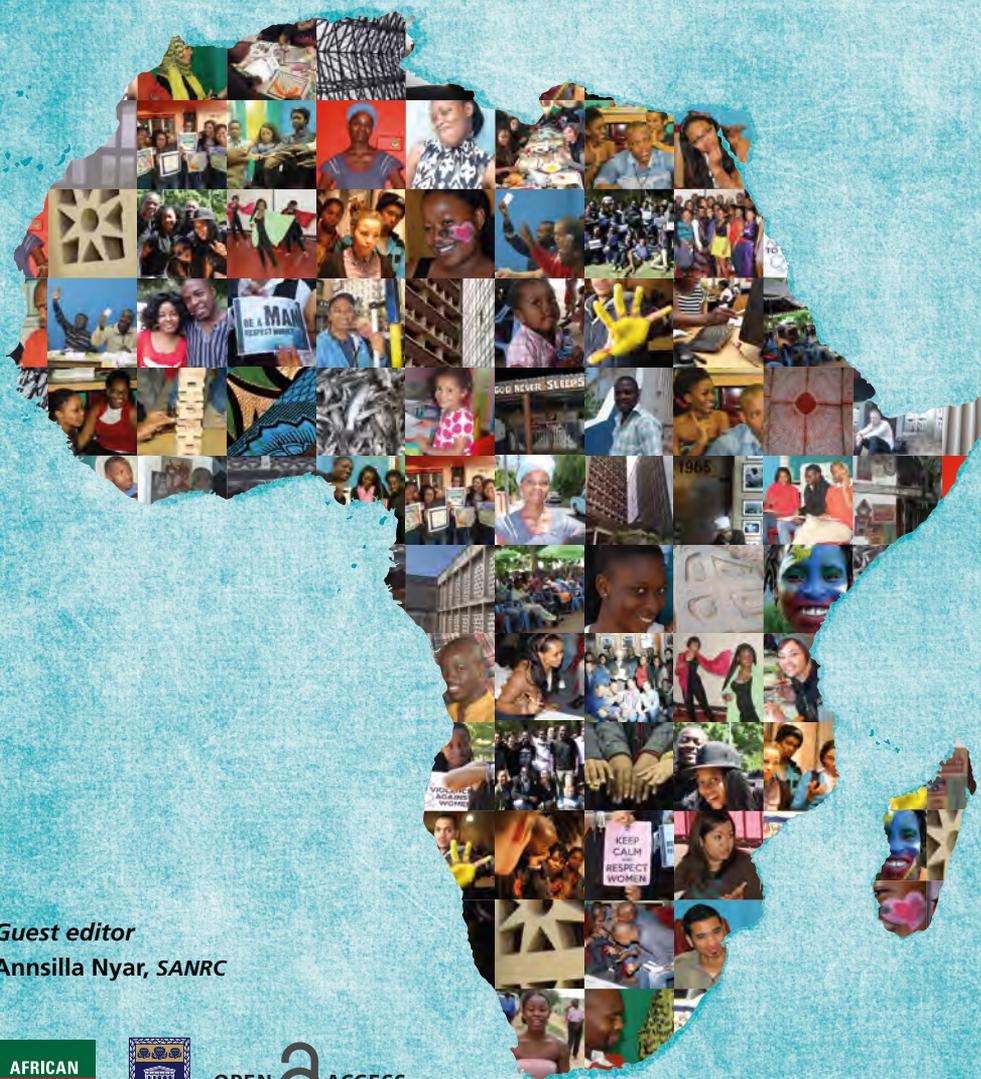




Journal of Student Affairs in Africa

Volume 4 Issue 1 2016

The first year experience, student transitions and institutional transformation



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EDITORIAL

Preface by the guest editor

Annsilla Nyar★

Welcome to the special SANRC guest-edited issue of the *Journal of Student Affairs in Africa* (JSAA). The South African National Resource Centre for the First-Year Experience and Students in Transition (SANRC) is pleased to have been afforded this opportunity by the JSAA to highlight some of the excellent work being undertaken in the first-year experience (FYE) knowledge community. Many of the contributors whose work is reflected in this issue are friends and colleagues of the SANRC. For example, the scholarly contributions received from our staunch supporters, Drs Jennifer Keup and Dallin George Young from the National Resource Centre for the First-Year Experience and Students in Transition (NRC) based at the University of South Carolina in the United States, reflect the strength of the SANRC's three-year partnership agreement with the NRC. Other key contributions, such as that of Dr André van Zyl from the Academic Development Centre at the University of Johannesburg and Prof. James Garraway, the extended programme co-ordinator at the Cape Peninsula University of Technology, are testimony to the strong support behind the establishment and consolidation of the SANRC.

What has been assembled here from the various contributors represents only a snapshot of some selected aspects of the FYE. A full and comprehensive treatment of the FYE in South Africa is not yet possible. The field of FYE remains under development and a robust culture of in-depth research into FYE is still being nurtured by the many scholars and practitioners who are passionately promoting the idea of the first year of study being integral to student transitions and success. It is these FYE scholars and practitioners who gather at the annual SANRC FYE Conference in search of the kinds of scholarly information, research and best practice that continues to inform and enrich the field of student success in South Africa. The SANRC is constantly working to draw such scholars and practitioners into a national space of collaboration and networking that will grow the field of FYE and eventually produce the kinds of researchers and academics who will make a tangible difference to how students are successfully retained in South Africa's higher education system.

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What is not found in this FYE-themed journal issue is set to be the subject of ongoing and future research by the SANRC. The challenge of ‘understanding the first-year experience’ – for example, through first-order questions about the theoretical underpinnings of FYE, definitional clarity, etc. – will be taken up by the SANRC in its mandate to examine the first year experience in its entirety critically. Further research outputs building on the richness of a journal issue such as this one can be expected as the SANRC grows and consolidates its place in South Africa’s higher education sector.

Annsilla Nyar

EDITORIAL

The first-year experience, student transitions and institutional transformation

Birgit Schreiber*, Thierry M. Luescher** and Teboho Moja***

Notions of foundation support for students have been critiqued as focusing on an *othered*, separated and identified group of underprepared students. Traditional approaches to first-year and foundation support frequently leave the mainstream status quo unchallenged and thus reproduce and reaffirm the very exclusionary structures and systems that foundation programmes aim to challenge. In South Africa, as early as 1986 (Vilakazi), 1988 (Nzimande), and 1995 (Ndebele), academic support was critiqued as focusing on students rather than challenging the institutional practices that require transformation. More recently, Akoojee and Nkomo (2007) have argued that higher education requires a focus on the system in order to achieve transformation goals. Kioko (2010) cautions against support premised on notions of assimilation and argues that student persistence and institutional success depends on the transformation of broad educational structures.

The emerging notion that the first-year experience is crucial to academic success in higher education has given rise to a focus in student affairs and higher education on the first-year experience (FYE). Conceptualisations of the FYE are located in at least three theoretical fields. Firstly, within adjustment frameworks of student retention and persistence the focus is mainly on students' adjustment in terms of behaviours, cognition and personal function, and attitudinal change, in order to adjust to the new demands of the higher education context (Tinto, 1997, 1998, 2014). Secondly, FYE may be conceptualised within stage models of student progression in which the FYE forms one stage through which students need to progress in order to engage with the undergraduate studies and to transition to work or postgraduate studies (Schlossberg, 2006). The third conceptualisation of FYE focuses on epistemological access to higher education. This is more than adjusting and potentially assimilating to the demands of higher education, and it is different from the normative changes expected at this developmental juncture. Epistemological access

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and epistemological engagement (Harper & Quay, 2009) as key aims of an FYE, focus on enabling equitable participation in undergraduate studies.

These frameworks, models and critiques present the background for many of the papers in this special FYE edition of the *Journal for Student Affairs in Africa*.

- André van Zyl explores layers of students' socio-economic status and other variables and highlights the challenges and strengths within heterogeneous groups, arguing for nuanced institution-wide responses, and cautioning against a one-size-fits-all approach.
- Dallin Young's article argues for an institutional approach and makes valuable recommendations for horizontal and vertical integration in higher education so as to impact student persistence and success rates.
- The third research article by Jennifer Keup is based on a meta-analysis of American research on peer support and peer leadership. She concludes that engaging peers is a high-impact practice.
- Continuing the theme of engaging fellow students, Tracey MacKay demonstrates that recruitment strategies and training are crucial for the impact that tutors make on student performance.
- Jaffer and Garraway highlight the disjuncture between student and staff perceptions and expectations and how the difference between what staff mean and expect and what students understand and demonstrate contributes towards the barriers to shifting towards increased persistence rates.
- Jacobs and Pretorius focus on a discrete skill within the range of maths competencies and explore how their focused work impacts on overall student performance rates.
- Gugu Khanye concludes this edition of the journal with in-depth interviews with Brenda Leibowitz and John Gardner on the FYE and how to ensure that our focus shifts from deficit frameworks to systems changes.

This issue of the *Journal of Student Affairs in Africa* thus continues, in greater depth, our engagement with a key theme at the intersection of student affairs and academic affairs. In this regard, previous issues of the journal have published case studies on academic development, such as Thembeke Shange's (2015) research article on the perceptions of engineering students, lecturers and academic development practitioners to academic development classes (Vol. 3, Issue 2), and we focused in a special issue on the work of Vincent Tinto (2014) on student persistence (Vol. 2, Issue 2). In addition, there have been a number of book reviews published by the JSAA on epistemological access.

In this issue, we publish two book reviews: Birgit Schreiber's review of *Strong Starts, Supported Transitions and Student Success* (Cambridge Scholars Publishing, 2014) edited by Andrew Funston, Miguel Gil and Gwen Gilmore directly deals with the FYE theme. She finds that "through critical reflection, scholarship, research and insightful narrative, the editors and authors illuminate the profound challenges in employing transformative strategies to truly transform higher education", and concludes that "overall, the book is an extremely valuable resource for anyone in higher education who is committed to the complex tasks of realising the ideals of higher education as an equaliser".

Annsilla Nyar reviews a ‘classic’ in South African higher education studies: the 2009 book *Higher Education in South Africa: A Scholarly Look Behind the Scenes* (Stellenbosch, Sun Press) edited by Eli Bitzer. She starts her review by explaining why it is important to review the book, specifically in this issue of the *JSAA* on the FYE. On the one hand, Nyar shows the strengths of the book with its particular angle, broad range of topics and diversity of contributors. On the other hand, taking a closer look at the book from the FYE angle, Nyar points out that some key issues in the field of higher education are clearly underplayed, particularly matters of student access and success, affordable education, graduateness and, more generally, transformation. Her reasoned assessment leads her to conclude that “the relative absence of important areas of analysis in the collection of contributions divests the book of a contemporary feel in terms of the broader contexts and concerns in which it places itself and perhaps even speaks to some blind spots within the academy itself”.

Nyar’s measured review of Bitzer’s book is a welcome critique of a book that remains widely used – including as prescribed reading in the syllabi of a number of professional qualifications in higher education in South Africa – but clearly needs revision in order to regain currency for the changing higher education context. In our last issue of *JSAA* (Vol. 3 Issue 2), we dealt at some length with equity and social justice in higher education, identifying them as key concerns underpinning the ongoing student struggles in South Africa and giving direction for the road ahead in the development of higher education in Africa and the role that student affairs will be called to play. Neither in student affairs nor, more broadly, in the academy can we afford to have blind spots in these areas.

Finally, we would like to thank one of the supporters of the establishment of the *Journal of Student Affairs in Africa* for her three-year service: the first patroness of the journal, Emeritus Professor Lullu Tshiwula, formerly Deputy Vice-Chancellor of Student Affairs at the University of the Western Cape (UWC). Among her many achievements during her office as DVC at UWC is that Prof. Tshiwula established the first Doctoral Programme in Student Affairs in South Africa as an international collaboration between UWC and California State University, Fullerton. Prof. Tshiwula’s support for the professionalisation of student affairs in Africa – which is also signified by her patronage of the *JSAA* – has been unwavering.

For the *JSAA* Editorial Executive,
Birgit Schreiber, Thierry Luescher and Teboho Moja

References

- Akoojee, S. & Nkomo, M. (2007). Access and quality in South African higher education: The twin challenges of transformation. *South African Journal of Higher Education*, 21(3), 385–399.
- Bitzer, E. (2009). *Higher Education in South Africa: A Scholarly Look Behind the Scenes*. Stellenbosch: SUN.
- Harper, S. & Quay, S. (2009). Beyond Sameness, with Engagement and Outcomes for All. In S. Harper & S. Quay (Eds), *Student Engagement in Higher Education*, pp. 1–15. London: Routledge.
- Kioko, J. (2010). Foundation provision in South African higher education: A social justice perspective. In C. Hutchings and J. Garraway (Eds), *Beyond the University Gates: Provision of Extended Curriculum Programmes in South Africa*, pp. 76–96. Proceedings of the January 2009 Rhodes University Foundation Seminar.

- Kift, S., Nelson, K. & Clark, J. (2010). Transition pedagogy: A third generation approach to FYE – A case study of policy and practice for the higher education sector. *The International Journal of the First Year in Higher Education*, 1(1), 1–20. DOI:10.5204/intjfyhe.v1i1.13.
- Ndebele, N. (1995). Maintaining domination through language. *Academic Development*, 1(1), 3–5.
- Nzimande, B. (1988). From disadvantage to deinstitutionalisation: Disaggregating liberal universities and some implications for academic support programmes. Paper presented at the ASP Conference, University of Cape Town, December 1988.
- Schlossberg, N. (2006). “Moving In, Moving Through, Moving Out”: Nancy K. Schlossberg’s Transition Theory. *Process of Adult Development* (27), Research paper: Student Development Theorist. Retrieved January 1, 2016, from <http://www.victoriaestrella.com/wp-content/uploads/2008/02/web-site-4.2-schlossberg-transition-theory.pdf>.
- Shange, T.G.C. (2015). Perceptions of Engineering students, lecturers and academic development practitioners about academic development classes at a university of technology. *Journal of Student Affairs in Africa*, 3(2), 33–44. DOI: 10.14426/jsaa.v3i2.134.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *Journal of Higher Education*, 68(6), 599–623.
- Tinto, V. (1998). Taking research on student persistence seriously. *Review of Higher Education*, 21(2), 167–177.
- Tinto, V. (2014). Tinto’s South Africa lectures. *Journal of Student Affairs in Africa*, 2(2), 5–28. DOI: 10.14426/jsaa.v2i2.66
- Vilakazi, H. (1986). The need for a revolution in education. Proceedings of the Aspects 7 ASP Conference, University of Natal, Pietermaritzburg.

RESEARCH ARTICLE

The contours of inequality: The links between socio-economic status of students and other variables at the University of Johannesburg

André van Zyl*

Abstract

The low level of student success in South Africa is an intractable problem, with levels of success differing between the various groups that make up South African society. One of the major constraints influencing student success involves the socio-economic status (SES) of newly entering students. In the South African context, with its very high levels of SES inequality and other social stratifications, a better understanding of issues related to SES would allow them to be addressed in targeted ways that lead to improved student success. This study was conducted at the University of Johannesburg and used data collected between 2010 and 2015. In this study, the SES of students was determined by measuring their self-reported Living Standards Measure (LSM) level. The relationships between the SES level and various socio-demographic variables were then tested using the chi-square test with standardised residuals. The trends that emerged can assist institutions to gain a more nuanced understanding of SES and its impact in the South African context. Three clear clusters emerged each with their own distinguishing attributes and risk profiles.

Keywords

Higher education, inequality, social stratification, transformation, University of Johannesburg, South Africa.

Introduction

Students in South African higher education find it difficult to succeed. South Africa's combination of a low participation rate and a high dropout rate has been called a "low participation, high attrition" system (CHE, 2013, p. 52). Not only are South African students and institutions failing to create a situation in which students have a reasonable chance of success, the net effect of the current situation is that only 5% of African and Coloured young people are succeeding in higher education (CHE, 2013). This state of affairs is worrying and has led to a lot of attention being focused on a variety of issues related to student success and equity of outcomes. The terms Coloured, White, African and Indian in this study refer to self-identified classifications according to nationally used equity criteria.

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Many students who fail are poor and, as Scott, Yeld and Hendry (2007) point out, the concept of student under-preparedness is often used to discount these poor students. This simplistic view is, however, not tenable. Issues such as social capital, schooling and a lack of career guidance are directly related to poverty and are known to play important roles in determining student success. The divided and unequal state of the socio-economic status (SES) distribution in South Africa has a crucial impact and, according to Walton, Bowman and Osman (2015), crystallises in the student protests about funding on many South African campuses. This also leads to a questioning of the concept under-preparedness (CHE, 2013, p. 17) and an acceptance that “a gap can be closed from either side” (from the student/societal or the institutional sides).

Schreiber, Leuscher-Mamashela and Moja (2014, p. vii) point out that the most important modern theorist on student academic persistence (Hausmann, Schofield and Woods, 2007), Vincent Tinto, links pre-entry attributes to student integration. They further identify the whole idea of integration as especially important in a context with “fragmented social structures” and “deepened social cleavages”. Tinto (2014) framed his South African discussions as part of the Quality Enhancement Project by pointing out that there is a performance gap between relatively rich and relatively poor students in the USA and that this gap seems to be growing over time. As Tinto (2014, p. 6) stated during his South African visit: “Providing students access without support is not opportunity. Without support, academic, social, and financial, too many students do not complete their programmes of study. It is my view that once an institution admits a student, it becomes obligated to provide, as best it can, the support needed to translate the opportunity access provides to success”. Walton, Bowman and Osman (2015) found that finance plays an enabling role allowing students admitted to university also to succeed.

The link between the financial resources available to a student and his or her ability to persist has been made by many researchers, including Astin (2005); Berkovitz and O’Quin (2006); Isaak, Graves and Mayers (2006); Kreysa (2006); and Veenstra (2009). In the South African context, the link between SES and student persistence has been confirmed by De Beer (2006); Manik (2014); and Van Zyl, Gravett and De Bruin (2012). Reason (2009) found that SES was the second most powerful predictor of student success (after previous academic performance) in the United States. Poor students often have a combination of factors that puts them at a higher than normal risk of non-completion (Van Rooyen, 2001; Wessel *et al.*, 2006).

Many authors, including Caison (2005) and Kuh *et al.* (2007), have found that poorer students often do not have the necessary skills and support to manage on their own. These students tend to have a variety of complex risk factors present in their background and demographic characteristics (Johnston & MacLeod, 2004; Kuh *et al.*, 2007). McLoughlin (2012) and Williams, Leppel and Waldauer (2005), for example, identify SES as an important factor in student career choice; lower levels of academic preparedness; general academic performance; and ability to complete their studies. Lower-SES students are often first-generation university entrants; have poorer high school education; and have access to very low levels of financial support and other socio-cultural factors (Jones *et al.*, 2008;

Wessel *et al.*, 2006). McLoughlin (2012, pp. 12–13) also suggests that low-SES students experience higher education differently from their richer colleagues. This includes their perceived ability to make friends and “fit in”, their experiencing pressure more acutely, and the fact that they experience pressures to access basic necessities. Such students often also lack the ability to make the necessary social links needed for academic success (Astin, 2005).

Breier (2010) points out that “financial constraints” in some contexts refer to temporary financial problems with which institutions are often able to assist students. As a result, internationally, low SES is often identified as a secondary cause for student early departure and/or dropout. The concept “financial constraints” can, however, often have a very different meaning depending on the context within which it is used. Breier (2010, p. 669) uses the words “deprivation” and “extreme poverty” to indicate the deeper level of financial constraints faced by students in the South African context. When someone is poor in South Africa, it often means they do not have access to many relatively basic life requirements. A lack of finances tends to impede their academic success more acutely and the wide range of serious financial side effects might cause them to drop out at any point during their academic career. Breier (2010) found that “financial constraints” have a greater and a more continuous effect on poorer students in South Africa than on their richer counterparts.

South Africa still suffers from deep economic fragmentation linked to the country’s history, clearly illustrated in one of the highest Gini coefficients in the world (0.63 in 2011 compared to 0.41 in the USA). This deep level of poverty prevalent in South African society is illustrated in the publication *Poverty trends in South Africa* (Statistics South Africa, 2014). In this document, it was reported that 45% of the South African population (approximately 23 million people) were classified as “poor” with 20.2% (10.2 million people) living in “extreme poverty”. Not only is there an exceptionally wide division between rich and poor (as reflected in the Gini coefficient), that division is still strongly delineated according to race (Manik, 2014). This is illustrated by the fact that 54% of black Africans are classified as poor and only 0.8% of Whites are so classified (Statistics South Africa, 2014). According to Breier (2010), these patterns of poverty continue to reflect the country’s racially divided past. This has led Letseka, Breier and Visser (2009, p. 25) to apply the concept of “two nations” living simultaneously in South Africa to the South African context. When students from the very poor SES groups enter university, they often struggle to meet the basic financial requirements of university studies; any unforeseen expenses exacerbate the problems they face.

