

Towards informed decision making: the importance of baseline academic literacy assessment in promoting responsible university access and support

A B S T R A C T Low levels of academic literacy in the language(s) of teaching and learning are regarded as one of the main reasons for a lack of academic success amongst undergraduate students. Indeed, at Unisa, current concerns about the predictive validity of the National Senior Certificate has motivated a need for a reliable and valid instrument, used under standardised conditions, to measure the academic literacy levels of first year students. The aims of this project were to gather diagnostic data and empirical evidence about the current levels of academic literacy of prospective students of Unisa, and to identify specific reasons for their poor performance during the NQF5 in-service training. A quantitative research approach in the form of an interrupted time-series design was followed. A simple random sample of students, who underwent in-service training in 2009, was drawn, and the Test of Academic Literacy Levels (TALL) was employed as measuring instrument. T-tests were performed on the data to compare the actual differences between the pre- and post-test scores and regression analyses were used to determine the correlation between the two tests. The article concludes with recommendations on how language tests, like TALL, can assist higher education to make more informed, and thus responsible, decisions about issues of access.

O P S O M M I N G Lae vlakke van akademiese geletterdheid in die onderrig- en leertaal, of -tale, word beskou as een van die hoofredes vir gebrek aan akademiese sukses by voorgraadse studente. By Unisa het die heersende kommer oor die voorspellingsgeldigheid van die Nasionale Senior Sertifikaat inderdaad gelei tot 'n behoefte aan 'n betroubare en geldige instrument wat in vasgestelde omstandighede gebruik kan word om akademiese geletterheidsvlakke onder eerstejaarstudente te meet. Die oogmerke

met hierdie projek was om diagnostiese data en empiriese getuienis oor die bestaande akademiese geletterdheidsvlakke onder voornemende studente aan Unisa te versamel, en om spesifieke redes vir hulle swak prestasie tydens NKR 5-indiensopleiding uit te wys. 'n Kwantitatiewe navorsingsbenadering in die vorm van 'n onderbroke-tydreëks-ontwerp is gebruik. 'n Eenvoudige ewekansige steekproef is geneem van studente wat in 2009 indiensopleiding ondergaan het, en die Toets van Akademiese Geletterdheidsvlakke (TAG) is as meetinstrument gebruik. T-toetse is op die data uitgevoer om die werklike verskille tussen die voortoets- en natoetstellings te vergelyk, terwyl regressieontledings uitgevoer is om die korrelasie tussen die twee toetse te bepaal. Die artikel sluit af met aanbevelings oor hoe taaltoetse soos TAG hoër onderwys van hulp kan wees om meer ingeligte – en gevolglik meer verantwoordelike – besluite oor toelatingskwessies te neem.

Keywords: academic readiness, academic literacy, first-year, Test of Academic Literacy Levels (TALL), throughput rates assessment, under-preparedness, university access

1. Introduction

Under-preparedness for university study is widely regarded as one of the main contributing factors to the lack of academic success amongst first-year students in South Africa, which is evident from the low national pass rate (Subotzky & Prinsloo, 2011). A study by Scott, Yeld and Hendry (2007), for example, indicates that approximately 30% of all first-year students drop out during, or after, their first year of study. This trend seems to continue in subsequent years of study – after five years of study, the overall picture shows that only 30% graduated, 14% are still registered, and 56% left without graduating. Consequently, the estimated national completion rate is calculated at only 44%.

There is furthermore agreement among academics that the South African higher education landscape is rather complex, and there are a number of factors that may contribute to high retention rates. Universities do not have full control over these factors and are, to a certain extent, powerless over the calibre of student they receive from the secondary education system (Subotzky & Prinsloo, 2011). One of the factors often reported on is the lack of academic readiness of school leavers. In a recent report published by Unisa, it is for example claimed that “[i]t is self-evident that the lack of academic readiness constitutes a major risk to student success. We have known this for a long time – both at Unisa and among other higher education institutions in South Africa and internationally” (Unisa, 2010a:22). This view is echoed in literature on the influence of academic language ability (also referred to as academic literacy) on study success – cf. Astin and Oseguera (2002); Boyuwoye (2002); Zamel and Spack (1998), and McKenzie and Schweitzer (2001).

