

Academic literacy

# Academic literacy

Five New Tests

**Five** new tests

Albert Weideman



**Workbook**

**Albert Weideman**

for prospective university students



# Preparing for university admission

Senior secondary school learners now have to prove that they can understand and use academic language before they begin studying at university.

This book will help you prepare for any academic literacy test required by a university, including the academic and quantitative literacy component of what are called benchmark or national benchmark tests, or one of the international language tests if you're applying to a university outside South Africa.

## The five new tests in this workbook will allow you to:

- practise taking a test of academic literacy;
- familiarize yourself with the format of such tests;
- use the answers given at the end to determine your level of academic literacy;
- expose you to a large range of tasks and exercises to develop your academic language ability;
- ask for and receive feedback on your work, or any areas that need attention.

**Testing your competence now and seeing which areas need improvement will give you an advantage.**

**You want to achieve the best possible results when you have to write an AQL or similar test.**



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# Academic literacy

## Five new tests

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A workbook for learners  
preparing for  
tests of academic and quantitative literacy

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# Preface

Grade 12 learners now have to prove that they are prepared for the demands of academic language before they begin studying at university. In order to gauge their level of preparedness in this respect, these institutions require them to write tests of academic literacy. Most of the time, prospective students are required to take such tests before they gain entry to tertiary institutions. What do these tests of academic literacy look like? Why do these institutions now require prospective students to write them before granting access to tertiary study? Why is there so much concern with academic literacy?

This book helps to answer these questions. Specifically, it will assist Grade 11 and 12 learners to familiarise themselves with tests of the ability to use academic language. It gives examples of the kinds of questions that they might be required to answer. Their answers are intended to demonstrate an ability – academic literacy – of which they may never even have heard, yet are now required to possess if they wish to enter higher education.

The publication of this book has been stimulated by an ongoing concern about the levels of academic literacy of students reaching university. Our experience in dealing with this over the past decade supports this book. That experience includes assisting thousands of students to develop their ability to use academic discourse competently. We therefore find the current interest in academic literacy both encouraging and relevant. In the first instance, the book is a response to the appeal often voiced as a result of these concerns, viz.: What can be done about low levels of academic literacy that impede students' progress, preventing them from achieving success in higher education? Second, we fully agree with the notion that being able to handle the demands of academic discourse in tertiary level studies constitutes a critically important component of one's overall preparedness.

We take as our starting point that, if one wishes to do something about low levels of academic literacy, one first has to be able to measure that ability accurately and reliably. The five tests in this book constitute this first step. The book should help not only teachers and parents, but especially those aspiring to enter higher education institutions. Once one has determined the academic literacy levels of those about to enter tertiary studies, one can come up with a relevant plan to develop further that particular language ability.

Albert Weideman  
February 2018

## Academic literacy: Why is it important?

This introduction will deal first with the importance of academic literacy – the ability to handle the demands of academic language at tertiary level. Then it will outline how this book should be used, and what prospective students and their teachers must do to ensure that they develop this ability.

### Education is mediated through language

Those who are in their last years at school, Grade 11 and 12, have of late become acutely aware of the challenges they will face once they enter higher education or the world of work. A sizeable chunk of that challenge concerns the ability of these learners to cope with the demands of language in those new contexts. Language ability will be critical for their learning, either in a course of study at university or at a university of technology, or in their new work environment. This is so because education is mediated through language. Though language is not everything, it is important enough to become a stumbling block for those who cannot cope as a result of too low a level of ability.

The ability to use language to meet the demands of tertiary education is called academic literacy. The term is sometimes used in the plural (“academic literacies”) to indicate the great variation in this complex ability, but we shall use the more familiar concept “academic literacy” as a general notion to indicate the ability to use academic discourse across different fields of study.

Of course, one’s ability to use academic language does not begin at university, but long before that. In fact, even at pre-school level teachers specifically plan activities for young learners that enable them to seek solutions to problems by making inferences, reaching conclusions, and coming up with rational plans. Even at that level, every cognitive process that those young learners go through is mediated through language. What these novices to the world of education are learning is that using academic language lies at the heart of the ability to make an argument. Academic arguments are built on analyses. It goes without saying, then, that the language one needs in the academic context is a kind of language that enables one to make distinctions. That is the same as saying that language allows and helps us to sort things, by contrasting and comparing them, isolating, i.e. distinguishing, the one from the other. It is another way of saying that analysis is the core of academic argumentation and discourse, and that the way that we articulate our academic analysis needs a specific kind of language: academic discourse.