It is therefore clear that many talented students in South Africa find themselves constrained by finances and, as a result, unable to translate their potential into actual performance. Yorke and Longden (2004) also point out that making progress in the area of student success in a relatively poor country, like South Africa, is a far greater challenge than in richer countries with more resources available to them. This makes it very important to unpack the various socio-economic status levels by looking into their constituents. As Reason (2009) points out, such an understanding would allow institutions the benefit of being able to target interventions at specific sub-groups.

Research method and analysis

To address the above questions in the context of one university in the South African context, this paper presents research conducted using a sample of 21 037 student responses collected using the Student Profile Questionnaire (SPQ) between 2010 and 2015 at the University of Johannesburg (UJ). UJ is a merged institution that came into existence in 2005, with four campuses, each with its own history. The demographic characteristics of the participants in this study closely matched the demographic profile of the institution (South African National Census 2011 data given in brackets; Statistics South Africa, 2012), with 82.1% (79.2%) of the sample being black African; 3.5% (2.5%) Indian; 3.6% (8.9%) Coloured; and 10.8% (8.9%) White. This is broadly representative of the demographic profile of South Africa. A total of 9 011 (42.8%) male students and 12 026 (57.2%) female students took part in this study and the four campuses and nine faculties of the university were proportionally represented in the sample.

Variables

To investigate the relationship between SES and other variables, it was decided to use the Living Standards Measure (LSM) instrument that was developed and refined by the South African Advertising Research Foundation (SAARF) (Martins, 2006). The LSM measure was used as a recognised SES measure to investigate links to other student data obtained from the Student Profile Questionnaire. The original LSM instrument was created in the 1980s; the updated universal Living Standards Measure came into use in, and was refined from, 2001 (Martins, 2006). The LSM subdivides the population into 10 LSM categories, which, for the purpose of this study, have been grouped into five groups. The development and testing of the SPQ is described in Van Zyl (2010) and van Zyl *et al.* (2012). The relationships between 21 socio-demographic and academic variables with the five SES levels created from the LSM scores were investigated. The LSM levels were typified as Low, Medium Low, Medium High, High and Very High. Classification was done based on the LSM level divisions as per the SAARF website (www.saarf.co.za).

Data analysis

Both variables in this study were categorical and, as a result, the chi-square test was selected to investigate the statistical association between them (Agresti & Finlay, 2009). The chi-square test assumes that no relationship between the variables exists and then tests that assumption statistically. The Pearson chi-square value was used (Pallant, 2005) to test if a statistically significant relationship between the two variables existed. While analysing the cross-tabs, a significance level of $p = < 0.05$ was used in selecting significant variables and Cramer's V was calculated to determine the effect size of the variables.

The results obtained from the analyses for the whole group using LSM and selected socio-demographic variables are shown in Table 1.

Table 1: Chi-square results for all variables with LSM level

Variable	χ^2	df	P	Cramer's V
Gender	11.674	4	0.020	0.024
Population group	2 485.712	12	<0.001	0.199
Campus	236.303	12	<0.001	0.063
Did you visit a campus before coming to university?	15.876	4	0.003	0.027
Why are you studying?	49.010	28	0.008	0.024
Which role does your family play in your studies?	54.740	16	<0.001	0.026
How easy will making friends be?	219.359	12	<0.001	0.059
Have you considered changing course?	45.976	8	<0.001	0.033
Self-rated English level	799.421	12	<0.001	0.113
How many books were there in the house in which you grew up?	1 592.084	20	<0.001	0.215
How many books have you read for fun in the past year?	355.544	12	<0.001	0.117
Rate your English teacher's English level	417.644	12	<0.001	0.130
For how many hours did you study at school?	112.952	16	<0.001	0.037
NBT Quantitative Lit. level	436.270	8	<0.001	0.175
NBT Academic Lit. Level	486.653	8	<0.001	0.188
Distance from campus	359.715	16	<0.001	0.065
Where will you stay?	585.630	20	<0.001	0.083
Are you worried about money stopping your studies ?	3 868.258	4	<0.001	0.429
How are you financed?	433.151	16	<0.001	0.072
Which level of education does the parent with the highest level have?	288.936	20	<0.001	0.060
First-generation status	422.394	20	<0.001	0.071

Note: Statistically significant pre-entry attributes on the $p \leq 0.001$ level shown in bold face

Standardised residuals

Chi-square results indicate a statistically significant relationship, but do not indicate where within the variables the relationship resided. By calculating standardised residuals for all instances where a statistically significant chi-square result was found, it was possible to see where in the variables the relationship was located (see Table 2). The general rule for standardised residuals is that an absolute value of 2 or greater (or -2 or less) implied that there is a 95% chance that the variation had been caused by the one variable's influence on the other. Any standardised residual of 3 or more (or -3 or less) moved the level of certainty up to the 99% level (Hinkle *et al.*, 1988). A positive standardised residual indicated that the

observed frequency in that cell was higher than would be expected if no relationship was found. A negative residual indicated that the cell had a lower frequency than would be expected if no relationship existed.

Table 2: Standardised residuals LSM and socio-demographic factors

LSM level	Low	Medium Low	Medium High	High	Very High
Factor					
Population group					
White	-8.1	-14.7	-14.0	-10.3	35.1
Indian		-9.8	-4.8	-4.5	12
Coloured	4.6	-3.8	-4.1		2.0
African	2.1	7.5	6.9	5.0	-15.6
Campus					
Campus 1 (City, degree focus)	-3.3	-3.8			6.9
Campus 2 (City, diploma focus)	3.8				
Campus 3 (Inner city, diploma)		3.3			-3.8
Campus 4 (City/informal)	2.0	4.5	4.9		-8.0
Visit campus					
No					-2.9
Why study?					
Because I really want to				-2.4	2.2
Family role					
Shows some interest, not very involved	3.2			2.0	-3.9
Making friends					
Very tough		-3.5			3.8
Somewhat difficult	3.2	3.9	3.4		-8.5
Very easy	-5.0				6.7
Considered changing course					
No	-2.0				3.1
Yes, but I did not change it					-3.4
Yes, and I changed it to something else	2.3				-2.8
English level					
First language		-9.1	-8.4	-7.3	17.1
Second language		6.7	6.0	5.5	-12.4
Books in house					
None	-11.3	-4.6		3.2	23.6
1	-4.6			2.6	4.9

LSM level	Low	Medium Low	Medium High	High	Very High
2 to 10	-8.4	2.9	5.0	6.1	
11 to 20	3.4				-6.9
21 to 50	8.9		-3.7	-3.9	-7.7
More than 50	14.2	-2.1	-4.7	-8.2	-7.6
Books read					
None	-4.2	-4.0	-2.2		15.2
Fewer than 5					-5.0
Fewer than 10					-4.9
English teacher					
First language	9.9	-3.1	-4.5	-7.9	
Second language (good)	-9.4	3.5	4.9	7.0	
Third language (reasonable)	-4.6			4.4	
Fourth (poor)				2.4	
Previous study habits					
Fewer than 5 hours per week		2.3		-3.8	3.9
Between 15 and 20 hours per week					-2.7
More than 20 hours per week			2.0	2.1	-6.0
NBT Quantitative Lit.					
Basic	4.3	3.8	3.7		-10.8
Intermediate	-2.7				5.9
Proficient	-4.0	-5.1	-4.5		12.6
NBT Academic Lit.					
Basic	5.6	4.3	3.6		-10.8
Proficient	-4.6	-5.3	-6.6		14.4
Distance from campus					
On campus		-2.8			2.6
Within easy walking distance		4.8	4.2	4.2	-9.4
Less than 20 minutes' drive away				-2.4	3.6
Between 20 minutes and one hour's drive		-3.4	-4.8	-2.4	7.7
More than one hour's drive	2.1	2.7	2.0	2.7	-7.3
Place of residence					
At home		-6.4	-6.6	-6.3	12.9
Institutional accommodation	-2.2	2.2	4.1	3.9	-5.1
Private accommodation (students only)		5.8	5.0	3.9	-10.9

LSM level	Low	Medium Low	Medium High	High	Very High
(students and non-students)					-2.0
Not at home but with family or friends					-2.0
Other	-2.0			3.5	
Worried about money					
Yes	27.0			-5.3	-19.9
No	-41.3	2.7		8.2	30.5
Financial options					
Parents will pay		-5.0	-4.9	-4.8	10.1
Loan		4.6	5.4	4.9	-10.9
Bursary	-4.2	3.8	3.7		-2.4
Combination of answers	2.0				
Parental qualifications					
Some schooling (not Grade 12)			3.1	2.0	-2.5
Completed Grade 12	-3.0	2.5	2.5	2.2	-2.2
Fewer than three years of study after Grade 12					-2.4
A three-year qualification	4.0				-3.2
More than tree years of study after Grade 12		-5.6	-6.4	-2.1	9.6
First-generation status					
First in family			2.0		-3.0
Both parents to university		-2.5	-3.3		3.5
Parents not but a brother or sister		5.9	4.1		-8.2
Many members of family attended		-6.3	-6.4	-2.6	10.8

Discussion

The results above contain a variety of interesting trends. Some confirm findings in other studies and others (especially amongst the Low SES [LSES] and the Very High SES [VHSES] groups) seem anomalous and require further investigation. Using the standardised residuals to identify the details of the location of statistically significant relationships, three main groups emerged from the results above: The Low SES group displayed a number of distinguishing attributes (Group 1); the Medium Low SES (MLSES), Medium High SES (MHSES), and High SES (HSES) groups have a lot in common (Group 2); and, the VHSES group emerges as distinct in some ways (Group 3).

As was found by Manik (2014, p. 159), and confirmed in Groups 1 and 2 (as discussed below), the various types of “deprivations” suffered by poor students were not mutually exclusive and, as a matter of fact, tended to overlap. In the case of Group 3, the various types

of advantage were also found to overlap. The findings also support the position of Visser and Van Zyl (2013) with regard to the linking of population groups to relative advantage and/or disadvantage in the South African context. Moreover, the findings support Kuh *et al.* (2007), who found a statistically significant link between the finance methods students use and academic performance.

The three groups that emerged from the analyses were, then, as follows:

Group 1: Low-SES students

The LSES group consisted mostly of African students who tended to congregate on specific campuses of the University of Johannesburg. This group of students used a combination of funding sources and in many cases they had to try any means they could to access the required funds. As a result, this group tended to be worried that a lack of funding would stop them from completing their studies. Such students were also less likely to be able to access relatively costly institutional accommodation; as a result, they often had to travel for more than one hour to get to campus. On a social level, these students tended not to have a lot of parental support, confirming Modipane's (2011) notion that relative socio-economic status was linked with the likelihood that parents would support their children towards academic success. Group 1 students also expected it to be difficult to make friends in the new environment. Many of these students had to change their intended course of study at a late stage – indicating that they are likely not to be enrolled for their first-choice course. These students were also the most poorly prepared group academically, being more likely to have an academic literacies (AL) and quantitative literacy (QL) National Benchmark Test (NBT) score in the basic band (and less likely to be in the proficient band).

It is clear that students in this group have many risk factors and seemingly insurmountable obstacles in their way, but they still manage to gain entrance to university. The seemingly anomalous findings of this paper might give an indication of some of the enabling factors that allow students to make this heroic leap. These factors include that such students come from homes with many books, which is likely to indicate a reading culture and a value placed on education. These students were also likely to have read a number of books during the previous year and their parents seem to have tried to access further education. Another enabling factor seemed to be that Group 1 students had been taught English by someone who, in their perception, is an English first-language speaker. In summary, a literacy culture and value of education at home and a good English foundation seem to be enablers to get these very poor students into higher education.

Group 2: Medium-low, Medium-high and High-SES students

The second group consists of students from the MLSES, MHSES and HSES groups. This “middle group” has a lot in common and tended to show very similar patterns. This group consisted mostly of African students who tended to be distributed more evenly (less so for MLSES) amongst the four campuses of the university. Socially, they expected some difficulty in making friends, but they did not have a propensity to change their course at a

late stage. This group tended to come from homes with a moderate number of books and they were likely to have read at least a few books in the previous year. Students were likely to report that English was not their first language and that the main person who taught them English was not an English first-language speaker. These students also tend to report that they worked relatively hard at school, but they tended to be more likely to be in the basic band (and less likely to be in the proficient band) for both the NBT AL and QL tests. These students tended either to stay in institutional accommodation or in communes relatively close to campus; they were less likely to stay at home. This meant that students in this group tended either to be able to walk to campus or had to travel for more than one hour to get to campus. Students tended to be less worried about money and they either used a bursary or a loan to fund their studies. It is likely that many of these students qualified for, and were able to access, National Student Financial Aid Scheme (NSFAS) loans. The parental education of students in Group 2 tended to be up to Grade 12 level, with few students having parents with more than a three-year qualification after school – as a result, these students also tended to be first-generation university entrants.

Group 3: Very-high-SES students

The last group were from the VHSES group and tended to represent the privileged minority. They were less likely to be African and were unevenly distributed amongst the institutional campuses. Students in Group 3 tended to report that they wanted to study, but contrary to the findings of Modipane (2011), their parents were not very involved in their studies. Socially, students either expected it to be very easy or very difficult to make friends, and they were not likely to have considered changing course. These students were much more likely to be English first-language speakers, and they tended to be more likely to score in the proficient NBT bands. Group 3 students tended to stay at home or on campus and have a moderate (less than one hour) commute to get to class. On the financial front, students tended not to be worried about money, and their main funding source was their parents (they were less likely to use a loan or a bursary). These students also tended to come from homes where higher education was something normal and where many members of their family had gone before them.

The analyses of the VHSES group also contained some seemingly anomalous findings, which put their seemingly strong position to succeed in higher education (explained above) at risk. More so than expected, VHSES students reported having no or one book in the house where they grew up and fewer than expected reported that they had more than 10 books (all categories). More students than expected in this group reported not having read any books for fun in the previous year, and fewer than expected reported having read 10 or fewer books. More students than expected in this group reported having studied for fewer than five hours a week at school and fewer than expected reported studying for 15 or more hours a week. These results seem to suggest that the advantaged background of VHSES students allows them easier access to higher education, but at the same time their poor literacy and study habits put them at risk of finding the transition into higher education particularly difficult.

Conclusion

Although it is difficult for institutions to address the financial problems that students experience directly, detailed early advice may be one possible strategy to lessen the impact of a lack of financial resources on student success. Students who anticipate the financial struggles they could encounter before they arrive are a lot more likely to persist when compared with those who are surprised by this challenge (Hawley & Harris, 2005, p. 133).

Although it is a well-known fact that SES in South Africa is unequally divided and still strongly delineated along racial lines, these conclusions in themselves can often obscure the truth about the challenges that students from different SES groups face. It is clear that both poverty (and its effects) and wealth (and its effects) create very high levels of inequality in an entering cohort, as well as in their experiences of higher education.

From these findings, it becomes clear that each of the broad SES groups brings its own strengths and weaknesses to the higher education endeavour. Students from the very low SES band come with many obstacles, but they also have unexpected strengths (such as literacy-friendly home and school environments). These students are most likely to drop out because of financial reasons and they seem to have less access to NSFAS than groups that are slightly higher on the SES ladder. Students in the middle group tend to be less worried about money and able to access external funding, but they seem to be less well prepared from social background, schooling and academic perspectives. Students in the VHSES group, on the other hand, seem to bring potential strengths, but their academic and literacy habits as well as parental support and commitment seem to be lacking.

These different descriptions – drawn from the University of Johannesburg – clearly show why a one-size-fits-all approach to student support and development will not work. This also holds important implications for many other South African institutions, as their student populations are increasingly representative of the country's population. As is the case with regards to many other attributes, students from different SES levels clearly have different needs, and institutions of higher learning should customise their interventions to the identified needs of these groups.

References

- Agresti, A., & Finlay, B. (2009). *Statistical Methods in the Social Sciences*. (4th ed.). New Jersey, USA: Pearson International Edition.
- Astin, A. (2005). Making sense out of degree completion rates. *Journal of College Student Retention*, 7(1–2), pp. 5–17.
- Berkovitz, R.A. & O'Quin, K. (2006). Predictors of graduation of readmitted “at-risk” college students. *Journal of College Student Retention*, 8(2), 199–214.
- Braunstein, A.W., Lesser, M. & Pescatrice, D.R. (2008). The impact of a program for the disadvantaged on student retention. *College Student Journal*, 42(1), 36–40.
- Breier, M. (2010). From “financial considerations” to “poverty”: Towards a reconceptualization of the role of finances in higher education student drop-out. *Higher Education*, 60, 657–670.
- Caison, A.L. (2005). Determinants of systemic retention: Implications for improving retention practice in higher education. *Journal of College Student Retention*, 6(4), 425–441.

- Council on Higher Education (CHE) (2013). *A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure*. CHE publication: Pretoria.
- De Beer, K.J. (2006). Open access, retention and throughput at Central University of Technology. *South African Journal of Higher Education*, 20(1), 33–47.
- Hawley, T.H. & Harris, T.A. (2005). Student characteristics related to persistence for first year community college students. *Journal of College Student Retention*, 7(1–2), 117–142.
- Hausmann, L.R.M., Schofield, J.W. & Woods, R.L. (2007). Sense of belonging as a predictor of intentions to persist among African American and white first year college students. *Research in Higher Education*, 48(7), 803–839.
- Hinkle, D.E., Wiersma, W. & Jurs, S.G. (1988). *Applied Statistics for the Behavioural Sciences*. Boston: Houghton Mifflin.
- Isaak, M.I., Graves, K.M. & Mayers, B.O. (2006). Academic, motivational and emotional problems identified by college students in academic jeopardy. *Journal of College Student Retention*, 8(2), 171–183.
- Jones, B., Coetzee, G., Bailey, T. & Wickham, S. (2008). *Factors that facilitate success for disadvantaged higher education students: An investigation into approaches used by REAP, NSFAS and selected higher education institutions (Executive summary)*. Athlone, SA: Rural Education Access Programme.
- Johnston, V. & MacLeod, L. (2004). *Using a research-led approach to informing retention strategies for students from low income and lower socio-economic groups*. Internal Napier University publication. Retrieved 16 June 2007 from www.napier.ac.uk/qes/studentretentionproject/SRPhome.asp.
- Kreysa, P.G. (2006). The impact of remediation on persistence of under-prepared college students. *Journal of College Student Retention*, 8(2), 251–270.
- Kuh, G.D., Kinzie, J., Buckley, J.A., Bridges, B.K. & Hayek, J.C. (2007). *Piecing together the student success puzzle: Research propositions, and recommendations*. Association for the Study of Higher Education (ASHE) Report, 32(5), 200 pp.
- Letseka, M., Breier, M. & Visser, M. (2009). Poverty, race and student achievement in seven higher education institutions. In: M. Letseka, M. Cosser, M. Breier & M. Visser (Eds), *Student Retention and Graduate Destination: Higher Education and Labour Market Access and Success*, pp. 25–40. Cape Town: HSRC Press.
- Manik, S. (2014). Shifting the discourse: Student departure in the context of relative deprivations. *South African Journal of Higher Education*, 28(1), 148–163.
- Martins, J.H. (2006). Household cash expenditure by living standards group. *Journal of Family Ecology and Consumer Sciences*, 34, 1–9.
- McLoughlin, II, P.J. (2012). The transition experiences of high-achieving, low-income undergraduates in an elite college environment. *Journal of the First-Year Experience & Students in Transition*, 24(2), 9–32.
- Modipane, M.C. (2011). Initial experiences of first entering students at the University of Limpopo: Implications for coping with academic work/studies. *South African Journal of Higher Education*, 25(8), 1592–1607.
- Pallant, J. (2005). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS Version 12*. Maidenhead, UK: Open University Press.
- Reason, R.D. (2009). An examination of persistence research through the lens of a comprehensive conceptual framework. *Journal of College Student Development*, 50(6), pp. 659–682.
- Schreiber, B., Leuscher-Mamashela, T. & Moja, V. (2014). Tinto in South Africa: Student integration, persistence and success, and the role of student affairs. *Journal of Student Affairs in Africa*, 2(2), i–v.