2. Access and support

Access to higher education is dependent on the academic readiness of prospective students, usually determined by some form of assessment. Academic readiness assessment can be done in two ways: by utilising Grade 12-results and/or by some other form of testing. The reliability of matric results has, however, been under rigorous scrutiny for a number of years and there

seems to be consensus that Grade 12-results are poor predictors of academic success (Bargate, 1999; Botha and Cilliers, 1999; Paras, 2001; and Wood, 1998). Moreover, and in light of the generally poor performance of National Senior Certificate (NSC) matriculants in 2009 and 2010, there still is no indication that the introduction of the NSC, in 2008, contributed to better prediction of academic readiness. Nonetheless, higher education institutions are still admitting students on the basis of their Grade 12-results as they are regarded as the single most reliable predictor of academic success, even though not a good one. It should, however, be taken into consideration that only three years' data is currently available, so it is thus too early to come to any conclusions either way (Unisa, 2010a). Universities are furthermore under pressure to admit and accommodate more underprepared students than in the past, which necessitates the implementation of additional forms of academic readiness assessment in order to come to informed decisions about access and support (Botha & Cilliers, 1999:144; Jawitz, 1995).

It is therefore quite common nowadays for higher education institutions to assess different aspects of student ability prior to entering, or upon entry to, the establishment. Relevant programmes/courses, designed to help first-year students make the transition from high school to tertiary education, are then recommended for those who need them. The purpose of these courses is usually to support students who have been identified as being at risk of not completing their studies within the recommended time-frame. It needs to be noted here that support courses should, in our opinion, be focused on both 'at risk students' and so-called 'stronger students' as all of them could benefit from such courses. Unfortunately, these are often stigmatised as being specifically aimed at 'weaker' students – cf. Van Dyk, Zybrands, Cillié and Coetzee (2009); Baik and Greig (2009); and Rural Education Access Programme: REAP (2008).

3. Low levels of academic literacy and throughput

In discussions on student throughput, and as already mentioned above, the notion of low levels of proficiency in the language(s) of teaching and learning (synonymously used for academic literacy levels) are often referred to as one of the bigger concerns when it comes to a lack of academic success among students with high academic potential (Baik & Greig, 2009; Blacquiére, 1989; Hylanda & Hamp-Lyons, 2002; Leibowitz, 2001; Perkins, 1991; Pretorius, 1995; Vorster & Reagan, 1990; Van Rensburg & Weideman, 2002). A reason for this is that first-year students have a great deal of difficulty in processing the prescribed material (both the amount and the level), and in producing academically acceptable text. Another is that the discourse of academia is considered to be a middle class discourse and those who are not familiar with the discourse are, according to Leibowitz (2001:22-23), extremely disadvantaged: firstly, they have to learn/acquire the conventions of academic discourse; secondly, they often need to survive academically in a second or additional language setting; and thirdly, they have to overcome the legacy of a poor schooling system. This is again confirmed, almost a decade later, by Subotzky and Prinsloo (2011), and the REAP (2008:8). The latter claims that low throughput rates are due largely to poor academic and social preparation for higher education by the South African schooling system. Additional culpable factors are inadequate academic teaching and learning planning and support initiatives at universities, as well as the fact that students, especially those who were previously disadvantaged, struggle to survive linguistically in academia.

Within this context Yeld's (2001:226) claim that language is used to learn (a heuristic function), and to produce and convey knowledge (a productive function) may be employed to argue that there is merit in offering linguistic support to all first-year students. Moreover, with the renewed emphasis on graduate attributes, first brought to the attention of management teams of institutions of higher education in 1997 (Education White Paper 3, 1997), and the challenge of producing well-rounded human beings for the work force, it seems imperative that universities should support students in different forms and at different levels, especially during the first year of undergraduate study (Baik & Greig, 2009).

4. Problem statement and purpose

The three preceding sections serve as background to the problem addressed in this article, namely a national concern about unreliable predictors of academic success, coupled with a school system that does not prepare students adequately for university study (leading to a lower throughput rate), and universities finding it difficult to support first-year students appropriately. The purpose of this article is thus to report on an initiative by Unisa's College of Law (CoL) and one of its partners in industry to make more informed decisions about promoting responsible university access and support. The way forward, however, is not always clear and needs constant investigation and reflection, as articulated by Unisa (2010a:22):

[W]e have not reached consensus about the appropriate method and procedure by which to assess [and minimise] academic readiness/risk... It is important to note that this kind of assessment is not intended as an admissions criterion. Instead its purpose is to enhance students' prospects of success by guiding them, in an informed way, towards suitable qualifications, towards an extended curriculum where required, towards realistic study loads and appropriate forms of academic and non-academic support.

It is therefore, and in particular, a first step towards refining and revising academic literacy support provided to previously disadvantaged students, so that they too have an opportunity to develop an authoritative academic 'voice' (McKenna, 2010:8).

5. The project

5.1 Broad context

A recently developed pilot tracking system at Unisa provided a detailed indication of the extent of the problem of throughput, which again raised the issue the very current issue of appropriate support at this institution. Table 1, below, is a summary of the attrition rates of entry-level first-time students at Unisa (Unisa, 2010a).