## Academic literacy as a school subject?

If academic literacy is important, since learning is mediated through language, why is it not taught as a separate school subject, like Biology, or History, or Mathematics? Or why can the languages taught at school not attend to academic literacy, thus helping learners to meet the demand of learning through language?

One can venture a number of answers to that, one of which may be that the curricula of the languages taught do not provide for that, but the most likely explanation is that one learns to handle language in primary and secondary school through the subjects themselves. Perhaps this ability can be taught separately from those subjects, but some would object that this might not really be effective. Fact is: school performance in a language that may become one's language of learning at tertiary level is neither a good measure of one's level of academic literacy, nor a sufficient preparation for using academic language across a variety of disciplines.

## Academic language is more than grammar, or writing

It is clear then that the ability to use language for cognition and analysis becomes critical as one's education progresses. What is not so clear, is that the cognitive processes of analysis referred to above go beyond conventional notions of 'language'. Ironically, those who deal professionally with language, teaching it and exposing learners to the appreciation of literature, sometimes have a quite narrow view of what language is. Language is more than words and grammar, and much more than sentences. In addition, competence in language is far more than the 'skills' of listening, speaking, reading, and writing. This is even more true of academic language, which is, as we have seen above, imbued with cognitive as well as analytical processing. Academic language has functions like exposition, clarification, and conclusion; the academic demands for language require us to do things with language like explain, define, compare, contrast, classify, agree, disagree, illustrate, elaborate, make claims, see implications, infer, exemplify, anticipate, and conclude.

One of the frequent complaints one hears from teachers and academics who take a conventional view of language is that "Children/students cannot write". Sometimes there is a kind of wistful (but always unsubstantiated) reference in the complaint to a time when that was not the case. So one often hears academic colleagues, from whom one would have expected a more sophisticated diagnosis, remark that "My students cannot string together a single sentence", and then hear them go on to suggest that to solve the problem these students should merely be taught how to write. More often than not the terms used are that such students should be "given the skills they need", as if learning a language, or a specific highly contextualised form of language such as academic discourse, is something that can merely be parcelled out (by an expert teacher), so that it can be



appropriated by a recipient (the non-knowledgeable student). Wouldn't it be wonderful if language could be learned in this way? Then none of us would ever have trouble learning a language! All that we would have to do would be simply to listen to the teacher, and, having done as we have been told, we would instantaneously – and somewhat miraculously – get it right.

Of course writing is important to academic language: in the kind of mass learning settings that characterise higher education, it is the form in which most students have to demonstrate their ability to handle this kind of language. Sometimes, in pedagogically deprived higher education environments, it is their only channel of academic communication with their lecturers. But we would be seriously mistaken if we ignored what precedes writing:

- the ability to *gather* academic information, either by listening or reading, or, having listened and read, by making notes or discussing things further with others;
- the ability to *process* that information by analysing it, i.e. sifting main from peripheral, comparing and contrasting, tabulating, summarising, making inferences, and sometimes again discussing it with others before modifying our analyses; and, finally,
- the ability to *produce* new information (often in writing) that captures our own final opinion, and, though it has been produced in collaboration with many other voices, is distinctly our own.

The tests in this book employ a notion of what constitutes academic language that attempts to capture it not in terms of 'listening', 'speaking', 'reading' or 'writing' but in skills-neutral terms. Its starting point is that academic discourse is a separate and distinct kind of language through which we can make sense of our own and others' analyses. The skills-neutral definition of academic literacy that we shall adopt here allows us to steer clear of the controversy of whether writing is more important than reading, or reading more important than speaking, or speaking more important than listening. We think that these 'skills' are difficult to separate, anyway, and in a sense trying to do so obscures the point. The point is, as we have seen above: to use language for academic purposes we need to *gather* information (perhaps by listening, but also by writing, or reading up, or speaking with others), *process* that information (either by thinking how to write it up in summary form, for example by tabulating it or presenting it graphically), and finally to *produce* it (which we can do by speaking, or presenting it for discussion, or writing it). We find this a more useful starting point than the outdated and inaccurate division of language into 'skills'.