- Scott, I., Yeld, N. & Hendry, J. (2007). A case for improving teaching and learning in South African higher education. *Higher Education Monitor*, 6, 1–86.
- Statistics South Africa. (2012). Statistical release (Revised): Census 2011. Retrieved 15 September 2015 from www.statssa.gov.za/publications/P03014/P030142011.pdf.
- Statistics South Africa. (2014). Poverty trends in South Africa: An examination of absolute poverty between 2006 and 2011. Retrieved 15 September 2015 from <http://beta2.statssa.gov.za/publications/Report-03-10-06/Report-03-10-06March2014.pdf>.
- Tinto, V. (2014). Tinto's South African lectures. *Journal of Student Affairs in Africa*, 2(2), 5–26.
- Van Rooyen, E. (2001). Die voorspelling van die akademiese prestasie van studente in 'n universiteitsoorbruggingsprogram. *South African Journal of Higher Education*, 15(1), 180–189.
- Van Zyl, A. (2010). The predictive value of pre-entry attributes for student academic performance in the South African context. Unpublished doctoral dissertation, University of Johannesburg, South Africa.
- Van Zyl, A., Gravett, S. & De Bruin, G.P. (2012). To what extent do pre-entry attributes predict first year student academic performance in the South African context? *South African Journal of Higher Education*, 26(5), 1095–1111.
- Veenstra, C.P. (2009). A strategy for improving freshman college retention. *The Journal of Quality and Participation*, January, 19–23.
- Visser, H. & Van Zyl, D. (2013). Assessment of academic readiness to achieve student success and retention. *South African Journal of Higher Education*, 27(2), 330–352.
- Walton, E., Bowman, B. & Osman, R. (2015). Promoting access to higher education in an unequal society. *South African Journal of Higher Education*, 29(1), 262–269.
- Wessel, R.D., Bell, C.L., McPherson, J.D., Costello, M.T. & Jones, J.A. (2006). Academic disqualification and persistence to graduation by financial aid category and academic ability. *Journal of College Student Retention*, 8(2), 185–198.
- Williams, M.L., Leppel, K. & Waldauer, C. (2005). Socioeconomic status and college major: A re-examination of the empirical evidence. *Journal of The First Year Experience*, 17(2), 49–72.
- Yorke, M. & Longden, B. (Eds). (2004). *Retention and Student Success in Higher Education*. Maidenhead, UK: The Society for Research into Higher Education, Open University Press.

RESEARCH ARTICLE

The case for an integrated approach to transition programmes at South Africa's higher education institutions

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Abstract

This paper advocates an integrated approach to transition programmes at South Africa's higher education institutions through drawing on the US literature on the first-year student experience and specific reference to behavioural interaction theory. The case for developing intentional and vertically integrated transition programmes is tied to: the need to understand the desired behaviours and learning outcomes at each stage of a student's experience; an appreciation of the cognitive, psychosocial and identity development at different years of study; and a recognition of environmental influences and how they relate to, and can be adapted to, changing student characteristics and needs. Particular reference is made to Chickering and Reisser's seven vectors of identity development, Baxter Magolda's work on young adults' journey toward self-authorship, and Bronfenbrenner's developmental ecology model. It is concluded that an intentional, vertical integration of transition programmes requires horizontal alignment between objectives (desired behaviour), the developmental needs of students, and educational environments. In this regard, a number of recommendations for higher education instructional and support staff are proposed.

Keywords

Higher education, transition programmes, first-year student experience, behavioural interaction theory, United States, South Africa.

Introduction

Tertiary education in South Africa has been characterised as a “low-participation, high attrition system” (Fisher & Scott, 2011, p. 1). Overall, only 17% of the 20–24-year-old population are enrolled in institutions of higher education (National Planning Commission, 2011). Moreover, large numbers of students who enter the academy leave. Estimates suggest that as high as 55% of the students who enrol in university will never graduate (Council on Higher Education [CHE], 2013). A report from the South African Council on Higher Education notes, “high attrition and low graduation rates have largely neutralized important

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gains in access” (CHE, 2013, p. 9). The national completion rate of 30% suggests that only 5% of young South Africans are effectively being served by the higher education system.

This problem hits historically underrepresented population groups particularly hard. While gains have been made in the past 20 years in terms of increasing access for students from these groups, there are still inequities in the current system. Participation rates for African and Coloured students are at 14% and 15% respectively (CHE, 2012). This is coupled with comparatively low rates of completion of qualifications (CHE, 2013). While the participation rate for Indian students (46%) is slightly lower but comparable to that of Whites (57%), their course completion rate in regulation time is more comparable to African and Coloured students (CHE, 2013).

The issue of “throughput” – or students’ successful entrance into, persistence in, and completion of – qualifications, has risen to the forefront of the national conversation on post-secondary education in South Africa. The national economy has become increasingly dependent on jobs that require rising amounts of training and education. Moreover, the number of jobs in the economy is outpacing the number of diploma and degree recipients. Educational policy, such as that outlined in the National Development Plan White and Green Papers on Post-school Education and Training (DHET, 2012; 2013) have focused on supporting the public universities and Technical Vocational Education and Training (TVET) colleges to meet the nation’s economic needs.

In addition, students themselves have an interest in completing their higher education in a minimal amount of time. Quicker time to degree or diploma completion translates to less money spent on tuition and other associated costs of attendance. Such increases in the time to degree can translate to debt and further financial drain on the student’s family. Aside from the monetary outlay required for ongoing enrolment, delayed entry into the job market can mean deferring earnings that would otherwise be gained from full-time employment at a higher salary. The longer a student stays in a college or university without completing the programme, the more likely it is that he or she will leave the educational system without a qualification, suggesting that motivation wanes as time extends. Moreover, if young members of a community see that their peers are consistently dealing with failure in the current system, they may shy away from seeking higher education, keeping participation levels low.

As figures presented earlier suggest, students at higher risk of attrition are those from historically underrepresented population groups in both higher education as well as the economy. This “revolving door” problem can compound social and economic problems among these groups; in effect, education becomes a mechanism for maintaining the status quo rather than a tool for its disruption. The high cost to students and their families with low chances of success can be a drain on the individual, the family, the community and the country.

Supporting Student Success

Issues concerning throughput are manifest throughout the undergraduate curriculum. The first year is a point in the educational pipeline at which students are particularly vulnerable.

In contact institutions, nearly a quarter of all students leave after the first year (CHE, 2013). In fact, one-half to two-thirds of all attrition in higher education occurs between the first and second year. Moreover, the remaining amount of attrition that occurs after the second year is not trivial. While estimates of the student departure between years two and three are not available, it is likely the period in which the second largest group of students leave their studies. Conversely, a substantial proportion of students remain in institutions for five years or longer. The CHE (2013) reported that 14% of the year 2000 cohort was still registered after five years.

The discussion of simply admitting and graduating students without attention to the quality of the educational experience is incomplete. Student success at university goes beyond simple completion of the requisite number of modules in their prescribed sequence. In fact, many stumbling blocks to successful completion of coursework are not directly related to academic skills. Furthermore, students need to develop as whole individuals for life beyond the university, learning how to become engaged citizens, responsible leaders and thoughtful employees. This suggests that any discussion of student success must include issues related to the co-curriculum, where many of these skills are developed.

To provide adequate curricular and co-curricular support, educators have developed initiatives with an aim to support students during key transition points in higher education, namely entry, the first year, the “senior years” and graduation. These initiatives are of relatively recent vintage in South Africa. As such, documentation of and research on these programmes is relatively sparse; however, there is evidence that they have become fairly widespread. To help facilitate the entry into higher education, universities and colleges have developed initiatives including pre-term orientation, bridging programmes and extended curriculum (Jones *et al.*, 2008; Lewin and Mawoyo, 2014). Once students arrive on campus, it is possible they are met with one or more offerings aimed at easing the challenges of the transition to university, such as: credit-bearing first-year seminars, programmes developing academic and personal skills, or workshops designed to foster information literacy development (Jones *et al.*, 2008; Lewin & Mawoyo, 2014; Scott, 2012). Some institutions, such as Stellenbosch University, have developed an institution-wide approach to orientation and the first-year experience that extends well beyond the first few weeks of the semester (Botha & Van Schalkwyk, 2009). Institutional attention to the first-year transition has given rise to two national conferences on the topic, one hosted by Stellenbosch University in 2008 and one sponsored by the newly established South African National Resource Centre for the First-Year Experience and Students in Transition in 2015.

The support of senior students and students preparing for graduation comes through other academic support offices (Lewin & Mawoyo, 2014). This typically occurs in situations where students engage with units focused on providing services related to writing and language support, academic advising and career development. These services are frequently administered under the banner of an academic development department on campus. While these services might not carry the title of “transition programmes” *per se*, they play a critical role in the ongoing support of students as they progress through the educational pipeline.

Statement of the problem

Transition programmes have historically been specialised (having a narrow focus on providing a particular service), localised (residing within a particular faculty or functional area or office), and aimed at a particular group of students (those in a particular programme of study, academically underprepared). Furthermore, they are usually temporally bound, such as a first-year seminar. Often, students are passed from one transition programme to the next like a baton in a relay race (Keup, 2015). Stated candidly, functions of student success offices remain in silos; where coordination exists, it is haphazard and incoherent. Speaking of first-year programmes specifically, Scott (2012) identified this problem and suggested that initiatives should be Janus-faced, looking forward and backward simultaneously; first-year programmes, like all other programmes supporting students in transition, should be a special but not discrete part of the educational process. Greenfield, Keup and Gardner (2013) emphasise that success is more likely when we take our focus from individual “star” programmes and create an integrated constellation of student success programmes.

Integrated transition programmes

But what does it mean to have an “integrated” approach to student transition programmes? Barefoot *et al.* (2005) set out to document the foundations of excellence in first-year and other transition programmes in institutions of higher education in the United States (US). In that investigation, they described that intentionality, integration and comprehensiveness are criteria for excellence *within* a specific programme, intervention, or time in university (e.g. the first-year experience), yet very little attention was paid to coherence *across* these efforts (Barefoot *et al.*, 2005). Other studies of transition programmes in South Africa and the US have characterised connections between efforts as primarily administrative or transactional rather than based on meaningful connections, coherence and interdisciplinarity (Ogude, Kilfoil & Du Plessis, 2012; Padgett and Keup, 2011; Young and Hopp, 2014).

Vertical integration of transition programmes – that is, integration across the undergraduate experience from beginning to end – is related to curricular sequencing and scaffolding (CHE, 2013). Vertically integrated programmes have coherence between initiatives, support campus-wide learning standards, and attend to student developmental and educational progression. Moreover, the “vertical” aspect of the integration suggests that not only are students’ needs attended to and supported at each step along the path, but that each experience is coordinated so that the experience that precedes dovetails into the one that follows. An integrated approach to support structures, curriculum and pedagogy would improve the effectiveness of the delivery of student support services, generate efficiencies and economies of scale at the institutional level, and create a more engaging and satisfying educational environment for students.

In what follows, the paper presents a theoretical case for the need to create vertically integrated programmes. After the theoretical case is made, discussion turns to the practical and research implications of this proposal.

The theoretical case

The theoretical perspective for vertically integrating transition programmes advanced here is based on Lewin's behavioural interaction theory, first published in 1936. Lewin proposed an understanding of an individual's behaviour based on a formula taken from the conventions of mathematics: $B = f(P, E)$. In this pseudo-mathematical formula, B refers to the individual's behaviour. P signifies the individual personal characteristics, such as cognitive and psycho-social states, as well as other characteristics and attitudes. Finally, E refers to the environment. The environment includes physical, social, organisational and psychic sources of influence on individuals (Strange & Banning, 2001).

Kolb (1984) extended this idea to include learning-as-behaviour. In other words, learning involves a transaction between the student's personal characteristics and the educational environment. This frame of reference allows the educator to recognise that learning outcomes can improve when the educational environment is optimised for the students who engage with it. An apt practical example of how the interactionist perspective can be operationalised is related to making decisions about how to improve institution-wide student outcomes. Educators attempting to improve student success markers such as persistence or completion rates (a proxy for student behaviours) are faced with a choice: to admit only the students who match the environment, the students for whom the system is already structured, whose success is all but assured; or to take the opportunity to find ways to recalibrate educational environments to unlock the potential in whichever groups of students enter institutions of higher education. In the former option, educators are manipulating the P in the formula by selecting a particular blend of personal characteristics in their students; in the latter, educators are adjusting the environments, E, to have an impact on the outcomes.

Furthermore, the interactionist perspective, as framed as a mathematical equation, suggests that to achieve particular behaviours over time, the person and environment must interact and adapt in ways responsive to each other. Lewin (1943) further expanded his formula to indicate that timing plays a critical role in individual behaviour: $B^t = f(S^t)$. In other words, behaviour at a given point in time, or B^t , is a function of a person's situation (which includes both personal and environmental factors) at that point in time, S^t . Moreover, as students progress through university, they grow in their knowledge and capability and their priorities are different at different stages of their development. Further, the desired learning outcomes change as students progress through their undergraduate careers.

Therefore, the behavioural interactionist perspective conveys three key insights to which higher education professionals must attend to develop intentional and vertically integrated transition programmes: (a) an understanding of the desired behaviours and learning outcomes at each stage of an undergraduate's experience; (b) an understanding of the characteristics of students, including how cognitive, psychosocial and identity development of students progresses throughout university years; and (c) an understanding of environmental influences and how they may be structured to be adaptive to changing

student characteristics and needs. What follows are theoretical and practice-based perspectives on each of these three conditions. As a full treatment of all theoretical and practical perspectives related to the constituent pieces of how interactionist theory informs vertical integration would be impractical, a selection will be presented to illustrate how each changes over time to set up a discussion of how they can inform the development of vertically integrated student success programmes.

Many of the perspectives discussed below have been developed based on university students in the US. There are certain to be nuanced differences in the applied particulars of these perspectives used to make the case; however, while differences exist, the underlying conceptual framework is transferrable across international and cultural boundaries. Thus, the connections presented herein are intended to be illustrative rather than prescriptive.

Behaviour

To describe the desired outcomes and behaviours of students at different points in their educational careers, the work of the National Resource Center for The First-Year Experience and Students in Transition in the US is instructive. The National Resource Center conducts national surveys on student transition programmes in higher education as its primary research activity, dating back to 1988. The studies conducted ask respondents from colleges and universities in the US to identify the objectives for the initiatives designed to support student transition and success in the first, second and final years in university.

Respondents to the most recent survey of first-year seminars identified the top objectives for the course (or module). The three most frequently identified objectives for students in the first-year seminar were to: (a) develop a connection with the institution; (b) develop knowledge of campus resources and services; and, (c) develop academic skills (Young & Hopp, 2014). Lewin and Mawoyo (2014) referred to similar aims of first-year experience initiatives within academic development departments in South African universities. These are aligned with the oft-stated goals of first-year experience programmes to facilitate students' academic and social adjustment to university (Lewin & Mawoyo, 2014; Ogude, Kilfoil & Du Plessis, 2012; Upcraft, Gardner & Barefoot, 2005).

Studies of institutional attention to the second year of university by the National Resource Center have similarly asked respondents to name the key objectives for students in year two. The most frequently designated objectives for second-year students were: (a) career exploration; (b) career preparation; (c) academic assistance; and (d) academic programme selection (Young, Schreiner & McIntosh, 2015). Other important outcomes for the second-year student include academic self-efficacy, motivation, values and deeper academic engagement (Schaller, 2010).

The student's final year of university is an important transition point in the higher education pipeline. Students in this stage are making preparations to exit the undergraduate phase of their lives and will enter the workforce or continue on in postgraduate or professional education (Hunter *et al.*, 2012). When institutions were asked by the National Resource Center in the US to identify the desired objectives of final-year capstone experiences, the most frequent responses were: (a) critical thinking or analytical,

problem-solving skills; (b) professional and career development; (c) proficiency in written communication; and (d) the ability to conduct research (Padgett and Kilgo, 2012).

Person

A robust opus of theoretical descriptions of human development during university studies has been developed over the past half century. While these theories differ in terms of philosophy, aspect of the person under consideration, or population group, one conclusion remains consistent throughout: late adolescence is an important developmental period for the majority of people (Evans *et al.*, 2010; McEwen, 2003). Key features of student development theory include not only the interpersonal and intrapersonal changes a student is undergoing in university, but the factors that lead to this development, the development towards which the university experience should be directed, and the aspects of the college environment that can encourage or inhibit growth (Knefelcamp, Widick & Parker, 1978).

Two useful theories for understanding how students are developing and that point to how environments can be constructed to support student success during key periods of university study include Chickering and Reisser's (1993) seven vectors of identity development and Baxter Magolda's (1999; 2001) description of young adults' journey toward self-authorship. A brief overview of each theory follows, along with a description of how the theories might manifest throughout the first, second and final years of university.

Identity development

Chickering and Reisser's theory of psychosocial identity development is cited as perhaps the best known and most widely referenced student development theory (Skipper, 2005). The theory, originally developed by Chickering in 1969 and revised by Chickering and Reisser in 1993 (Evans *et al.*, 2010; Skipper, 2005) describes seven vectors representing developmental tasks university students undertake as they develop their individual identities. Students will encounter these tasks to varying degrees over time and may not complete them in exactly the presented order. However, the seven vectors suggest a progression, where each subsequent vector represents greater complexity, stability and integration (Evans *et al.*, 2010). The seven vectors are: (1) developing competence; (2) managing emotion; (3) moving through autonomy towards interdependence; (4) developing mature interpersonal relationships; (5) establishing identity; (6) developing purpose; and (7) developing integrity.

Chickering and Reisser (1993) suggest that students are likely to encounter certain developmental challenges earlier in their progression than others, to wit the first four vectors. For example, the first year is widely thought of as an exciting time of new discoveries, freedoms in thought and behaviours, and growth in self-confidence. However, as Scott (2012) points out, the reality for many students is that the first year is pocked with experiences of failure, lost confidence and disillusionment. New students have entered a novel social milieu, meeting unfamiliar peers and instructors. Thus, they may face emotions such as excitement, fear or depression. Emotion and interpersonal relationships intertwine as they explore their newfound freedom to follow romantic pursuits.

As well-constructed curricular and co-curricular experiences help students to move along these vectors, students commence work on development related to the latter three. Studies on the second year of university have described the time as one in which students begin to reflect on their experiences and explore how they fit into university life and the world at large (Schaller, 2010). Second-year students have developed enough competency, self-awareness and confidence to begin grappling with larger questions such as the purpose of their education and what meaning their life might have (Margolis, 1989; Schaller, 2005; 2010). In the best cases, this eventually leads to commitments related to academics, relationships, and self (Schaller, 2010). Students begin to establish an identity, gain greater clarity about their purpose, and begin to solidify coherent commitments (Chickering & Reisser, 1993).

By the final year of university, students have begun to cultivate strengths in each of the seven vectors. Students have developed intellectual, physical and interpersonal competence; gained an awareness of emotions and the ability to pair them with responsible action; moved from emotional dependence to interdependence free from the need for continual reassurance; and fostered the capacity for enduring and healthy relationships (Chickering & Reisser, 1993). Moreover, these students are about to leave university having matured a clearer sense of who they are as individuals, marked by heightened self-acceptance and self-esteem, increased clarity of personal and professional goals, and deepened clarification and congruence of values and actions.

Self-authorship

As the result of more than 20 years of interviews of individuals in university and in their lives afterwards (Evans *et al.*, 2010), Baxter Magolda developed a theoretical model to describe the intellectual development of students' meaning-making frameworks. The theory describes dimensions of development that are characterised by three major questions that young adults face: (1) the intrapersonal *who am I?* (2) the interpersonal *what relationships do I want with others?* and (3) the epistemological *how do I know what I know?* (Baxter Magolda, 2001). Baxter Magolda describes a developmental framework where students, early in their university studies, "adopt what to believe, how to view themselves, and how to act in relationships from external authorities without carefully examining their own thoughts and feelings" (Baxter Magolda *et al.*, 2012, p. 418). The demands of the stated outcomes of higher education and life beyond university require adults to develop self-authorship: the internal capacity to author one's views, identity and relationships (Baxter Magolda, 2001; Baxter Magolda *et al.*, 2012).

Students arrive at university with a strong reliance on external authorities (Baxter Magolda *et al.*, 2012). First-year students frequently reach to external sources of authority in the classroom, where learning is characterised by memorisation and uncritical acceptance of the perspectives of others. Rather than engaging in critical thought by expanding and judging perspectives, students gravitate toward and imitate their instructors' points of view. Baxter Magolda has termed this phase of the journey toward self-authorship "following formulas" and students often frame these formulas as if they are their own (Baxter Magolda,

2001; Evans *et al.*, 2010). Baxter Magolda *et al.* (2012) found that nearly all (96%) students in a sample of 228 were predominantly reliant on external sources of authority; 86% were characterised as “externally defined” (p. 424).