From the table above, it is evident that by the second year of study, between approximately 36% and 51% of the students had dropped out. Dropout rates increased to between approximately 49% and 61% in the third year of study and even reached percentages as high as 69% in subsequent years (Unisa, 2010a). This led to renewed discussions on the reliability of predictors of academic success, and support courses.

Unisa has, in this regard, been exploring the idea of test-based assessment of students' academic readiness, as an added dimension to matric results, for many years. The first initiative was the

Table 1 Attrition rates at Unisa amongst entry-level first-time students, 2001-7 Cohorts

Cohort	N	Y2	Y3	Y4	Y5	Y6	Y7	Y8
2001	44 551	37,7%	54,8%	60,9%	62,4%	63,5%	64,4%	65,0%
2002	46 216	47,5%	61,9%	65,1%	66,9%	68,4%	69,6%	
2003	41 190	51,6%	59,3%	63,6%	66,6%	69,0%		
2004	43 191	38,5%	49,8%	56,8%	61,4%			
2005	43 428	36,6%	51,5%	60,3%				
2006	51 478	44,2%	59,7%					
2007	60 456	44,4%						

Managed Open Access Programme (MOAP) and more recently, the Responsible Open Access Programme (ROAP). Various concerns have, however, been raised about these, of which the most significant is the politically problematic issue of creating barriers to access. The reasoning behind this is that it is not aligned with Unisa’s social mandate to promote student success by channelling students academically so as to provide appropriate support (Unisa, 2010a). Note that many, if not all, South African universities struggle with similar concerns.

Higher Education South Africa (HESA) has therefore commissioned the development of the National Benchmark Tests (NBTs) with the aim of assessing the academic readiness of all new higher education students by means of a single test opportunity. These NBTs have been piloted at most higher education institutions over the last couple of years. At the majority of universities, both the 2010 NSC and NBT results were taken into consideration to produce a more reliable predictive model, based on the strengths of the two forms of assessment. Some institutions even decided to use the NBT results as part of their requirements for access – a purpose for which these tests were not originally intended, as they are portrayed as placement tests. Other institutions use the test results more correctly: to categorise students in terms of three readiness/risk categories:

- under-prepared students who are channelled into special access courses, to Further Education and Training (FET) colleges, or Higher Certificates;
- at-risk students who are channelled into special programmes and into Certificates, Diplomas and Extended Degree Programmes; and
- students at little to no risk, who would be permitted to enrol for any course (Unisa, 2010a:23).

Although this may be a viable option to address the issue of low throughput and expose students to appropriate support, the main practical obstacle to the implementation of the NBTs at Unisa is that the unavailability of a sufficiently large item bank would make it impossible to consider an online administration of the test. Moreover, the logistical and cost considerations of a face-to-face administration of the test would be formidable, considering that Unisa has a student body of approximately 350 000 students, distributed internationally. “The most important consideration, however, is whether the NBT would add sufficient value to the NSC in the Unisa

context as a predictor of success in order to justify undertaking it” (Unisa, 2010a:24). In light of this, it may be argued that a study such as the one undertaken by the CoL will be beneficial in assisting Unisa to make informed decisions.

5.2 Detailed view

In 2008, one of the CoL’s partners in industry issued a request to various institutions (such as Unisa) to tender for a research project to investigate English proficiency-related problems experienced by their trainees. This initiative was applauded by the CoL at Unisa, since lecturers across the board experience English proficiency-related problems on a daily basis when they assess students. The College felt that such research was long overdue and they looked forward to the findings and recommendations of the research venture, as it is not uncommon for industry trainees to become Unisa students at a later stage.

The CoL could not participate in the above-mentioned research project, due to the limited timeframe (four months) that was made available to complete it. It requested instead the launch of a specific study pertaining to the academic literacy levels of trainees. It was foreseen that such a study had the potential to shed light on the poor performance of trainees during training, as well as when they entered higher education (typically at Unisa).

In 2009 the Inter-institutional Centre for Language Development and Assessment (ICELDA), together with Unisa’s CoL was invited to perform a preliminary investigation into the academic literacy levels of trainees, and ascertain its influence on academic success. ICELDA is a syndicate of four local universities, namely the Universities of Stellenbosch, Pretoria, North West and the Free State.

6. The investigation

6.1 Hypotheses and research question

The initial study had four hypotheses, but for reasons of confidentiality, only two will be discussed here. The first was that academic literacy levels of trainees entering the industry training programme is low; and the second was that the industry training programme fails to address trainees’ academic literacy problems effectively, even though it has a so-called academic literacy component built into the course.

Accordingly, the following research questions were formulated: (i) what are the academic literacy levels of trainees, and (ii) does the industry training programme address trainees’ academic literacy problems?