## The definition of academic literacy

In order to assess one's competence in using language for academic purposes, we employ a definition of academic literacy that is widely used. Teachers who have been asked to help prepare learners for academic literacy tests will recognise its components immediately. It defines academic literacy (Weideman 2007: xi-xii) as the ability to

- understand a range of academic vocabulary in context;
- interpret the use of metaphor and idiom in academic usage, 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 that they convey, and the audience at which they are aimed;
- interpret, use and produce information presented in graphic or visual format;
- make distinctions between essential and non-essential information, fact and opinion, propositions and arguments; distinguish between cause and effect, classify, categorise and handle data that make comparisons;
- see sequence and order, 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.

This definition is not the final word on what academic literacy is – and we are indeed always investigating, with the help of our postgraduate students, ways of improving on it – but it provides a good starting point. It offers a rationale for what gets tested.

## How academic literacy is tested

Most academic literacy tests that prospective students are required to take will in some way make use of the above definition of academic literacy. The definition is sometimes referred to as a ‘construct’. That means it is a theoretical description or articulation of the ability being tested. In order to test the ten components listed above, tests rely on one or more kinds of questions. Normally the ones that rely on fewer kinds of questions predominantly use comprehension-type questions. To these may perhaps be added questions about the interpretations of graphs, or questions that test verbal reasoning, as in the well-known American tests of this nature. Other tests, such as the ones used by a number of multilingual South African universities, are more varied in terms of task type. There is a greater number of subtests in them, for a start.

This book takes its cue from the design of the latter group of tests. The main reason for this is that a monotone design cannot do full justice to as rich a construct as the one for academic literacy outlined above. If you wish to test as comprehensive a construct as academic literacy, you need an appropriately differentiated range of subtests. The more differentiated and better the test design, the more likely it is that it will give a valid reading of ability. The more care one puts into the design of a test, the more probable it is that it will yield meaningful results that can be interpreted with a view to assisting learners and their teachers. What is more, exposing students to a greater variety of academic literacy tasks is obviously more beneficial than presenting them with a reduced offering. Perhaps some of the high-stakes academic literacy tests that users of this book will encounter will belong to those with a monotone design; it is our contention, nonetheless, that the more varied examples should provide a better preparation even for those.

The subtests in a test of academic literacy specify the ways in which we can assess the ability to handle the components of academic literacy. For each of the tests in this book, various subtests are used. The subtests sometimes test more than one component of academic literacy; sometimes more than one subtest will give one information of ability as regards one of the components. These subtests and the components of the ability they test are as follows:

Component	Subtest
Understanding academic vocabulary	Vocabulary knowledge; Text comprehension; Grammar & text relations
Metaphor and idiom	Text comprehension; (and sometimes) Grammar & text relations
Understanding relations between different parts of a text	Scrambled text; (sometimes) Text comprehension and Grammar & text relations, Register & text type
Understanding text type (genre)	Register & text type; Interpreting graphs & visual information; Scrambled text; Text comprehension; Grammar & text relations
Interpreting graphic and visual information	Interpreting graphs & visual information; (sometimes) Text comprehension
Distinguishing between essential and non-essential information	Text comprehension; Interpreting graphs & visual information
Sequencing, ordering, and simple numerical computation	Interpreting graphs & visual information; Text comprehension
Finding evidence, making inferences, and extrapolating	Text comprehension; Verbal reasoning; Interpreting graphs & visual information
Understanding communicative function	Text comprehension; (sometimes) Grammar & text relations
Making meaning beyond the sentence	Text comprehension; Register & text type; Scrambled text; Interpreting graphs & visual information

The components of this definition of academic literacy are therefore tested through a number of different task types. Their integration ensures that the results of the test give a highly reliable picture of what the academic literacy level is of a person taking the test. For those with a scholarly interest in the field of academic literacy testing, and the rationale for the design of these tests, the close to 100 articles in accredited journals, books, theses and dissertations listed under the ‘Bibliography’ tab on the website of the Network of Expertise in Language Assessment (NExLA; <https://nexla.org.za/research-on-language-assessment/> as well as <https://albertweideman.site/test-design/>) will provide more information.