However, the second year is an important moment along the path to self-authorship. Students begin to recognise the shortcomings of their reliance on external sources of authority, to become aware of the need to develop an internal voice, and to work towards constructing new ways of making meaning. The period in which students find themselves between external and internal roots of authority is characterised as a “crossroads” (Baxter Magolda, 2001; Baxter Magolda *et al.*, 2012). Studies have demonstrated that as second-year students recognise the shortcomings of their previous ways of knowing, defining their sense of self, and their relationships, they seek ways to redefine them on their own terms (Baxter Magolda *et al.*, 2012; Schaller, 2010; Schreiner *et al.*, 2012). Specifically, Baxter Magolda *et al.* (2012) found that 63% of second-year students demonstrated development exhibiting more complex meaning-making and less reliance on external authority than in their first year.

Baxter Magolda’s self-authorship theory is especially useful for understanding how students might develop their internal meaning-making frameworks during their time at the university in ways that will ultimately serve them as they engage in relationships, learning, employment and other activities as young adults post-graduation. In the final year of university, students’ journey to self-authorship will progress as they “become the author of [their] life”, marked by choosing their own beliefs and becoming owners of their knowledge, determining their own values and identity, and engaging in relationships in which they can remain true to themselves and develop reciprocal attention to needs (Baxter Magolda, 2001). However, in the initial study where the theory was developed, the students were only anticipating self-authorship upon graduation. It was found that graduates “left [university] with an initial awareness that they would have to make their own decisions, but without internal mechanisms to do so” (Baxter Magolda, 2001, p. 36).

Environment

The importance of creating educationally purposeful environments has been discussed widely for at least the past century. As Dewey (1933) states, “whether we permit chance environments to do the [educating], or whether we design environments for the purpose makes a great difference” (p. 22). Environments, as stated earlier, are important levers in the student success equation, particularly as wider access to higher education has become more important and the characteristics of students have become more diverse.

Bronfenbrenner (1993) proposed an ecological model of human development based on Lewin’s model of person–environment interaction. The strength of Bronfenbrenner’s developmental ecology model is its ability to describe the importance of the interactions between the person and the environment and to understand how the interaction influences outcomes (Evans *et al.*, 2010). The model focuses on the interaction between four components of human ecology: person, process, context and time (Bronfenbrenner, 1993). As the discussion presented herein is focused on a framework for educational environments,

the components of context and time are the most germane to this framework and will thus constitute the bulk of the discussion. It is worth presenting the components of person and process briefly to illustrate how person and environment interact within this ecological model.

One of the chief pillars upon which Bronfenbrenner's (1993) model rests is the extension of Lewin's behavioural interaction perspective to state that development is an ongoing result of the interaction of the person and the environment (Evans *et al.*, 2010). From this, Bronfenbrenner described two key mechanisms that have the most influence on this interaction. First, the personal characteristics with the greatest influence on personal development are those that strengthen or diminish dispositions toward the immediate environment. These characteristics include those attributes that elicit responses from the environment, the manner in which individuals react to the environment, the differences in how people engage or persist in activities of increasing complexity, and the way in which individuals perceive their agency relative to the environment (Renn & Arnold, 2003). Second, "proximal processes", or the forms of interaction between the person and the environment that are closest to the individual, are the primary sources of developmental influence (Evans *et al.*, 2010). Proximal processes should be encountered at progressive and developmentally appropriate times to achieve optimal development and so as not to be too complex and overwhelming.

Context is the aspect of the model that receives the most attention and forms the framework for the conceptualisation of the environment. Bronfenbrenner (1993) described the environment as four nested levels of context, surrounding the person at the centre: (1) microsystem, (2) mesosystem, (3) exosystem, and (4) macrosystem. The *microsystem* is characterised as the physical, social or constructed features of the immediate environment. Interactions with roommates, friendship groups, work settings, athletics teams, families and relationships with instructional staff all constitute common microsystems of the university student's environment (Renn & Arnold, 2003). Educators create structures to facilitate and ensure students' engagement with these microsystems, for example by teaching in classrooms, setting up office hours for instructor–student interaction, and offering peer mentoring to students.

The *mesosystem* refers to the processes taking place between two or more settings containing the developing person (Bronfenbrenner, 1993). In other words, a mesosystem is an interaction between microsystems. For example, a mesosystem occurs when a roommate relationship influences the way in which the student and a classroom environment interact. Other mesosystems are formed when students' family situations interact with their educational environs. Examples of educational environments that have been designed to facilitate high-impact student success by creating mesosystems include linked courses, residential living–learning communities, and connecting service–learning to first-year experience programmes (Young & Hopp, 2014).

Exosystems are environments that exist beyond the immediate environment of the individual but still have strong influence on the microsystems or the individual (Bronfenbrenner, 1993; Renn & Arnold, 2003). Exosystems within university students'

ecosystems include the fiscal and policy environments of the university, the curriculum committee, and even the environments of important others, such as their parents' workplaces. Other important exosystems for students include national policy on degrees and diplomas, such as the Higher Education Qualifications Framework, and needs and hiring processes of the industries into which graduates will be entering.

The most distal of the students' ecosystem is the *macrosystem*. The macrosystem contains the sum total of the micro-, meso- and exosystems within a particular social structure (Bronfenbrenner, 1993). This includes the broader university and all members of its community, but also comprises larger environments, such as socio-historical trends and larger cultural expectations (Renn & Arnold, 2003). The macrosystem has profound influences on students in transition. For instance, a first-year student moves from the culture of home to a new culture of the university. Additionally, the expectations of society about what it means to be a student at university, as well as the meaning that particular cultural perspectives assign to a university graduate, are forms of the influence that the macrosystem has on students and their transitions.

Finally, Bronfenbrenner (1993) outlined the role that time plays in the interaction of the person with the environment. As proximal processes should be structured at appropriate times to optimise the developmental potential of the person-environment interaction, the model suggests that time has a critical role in structuring educational environments. The idea of vertical integration as presented herein has a strong basis in the notion of the role of time in how the person and the environment interact to achieve learning and development.

Discussion

Lewin's (1936) behavioural interaction perspective stipulates that behaviour, learning (Kolb, 1984), or development (Bronfenbrenner, 1993) is influenced by the interaction between the person and the environment. Transition programmes have been developed to assist university students to adapt and achieve goals along their educational journey through higher education. As students change during their time at university, the environment can, and must, be responsive to achieve optimal learning and development. However, it is unreasonable to expect that an environment developed to achieve a particular outcome at one point in time would be adequate to produce a new outcome for a student who has changed at some future point. For example, second-year students are less prone to seek out help in the same ways as they did in the first year (Young, Schreiner & McIntosh, 2015). Moreover, vertical integration of student success programmes requires sequencing educational experiences in an intentional, focused and ordered way. Successfully integrated approaches to transition are built on an understanding of how students develop during and throughout their time at university.

Thus, an intentional *vertical* integration of transition programmes also requires, and is built upon, *horizontal* alignment between objectives (desired behaviour), the developmental needs of students, and educational environments. For instance, if the desired objective (i.e. behaviour) for first-year students is academic adjustment, educators must consider who they are as people. Students in the first year of university are likely to be confronted with

challenges related to confidence, emotions, relationships and new-found independence (Chickering & Reisser, 1993). Moreover, they are likely to look to external sources of authority as they engage in learning and making meaning of novel information (Baxter Magolda *et al.*, 2012). As educators adapt, adopt and create environments, they must consider how they can create educationally supportive ecosystems. Educators must consider the elements of the micro-, meso-, exo- and macrosystems both related to the curriculum and the co-curriculum that they can modify and improve to assist students in the first year.

The same pattern is followed for the subsequent years of university. However, vertical integration suggests a progressive approach to the objectives. Thus, as Scott (2012) suggested, transition-focused initiatives should look both forwards and backwards, creating a seamless educational experience. First-year programmes should set students up for the second year, the second year should build on the first-year and prepare students for the final year, and final-year initiatives and culminating experiences should be based on creating an integrative educational opportunity for students who are poised to graduate and enter the next phase of life, either in the workforce or in graduate or professional education.

Implications for practice and research

As a result of this conceptual case for vertically and horizontally integrated approaches to student transitions, three recommendations for higher education instructional and support staff can be advanced for South Africa's higher education institutions: (1) determine what the desired outcomes are for students at each year of university; (2) develop an understanding of who students are at each step throughout their undergraduate years; and, (3) create educational environments to match and facilitate development and learning in the micro-, meso-, exo and macrosystems.

First, institutions must determine realistic and desirable outcomes for each year. A reasonable place to start is with a set of general learning objectives for all students at the institution. Similar to how a qualification's curriculum is built on a specific set of learning outcomes related to the discipline, an institution can create a general overview of what it means to be a graduate from that university. Then, the next question follows: What do institutions want their students to know at each step along the way? Coming to some consensus about this at an institution-wide level is likely to be somewhat difficult as there are likely to be differing opinions. However, there is power in this process; if done properly, multiple stakeholders can come to the table and develop buy-in as they participate in the development of these objectives.

Second, an ongoing commitment to understanding who South African students are and how they develop throughout their undergraduate years is critical. As expressed earlier, a major limitation of the examples presented herein is that they are based on scholarship that is based on university students in the United States. The specific application and development of programmes must be built to serve local needs within the broader national context. Understanding the unique circumstances and developmental trajectory of students at each institution will allow for creativity in developing high-impact interventions.

Finally, the educational environment represents the opportunity for higher-education professionals to intervene and make a difference in the trajectory of the lives of students. However, the students who are at university now will not be served by systematic structures that take years to develop. Even in the rare cases where there is systemic agreement that widespread changes to curricular or co-curricular structures are necessary, changes are slow to come. While the long-term goal is to weave this integrated support into the institutional fabric, a more measured approach can be advocated.

Educators can seek opportunities to support students in structures that already exist on campus; this is especially important for senior university students. The interested higher-education professional on campus or institutional researcher can create an inventory of the existing points in universities that are currently uniquely poised to provide the first steps toward integrating student transitions. Such examples include services under academic development and support, academic advising, and on-campus residences. Studies of the evolution of student success programmes in the United States have revealed that initiatives aimed at supporting second-year students most frequently emerged out of different functional areas first (e.g. student residences, academic advising, career services) and then became more coordinated (Keup, Gahagan & Goodwin, 2010; Young, Schreiner & McIntosh, 2015).

Once the offices, programmes and initiatives have been identified, it is important for those staff to connect, collaborate and create communities of practice. The coordination of transition programmes can lead to opportunities for efficiency and identifying gaps in coverage. The appointment of a coordinator of senior student programmes can put in place an individual to be a champion. However, the appointment of an administrator does not signal the successful implementation or integration of transition initiatives – it is merely a first step.

Concluding comments

Creating intentional educational environments can help students as they move through university. Vertical integration, as a progressive, intentional, and student-centred approach to developing and delivering student success, provides a comprehensive method for incorporating best practice for student success. As institutions attend to how students develop as they progress through university and respond appropriately, they will be better positioned to deliver on the social and economic promises of higher education.

References

- Barefoot, B.O., Gardner, J.N., Cutright, M., Morris, L.V., Schroeder, C.C., Schwartz, S.W., Siegel, M.J. & Swing, R.L. (2005). *Achieving and sustaining institutional excellence for the first year of college*. San Francisco, CA: Jossey-Bass.
- Baxter Magolda, M.B. (1999). *Creating contexts for learning and self-authorship: Constructive-developmental pedagogy*. Nashville, TN: Vanderbilt University.
- Baxter Magolda, M.B. (2001). *Making their own way: Narratives for transforming higher education to promote self-development*. Sterling, VA: Stylus.

- Baxter Magolda, M.B., King, P.M., Taylor, K.B. & Wakefield, K.M. (2012). Decreasing authority dependence during the first year of college. *Journal of College Student Development*, 53(3), 418–435.
- Botha, L. & Van Schalkwyk, S. (2009). The first-year academy: An institution-wide initiative to foster student success. In: D. Nutt & D. Calderon (Eds). *International perspectives on the first-year experience in higher education* (Monograph No. 52), pp. 95–100. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Bronfenbrenner, U. (1993). The ecology of cognitive development: Research models and fugitive findings. In R.H. Wozniak & K.W. Fischer (Eds). *Development in context: Acting and thinking in specific environments*, pp. 3–44. Hillsdale, NJ: Erlbaum.
- Chickering, A.W. & Reisser, L. (1993). *Education and identity*. (2nd ed.). San Francisco, CA: Jossey-Bass.
- Council on Higher Education (CHE). (2012). *VitalStats: Public higher education 2010*. Retrieved 29 August 2015 from www.che.ac.za/sites/default/files/publications/vital_stats_public_higher_education_2010.pdf.
- Council on Higher Education (CHE). (2013). *A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure*. CHE publication: Pretoria. Retrieved 29 August 2015 from www.che.ac.za/sites/default/files/publications/Full_Report.pdf.
- Department of Higher Education and Training. (2012). *Green paper for post-school education and training: The doors of learning and culture shall be opened*. Retrieved 29 August 2015 from www.che.ac.za/sites/default/files/publications/DHET_green_paper_post_school_education_training.pdf.
- Department of Higher Education and Training. (2013). *White paper for post-school education and training: Building an expanded, effective, and integrated post-school system*. Retrieved 29 August 2015 from www.dhet.gov.za/SiteAssets/Latest%20News/White%20paper%20for%20post-school%20education%20and%20training.pdf.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. New York, NY: D. C. Heath.
- Evans, N.J., Forney, D.S., Guido, F.M., Patton, L.D. & Renn, K.A. (2010). *Student development in college: Theory, research, and practice*. San Francisco, CA: Jossey-Bass.
- Fisher, G. & Scott, I. (2011). *The role of higher education in closing the skills gap in South Africa*. Closing the Skills and Technology Gap in South Africa Background Paper 3. Washington, DC: The World Bank.
- Greenfield, G.M., Keup, J.R. & Gardner, J.N. (2013). *Developing and sustaining successful first-year programs: A guide for practitioners*. San Francisco, CA: Jossey-Bass.
- Hunter, M.S., Keup, J.R., Kinzie, J. & Maietta, H. (2012). *The senior year: Culminating experiences and transitions*. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Jones, B., Coetzee, G., Bailey, T. & Wickham, S. (2008). Factors that facilitate success for disadvantaged higher education students: An investigation into approaches used by REAP, NSFAS and selected higher education institutions. Retrieved [date] from www.reap.org.za/pieces/reports/pdf/tracking_reports/2008_june_factors_that_facilitate_success.pdf.
- Keup, J.R. (2015). National research and trends on senior capstone experiences. Presentation given to Academic Development Centre, University of Johannesburg, South Africa.
- Keup, J.R., Gahagan, J., and Goodwin, R.N. (2010) *2008 National Survey of Sophomore-Year Initiatives: Curricular and Cocurricular structures supporting the success of second- year college students (Research Reports on College Transitions No 1)*. Columbia, SC: University of South Carolina, National Resource Centre for the First-Year Experience and Students in Transition.

- Knefelkamp, L.L., Widick, C. & Parker, C.A. (1978). Editor's notes: Why bother with theory? In L. Knefelkamp, C. Widick & C.A. Parker (Eds). *Applying New Developmental Findings: New Directions for Student Services* No. 4, pp. vii–xvi. San Francisco, CA: Jossey-Bass.
- Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, New Jersey: Prentice Hall.
- Lewin, K. (1936). *Principles of topological psychology*. New York, NY: McGraw-Hill.
- Lewin, K. (1943). Defining the “field at a given time”. In K. Lewin (Ed.). *Field theory in social science*, pp. 43–59. New York, NY: Harper & Row.
- Lewin, T. & Mawoyo, M. (2014). *Student access and success: Issues and interventions in South African Universities*. Retrieved 29 August 2015 from www.inyathelo.org.za/knowledge-services/in-yathelo-publications/view-all-publications-for-download/item/student-access-and-success-issues-and-interventions-in-south-african-universities-2014.html.
- Margolis, G. (1989). Developmental opportunities. In P.A. Graysen & K. Cauley (Eds). *College psychotherapy*, pp. 71–91. New York, NY: Guilford Press.
- McEwen, M.K. (2003). The nature and uses of theory. In S.R. Komives, D.B. Woodard & Associates (Eds). *Student Services: A handbook for the profession* (4th ed.), pp. 153–178. San Francisco, CA: Jossey-Bass.
- National Planning Commission. (2011). *National Development Plan 2030: Our future – Make it work*. Retrieved [date] from www.poa.gov.za/news/Documents/NPC%20National%20Development%20Plan%20Vision%202030%20-lo-res.pdf.
- Ogude, N., Kilfoil, W. & Du Plessis, G. (2012). An institutional model for improving student retention and success at the University of Pretoria. *The International Journal of the First Year in Higher Education*, 3(1), 21–34.
- Padgett, R.D. & Keup, J.R. (2011). *2009 National Survey of First-Year Seminars: Ongoing efforts to support students in transition*. Research Reports on College Transitions, No. 2. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Padgett, R.D. & Kilgo, C.A. (2012). *2011 National Survey of Senior Capstone Experiences: Institutional-level data on the culminating experience*. Research Reports on College Transitions, No. 3. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Renn, K.A. & Arnold, K.D. (2003). Reconceptualizing research on college student peer culture. *The Journal of Higher Education*, 74(3), 261–291.
- Schaller, M.A. (2005). Wandering and wondering: Traversing the uneven terrain of the second college year. *About Campus*, 10(3), 17–24.
- Schaller, M.A. (2010). The journey into self. In M.S. Hunter, B.F. Tobolowsky, J.N. Gardner, S.E. Evenbeck, J.A. Pattengale, M.A. Schaller & L.A. Schreiner (Eds). *Helping sophomores succeed: Understanding and improving the second-year experience*, pp. 66–80. San Francisco, CA: Jossey-Bass.
- Schreiner, L.A., Slavin Miller, S., Pullins, T.L., & Seppelt, T.L. (2012). Beyond sophomore survival. In: L.A. Schreiner, M.C. Schreiner, & D.D. Nelson (Eds), *Thriving in Transitions: A Research-Based Approach to College Student Success*, pp. 111–156. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Scott, I. (2012). First-Year Experience as terrain of failure or platform for development? Critical choices for higher education. In B. Leibowitz, A. van der Merwe & S. van Schalkwyk (Eds). *Focus on First-Year Success: Perspectives Emerging from South Africa and Beyond*. Stellenbosch: Sun Press.

- Skipper, T.L. (2005). *Student development in the first college year: A primer for college educators*. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Strange, C.C. & Banning, J.H. (2001). *Educating by design*. San Francisco, CA: Jossey-Bass.
- Upcraft, M.L., Gardner, J.N., and Barefoot, B.O. (2005) *Challenging and supporting the first-year student*. San Francisco, C.A: Jossey-Bass.
- Young, D.G., Schreiner, L.A. & McIntosh, E.J. (2015). *Investigating sophomore student success: The National Survey of Sophomore-Year Initiatives and the Sophomore Experiences Survey, 2014*. Research Report No. 6. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience & Students in Transition.
- Young, D.G. & Hopp, J.M. (2014). *2012–2013 National Survey of First-Year Seminars: Exploring high-impact practices in the first college year*. Research Report No. 4. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience & Students in Transition.

RESEARCH ARTICLE

Peer leadership as an emerging high-impact practice: An exploratory study of the American experience

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Abstract

Given the powerful and ubiquitous qualities of peer influence, higher educators have begun to harness this resource in student support and service delivery by using undergraduates as leaders, mentors and educators for their fellow students. This paper analyses data from 1 942 students from 142 institutions in the United States who responded to a national survey of peer leaders administered by the National Resource Center for The First-Year Experience and Students in Transition in 2009. Descriptive and inferential analyses indicate that survey respondents often hold more than one peer leader position, academic positions were the most common peer leadership experiences, and they receive extensive training for their peer leader roles in the form of initial training, ongoing support and supervision by professional staff. Further, the overwhelming majority of survey respondents felt that their peer leadership experience was highly beneficial to their skill development, nature of interactions and campus integration. Students engaged in community service peer-leader roles reported positive change on more outcomes than peer-leader roles in academics, residence halls and orientation and peer leaders who received financial compensation reported positive differences on a wider range of self-rated outcomes than those students not receiving remuneration. In sum, the examination of peer-leader structures and outcomes provide suggestive evidence that peer leadership meets many of the criteria to be considered as a high-impact practice.

Keywords

Higher education, peer leadership, high-impact practice, first-year student experience, United States.