6.2 Methodology

The methodology adopted for this study was quantitative in nature, using a quasi-experimental design. The design enabled the researchers to investigate problems that preclude the use of procedures required by a true experimental design. In other words, experimental procedures were applied but not all extraneous variables were controlled, since the requirement of random assignment to the treatment groups could not be met. A quasi-experimental design was also considered the best type of design for field studies of this nature, where causal inferences would be included. More specifically, an interrupted time-series design was used, which is able to

eliminate rival hypotheses without using a control group. This is a design in which a treatment effect is assessed by comparing the pattern of pre- and post-test scores of one group of research participants (Terre Blanche, Durrheim & Painter, 2006).

6.3 Sample

A simple random sample was taken from the second intake of trainees, located in Pretoria, in June, 2009. A list of the total intake of trainees was received from the industry and every *n*th trainee was selected until the required sample size was reached. The total sample size was determined by the capacity constraints of the two industry venues to be used for the testing. Of the approximate 2000 trainee intake, a representative number of 904 trainees were sampled. However, only 733 trainees completed both the pre- and post-test.

The sample demographics, in terms of language exposure in formal education, were as follows:

- 99% of the trainees had an African language as their mother tongue and the remaining 1% had either Afrikaans or English as mother tongue;
- 71% of the trainees completed their secondary education in English, 1% in Afrikaans and 28% in another language;
- 99.4% of the trainees studied English as a subject at school; and
- 1.5% of the trainees had zero to three years of training in English at school level, 33% had four to seven years and 65.5% had had training in English at school level for eight years or longer.

6.4 Instrument

The Test of Academic Literacy Levels (TALL), one of the tests in the ICELDA-battery was recommended for use in this investigation. It was considered useful for several reasons. Firstly, the assessment only requires an hour to administer. The second advantage is its affordability. Thirdly, the data can be interpreted and compared concurrently, as it is used annually by at least four South African universities to determine levels of language risk among first-years in an attempt to make informed decisions regarding academic support. It is also an extremely reliable instrument – that shows, without exception, an internal consistency / stability with an average alpha value of 0.93 across fifteen administrations. In addition, there is strong evidence of its validity – it has been proven adequate and appropriate for its intended uses, and therefore measures what it is supposed to measure, in this case academic literacy. In the sixth instance, it is standardised in terms of its administration and scoring principles. It is also based on a large item bank and an online version is currently being developed and tested. Finally, it is one of the best language placement tests, with diagnostic features, currently utilised in the country, especially if one considers that it is based on thorough research: more than 15 articles have been published in scientific journals over the past seven years about this test/some aspect of the test; one postgraduate study has been completed and two are underway.

Van Dyk and Weideman (2004) can be consulted for a detailed description of the design and development of this instrument, and Van Dyk (2010) for a validation thereof. In summary, the construct of TALL requires students/trainees to

- understand a range of academic vocabulary in context;
- interpret and use metaphor and idiom, 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 ensure cohesion of different parts of a text;
- interpret different text types and genres, and show sensitivity for the meaning that they convey, and 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;
- recognise sequence and order, do simple numerical estimations and computations that are relevant to academic information, that allow comparisons to be made, and that 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.

The construct above is tested in six subtests, with a combination of its components tested in each section:

Section 1: Scrambled text

Section 2: Interpreting graphs and visual information

Section 3: Text type and genre

Section 4: Academic vocabulary

Section 5: Understanding texts / reading comprehension

Section 6: Grammar and text editing

6.5 Procedures

As was mentioned earlier, a representative sample was obtained through simple random sampling. Each selected trainee received a letter informing him/her of the purpose of the research and the procedures which were to be followed. Trainees were also guaranteed that their individual test results would be kept confidential and that they would receive individualised feedback at the end of the study. Two suitable venues for psychometric assessment of the sample were identified at the industry training site in Pretoria. The two research project coordinators from Unisa underwent training from ICELDA on the use of TALL. One of the coordinators is a qualified psychometrist and the other a linguist. A total of 10 psychology masters' students and qualified psychometrists, as well as 29 industry trainers were hired to assist with the assessments. A training session was held with the above-mentioned students, psychometrists and trainers prior to each assessment, in order to introduce them both to TALL and to train them in general psychological assessment procedures. The trainee sample was divided according to the capacity of each venue and trainees were told where to report for the assessment.

The study was conducted in two phases. The first was in July of 2009 and occurred before the commencement of the training. The second phase took place in December 2009 and on this occasion trainees were re-assessed on completion of their industry training.

After each assessment, the completed test answer sheets were forwarded to ICELDA for processing. Other test material and information that could identify individuals were kept

securely at Unisa. In June 2010 a report on the trainee group performance as well as possible interventions to consider in future were presented to the industry. Unisa also sent individualised feedback letters to each trainee tested.