## How to use this book

There are five different tests in this book. Teachers may deal with them in one of two ways. First, since the answers to each are given at the end of the book, they may mark the tests themselves. Second, if they prefer to have it done more professionally, they may require their students to answer on optical reader sheets, have those scanned, and dispatch the results, captured on a spreadsheet, to Prof. Albert Weideman ([albert@lcat.design](mailto:albert@lcat.design)), the author. He will then analyse the results, and give a test- and item-level analysis to those who require them.

These analyses will show which areas (components of academic literacy) still need attention. What is more, results need interpretation, which the author will be happy to provide. For example, many academic literacy tests simply place the bottom third of a group into a category of “at risk” students. This is a rule of thumb that has endured over many years, and is borne out by further empirical and other evidence. But students enrolling at prestigious universities already have a fairly high level of academic literacy, so that for them the cut-off point between “at risk” and “little/less risk” is sometimes put at 58% or even as high as 68%. This means that an unsophisticated interpretation, for example of a mark of above 50% necessarily meaning a ‘pass’, is misleading and inaccurate. Teachers are more than welcome, therefore, to discuss the results with (or send them for analysis to) the author of this book, and discuss how best they can be interpreted.

As regards the administration of the tests, it is up to teachers themselves to decide how best to go about it. The tests are each 100 marks in length, which in normal circumstances would require a time of about one and a half hours (90 minutes). If there is no time slot available during school hours to administer them, they can of course be broken up, and done piecemeal. It may be worthwhile experimenting with an arrangement where they are completed for homework, though the security of the tests may potentially be compromised in that case. Also, since measuring academic literacy without a doubt also includes a measurement of the fluency with which one can complete a test, it may be preferable to administer them under controlled conditions. We know that in the case of some tests used for access at a few South African universities it has been the practice not to place a time limit on completing tests. In our experience, however, nothing much is gained by giving more time to students who are struggling to complete such tests in time. The results remain more or less the same; in any event, dealing with a language-intensive academic task such as conceptualising and doing an assignment at university often places students under severe time constraints.

## Developing one's academic literacy further

Though writing a test of academic literacy determines one's level of competence in using and handling academic language, it goes without saying that one does not develop one's ability to use academic language merely by writing tests. For those who need further practice beyond this book, the reference below (Weideman 2007) may be a good starting point. The main challenge, however, lies in discovering how to develop one's ability to handle academic language while one is doing the special, non-language subjects. How does my ability to use language appropriately affect my competence in making and articulating distinctions in Accountancy, in Biology, in Chemistry, Mathematics, or History? The answer is: more than you would expect.

For the sake of being successful at higher levels of study, it pays to be much more attentive to developing the language we use in education.

*Albert Weideman*

February 2018

## Reference

Weideman, A. 2007. *Academic literacy: Prepare to learn*. 2<sup>nd</sup> ed. Pretoria: Van Schaik.

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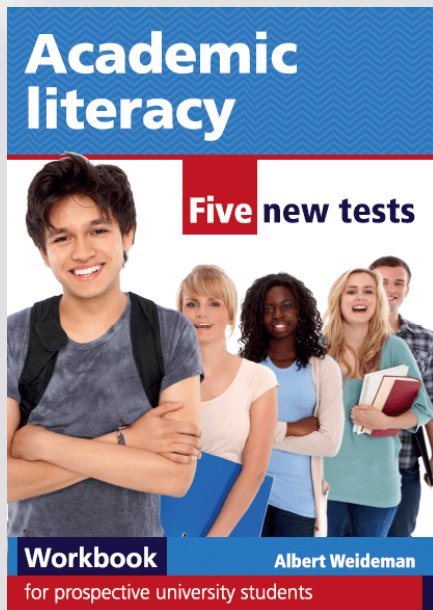
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Learners preparing themselves for the world of higher education will need the complete book with practice tests and answers to test their competence. Order details are on the next page.



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