Introduction

One of the most profound influences on the human experience is the interaction with other individuals, especially among adolescents and particularly within an educational setting. Within the field of education in America, the role of peers in the development, learning, transition and success of fellow students is widely noted in the literature on the intellectual and personal development of undergraduates, the impact of college on students, and leadership and career development (e.g. Astin, 1993; Evans *et al.*, 2010; Pascarella & Terenzini, 1991, 2005; Skipper, 2005). In a summary of this body of scholarly work, Pascarella and Terenzini (1991) highlight

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the degree and scope of the impact of undergraduates upon one another in their statement that “students’ interactions with their peers ... have a strong influence on many aspects of change during college, [including] intellectual development and orientation; political, social, and religious values; academic and social self-concept; intellectual orientation; interpersonal skills; moral development; general maturity and personal development; and educational aspirations and educational attainment” (pp. 620–621).

Given the power and prevalence of student influence on other students, colleges and universities in many countries and various higher education contexts have begun to employ peers in key leadership roles and as a resource in the delivery of undergraduate services and support programmes. Students may be engaged in elected or appointed leadership roles or as individual mentors, group facilitators, or instructors, and as instruments of support, resource or referral (Cuseo, 2010a; Keup, 2012; Newton & Ender, 2010). Students also may be used in various domains of the institution. Peer leadership has a long history in co-curricular support and student activities, has more recently gained traction in campus governance and in the classroom, and the number of campus settings that engage students as peer leaders is likely to continue to increase (Ender & Kay, 2001; Keup, 2012). Further, student peer leaders may be useful in contexts that range from individual interaction, such as a mentoring relationships or one-on-one peer advising, to leadership in a group, organisational, or community setting. Regardless of the role, domain, or context, peer leader roles share several common features, including intentional selection, formalised training and support, authority endorsed by the college or university, a role that is intentionally designed to serve other students, and a degree of accessibility that makes them a less intimidating resource to fellow undergraduates than professional staff or faculty (Cuseo, 1991, 2010a; Greenfield, Keup & Gardner, 2013; Hart, 1995; Newton & Ender, 2010).

Research has yielded substantial evidence to support the decision to use peer leaders in higher education and in a wide array of roles and settings. Those students who are the beneficiaries of peer leadership, mentorship and education have garnered a wide range of positive benefits from the experience, including increased engagement (Black & Voelker, 2008), more timely and focused utilisation of campus services (Cuseo, 1991; Grosz, 1990; Kram & Isabella, 1985; Sharkin, Plagement & Mangold, 2003), enhanced academic skills and performance (Astin, 1993; Landrum & Nelson, 2002; Lewis & Lewis, 2005), feelings of support and sense of belonging (Colvin & Ashman, 2010; Hill & Reddy, 2007; Jacobi, 1991; Light, 2001; Nora & Crisp, 2007; Yazedjian *et al.*, 2007), and retention (Cuseo, 2010b; Schwitzer & Thomas, 1998; Tinto, 1993).

To complement this body of scholarship and to further support the impact of peer leadership, more recent research has shown that peer leaders gain as much, if not more, value from the experience than the students they serve. More specifically, students in these leadership roles report: development in their communication and leadership skills; integrative and applied learning; knowledge of campus resources; interaction with faculty, staff, and peers; critical thinking, problem-solving, and higher-order thinking skills; the ability to work under pressure; interpersonal skills; and an awareness and appreciation of diversity (Astin, 1993; Newton & Ender, 2010; Russel & Skinkle, 1990; Wawrzynski & Beverly, 2012). Furthermore, there is evidence of enhanced ability to manage groups,

empathise with students and facilitate learning (Harmon, 2006). Given the mutuality and breadth of benefits to both the students being served and the undergraduates assuming the leader roles, peer leadership has been identified as an emerging high-impact practice (Bunting, 2014; Keup, 2012,).

Despite these potential benefits to both the students being served and the peer leaders providing the support, as well as the growing use of these programmes on campuses across the country, the body of research on the effects of the peer leadership experiences on the peer leaders themselves is still relatively underdeveloped. Further, the existing studies are limited by small sample sizes and single institution accounts (Wawrzynski & Beverly, 2012). The current study seeks to add to this nascent body of literature and attempts to explore the experiences and outcomes of peer leaders on a broad level via data drawn from a national survey of peer leaders conducted by the National Resource Center for The First-Year Experience and Students in Transition in the United States. Analyses of the data will attempt to explore the following research questions: (1) What are the structural characteristics of peer leadership programmes in higher education? (2) What are the outcomes of the peer leader experience for the students in these roles? and (3) How do the outcomes of peer leader experiences vary by the structural characteristics of these programmes?

Conceptual Framework

Recently, the Association of American Colleges and Universities (AAC&U) identified four essential learning outcomes for the 21st century. These outcomes include global and intercultural competence, intellectual and practical skill development, personal and social responsibility, and integrative and applied learning (Brownell & Swaner, 2010; Kuh, 2008). In addition, AAC&U identified ten high-impact practices that facilitate student progress towards these 21st-century learning outcomes and provide essential preparation to address the personal, civic, economic and social challenges that individuals are facing in society today. High-impact practices are defined as “teaching and learning practices [that] have been widely tested and have been shown to be beneficial for college students from many backgrounds [and represent] practices that educational research suggests increase rates of retention and student engagement” (Kuh, 2008, p. 9).

The ten educational strategies and programmes identified by the AAC&U as high-impact practices (HIPs) are as follows: first-year seminars and experiences; common intellectual experiences; learning communities; writing-intensive courses; collaborative assignments and projects; undergraduate research; diversity/global learning; service learning and community-based learning; internships; and capstone courses and projects (Kuh, 2008). These ten HIPs can be viewed as an aspirational checklist of approaches to student success and guideposts for best practice in higher education. Moreover, the elements that make them impactful provide a theoretical foundation for understanding, examining and delivering a high-quality undergraduate experience. Specifically, these high-impact practices share a set of common characteristics that include an investment of time and energy, substantive interaction with faculty and peers, high expectations, a robust feedback loop, exposure to diverse perspectives, reflection and integrated learning, discovery of relevance through real-world application, and accountability (Kuh, 2008; Kuh & O'Donnell, 2013).

While these characteristics are shared features across high-impact practices, they are not unique to them. In fact, Kuh (in Brownell & Swaner, 2010) posits that “these key conditions can be adapted and incorporated into any teaching and learning situation inside or outside the classroom to promote higher levels of student performance” (p. xi). Thus, the potential exists for any student experience to emerge as a high-impact practice if these characteristics are embedded therein. Therefore, these foundational features of high-impact practice provide a conceptual framework to examine the structural characteristics and outcomes of peer leader experiences as a potential high-impact practice and as a component of a high-quality undergraduate experience.

Method

Data source and sample

The data for this study were drawn from the 2009 Peer Leadership Survey sponsored by the National Resource Center for The First-Year Experience and Students in Transition in the United States. This student-level survey contained items that measured student demographics, experiences of peer leaders, structural characteristics of peer leader roles and programmes (such as training opportunities and remuneration packages), and self-rated change as the result of peer leader experiences. The survey also included open-ended items to capture students’ perceptions of their experiences as peer leaders. The survey was administered as an online questionnaire in Spring 2009, and its recruitment represented a two-step process. Institutional representatives were recruited via invitations sent to 3 733 subscribers to the five listservs sponsored by the National Resource Center at that time. These invitations included a description of the study, a request to forward an invitation to participate in the survey to “undergraduate students who hold or have held a peer leader position on your campus”, a survey link, and a template for an invitation letter to students. Institutional representatives then forwarded the survey invitation and link to their respective networks of student peer leaders on their campuses. Completed surveys were submitted directly to the online data repository for the National Resource Center for The First-Year Experience and Students in Transition.

Survey recruitment efforts yielded responses from 1 972 students from 142 institutions who submitted usable data via the online instrument. Listserv subscribers who were sent the survey information included more than one individual per campus and campus representatives were not required to report the number of students to whom they forwarded the survey instrument, so institutional and student-level response rates cannot be calculated. Given the exploratory nature of this study, national representativeness was not a goal and the inability to calculate a response rate from what was a snowball method of recruiting participants is a limitation of the study.

Characteristics of survey respondents on several background and academic characteristics are summarised in Table 1. These analyses suggest that the survey sample is skewed towards female students and high academic performers (79.6% reported a GPA of 3.0 or above) but contains a reasonable representation of respondents by race/ethnicity, class standing

(first-year, sophomore, junior and senior), in-state and out-of-state status, and residential vs commuter students. While the sample is not representative, it represents the first national survey that focuses, in detail, on American college students' peer leadership experiences.

Table 1: Characteristics of survey respondents

Characteristic	Per cent
Gender	
Women	74.1
Men	25.6
Other/Did not report	0.3
Race/ethnicity (“mark all that apply”)	
White	72.8
Black or African-American	14.9
Prefer not to answer	7.7
Hispanic/Latino	6.8
Asian	6.0
American Indian or Alaska Native	1.4
Native Hawaiian or other Pacific Islander	0.7
Residency status	
In-state student	70.1
Out-of-state student	27.7
International student	2.2
Housing location	
On campus	62.0
Private housing off campus	34.7
University-sponsored off-campus housing	3.3
Class standing	
First-year student	10.8
Second-year student	31.4
Third-year student	30.0
Fourth-year student	24.2
Fifth-year student	3.6
Grade Point Average	
No grades	0.6
1.5 or lower	0.7
1.6–2.0	0.6
2.1–2.5	3.5
2.6–3.0	15.3
3.1–3.5	34.6
3.6–4.0	44.9
N = 1 972	

Measures

Since the primary focus of interest for this study is participation in peer leader experiences, survey participants were recruited based upon their participation as a peer leader. However, the questionnaire also contained an item to verify their involvement as “an undergraduate student who has been selected to serve as a mentor or peer educator to other students through a position with a school-run organization”.

As indicated by the research questions outlined earlier, this study was interested in exploring the various characteristics of the peer leader experiences. Therefore, a notable measure of interest was the campus unit that sponsored the experience, which, in turn, would set the expectations and context for the peer leader roles and responsibilities. This information was collected via a question on the survey that asked respondents to “please indicate the type of campus-based organization that you work or worked for as a peer leader”. Thirteen response options for this question were available to respondents as well as an “other” category with a prompt of “please specify” and room for narrative feedback. Respondents were asked to “check all that apply”, so responses to this survey item were not independent and were recoded into separate dichotomous variables for the analyses.

Similarly, quantitative measures of other key characteristics of peer leader experiences represent important independent variables for the study. Students were asked to report the number of peer leader positions that they currently held as well as the number that they had held throughout their undergraduate experience thus far. These two survey items provided five response options that ranged from “1” to “5 or more”. Measures of compensation included separate categories for course credit, financial remuneration, none (i.e. “I volunteer as a peer leader and do not receive any compensation”), and an “other” category with an option for narrative feedback. Another category of measures accounted for the provision of training (dichotomous measure) and the duration of training for peer leaders, which contained six separate response options that ranged from “half day or less” to “1 week” and a seventh response category of “other” with the option for narrative feedback. Both the compensation and training items were structured in such a manner that respondents were able to mark all response options that applied to their experience in order to capture the various types of compensation and training that may have been associated with different peer leader experiences. Thus, each response category for these items was coded as a dichotomous variable for the analyses.

Two classes of outcome variables served as important measures of potential impact of peer-leader experiences. Both types of outcome variables were worded on the survey as self-reported gains, thereby representing perceived measures of change rather than direct gauges of difference or development. The first set of outcomes included six measures of self-reported gains in skill areas: time management; organisation; written communication; interpersonal communication; presentation; and academic. Respondents were asked to indicate their self-rated change on a five-point scale – “much weaker”, “weaker”, “no change”, “stronger”, “much stronger” – and an additional category of “unable to judge”. A second set of outcomes included eight measures of self-rated change in undergraduate

experiences, such as meaningful interaction with various campus constituents (i.e. faculty, staff and peers), diversity (i.e. both interaction with and understanding of people with backgrounds different from their own), knowledge of campus resources, sense of belonging at the institution, and desire to persist at the institution. Response options for these items were coded on a three-point scale – “decreased”, “no change” and “increased” – and the option to mark “unable to judge”.

The structure of these measures on the survey represents one of the primary limitations of the scope of this research. Most notably, the wording of the outcomes of interest for peer-leader involvement as self-rated measures limits the scope to draw conclusions about true impact; it restricts the interpretation of analyses containing these measures as perceived measures of change and development. Further, survey respondents were allowed to mark “all that apply” on a number of items, thereby capturing the wide range of peer-leader sponsors, training models and remuneration plans. While this method of response enhanced the descriptive capabilities of these data, they yielded variables that were no longer independent and disrupted the continuous scales of some of the items, most notably training. Therefore, this study is unable reasonably to examine the relationships between certain structural characteristics of peer-leader experiences and self-rated outcomes.

Analyses

The quantitative data generated via this survey were used in descriptive and inferential statistical analyses to address the research questions for this exploratory study. In order to prepare items for analysis, all categories of “unknown” and “unable to judge” were recoded or removed. Means and frequency distributions were conducted for all items on the survey. Cross tabulations and Mann–Whitney U tests were the foundation of comparative analyses between groups, most notably with respect to the examination of structural characteristics of peer-leadership experiences and self-rated outcomes of those experiences. Correlations were conducted for analyses where both classes of variables under study were continuous measures (e.g. outcomes and number of peer-leader positions).

Findings

Given the survey recruitment parameters, it is not surprising that 89.5% of respondents indicated that they held a student position that met the description of a peer-leader position (i.e. “an undergraduate student who has been selected to serve as a mentor or peer educator to other students through a position with a school-run organization”). Survey data also revealed that these peer leaders often hold more than one position mentoring, educating or leading other undergraduates. More specifically, 43.6% served in more than one peer-leader position at the time they completed the survey and 7.9% held four or more peer-leader positions at the time of survey completion. Further, students held several different peer-leader positions throughout their time in college; students reported an average of 2–3 positions ($\mu = 2.67$; $SD = 1.43$).

Structural characteristics of peer leadership experiences

The survey also asked students to identify the type of campus-based organisation or institutional area for which they currently or previously worked as a peer leader (Table 2). While past research showed that academic peer-leader positions were less frequent than other types of roles (Ender & Kay, 2001), academic positions were the most common peer-leadership experiences for the students in the current study. Students' responses to an open-ended question about their peer-leader title also showed many academic roles, including first-year seminar peer leader, tutor, academic mentor, peer advisor and teaching assistant. Positions in orientation programmes, residence halls and community service were also common among the students surveyed in this study. Responses showed lower levels of peer-leader participation in student government, athletics, religious organisations, multicultural organisations and counselling or mental health – although these response options may also represent emerging areas of peer-leader involvement. Finally, fewer than 5% of survey respondents indicated that their peer-leader positions were in student productions, physical health programmes, judicial affairs and study-abroad programmes. Open-ended responses to the “other” category also showed participation in opportunities sponsored by campus organisations and units that were not included on the list such as admissions, first-year experience (FYE) programmes, student media, fraternity and sorority life, and formalised leadership curricula. While some of these write-in responses represent long-standing areas of involvement and an oversight on the survey construction (e.g. FYE and Greek life), other responses indicate innovative ways for peer leaders to engage in the campus environment.

Table 2: Sponsor of peer leadership experience

Campus-based organisation	Per centa
Academic (e.g. tutoring centre, first-year seminar)	58.6
Orientation	31.6
Residence hall	29.6
Community service	25.2
Student government	11.6
Athletics	8.6
Religious	8.2
Multicultural	7.4
Counselling or mental health	7.0
Student productions	4.6
Physical health	3.4
Judicial	3.0
Study abroad	2.5
Other	14.8

N = 1 748;

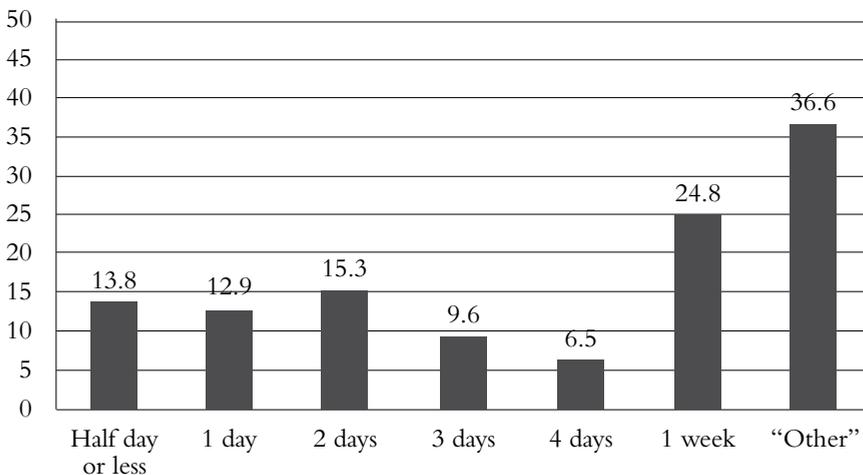
Percentages add up to more than 100% because respondents were asked to “check all that apply”.

Training is a vital component of most peer-leader programmes and what differentiates this role from informal peer-to-peer interactions (Hamid, 2001; Keup, 2012; Newton & Ender, 2010). As such, it was not surprising that 86.3% of survey respondents who participated in peer-leader roles reported that they received training for their positions. Further analyses indicated that peer leaders reported fairly consistent patterns of training across positions, although training was reported at a slightly higher level (i.e. greater than 90%) for students who identified counselling or mental health, orientation, physical health and residence halls as the sponsoring organisation for their peer-leader position. Conversely, just under 80% of students with peer-leader positions in religious organisations, student government and student productions reported that they participated in training, a finding that indicates areas where additional professional development and support may be necessary.

As shown in Figure 1, the duration of training for peer leaders varied. The figure shows that 42% of respondents reported that they participated in training that was two days or fewer in duration. On the other side of the spectrum, nearly one quarter of survey respondents reported that their training lasted one week. Over one third reported some other amount of training. Narrative feedback to an open-ended item asking for additional information about this response option indicated that nearly all of the respondents in the “other” category experienced training that was longer than one week. In fact, these “other” training modules often represented sustained professional development and support throughout the peer-leader experience (e.g. a leadership course, ongoing workshops, supervision) rather than just an initial infusion of training before or at the outset of the peer-leader experience.

Figure 1: Amount of training for peer leaders

(Percentages add up to more than 100% because respondents were asked to “check all that apply”).



The survey also inquired about compensation models and rewards for students in these peer-leader positions. Nearly two thirds of respondents (65.1%) reported that they received financial compensation for their peer-leader position and 21.9% indicated that they received course credit instead of, or in addition to, being paid. However, it appears that many peer leaders are also motivated by the intrinsic rewards of the experience as 50.5% stated that at least one of their peer-leader positions was on a volunteer basis. Perhaps given their long history as paraprofessional positions, peer-leader roles in residence halls and orientation tended to report being rewarded with monetary compensation at a higher rate (77.4% and 70.5% respectively) than other positions. Academic peer leaders were much more likely to receive course credit for their service than other positions (30.3%).

Outcomes of peer leadership experiences

In addition to providing national data about the structure and characteristics of peer-leader programmes, the survey also asked students to rate the outcomes of their leadership experience. Table 3 shows self-rated change in six skill areas and Table 4 shows self-rated change in eight undergraduate experiences. Overall, these data indicate that survey respondents believe that their peer-leadership experience was highly beneficial to their skill development, nature of interactions and campus integration. Over 90% of the peer leaders in the current study reported that they became “stronger” or “much stronger” in their interpersonal communication skills and perceived particular gains in meaningful interaction with peers, staff and faculty. An overwhelming majority of survey respondents also reported an enhanced understanding of campus resources, a greater sense of belonging, as well as increases in experiences with, and understanding of, students from different backgrounds from their own. Further, over three quarters of peer leaders in the study reported positive gains in organisation, time management and presentation skills. In addition, 70% of respondents indicated that their peer-leader experience “increased” their desire to persist at the institution. Given the high number of survey respondents engaged in academic peer-leader roles, it is interesting to note that the proportion of survey respondents reporting gains in academic skills was the lowest of all areas. However, when coupled with the fact that 97.7% of peer leaders in this study report that they would recommend being a peer leader to other students, these data provide evidence that students generally perceive that peer-leadership experiences are positively associated with student development and important college outcomes.

Table 3: Self-rated change in skills as the result of peer leadership experience

Skill	% reporting “Stronger” or “Much Stronger”
Interpersonal communication	93.8
Organisation	80.7
Time management	79.5
Presentation	79.2
Written communication	60.7
Academic	51.2
N = 1 654	

Table 4: Self-rated impact of peer leadership on undergraduate experience

Experience	% reporting “Increased”
Knowledge of campus resources	91.1
Meaningful interaction with peers	89.1
Meaningful interaction with staff members	85.6
Meaningful interaction with faculty	82.8
Feeling of belonging at institution	80.7
Understanding of people from different backgrounds	78.5
Interaction with people from different backgrounds	78.1
Desire to persist at institution	70.7
N = 1 654	

Relationship between structural characteristics and outcomes

Data on the structural characteristics of peer-leader programmes offer a greater understanding of the range of administrative models for these programmes. Students’ self-reported gains in skill areas and of perception of impact provide suggestive evidence of peer-leader outcomes. However, when these two aspects of peer-leader programmes are examined together via inferential statistics, they provide even richer data on the relationship between programme characteristics and self-rated outcomes.