6.6 Results and interpretation

The descriptive statistics and distributions of the two test administrations are recorded in Table 2 and Figures 1 and 2, below. From these it can be deduced that the data show attributes typical of a normal distribution. There are furthermore no significant discrepancies between the data of the two administrations with respect to any of the statistical parameters. Hence, regression analyses and t-tests were performed for further investigation and will be discussed below.

Table 2 Descriptive statistics for both test administrations

	Administration 1	Administration 2
Mean	23.003	28.006
Standard error	0.377	0.369
Median	22	26
Mode	23	26
Standard deviation	10.422	9.913
Sample variance	108.609	98.275
Kurtosis	6.018	4.237
Skewness	1.603	1.263
Range	89	85
Minimum	0	4
Maximum	89	89
Count	703	703

TALL Histogram: July 2009

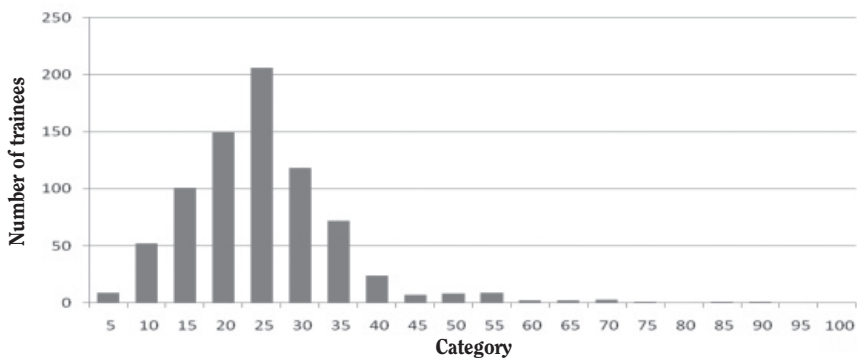


Figure 1 Distribution of results in July

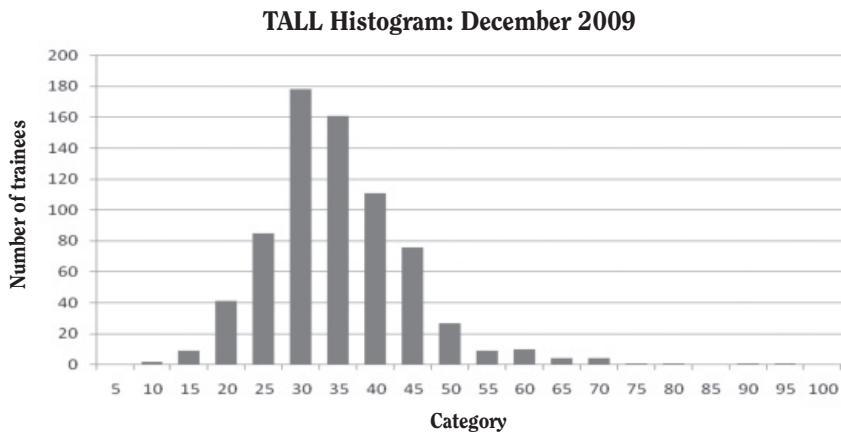


Figure 2 Distribution of results in December

In terms of risk levels, the cut-scores for the test used in this study are statistically determined nationally, as indicated in Table 3, below (this specific test is written by first-year students at four other South African universities). Test takers/students with a mark of, for example, 43% or lower are, with regard to language, at an extremely high risk of not completing their studies successfully. Similarly, students with a mark of between 44% and 54% are, with regard to language, also high risk candidates.

Table 3 Cut-scores for risk levels

Risk level	Cut-score
Band E: Extremely high risk	<44%
Band D: High risk	≥44% – <55%
Band C: Risk	≥55% – <60%
Band B: Low risk	≥60% – <81%
Band A: Low to no risk	≥81%

After completion of both administrations, the distribution of risk of trainees in this investigation, are as indicated in Table 4, below.

Table 4 Distribution of risk for trainees

	Administration 1	Administration 2
Trainees	Band E: Extremely high risk (98%)	Band E: Extremely high risk (94%)
	Band D: High risk (1.30%)	Band D: High risk (1.50%)
	Band C: Risk (0.17%)	Band C: Risk (1.50%)
	Band B: Low risk (0.30%)	Band B: Low risk (1.80%)
	Band A: Low to no risk (0.30%)	Band A: Low to no risk (1.20%)

The risk levels, outlined above, compared to that of four other South African universities, indicate a huge discrepancy: only about 37% of the first year intake at these universities measure below Band C. If one compares this to the results of the trainees used in this study, it can be seen that more than 95% of the trainee’s language abilities are below that of the first year aggregate at the other universities (hypothesis 1). Academic literacy levels of trainees entering the industry training programme are indeed low, which proves the first hypothesis to be correct.

