	○	○	○	○	○	○
Distinguish between fact and opinion:	○	○	○	○	○	○	○	○
Distinguish between propositions and arguments:	○	○	○	○	○	○	○	○
Distinguish between cause and effect:	○	○	○	○	○	○	○	○
Classify, categorize and handle data that make comparisons:	○	○	○	○	○	○	○	○
See sequence and order, and do simple numerical estimations and computations that are relevant to academic information, that allow comparisons to be made, and can be applied for the purposes of an argument:	○	○	○	○	○	○	○	○
Know what counts as evidence for an argument:	○	○	○	○	○	○	○	○
Extrapolate from	○	○	○	○	○	○	○	○

information by making inferences:								
Apply the information or its implications to other cases than the one at hand:	○	○	○	○	○	○	○	○
Understand the communicative function of various means of expression in academic language, e.g. defining/ describing/illustrating/ exemplifying:	○	○	○	○	○	○	○	○
Provide examples, substantiate, prove and support claims:	○	○	○	○	○	○	○	○
Argue, make claims, contend, question and disagree:	○	○	○	○	○	○	○	○
Clarify, explain, elaborate, justify and defend:	○	○	○	○	○	○	○	○
Agree, evaluate and interpret:	○	○	○	○	○	○	○	○
Judge, conclude and draw logical conclusions from texts:	○	○	○	○	○	○	○	○
See implications, estimate, anticipate and predict:	○	○	○	○	○	○	○	○
Persuade, suggest and recommend:	○	○	○	○	○	○	○	○
Contemplate, assess and appreciate:	○	○	○	○	○	○	○	○
Inform, report and assert:	○	○	○	○	○	○	○	○
Refute, reject and oppose:	○	○	○	○	○	○	○	○
Contradict and criticise:	○	○	○	○	○	○	○	○

10. Do you think that a student's ability/inability to do the above has any influence on their writing skills? Why/why not?