For example, the results of correlations between the number of peer-leader positions currently held by students and self-rated skill development reveal uniformly weak ($r \leq .20$) but statistically significant ($p < .001$) relationships. The strongest relationships between current number of peer-leader positions held and self-rated improvement in skill areas are for self-rated change in time management ($r = .201$, $p < .001$) and self-rated change in writing skills ($r = .210$, $p < .001$). When these same self-rated skills were correlated with the *total* number of peer-leader positions held during the student’s college career, a similar pattern emerged, but the correlation coefficients were slightly stronger overall and self-rated change in time management yielded a correlation coefficient of 0.245 ($p < .001$).

When similar correlation analyses were conducted between the number of current peer-leader positions and the self-rated impact of peer leadership on undergraduate experiences, as well as the total number of peer-leader positions on these same outcome variables, very few correlation coefficients were statistically significant and larger than 0.15. Only one approached 0.20, which is the threshold for even a weak correlation: the desire to stay at the institution and graduate. The correlation of this outcome with the current number of peer-leader positions yielded a coefficient of 0.192 ($p < .001$) and a similar analysis with total number of peer-leader positions resulted in an even weaker relationship ($r = .168$, $p < .001$).

Mann–Whitney U statistics were used to explore the relationship between self-rated outcomes of peer leadership experiences and the four most common sponsors of peer-leader experiences: academic, orientation, residence halls and community service. Since students could indicate more than one peer-leader experience with different sponsors, respondents for each of these four peer-leader experiences were not independent and separate analyses were conducted for each experience and the outcomes. Consequently, the

categories examined with each Mann–Whitney U analysis included students who engaged in that specific peer-leadership experience as compared to those who did not and, thus, represented independent categories. Table 5 indicates a summary of the Z statistics and their statistical significance and indicates patterns of results.

The results in Table 5 show that academic peer-leader experiences yield fewer statistically significant differences with respect to outcomes when compared with other peer-leader experiences. Additionally, other than self-rated change on academic skills ($U = 261342$, $Z = -5.054$, $p \leq .001$), the statistically significant differences between academic peer-leader experiences and those with other sponsoring units (i.e. in orientation, residence halls and community service) were comparatively small (i.e. Z statistics between 2.000 and 2.999).

Overall, peer-leader experiences in residence halls yielded more positive differences on self-rated outcomes between that group and other peer-leader sponsors than did these same comparisons for academic peer-leader experiences. The largest positive difference for peer leaders in residence halls emerged for self-rated change in time management skills ($U = 242540$, $Z = -4.975$, $p \leq .001$). Gains for residence-hall peer leaders were slightly more consistent for self-rated change in skill development areas than for the outcomes related to undergraduate experiences; all of the self-rated skills were statistically significant, whereas only half of the undergraduate outcomes were.

Table 5: Student self-rated outcomes by sponsorship of peer-leadership experience

Outcomes	Academic		Residence Halls		Orientation		Community Service	
	Z	Sig	Z	Sig	Z	Sig	Z	Sig
Time management			+++	***	+	*	+++	***
Organisation			+	**	+	**	+++	***
Written communication	+	*	+	**			+++	***
Interpersonal communication			+	*	++	**	++	**
Presentation			+	**	++	***	++	**
Academic	+++	***	++	***			++	***
Meaningful interaction with faculty	+	**	+	**	+++	***	+	**
Meaningful interaction with staff members			++	***	+++	***	+	**
Meaningful interaction with peers					+	*	+	*
Diverse interactions					++	***	++	***
Understanding of diversity			++	**	++	***	++	***
Knowledge of campus resources	+	**	++	***	++	***		
Feeling of belonging at institution	+	*			+++	***	+	*
Desire to persist at institution					+++	***	++	***

Notes: $N = 1\ 654$; + Z statistic 2.000–2.999; ++ Z statistic 3.000–3.999; +++ Z statistic > 4.000 * $p < .05$; ** $p < .01$; *** $p < .001$

Conversely, peer-leader experiences in orientation as compared to peer-leadership experiences sponsored by other campus units yielded uniform differences on self-rated change in all six measures of undergraduate experiences, but only four measures of self-rated change in skill areas had statistically significant results. Differences between peer leaders in orientation as opposed to other areas were especially noteworthy for feeling of belonging at the institution ($U = 259314.5$, $Z = -5.753$, $p \leq .001$.), meaningful interaction with faculty ($U = 262196$, $Z = -5.392$, $p \leq .001$.), desire to persist at the institution ($U = 261784.5$, $Z = -4.340$, $p \leq .001$.) and meaningful interaction with staff ($U = 270474.5$, $Z = -4.206$, $p \leq .001$.).

Even though only one quarter of respondents indicated that they engaged in peer-leader roles in a community service capacity, results of the Mann–Whitney U analyses indicate that these experiences were connected to more outcomes than peer-leader roles in academics, residence halls and orientation. Comparisons between peer leaders in community service and other leadership experiences yielded statistically significant positive differences on all but one of the self-rated outcomes (knowledge of campus resources), thereby suggesting that this form of peer leadership is especially impactful on students' perceptions of gains. The most substantial positive differences occurred with respect to three skill areas: written communication ($U = 207954.5$, $Z = -5.874$, $p \leq .001$.), organisation ($U = 220502$, $Z = -4.761$, $p \leq .001$.) and time management ($U = 222080.5$, $Z = -4.599$, $p \leq .001$.).

A final series of analyses between structural characteristics and outcomes explored the relationships between form of compensation for the peer-leader experience and self-rated outcomes, which also employed Mann–Whitney U statistics. As noted above, survey respondents reported whether they received financial compensation (65.1%), course credit (21.9%), or no compensation (50.5%) for their service as peer leaders. Again, students were invited to mark all the compensation options that applied to the range of peer-leader positions in which they serve(d) and, thus, the responses for each of the three compensation categories were not independent. Therefore, in order to create compensation categories that were independent, separate analyses were conducted for dichotomous measures of each form of compensation (as compared to the other two) and the outcomes. Table 6 indicates a summary of the Z statistics and their statistical significance, and highlights patterns of results.

Results of these analyses indicate that peer leaders who received financial compensation reported positive differences on a wider range of self-rated outcomes than those students not receiving remuneration for their service in these roles. The significance of these relationships was especially consistent for self-rated changes in skills, particularly for time management. In fact, only one category of self-rated skills – academic – did not yield a statistically significant Z -statistic. Analyses showed that peer leaders who were paid also reported substantially greater levels of meaningful interaction with staff members and knowledge of campus resources as well as moderately greater levels of meaningful interaction with faculty than peer leaders who did not receive financial compensation. Considering that these student paraprofessionals were likely to go through in-depth

training and be supervised by professional staff at the college or university, it is not surprising that they would report development in these areas. Further, the receipt of financial compensation could be interpreted as the compensation category with the highest level of accountability of the three; students who receive payment for their service as a peer leader may feel a greater obligation to demonstrate proficiency in the skill areas related to their position. It is also worthy to note that these findings are consistent with those reported for student leaders in residence halls and orientation (Table 5), which are the most common areas of peer leadership that receive remuneration for their service.

Table 6: Student self-rated outcomes by sponsorship of peer-leadership experience

Outcomes	Financial		Course credit		None/volunteer	
	Z	Sig	Z	Sig	Z	Sig
Time management	+++	***				
Organisation	+	**			+	**
Written communication	++	***	++	***	+	*
Interpersonal communication	++	***				
Presentation	++	***	+	*		
Academic			+++	***		
Meaningful interaction with faculty	+	*	++	**		
Meaningful interaction with staff members	+++	***				
Meaningful interaction with peers					++	***
Diverse interactions						
Understanding of diversity						
Knowledge of campus resources	++	***				
Feeling of belonging at institution						
Desire to persist at institution					++	**

Notes: $N = 1\,748$; + Z statistic 2.000–2.999; ++ Z statistic 3.000–3.999; +++ Z statistic > 4.000 * $p < .05$; ** $p < .01$; *** $p < .001$

Although the allocation of course credit could be interpreted as another area of accountability, students who received course credit as compensation for their peer-leader roles showed fewer statistically significant relationships with self-rated outcomes than for the analysis of financial compensation. Those students who reported receiving course credit were more likely to report gains in academic skills, written communication, presentation skills and meaningful interaction with faculty, which are consistent with the structure and interactions of a classroom-based environment that would be the foundation of awarding course credit. Again, there is overlap between these findings and those for students in peer-leader positions sponsored by academic units on campus as noted above.

Finally, analyses of students who reported that they volunteered for their peer-leader positions and did not receive compensation resulted in statistically significant positive relationships for meaningful interaction with peers, desire to persist at the institution, organisation skills and written communication. It is interesting to note that volunteer peer leadership was the only compensation category that yielded an association with desire to persist at the institution. However, one needs to be cautious about the issue of directionality when interpreting this finding; it is very likely that more involved students who are already more likely to persist are the ones who are most inclined to volunteer their time in these peer-leader positions.

Significance and Implications

The findings of this study have the potential to impact educational research and practice. The results of this study provide the first national portrait of the structure and characteristics of peer-leader programmes, training and compensation, which can provide a context in which to guide decisions on the institutional level, identify prominent and emergent models, and suggest trends for the development, delivery and administration of peer-leader programmes. These data show that residential life and orientation remain strongholds of activity for peer leadership in higher education and that community service is another common location for peer-leadership activity. Further, responses to the survey items suggest that student media, first-year experience and formalised leadership curricula are emergent areas of peer leadership that could represent opportunity for development on a practical level and for future research studies. The most substantial finding from this sample regarding sponsoring organisations for peer leadership was the position of academic-sponsored peer-leader roles as the most common among the respondents in this sample.

Given that academic and instructional roles for peer leaders have historically been the least common in American higher education (Ender & Kay, 2001), the results of the current study suggest the potential for a substantial paradigm shift in peer-leader programmes and research in the United States. This finding may result from the development and expansion of roles for peer leaders in first-year seminars, supplemental instruction, peer advising, and tutoring. However, these findings may also be the result of a more collaborative relationship between academic and student affairs in the delivery of student services such that peer roles that have been solely the province of student affairs (e.g. residential life and orientation) may now also include academic support responsibilities. The examination of peer-leader roles that represent horizontal structures across student and academic affairs would be a topic worthy of exploration in future research.

In addition, this study provides different models and emergent trends in the area of peer-leader compensation and rewards. While there may be pressure to focus on remuneration and credit-bearing alternatives, it appears that a large proportion of students are engaged in peer-leader opportunities on a volunteer basis, which will continue to make them a valuable and cost-effective support structure in resource-sensitive times. Yet, an analysis of the relationship between compensation models and outcomes show preliminary evidence that compensation models do seem to affect student leaders' self-rating of gains

in skill development and perception of impact on the undergraduate experience. Most notably, students in paid peer-leader positions report gains across more self-rated outcomes and especially for skill development than those not receiving remuneration for their service. However, compensation models that included course credit and volunteer peer-leader positions were associated with some self-rated gains on associated outcomes such as academic skill development for peer leaders who receive course credit, and meaningful interaction with peers and a desire to persist at the institution for students who volunteer. Thus, while financial compensation may yield the greatest range of outcomes, other more fiscally conservative and financially manageable compensation models also appear to generate meaningful experiences for the students serving in these roles.

These data also offer a current empirical picture of peer-leader training tactics. More specifically, findings from the current study indicate that peer-leader training is often longer than one week in duration and suggest an emergent model of best practice for peer-leadership training that represents a sustained professional development programme inclusive of initial training, ongoing support and supervision by professional staff. Unfortunately, the structure of these items on the survey did not allow for meaningful analyses of training modules or duration and the relationship with self-rated outcomes measures, which suggests an area for future study in the peer-leader research agenda.

The current study also indicates that student peer leaders do, in fact, perceive benefit from their service in these roles in both skill areas and enhancements to their undergraduate experience. Peer leadership seems an effective tool for forging connections with campus constituents (i.e. faculty, staff and peers) and enhancing a sense of belonging. Further, it provides a valuable means to advance diversity skills and intercultural competence in a way that is more organic and less socially engineered than more formal curricula and events about the topic of cross-cultural awareness and interaction. The fact that academic outcomes are last among the areas of perceived benefit is interesting, especially given the expansion in academic areas as a sponsor for these opportunities. This begs for additional research to examine this disconnect, as well as for the educators who oversee peer-leader programmes to place greater focus on the enhancement of academic skills as an outcome of students' service in this role.

The examination of outcomes by peer-leader role offers additional information and suggestive evidence about how to leverage these programmes and focus future efforts. Again, academic peer-leader programmes were found to be the least influential when examining students' self-ratings of outcomes. Conversely, peer-leadership programmes sponsored by community service were especially impactful across both skill areas and experiential outcomes; this suggests that there is great potential in expanding peer-leader opportunities in this area to more than one quarter of the student population. Peer-leader roles in both orientation and residence life also yield significant returns. However, peer leaders perceive that their service in a residential setting is slightly more beneficial to the development of their skill-based outcomes whereas orientation leaders yielded slightly greater benefits across experiential outcomes. Whereas this may be appropriate to the scope of responsibilities for these respective roles, these results provide a framework for educators

to examine these peer-leader positions to expand their range of impact, to communicate to current and potential peer leaders the developmental areas associated with their service, and to identify outcomes for future research on the most common peer-leadership roles.

Finally, the examination of peer-leader structures and outcomes provides suggestive evidence that peer leadership meets many of the criteria to be considered as a high-impact practice. For instance, the number and wide range of peer-leader positions held by students indicates a strong investment of time and energy. The positive results of self-rated measures on faculty, staff and peer interaction indicate high levels of meaningful contact. Further, the high self-ratings on interaction with, and understanding of, people from backgrounds different from their own illustrate the potential for peer leadership to expose students to diverse perspectives. The more sustained model of peer-leader training and the initial evidence of supervision as a substantial part of peer-leader training are important vehicles for communicating high expectations and providing frequent feedback. Training and rewards structures for peer-leader programmes also represent a means of creating accountability loops. The quantitative data drawn from the current study did not directly address reflection, integrated learning, or discovery through real-world application. However, these may be considered in future examinations of data drawn from the open-ended items included in the survey and guidelines for the examination of those qualitative data in future research. These results suggest that peer leadership is an emerging high-impact practice and, thus, a valuable tool toward the advancement of 21st-century learning outcomes.

In sum, the findings of this study have the potential to impact educational research and practice in several ways. First, the diversity and relative size of the sample allowed for an exploration of a wide range of peer-leader experiences as well as the structure and outcome of these experiences and, thus, represent a unique opportunity to explore and capture a more comprehensive picture of peer-leadership programmes and outcomes than has been achieved in past research. Results of this examination include a national portrait of the characteristics of peer-leader programmes, training and compensation; the expanding use of peer leaders in academic programmes; and the important benefits and potential challenges that peer leaders report as the result of these experiences. Second, the exploration of the interrelationships between structural characteristics of peer-leadership experiences and their outcomes lends important empirical support for the nature, structure, area of focus and impact of peer-leader experiences, which can help institutional efforts to develop and support peer-leader programmes as a cost-effective means of student support for both the curricular and co-curricular student experience. Third, these data identify common structures for peer-leader recruitment and training and suggest ways to enhance the effectiveness of these methods, which is one of the most important components of peer-leader success (Hamid, 2001). As such, these data represent the first national portrait of peer-leader programmes and have the potential to enhance the recruitment, preparation and continued support of peer leaders as well as significantly to advance the research agenda on this important undergraduate experience of and for students.

References

- Astin, A.W. (1993). *What matters in college? Four critical years revisited*. San Francisco, CA: Jossey-Bass.
- Black, K.A. & Voelker, J.C. (2008). The role of perceptions in first-year student engagement in introductory courses. *Journal of The First-Year Experience & Students in Transition*, 20(2), 25–44.
- Brownell, J.E. & Swaner, L.E. (2010). *Five high-impact practices: Research on learning outcomes, completion, and quality*. Washington, DC: Association of American Colleges & Universities (AAC&U).
- Bunting, B.D. (2014). Being transformed by being a peer mentor: An examination of high-impact and transformative peer mentor experience. Unpublished doctoral dissertation, Brigham Young University, Provo, UT.
- Colvin, J.W. & Ashman, M. (2010). Roles, risks and benefits of peer mentoring relationships in higher education. *Mentoring & Tutoring: Partnership in Learning*, 18(2), 121–134.
- Cuseo, J.B. (1991). *The freshman orientation seminar: A research-based rationale for its value, delivery, and content*. Monograph No. 4. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience.
- Cuseo, J.B. (2010a). Peer leadership: Definition, description, and classification. *E-Source for College Transitions*, 7(5), 3–5.
- Cuseo, J.B. (2010b). Peer power: Empirical evidence for the positive impact of peer interaction, support, and leadership. *E-Source for College Transitions*, 7(4), 4–6.
- Ender, S.C. & Kay, K. (2001). Peer leader programs: A rationale and review of the literature. In S.L. Hamid (Ed.). *Peer leadership: A primer on program essentials*. Monograph No. 32, pp. 1–12. Columbia, SC: National Resource Center for The First-Year Experience and Students in Transition, University of South Carolina.
- Evans, N.J., Forney, D.S., Guido-DiBrito, F.M., Patton, L.D. & Renn, K.A. (2010). *Student development in college: Theory, research and practice*. (2nd ed.). San Francisco, CA: Jossey-Bass.
- Greenfield, G.M., Keup, J.R. & Gardner, J.N. (2013). *Developing and sustaining successful first-year programs: A guide for practitioners*. San Francisco, CA: Jossey-Bass.
- Grosz, R.D. (1990). Suicide. *Journal of College Student Psychotherapy*, 4(3), 304–319.
- Hamid, S.L. (Ed.). (2001). *Peer leadership: A primer on program essentials*. Monograph No. 32. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Harmon, B.N. (2006). A qualitative study of the learning processes and outcomes associated with students who serve as peer mentors. *Journal of The First-Year Experience and Students in Transition*, 18(2), 53–82.
- Hart, D. (1995). Reach-out advising strategies for first-year students. In M. L. Upcraft & G.L. Kramer (Eds). *First-year academic advising: Patterns in the present, pathways to the future*. Monograph No. 18, pp. 75–82. Columbia, SC: University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Hill, R. & Reddy, P. (2007). Undergraduate peer mentoring: An investigation into processes, activities, and outcomes. *Psychology Learning & Teaching*, 6(2), 98–103.

- Jacobi, M. (1991). Mentoring and undergraduate academic success: A literature review. *Review of Educational Research*, 61, 505–532.
- Keup, J.R. (2012). *New directions in higher education: Peer leadership in higher education*. San Francisco, CA: Jossey-Bass.
- Kram, K. E. & Isabella, L. A. (1985). Mentoring alternatives: The role of peer relationships in career development. *The Academy of Management Journal*, 28, 110–132.
- Kuh, G.D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges & Universities (AAC&U).
- Kuh, G.D. & O'Donnell, K. (2013). *Ensuring quality and taking high-impact practices to scale*. Washington, DC: Association of American Colleges and Universities (AAC&U).
- Landrum, R.E. & Nelson, L.R. (2002). The undergraduate research assistantship: An analysis of the benefits. *Teaching of Psychology*, 29(1), 15–19.
- Lewis, S.E. & Lewis, J.E. (2005). Departing from lectures: An evaluation of a peer-led guided inquiry alternative. *Journal of Chemical Education*, 82(1), 135–140.
- Light, R.J. (2001). *Making the most of college: Students speak their minds*. Cambridge, MA: Harvard University Press.
- Newton, F.B. & Ender, S.C. (2010). *Students helping students: A guide for peer educators on college campuses*. (2nd ed.). San Francisco, CA: Jossey-Bass.
- Nora, A. & Crisp, G. (2007). Mentoring students: Conceptualizing and validating the multi-dimensions of a support system. *Journal of College Student Retention: Research, Theory & Practice*, 9, 337–356.
- Pascarella, E.T. & Terenzini, P.T. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco, CA: Jossey-Bass.
- Pascarella, E.T. & Terenzini, P.T. (2005). *How college affects students: Volume 2, a third decade of research*. San Francisco, CA: Jossey-Bass.
- Rose, G.L. (2003). Enhancement of mentor selection using the Ideal Mentor scale. *Research in Higher Education*, 44(4), 473–494.
- Russel, J.H. & Skinkle, R.R. (1990). Evaluation of peer-adviser effectiveness. *Journal of College Student Development*, 31(5), 388–394.
- Schwitzer, A.M. & Thomas, C. (1998). Implementation, utilization, and outcomes of a minority freshman peer-mentor program at a predominantly White university. *Journal of The First-Year Experience & Students in Transition*, 10(1), 31–50.
- Sharkin, B.S., Plageman, P.M. & Mangold, S.L. (2003). College student response to peers in distress: An exploratory study. *Journal of College Student Development*, 44(5), 691–698.
- Skipper, T.L. (2005). *Student development in the first college year: A primer for college educators*. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. (2nd ed.). Chicago: The University of Chicago Press.
- Wawrzynski, M.R. & Beverly, A.M. (2012). Realized benefits for first-year student peer educators. *Journal of The First-Year Experience & Students in Transition*, 24(1), 45–60.