The results per section, per test, are shown in Figure 3. Note that although there appears to be an improvement from the first to the second administration, the difference was not statistically significant. The improvement from administration 1 to administration 2 can probably be attributed to the fact that the trainees were exposed to (i) a training environment, and (ii) language intervention of some kind. The latter may have included developing the skills which are measured by TALL on an incidental basis, since the trainers were not familiar with the construct of TALL so they could not have taught to the test (no wash back between teaching and testing).

It is worth mentioning that the largest improvement between the first and second administration was in terms of Section 6: Grammar and text editing, which articulates with the suspicion that a learning effect occurred from one test to the next. This is because a certain amount of decoding skill is required to perform well in this section of TALL and previous studies have proved that test takers perform better in this section each time they are exposed to this type of question.

A regression analysis was also performed to investigate the apparent progress made in the second test administration, and the results are shown below, in Table 5 and Figure 4. This analysis indicated a positive and significant correlation between the two administrations: $r=0.49$, with $p \leq 0.05$. These findings illustrate that, statistically, performance on the two administrations stayed the same.

T-tests were also performed to determine if there were significant differences between the first and second administrations of the test in order to answer the question of whether the industry training programme addressed trainees’ academic literacy problems or not (hypothesis 2). This t-test is a two sample location test, and for this statistical measure the nil hypothesis claims that there was no significant difference between the means of two normally distributed populations (in this case the results of the trainees for the two respective administrations). The second hypothesis also proved to be correct as the nil hypothesis was not rejected. Moreover,

Results per section per test

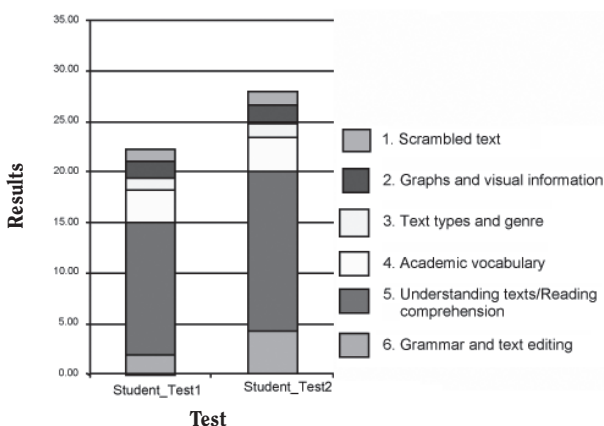


Figure 3 Results per section per test

Table 5 Regression analysis – correlation between administration 1 and administration 2

Regression Statistics	
Multiple R	0.492227
R Square	0.242288
Standard Error	8.245684
Observations	659

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	14283.859	14283.86	210.084	1.644
Residual	657	44670.286	67.991		
Total	658	58954.146			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	16.461	0.842	19.549	0.0001	14.807	18.114	14.807	18.114
X Variable 1	0.507	0.035	14.494	0.0001	0.439	0.576	0.439	0.576

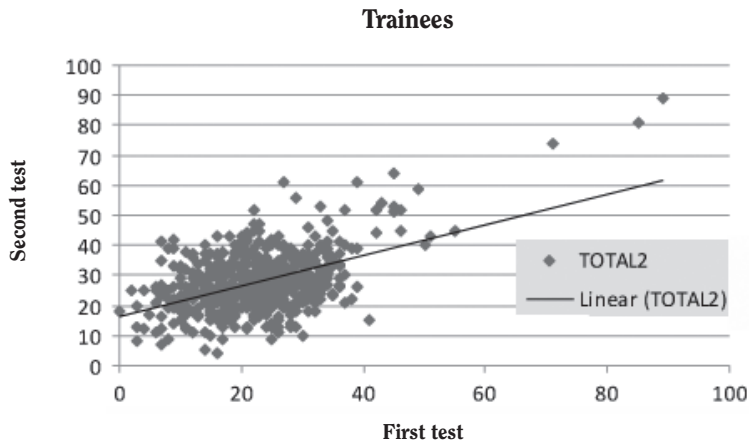


Figure 4 Regression analysis – correlation between administration 1 and administration 2

it could be concluded that the industry training programme did not sufficiently address the academic literacy problems of trainees. The results of the t-tests can be seen below, in Table 6.

Table 6 T-test: paired two samples for means

	Administration 1	Administration 2
Mean	23.003	28.006
Variance	91.741	98.273
Observations	720	720
df	719	
t Stat	-15.881	
P(T<=t) two-tail	0.000	
t Critical two-tail	1.963	

7. Conclusion and recommendations

The conclusions and recommendations that follow are based purely on the evidence at hand and within the limitations of the project. For example, the specific context of the trainees was unknown, and it was therefore recommended that no decisions on further developments be made without considering the entire context or prior consultation with ICELDA. From the data presented above, and in light of consulted expertise in the field of language development and testing, it can, however, be concluded that the trainees did indeed have low levels of academic literacy when entering their training programme, and that this remains the case even after completion of the training programme.