Yazedjian, A., Purswell, K.E., Toews, M.L. & Sevin, T. (2007). Adjusting to the first year of college: Students' perceptions of the importance of parental, peer, and institutional support. *Journal of The First-Year Experience & Students in Transition*, 19(2), 29–46.

RESEARCH ARTICLE

Do tutors matter? Assessing the impact of tutors on first-year academic performance at a South African university

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Abstract

This research sought to determine if a teaching intervention using tutors in a South African university could promote epistemological access to university for first-year students. Although hiring, developing and managing tutors takes money, time and energy, the effectiveness of tutors in the South African context is underreported. The first-year class under study was diverse in terms of gender, race, ethnicity and geographical origin. The tutors were all postgraduate students, and similarly diverse. In terms of research design, student test results were compared from one test to another. The students also rated the tutors. Students who attended the majority of the assigned tutorials improved their marks by an average of 20%. Even students whose tutorial attendance was haphazard fared better academically than those who did not attend at all. Students who skipped all the tutorials saw a dramatic decline in their marks, suggesting that tutorial attendance should be obligatory. Individual tutors matter, however. It seems that some tutors can explain, facilitate understanding and engage their students better than others. Students assigned to such tutors achieved the greatest academic gains. Thus, recruitment strategies and tutor training are crucial. Tutor popularity (based on student ratings) did not correlate with positive academic improvements. Thus, student ratings should not by themselves strongly influence hiring decisions. In conclusion, resources allocated to tutors were worthwhile and the tutors enabled epistemological access for many.

Keywords

Higher education, teaching and learning, tutoring, first-year student experience, South Africa.

Introduction

One of the characteristics of higher education in South Africa is the poor pass rate of first-year students, with between one in three and two in three students failing at least some modules (Badat, 2010; Coughlan, 2006; Du Plessis, Müller & Prinsloo, 2005; Eiselen & Geysler, 2003; Grussendorff, Liebenberg & Houston, 2004; Lourens & Smit, 2003). Multiple reasons for this failure have been posited. These include: a mismatch between home language and the language of learning and teaching (LOLT); students lacking the socio-cultural skills and knowledge (such as academic literacy) required for success in higher

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education; poor time management; poor orientation strategies; and poor study habits (Cross & Carpentier, 2009; Grant, 2005; Jansen, Sehlapelo & Tabane, 2007; Maree, 2008; Mqgwashu, 2009; Mouton, Louw & Strydom, 2013). Such students are often described as “underprepared for university study” (Davids, 2014; Dube, Kane & Lear, 2012; Underhill & McDonald, 2010). Ensuring that students gain epistemological access to the knowledge domains of academia requires an adaptation to the teaching programme to help students acquire the requisite skills, content and ways of doing specific to the discipline (Underhill, Clarence-Fincham & Petersen, 2014). This includes overt teaching of the conventions of academia, where students are “socialised” into the discipline of study (Archer, 2008). One way of doing this is to make use of structured tutorials run by discipline-specific tutors.

As tutors and tutorial groups can be viewed as a means of bringing the key elements of participation and “reification” together, the tutor intervention study described here drew on the community of practice approach (Davids, 2014; Grant, 2005; Lave & Wenger, 1991). “Reification” is understood here as the “way things are done” and is manifest in specific academic activities; participation is the performance of the way “things are done” (Wenger, 1998). In this case, the tutorials and the tutors created a learning environment in which students could learn the way things are done through performance in a safe, supportive environment (Sutherland, 2009; Aluko & Hendrikz, 2012). The tutorial activities can be thought of as boundary objects – structured learning activities designed to enable students to move progressively towards full participation in a community of practice (Wenger, 1998). However, the structured learning activities are insufficient on their own: they require brokering by the tutors. Page, Loots and Du Toit (2005) and Underhill, Clarence-Fincham and Petersen (2014) both argue strongly that these tutors must be part of the discipline themselves if this “brokering” is to be successful.

Tutorials and tutors

There are various types of tutoring: (1) one-on-one; (2) peer; (3) group; (4) cross-age; and (5) online, using email or discussion forums (Van Lehn, 2011). In this study, the type of tutorial system could be best described as a small group or class in which a more experienced or able student works with less experienced students to help them, in a structured and organised manner (such as with set meeting times and venues), to adjust to a new environment or discipline (Page, Loots & Du Toit, 2005). Such tutorials enable a more individualised instruction, considered vital in the context of large classes, complex student needs and a diverse student body (Underhill, Clarence-Fincham & Petersen, 2014). They were also broadly similar to Geography tutorials described by Appleton (2010) as teaching sessions aimed at helping students understand complex power relations and writing skills, by making use a variety of sources such as books, websites and reports. Tutorials are, therefore, small groups or classes in which learning is more personalised and individualised. They complement the lectures (Mischo & Haag, 2002).

The international perspective

A great deal of literature supports the notion that tutoring can have a positive effect on student academic performance (Beck, Skinner & Schwabrow, 2013; Cohen, Kulik & Kulik,

1982; Colvin, 2007; Merrill *et al.*, 1992; Robinson, Schofield & Steers-Wentzell, 2005). For example, Mischo and Haag's (2002) work in Germany found that tutoring positively affected school performance and motivational levels. Margolis (2005) found that exposure to tutoring resulted in better test scores, enabled students to acquire more learning strategies, and improved their reading skills. Walsh, Larsen and Parry (2009) found that both academic tutors (who helped students with the discipline) and personal tutors (who helped them to adjust to university life) had a positive effect on first-year student success. In a cross-national study, Hof (2014) found that tutoring had a positive impact on academic performance in India, Israel, Italy and the United States. With tutoring, student's tests scores go up, their reading improves, and their ability to understand mathematics, language and social science concepts increases (Hof, 2014; Robinson, Schofield & Steers-Wentzell, 2005). Thus, employing tutors in higher education offers a significant value proposition (Retna, Chong & Cavana, 2009; Truer, 2014). This is especially true for universities battling with large classes and at-risk students (Colvin, 2007; Retna, Chong & Cavana, 2009; Robinson, Schofield & Steers-Wentzell, 2005).

While the literature calls for the need for well-planned tutorials, there is also strong support for the proper training and careful appointment of tutors (Sutherland, 2009). For example, Margolis (2005) emphasises that tutors who are certified (qualified), experienced and competent are more successful than ones who are not. Thus, expertise and skills matter. In particular, good tutors help students to build self-efficacy, encourage persistence and take credit for achievements. Walsh, Larsen and Parry (2009) suggested the best tutors make themselves available to their students and are friendly, approachable and sympathetic. Van Lehn (2011) argues that good tutors are ones who are able to scaffold reasoning tasks (using guided prompting) and give frequent and motivational feedback (praise the efforts of the students; get students to focus on effort, not ability). Scaffolding also requires that a tutor is able to unpack the task/reading; break tasks down into smaller manageable components; make tasks shorter, less complex, and more concrete; and issue clear instructions (Appleton, 2010).

Good tutors, therefore, give students repeated opportunities to master a skill. They are strategic in their focus – that is, on the important skills/content. They use simple, direct language and avoid negative comments. They have good social skills as they are enthusiastic, good listeners, have good/positive body language and actively manage anxiety in their students (Appleton, 2010). Tutors are unlikely to be simply born with such skills and pedagogical knowledge, so tutors need structured support and training – workshops, survival guides, definite roles and responsibilities, tutor support groups and mentoring (Sutherland, 2009). Robinson, Schofield and Steers-Wentzell (2005) found that tutor training had a positive effect by making the tutors more interactive; training improved their interpersonal, managerial and content skills (especially teaching tutors to stay on task and being well versed in the content). Nevertheless, tutors also need to be chosen well, monitored, and adequately supervised (Appleton, 2010; Margolis, 2005). Despite this, tutors are often part-time, motivated only by the money, inexperienced, and usually students themselves. Tutors, then, are beginners, lacking in subject knowledge and teaching experience, yet under pressure to produce high-quality learning experiences.

Tutors: the South African perspective

A number of studies published between 2005 and 2014 indicate that many South African universities are grappling with tutor-related issues. A number of themes emerge from these studies. First, within the context of massification, a tutorial system is seen as pivotal to broadening participation and improving throughput rates of underprepared students (Fouche, 2007; Page, Loots & Du Toit, 2005; Thomen & Barnes, 2005; Underhill, Clarence-Fincham & Petersen, 2014). Second, tutorials seem to have a positive impact on academic performance – so much so that skipping tutorials was linked to academic failure (Fouche, 2007; Page, Loots & Du Toit, 2005). Fouche (2007) and Seabi, Cockcroft and Fridjhon (2009) found a statistically significant difference between the academic performance of students who attended tutorials and those who did not. Third, much work has been conducted on the value that tutorials offer students, such as promoting deep learning, enabling active engagement, lowering student stress levels, building cognitive strengths that support the acquisition and retention of skills and knowledge, and promoting a passion for the discipline (Hlatshwayo, 2013; Thomen & Barnes, 2005; Underhill, Clarence-Fincham & Petersen, 2014). Fourth, a strong emphasis on the need to develop and train tutors, specifically within the discipline in which they must operate, emerges (Dube, Kane & Lear, 2012; Roux, 2009; Underhill, Clarence-Fincham & Petersen, 2014; Underhill & McDonald, 2010).

The research context

The students who participated in this study were all first-year Geography students at the University of Johannesburg. The class was diverse in terms of race, gender, socio-economic status, and degrees for which students were registered. A typical student in this module could be described as black, male, aged roughly 19½, having matriculated in a rural or township school in Gauteng, where the fees were nil or low but the matriculation pass rate was relatively good. The tutorials were designed explicitly to support the lectures but not to replace or repeat them. Tutors were to assist students with course-related Geography knowledge but – in line with the recommendations of Roux (2009) – without re-teaching the lectures and without doing all the work for the student. Tutorials supported the lectures by providing the students with additional information, through case studies or examples, of the content with the purpose of promoting greater understanding thereof (see Appendix I for an example from the lecture/work schedule).

Also, the tutorials were designed to support the acquisition of specific academic literacy skills, such as “reading for understanding”, academic writing, problem-solving, and how to build an academic argument. Thus, the tutorials were highly structured, with specific reading and writing tasks that students had to complete. This type of tutorial was developed based on earlier work done by the author (McKay, 2013). Students signed up for specific time slots, which were then allocated to specific tutors. In line with the recommendations of Roux (2009), all tutors were supposed to have the same number of students and students were not supposed to switch tutor groups. To “incentivise” the students to attend and do the learning activities, students were told that the tutorials were compulsory and that work completed for the tutorials would count 10% towards the semester mark. There were 13

tutorials over the 14-week semester, each with an associated task. Each student's 10 best tutorial tasks were incorporated into the final semester mark (similar to what was reported by Thomen and Barnes [2005], where tutorial marks counted 5%). Unfortunately, as with the case of Fouche (2007), and unlike the situation reported at the University of Fort Hare by Thomen and Barnes (2005), there was no way to force students to attend tutorials.

The tutors were all postgraduate Geography students of mixed gender and race. In line with the recommendations of Roux (2009), there was a tutor co-ordinator who was a doctoral student in Geography. The coordinator assisted the lecturer with academic administration – capturing marks, checking that tutorials took place, assisting with the management of the tutors, giving feedback to the lecturer when problems arose, and so forth. The tutors had a number of duties: (1) attending tutor meetings and training sessions; (2) sitting in on lectures (to assist the lecturer to maintain order in the lecture hall); (3) handing out and collecting documents (such as tests and assignments); (4) preparing for the tutorial sessions; (5) being punctual for tutorials, using the full teaching time; (6) various administrative tasks (such as assisting with capturing marks and keeping attendance records); (7) the marking of some tasks; (8) scheduling individual one-on-one sessions with students (on request); and (9) referring students with general study habit problems, writing problems, emotional and other problems to the relevant professionals (such as the Writing Centre or Student Psychological services).

Although tutorial support for this module began in earnest in 2010, to date there are no official time slots for tutorials (due to timetable and venue constraints). The tutorial model was refined over time. In 2011, not all the tutors taught all the scheduled tutorials or submitted reports. This could be because once a tutor was on the payroll, he or she was paid regardless of whether he or she had delivered the service. Thus, some tutors realised that they could skip tutorials without losing out financially. In addition, if tutors resigned, they could not be replaced as the budget had already been allocated to a specific individual and reallocation of these funds was an overly bureaucratic task that often yielded no result. Another challenge was that not all students attended the tutorials, and tutors reported that even when students attended, they were seldom prepared for them. Moreover, informal complaints from students indicated that some tutors seemed to have better teaching and facilitation skills than others. Consequently, changes were implemented in 2012. Tutor payments were switched to the end of each term and only upon the submission of a claim form. Tutors had to sign contracts outlining their duties and what was expected of them. Tutors could no longer give 24 hours' notice – they could only leave at the end of a term or semester. Contracts were only issued for one semester at a time to manage poorly performing tutors out of the system.

For years, poor salaries hindered the recruitment of quality tutors. Thus, over time, payment rates were improved, with the rate per hour moving from R65 in 2011 to R109 by 2013. The number of hours for which the tutors worked also increased from five to ten per week, to increase the “take-home pay” of the average tutor. A cause of disagreement for the tutors was that under the old system hourly rates were based on qualifications, not job description. For example, in 2011, a tutor with an undergraduate degree was paid R65 an

hour, one with an honours degree R75 an hour, and one with a master's degree R88 per hour. Tutors considered this system unfair and wanted equal pay for equal work. In 2014, changes were made and all tutors were paid the same rate of R109 per hour for 140 hours (or roughly R15 200 per semester). This is in line with Page, Loots and Du Toit (2005), who recommend paying tutors the same basic fee (although with a bonus system for those who "went the extra mile"). The tutor coordinator received double that, as he or she worked 20 hours a week. Overall, the total tutor budget for the first semester in 2014 was about R90 000 (an increase of 53% from 2011). In addition, stricter hiring criteria were adopted to ensure that only tutors who had an affinity for teaching were hired.

Research method

To determine whether the tutors had a positive effect on students' academic performance, the following methodology was employed. First, a class list was drawn up to constitute the population. As the official class list can change from day to day and week to week, the lecturer had to develop a class list using class attendance forms, test scripts, assignment submissions and tutorial attendance registers. On this basis, some 358 students constituted the total population. However, only 336 were on the final official faculty-issued class list. When the class list and the final official list matched one another by the end of the semester, a discrepancy of 6% (22 students) was recorded. It may be that some students attend classes and write tests but do not register or cancel their registration. The study followed the methodology used by Fouche (2007), Mischo and Haag (2002), and Seabi, Cockcroft and Fridjhon (2009) – one in which the first test was used as a pre-test (or baseline test) and the second test constituted the post-test. Only students who wrote both tests were included in the sample (323 students). Those students (numbering 243) who had consistently attended tutorials (at least 10 of the 13 tutorials) were placed into Group One. The second grouping (Group Two) comprised students who attended only a few tutorials (64 students); and the third group (Group Three) represents students who had attended no tutorials (11 students). Results of the tests for each of these three groups were compared to establish if there had been an improvement.

In order to enable students to rate their tutor, a rating sheet was developed using a Likert scale (see Appendix II). In terms of approval ratings, 238 students participated in the opinion survey. The opinion survey was conducted during the last week of the semester during one of the lecture periods, and yielded an overall response rate of 71% of those on the final official class list (a few students who did not attend any tutorials also rated the tutors, but these scores were not included in the analysis). No student who was not on the official class list submitted an opinion survey. The survey was not anonymous, as the survey instrument asked for their student number – but they could leave it off if they wanted to. Students were assured that they could be entirely honest in their evaluation of the tutor as there would be no ramifications either for the tutor or for themselves. The scores were added up and converted to a percentage. This methodology meant that no tutor could score less than 20%, but could score up to 100%. The rating sheets were then captured in a way that generated an average rating for each tutor.

Research findings and discussion

Comparing the results between Test One and Test Two for each three groups (Table 1) makes it clear that the tutorials helped the students. Even attending some tutorials was better than attending no tutorials. The marks of students who attended 10 or more tutorials (Group One) marks went up, on average, by 20%. The marks of students who attended some tutorials (Group Two) fell by an average of 8%. Students who attended no tutorials (Group Three) saw their marks decline by an average of 13%. As the class average for Test One and Test Two was 46% and 45% respectively, it can be deduced that students who did not attend tutorials, or who attended only a few, placed significant downward pressure on the class average.

Table 1: Test result comparison between the three groupings

Tutorial groupings by attendance	Change between Test 1 and Test 2
Group One (attended 10 or more tutorials)	Mean increase +20%
Group Two (irregular tutorial attendance)	Mean decrease -8%
Group Three (did not attend tutorials)	Mean decrease -13%

An interesting, yet unexpected, finding was that there was a large difference between some of the tutors when a deeper analysis was undertaken of Group One students. For example, as shown in Table 2, two tutors (Tutor A and Tutor B) stood out as having the most positive effect on the marks of the students in their tutorial group. Students tutored by tutors A and B recorded an average increase between Test One and Test Two of 29%. One tutor (Tutor E) was found not to have made a positive difference; students tutored by this person recorded a decline in their test marks by 2% on average. Nevertheless, when compared to Group Two and Group Three, it was found that it is better to have a weak tutor than no tutor at all. Of interest, students also voted for one of the good tutors with their feet. That is, they had left the weakest tutor's class and joined the class of the strongest tutor. Accordingly, the strongest tutor was overwhelmed with student numbers (77), whereas the weakest tutor was left with only 42 students. Tutor A and Tutor B also had the best attendance records – indicating that they seemed to be more effective than other tutors in getting students to attend tutorials.

Table 2: Test result comparisons by individual tutors

Tutor	Change between Test 1 and Test 2 for the whole tutorial group	Average change per student	No. of students per tutor	No. of students who attended 10+ tutorials
Tutor A	Cumulative increase: + 188%	+29%	77	62 (81%)
Tutor B	Cumulative increase: + 188%	+29%	57	52 (91%)
Tutor C	Cumulative increase: + 136%	+21%	68	50 (74%)
Tutor D	Cumulative increase: + 118%	+19%	68	52 (76%)
Tutor E	Cumulative decrease -14%	-2%	42	27 (64%)

Note: the larger tutorial groups were split into two different timetable slots.

Analysis of the results of the opinion survey (Table 3) reveals that student approval ratings do not correlate with improved academic performance [$r^2 = 0.0022$]. This finding may explain why Davids (2014) could not determine whether a tutorial system is worthwhile because that study used an opinion or rating survey. Table 3 shows that the approval rates were all uniformly high (the average rating was 83%) and clustered. One tutor (Tutor B) was given an extremely low rating by 17% of the class, despite the fact that this tutor had a positive impact on test scores. The tutor deemed the worst (Tutor E) had the second highest approval rating. That said, Tutor A, deemed to be one of the best tutors by the test scores, was also rated the best by the students. Tutor A also had the largest number of students responding – again, reinforcing the possibility that a good tutor inspires students to be more engaged and attend classes. Overall, with only five tutors to evaluate, it is not possible to say that race, gender and level of qualification of the tutor had an effect on the difference in test scores or the results of the opinion survey.

Table 3: Approval ratings of individual tutors

Tutor	Approval ranking	Rating	No. of responses per tutor	Response rate	Percentage of very poor ratings	Percentage of very good ratings
Tutor A	1	87%	66	86%	3%	29%
Tutor E	2	86%	30	71%	7%	27%
Tutor D	3	82%	44	65%	2%	2%
Tutor C	4	81%	52	76%	4%	8%
Tutor B	5	79%	46	81%	17%	9%

Attending tutorials had a positive effect on the academic performance of the students. It must be stressed, however, that these tutorials were highly structured. Each one was carefully constructed as a unique learning opportunity to support the acquisition of conceptual and content understanding, as well as academic literacy. Thus, it cannot be assumed that tutorials not similarly structured will have the same positive effect. The actual tutor also matters. Some tutors are better able to explain, facilitate understanding, and encourage their students to become engaged learners. These tutors saw their students make the biggest gains between Test One and Test Two. The findings highlight that a poor or weak tutor can negatively affect learning. When considering both tutorial attendance and participation in the opinion survey, the results indicate that a good tutor may also stimulate and encourage participation in the module. In a situation where the class is big, students are new to the university and the lecturer is overloaded work-wise, the support of tutors and the tutor coordinator proved valuable and the expenditure justifiable.