The following recommendations were made to the industry partner with regards to their trainees: firstly, that the language ability and academic literacy levels of all trainees be measured at the beginning of each intake, in order to determine their specific needs. Secondly, that all at-risk trainees follow intensive language development and academic literacy programmes, where their respective levels of competency are taken into account. Thirdly, that the impact of such interventions be investigated. Finally, that thorough and ongoing investigation is carried out concerning the transferability of these skills to other content subjects.

The College of Law is currently also working on incorporating some of these suggestions into its first year curricula. These are especially pertinent in terms of promoting academic literacy and transferring such skills to other subject areas, and even extending them into the second and third year. Follow up research to determine the impact of the intervention is planned on a cohort of students who were exposed to the new curricula.

Findings from studies, such as the one reported on in this article, inform Unisa's strategies for admission and placement, and have resulted in a revision of the admission requirements for Diplomas and Degrees, as well as the support mechanisms to be introduced:

- First-year students will be required to have a Grade 12 achievement level of 50% (instead of the old 30%) in the language of tuition. Alternative pathways have been identified for students who do not meet the revised criteria (Unisa, 2010b).
- The possibility of introducing Higher Certificates, in each College, that will that will provide access to Diploma and Degree courses for those who do not meet the institutional minimum requirements is also being considered. The curricula of Higher Certificates should aim to improve academic literacies in an Open and Distance Learning (ODL) context.
- The implementation of the NBTs at Unisa will not be feasible until there is a sufficiently large item bank, which would then make it possible to consider an online administration of the test. Face-to-face administration of the test(s) could be considered, but from a practical and economic perspective, it would not be viable and it is thus more sensible to investigate other existing (some of them in-house to Unisa), high-quality instruments for use.

Unisa is currently exploring the development and implementation of a framework for enhancing student success, retention, graduation and satisfaction rates. Existing frameworks do not address the unique demands that prevail within an ODL context, and studies such as the one reported on in this article could possibly inform this. In addition, all the identified

strategies and ventures mentioned above will address specific areas, earmarked by the Council on Higher Education for the second cycle of quality assurance audits, to be held between 2012 and 2017 (Council on higher Education, 2011).

This article started with a discussion on low throughput rates, and possible reasons for this. It then focused on academic literacy levels influencing academic success. A project from the College of Law at Unisa was then drawn upon for empirical evidence to firstly indicate that the academic literacy levels of prospective students who underwent industry training are indeed low. Secondly, to find proof that current language support programmes do not necessarily prepare students to survive academically.

In a context where many, if not all, higher education institutions struggle to design and implement appropriate and adequate solutions to problems like these, it is necessary to contribute as much as possible to the academic community by being transparent about projects such as the one reported on in this article. Informed decision making, promoting responsible access and support, can only be achieved in a context where endeavours are shared and scrutinised.

REFERENCES

- Astin & Oseguera. 2002. *Degree attainment rates at American colleges and universities*. Los Angeles: Higher Education Research Institute, UCLA.
- Baik, G. & Greig, J. 2009. Improving the academic outcomes of undergraduate ESL students: The case for discipline-based academic skills programs. *Higher Education Research & Development*, 28 (4):401–416
- Bargate, K. 1999. Mathematics as an indicator of success in first year accounting programmes at Technikon Natal. *South African Journal of Higher Education*, 13(1):139-143.
- Blacqui re, A. 1989. Reading for survival: text and the second language trainee. *South African Journal for Higher Education*, 3(1):73-82.
- Botha, H.L. & Cilliers, C.D. 1999. Preparedness for university study: designing a thinking skills test. *South African Journal of Higher Education*, 13(1):144-152.
- Boyuwoye, O. 2002. Stressful experiences of first year students of selected universities in South Africa. *Counselling Psychology Quarterly*, 15(3):277-290. COUNCIL ON HIGHER EDUCATION. 2011. *Framework for the second cycle of quality assurance: 2012-2017*. Pretoria: Council on Higher Education.
- Education White Paper 3. 1997. *A programme for higher education transformation*. Pretoria: Department of Education.
- Hylanda, K. & Hamp-Lyons, L. 2002. EAP: issues and directions. *Journal of English for Academic Purposes*, 1: 1-12.
- Jawitz, J. 1995. Performance in first- and second-year engineering at UCT. *South African Journal of Higher Education*, 9(1):101-108.
- Leibowitz, B. 2001. *Students' prior learning and their acquisition of academic literacy at a multilingual South African university*. Unpublished PhD dissertation, University of Sheffield.
- McKenna, S. 2010. Cracking the code of academic literacy: An ideological task. Pp. 8-15 in *Beyond the University gates: provision of extended curriculum programmes in South Africa*. Grahamstown: Rhodes University.

- McKenzie, K. & Schweitzer, R. 2001. Who succeeds at university? Factors predicting academic performance in first year Australian university students. *Higher Education Research and Development*, 20(1): 21-33.
- Ministry of Education. 2004. *A new funding framework: how government grants are allocated to public higher education institutions*. Retrieved January 28, 2011 from [Http://Www.Education.Gov.Za/Dynamic/Dynamic.aspx?Pageid=326&Dirid=12](http://www.education.gov.za/Dynamic/Dynamic.aspx?Pageid=326&Dirid=12)
- Paras, J. 2001. Crisis in mathematics education. Trainee failure: challenges and possibilities. *South African Journal of Higher Education*, 15(3):66-73.
- Perkins, D.M. 1991. Improvement of reading and vocabulary skills at the University of Transkei. *South African Journal of Education*, 11(4):231-235.
- Pretorius, E.J. 1995. Reading as an interactive process: Implications for studying through the medium of a second language. *Communicatio*, 21(2):33-43.
- Rural Education Access Programme (REAP). 2008. *Factors that facilitate success for disadvantaged higher education students*. http://www.reap.org.za/REPORTS/RESEARCH/Factors%20that%20facilitate%20success_Final%20report%202008.pdf . Accessed 8 February 2011.
- Scott, I., Yeld, N. & Hendry, J. 2007. *A case for improving teaching and learning in South African higher education*. Higher Education Monitor No. 6. Pretoria: Council on Higher Education [Online]. Available: <http://www.che.ac.za/documents/d000155/index.php> [2009, September 17]
- Subotzky, G. & Prinsloo, P. 2011. Turning the tide: A socio-critical model and framework for improving student success in open distance learning at the University of South Africa. Article accepted for publication in *Distance Education Journal*.
- Terreblanche, M. Durrheim, K. & Painter, D. (Eds). 2006. *Research in practice: Applied methods for the social sciences (2nd ed.)*. Cape Town: University of Cape Town Press.
- Unisa. 2010a. *Towards a framework and strategy for enhancing student success, retention, graduation & satisfaction at Unisa (revised draft)*. University of South Africa. Unpublished report.
- Unisa. 2010b. *Proposal for generic undergraduate admission requirements at Unisa for NSC students*. University of South Africa. Unpublished report.
- Van Dyk, T.J. 2010. Konstitutiewe voorwaardes vir die ontwerp van 'n toets van akademiese geletterdheid. Unpublished PhD thesis, University of the Free State.
- Van Dyk, T.J. & Weideman, A.J. 2004. Switching constructs: On the selection of an appropriate blueprint for academic literacy assessment. *Journal for Language Teaching* 38(1): 1-13.
- Van Dyk, T.J., Zybrands, H., Cillié, K. & Coetzee, M. 2009. On being reflective practitioners: the evaluation of a writing module for first-year students in the Health Sciences. *Southern African Linguistics and Applied Language Studies*, 27(3):333-344.
- Van Rensburg, C. & Weideman, A.J. 2002. Language proficiency: Current strategies, future remedies. *Journal for Language Teaching*, 36(1&2):152-163.
- Vorster, J. & Reagan, T. 1990. On the lexical development of L1 and L2 speakers. *South African Journal of Linguistics*, 9(3):80-84.
- Wood, T. 1998. Issues relating to the cognitive development of students at historically disadvantaged institutions. *South African Journal of Higher Education*, 12(1):87-94.
- Yeld, N. 2001. Assessment, equity and language of learning: Key issues for higher education selection in South Africa. Unpublished DPhil thesis, University of Cape Town.
- Zamel, V. & Spack, R. (eds.) 1998. *Negotiating academic literacies: Teaching and learning across languages and cultures*. Mahwah, New Jersey: Lawrence Erlbaum.

ABOUT THE AUTHORS

M. Petersen-Waughtal*

Educational consultant: Directorate for Curriculum and Learning Development (Unisa)

Mariana Petersen-Waughtal is responsible for curriculum and learning design of Law qualifications. Her research has mainly focussed on determining student needs and students' learning experiences

Tel: 012 429 6411

Email: peterm1@unisa.ac.za

T. van Dyk

Head: Unit for Afrikaans and English Language Centre

Language Centre, Stellenbosch University

Tobie van Dyk heads up the Unit for Afrikaans and English in the Language Centre and administers the collaborative effort of four local universities, known as the Inter-Institutional Centre for Language Development and Assessment (ICELDA).

Tel: 021 808 2495

Email: tjvd@sun.ac.za

* Corresponding author