Concluding remarks

Overall, this study supports the work of Fouche (2007), Page, Loots and Du Toit (2005), Thomen and Barnes (2005), and Underhill, Clarence-Fincham and Petersen (2014). In the case of this first-year class, tutors played an important role in promoting student academic success. As the tutorials were carefully structured, however, this may also have contributed

to the academic success of the students. In line with Fouche (2007) and Page, Loots and Du Toit (2005), skipping tutorials was linked to academic failure. Thus, it is recommended that tutorials be made compulsory. This study also indicates that, as noted by Davids (2014), only people with the appropriate mix of qualifications, facilitation skills and popularity be employed as tutors. Certainly, the most popular tutor is not necessarily the best one. There is a need to develop and train tutors, because there was a discernible difference in skill and competence. Training may not be sufficient; tight management of who is appointed and how they conduct themselves is required to ensure that poor tutoring does not disadvantage students. Thus, accountability and reward should be built into the tutor system. Good tutors need to be paid well and retained. Perhaps programmes to retain good tutors for longer than a semester or an academic year should be explored.

Appendix I: Example from the lecture/work schedule

Week 1 Tut 1 Gauteng as a gateway to Africa	The purpose of this tutorial is to help you understand the importance of: (a) using a number of different sources to inform yourself; (b) using sources from a variety of places or writers; and (c) knowing the difference between information written by corporations or employees for the purpose of selling something (a product or an idea) and information written by academics.	Contextual analysis
Week 2 Tut 2 Exploring social grants in South Africa	The purpose of this tutorial is to explore the pros (advantages) and cons (disadvantages) of social grants. While it is obvious that in the face of poverty, social grants play a vital role in helping people improve their quality of life in South Africa, there are significant downsides to having a population dependent upon welfare.	Read text and figures and graphs and answer questions
Week 6 Tut 6 What are the environmental consequences of the massive rise of manufacturing in China?	Here, we trace the environmental and human health consequences of China's massive economic growth. This growth has been based primarily on manufacturing, with China effectively becoming the "workshop of the world". However, this economic success story has come at huge environmental and human health costs. Some argue that if China were a true democracy, then the government would have to pay far more attention to solving this problem than they currently do.	Essay writing

Appendix II: The tutor rating survey

Read the statements below and decide the degree to which they are true or not. Focus on YOUR TUTOR. My tutor's name is: _____

Circle the number that corresponds with your opinion:

Statement	1=strongly agree 2=agree 3=neither agree nor disagree 4=disagree 5=strongly disagree				
My tutor is friendly	1	2	3	4	5
My tutor always started the tutorial on time	1	2	3	4	5
My tutor knew the work, was always prepared	1	2	3	4	5
My tutor speaks well; it is easy to understand him/her	1	2	3	4	5
My tutor helped me in this module	1	2	3	4	5
I would recommend my tutor to other students	1	2	3	4	5
I would recommend my tutor as a teacher	1	2	3	4	5
My tutor makes full use of the tutorial time	1	2	3	4	5

Acknowledgements

The author wishes to thank Joy-Michelle Tupholme and Annie-Estelle Ambani for the data capturing and assistance with the analysis, as well as Andrew Karam for the literature search.

References

- Aluko, R. & Hendrikz, J. (2012). Supporting distance education students: The pilot study of a tutorial model and its impact on student's performance. *Progressio*, 34(2), 68-83.
- Appleton, L. (2002). Tutoring relevant Geography: A People's Geography Project initiative. *Journal of Geography in Higher Education*, 26(3), 291-307.
- Archer, A. (2008). Investigating the effect of Writing Centre interventions on student writing. *South African Journal of Higher Education*, 22(2), 248-264.
- Badat, S. (2010). *The challenges of transformation in higher education and training institutions in South Africa*. Paper Commissioned by the Development Bank of Southern Africa, 56 pp. Retrieved [date] from www.ru.ac.za/media/rhodesuniversity/content/vc/documents/The%20Challenges%20of%20Transformation%20in%20Higher%20Education%20and%20Training%20Institutions%20in%20South%20Africa.pdf.
- Beck, R.J., Skinner, W.F. & Schwabrow, L.A. (2013). A study of sustainable assessment theory in higher education tutorials. *Assessment & Evaluation in Higher Education*, 38(3), 326-348.
- Cohen, P.A., Kulik, J.A. & Kulik, C-L. (1982). Educational outcomes of tutoring: A meta-analysis of findings. *American Educational Research Journal*, 19(2), 237-248.
- Colvin, J.W. (2007). Peer tutoring and social dynamics in higher education. *Mentoring & Tutoring: Partnership in Learning*, 15(2), 165-181.

- Coughlan, F. (2006). Access for success. *South African Journal of Higher Education*, 20(2), 209–218.
- Cross, M. & Carpentier, C. (2009). “New students” in South African higher education: Institutional culture, student performance and the challenge of democratisation. *Perspectives in Education*, 27(1), 6–18.
- Davids, M.N. (2014). Traditional tutorial system –fit for purpose or past its sell-by date? University students’ pedagogical experiences. *South African Journal of Higher Education*, 28(2), 338–354.
- Dube, C., Kane, S. & Lear, M. (2012). The effectiveness of students redrafting continuous assessment tasks: The pivotal role of tutors and feedback. *Perspectives in Education*, 30(3), 50–59.
- Du Plessis, A., Müller, H. & Prinsloo, P. (2005). Determining the profile of the successful first-year accounting student. *South African Journal of Higher Education*, 19(4), 684–698.
- Eiselen, R. & Geysers, H. (2003). Factors distinguishing between achievers and at-risk students: A qualitative and quantitative synthesis. *South African Journal of Higher Education*, 7(2), 118–130.
- Fouche, I. (2007). The influence of tutorials on the improvement of tertiary students’ academic literacy. *Per Linguam*, 23(1), 45–55.
- Grant, A. (2005). From a distance: Tutors as a community of practice. *Education as Change*, 9(1), 80–100.
- Grussendorff, S., Liebenberg, M. & Houston, J. (2004). Selection for the Science Foundation Programme (University of Natal): The development of a selection instrument. *South African Journal of Higher Education*, 18(1), 265–272.
- Hlatshwayo, A. (2013). Tutorials as a way of enhancing active participation in university classes. *Journal for Language Teaching*, 47(1), 11–27.
- Hof, S. (2014). Does private tutoring work? The effectiveness of private tutoring: A nonparametric bounds analysis. *Education Economics*, 22(4), 347–366.
- Jansen, J.D., Sehlapelo, H. & Tabane, R. (2007). *I must study double now: How students encounter and negotiate academic lives at the University of Pretoria*. Pretoria: Council on Higher Education.
- Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lourens, A. & Smit, I.P.J. (2003). Retention: Predicting first-year success. *South African Journal of Higher Education*, 17(2), 169–176.
- Maree, K. (2008). The story of changing realities in the 21st century: Familiar themes, same relevance. *Perspectives in Education*, 26(4), 1–5.
- Margolis, H. (2005). Interesting struggling learners’ self-efficacy: What tutors can do and say. *Mentoring & Tutoring: Partnership in Learning*, 13(2), 221–238.
- McKay, T. (2013). Embedding academic support within an academic discipline: A teaching model. *South African Journal of Higher Education*, 27(3), 682–695.
- Merrill, D.C., Reiser, B.J., Ranney, M. & Trafton, J.G. (1992). Effective tutoring techniques: A comparison of human tutors and intelligent tutoring systems. *The Journal of the Learning Sciences*, 29(3), 277–305.
- Mgqwashu, E.M. (2009). Rethinking academic literacy for educators: Towards a relevant pedagogy. *Perspectives in Education*, 27(3), 215–227.
- Mischo, C. & Haag, L. (2002). Expansion and effectiveness of private tutoring. *European Journal of Psychology of Education*, 17(3), 263–273.
- Mouton, N., Louw, G.P. & Strydom, G.L. (2013). Restructuring and mergers of the South African post-apartheid tertiary system (1994–2011): A critical analysis. *International Business and Economic Research Journal*, 12(2), 151–166.

- Page, B.J., Loots, A. & Du Toit, D.F. (2005). Perspectives on a South African tutor/mentor program: The Stellenbosch University experience. *Mentoring & Tutoring: Partnership in Learning*, 13(1), 5–21.
- Retna, K.S., Chong, E. & Cavana, R.Y. (2009). Tutors and tutorials: Student's perceptions in a New Zealand university. *Journal of Higher Education Policy and Management*, 31(3), 251–260.
- Robinson, D.R., Schofield, J.W. & Steers-Wentzell, K. L. (2005). Peer and cross-age tutoring in math: Outcomes and their design implications. *Educational Psychology Review*, 17(4), 327–362.
- Roux, C. (2009). Holistic curriculum development: Tutoring as a support process. *South African Journal of Education*, 29, 17–32.
- Seabi, J., Cockcroft, K. & Fridjhon, P. (2009). Effects of mediated learning experience, tutor support and peer collaborative learning on academic achievement and intellectual functioning among college students. *Journal of Psychology in Africa*, 19(2), 161–168.
- Sutherland, K.A. (2009). Nurturing undergraduate tutors' role in the university teaching community. *Mentoring & Tutoring: Partnership in Learning*, 17(2), 147–164.
- Thomen, C. & Barnes, J. (2005). Assessing students' performance in first-year university management tutorials. *South African Journal of Higher Education*, 19(5), 956–968.
- Truvert, T. (2014). Enhancing tutorial learning experiences: A programme to develop sessional-tutor teaching skills by raising awareness about learning. *Studies in Higher Education*, 39(1), 20–33.
- Underhill, J., Clarence-Fincham, J. & Petersen, N. (2014). Developing a mentorship programme for junior lecturers working with student tutors at a South African university: Emerging shifts in pedagogy and identity. *Education as Change*, 18(Supp.), 1–15.
- Underhill, J. & McDonald, J. (2010). Collaborative tutor development: Enabling a transformative paradigm in a South African University. *Mentoring & Tutoring: Partnership in Learning*, 18(2), 91–106.
- Van Lehn, K. (2011). The relative effectiveness of human tutoring, intelligent tutoring systems, and other tutoring systems. *Educational Psychologist*, 46(4), 197–221.
- Walsh, C., Larsen, C. & Parry, D. (2009). Academic tutors at the frontline of student support in a cohort of students succeeding in higher education. *Educational Studies*, 35(4), 405–424.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.

RESEARCH ARTICLE

Understanding gaps between student and staff perceptions of university study in South Africa: A case study

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Abstract

“Under-preparedness” of students entering higher education is an issue that many academic institutions in South Africa are currently trying to address. Such students are seen as disadvantaged, lacking the skills, knowledge and/or language proficiency to navigate their way to success in higher education. This paper seeks to identify students’ understanding of the behaviour they should display in higher education and how this clashes with the expectations of academics, through the lenses of different discourses and academic literacy models. Specifically, the focus is on how students try to engage with the institutional discourse and how they try to identify a “sense of being” through a case study of the Extended Curriculum Programme in Nature Conservation at the Cape Peninsula University of Technology. Here, qualitative research was used through the administration of student essays, as well as individual face-to-face interviews. Lecturers were also interviewed so that a comparison could be made between what students perceive and the expectations of higher education. Different themes were identified through the analysis of the data, using an inductive approach; by developing the themes, the gaps are better identified and analysed with a view to redress.

Keywords

Higher education, teaching and learning, extended curriculum programmes, academic literacy, South Africa.

Introduction

Although the number of black students entering higher education has increased significantly since 1994, in post-apartheid South Africa, the throughput rate remains low. For example, Scott, Yeld and Hendry (2007) reported that of the intake of students registered for study at universities of technology, only 23% graduated within five years, 11% remained in the institution’s system, and 66% disappeared from the system without graduating. The majority comprised ‘black’ students, thus issues of race continue to bedevil South African higher education, even 20 years after the advent of democracy. The low

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throughput rate could be attributed to a variety of reasons, including socio-economic factors (Scott, Yeld & Hendry, 2007), as well as students struggling to access the discourse of the institution (Boughey, 2008).

One response to low throughput of black students in South African universities and the associated issue of high levels of under-preparedness of first-year students is the introduction of Extended Curriculum Programmes (ECP). ECPs are foundation programmes where the focus is on enabling talented students from disadvantaged educational backgrounds to build sound academic foundations for success in the programmes of their choice. Disadvantage is and remains a contested term, which may differ across institutions. In the South African university context, it usually refers to black students (including Indian and Coloured students) who may meet general Faculty entrance requirements but not necessarily those of the programme, or who fall into a borderline category (Leibowitz & Bozalek, 2015; Dhunpath & Vital, 2012).

Not only is the issue of “disadvantage” contested, but so, too, the purpose of the ECP itself. ECPs, as they stand, may further perpetuate racial differences as opposed to creating equal opportunities for success at university (Leibowitz & Bozalek, 2015). Rather, the authors suggest, all students should be seen as having different learning needs regardless of their racial heritage. Thus more flexible mainstream curricula to accommodate diversity, rather than the current ECP model, would go some way to reducing differentiation, and possibly stigmatisation, on the basis of race.

In this context, the research reported in this paper was conducted in the Nature Conservation ECP in the Faculty of Applied Science at the Cape Peninsula University of Technology, in the early part of 2012. As the ECP is specifically designed to assist students in entering higher education and succeeding, it is an ideal site to explore the difference in discourse between students and staff and it allows us to comment on ways to better assist in teaching and learning. By exploring the perceptions of staff and ECP students of what it means to be a Nature Conservation student, a better understanding may be gained of differences between what students bring with them to the university and the university requirements.

The starting point for this research is that university practices are, by and large, different from practices in everyday life. This particular difference is captured in Bernstein’s (1999) analysis of more formal knowledge discourses typical of traditional university fields. These “vertical discourses” (Bernstein, 1999, p. 159) are typified by dense and abstract conceptual networks that serve to organise knowledge and explain events. Horizontal discourse, on the other hand, is likely to be “oral, tacit, local, specific to particular contexts, multi-layered and contradictory across but not within contexts” (p. 157). This is the dominant discourse of the home and society. Even though schooled knowledge may contain some elements of vertical discourses, there still tends to be a divide between school and university discourses (Boughey, 2008; Slonimsky & Shalem, 2006).

An additional way of understanding differences between different institutions and practices is through Gee’s (1990) concept of discourses. He views discourse as the ways in which people act out different societal roles and how they use and interpret language. Each

community and social group masters a home-based discourse that integrates words, actions, interactions, values, feelings, attitudes and thinking in specific and unique ways. Discourse contributes to the construction of systems of knowledge and belief. These are connected to a particular social group's way of being in the world, their "form of life", their identity, who they take themselves to be (Gee, 1996). Thus, in terms of discourse, academic practices are constituted through webs of values, criteria, conceptual tools, specialised means of activity, and forms of communication that practices in other sites of knowledge production do not fully share, though they may have some elements in common (Slonimsky & Shalem, 2006, p. 38).

Boughey (2013) explains, following and developing Gee's discourse theory, that entering higher education is neither a natural process nor one easily acquired; the transition needs much support from staff to students and what counts as "being a student" to be overtly taught. Certain discourses may enable or disable access; this can be seen in Boughey's view of home-based literacies that are linked to individuals' chances of accessing and succeeding in higher education. According to Boughey (2008, p. 7):

A position which views education as natural would have to argue that working class students do less well in education because they themselves are lacking in some way; that is: the reasons for failure would be located in factors inherent to the individual.

Boughey (2013, p. 5) argues that literacy practices are embedded in those discourses, and academics need to understand those practices as related to valuing and believing, and to a person's identity and sense of self.

Access to higher education can be further complicated as, according to Boughey (2013, p. 3), literacy is a multiple rather than unitary phenomenon, and is more than the ability to read and write. She identifies multiple academic literacies, and these literacies are related to disciplinary difference. There are values that underpin these, rather than a generic set of practices often conceptualised as skills.

Lea and Street (2006) propose a three-tier model for what has come to be known as "literacy" at universities. There is, firstly, the skills model, in which becoming literate is largely a technical task to be learnt independently of the discipline under study or even the nature of the university. This includes sentence and paragraph level but may also include more general reading and writing skills such as identifying main points, summarising and essay writing (Lea and Street are less clear where these latter skills lie). The second enculturation model focuses strongly on literacy as being embedded generally in how knowledge is understood at university, for example as distanced from personal experience (Slonimsky & Shalom, 2006) but also embedded in and partly structured by particular disciplines. Thus Nature Conservation would have particular reading and writing requirements that are different from, for example, Chemistry studies. In the enculturation model, the particular literacies of university and the discipline would need to be overtly taught. The third model, academic literacy, contains elements of the first two but understands literacy as less fixed in time involving issues of "meaning making, and identity that are implicit in the use of literacy practices within specific institutional settings" (Lea & Street, 2006, p. 370).

McKenna (2004), like Boughey, acknowledges that students' background does not make it easy to take on a literacy practice, pointing to the difficult transition into higher education and that consideration needs to be given to the fact that students need to be guided into academic practices. Students' home-based and previous schooling practices are different from those of higher education and, at times, may not be enough of a basis for students to deal with higher education. Accordingly, this paper sets out to examine perceptions of studying at university from both students and staff, and to investigate whether there are differences and, if so, what the nature of these differences is. The research can then contribute to our understandings of "discourse clashes" at university, as raised by Boughey and McKenna. It can also contribute to a better understanding of the high dropout rate of predominantly black students at South African universities.

Research methods

Interviews were conducted with eight first-year Nature Conservation students on ECP and three lecturers who have extensive teaching experience in the programme. Lecturers were interviewed to obtain a clear understanding of what Nature Conservation entailed and what completing a National Diploma in Nature Conservation would allow students to do. We wanted to get clarity on the expectations of academics; we also wanted to establish what were considered valuable ways of learning from academic staff. Responses would also serve as a yardstick for gauging the responses of the student participants.

In this study, participants were not directly asked what they thought the gap to be; rather, their understandings of what was involved in studying in the field were probed. What constituted any possible gap could then be inferred by comparing student and staff responses to the questions. Students and staff were asked what they understood the field of Nature Conservation to entail, as well as what they understood constituted learning within the field.

Data analysis

An inductive approach was first employed to analyse data, and data from staff and students was treated separately. According to Thomas (2006, p. 239), the primary purpose of an inductive approach is to allow research findings to emerge from frequent, dominant, or significant themes inherent in the raw data, without the restraints imposed by structured methodologies.

Data was analysed and coded repetitively so that categories could be formulated. The type of coding used first was *in vivo* coding (Saldaña, 2009, p. 4) in that reference is made directly to what participants have said. These are referred to as patterns in Table 1 (see below). From the patterns, categories of student and staff perceptions of what it is to be a nature conservation student could then be identified by providing words or short phrases that described and organised the raw data into the themes. Patterns and themes were tabulated (Table 1) so that differences in perceptions could be identified across the themes, as discussed in the findings. These gaps were then linked to discourse theory and understandings of academic literacy in the discussion and conclusion sections so that recommendations may be made for future practice.

Research findings

The patterns identified from the student and staff interviews could be classified into the four following themes, as reflected in Table 1: (1) *Attitude to learning* reflects the general characteristics that students should have to be successful as students – these include the kinds of dispositions students are inclined to use or avoid to achieve success (this could refer to the hard work needed to be invested in their studies, focus on studying in the field, and the time and attention needed for subjects); (2) *Literacy* in this study comprises a variety of discourses; ways of thinking and behaving with their own sets of rules and values for meaning-making, which should be acquired implicitly or explicitly (McKenna, 2010, p. 16). We divided the theme of literacy into two subsections: *general university literacy* and *discipline-specific literacy*. The former focuses on skills such as reading, summary writing, more general writing and referencing; discipline-specific literacy refers to the specific ways of thinking and behaving in the discipline and keeping abreast of current research and events, as well as the scientific writing and presentation of knowledge required of students, critical thought, problem-solving and laboratory skills; (3) *Knowledge for the course* refers to the basic concepts of biology and knowledge of biology that are required in the field. It also refers to any other subject content knowledge that students engage with for the purpose of completing a National Diploma in Nature Conservation; and (4) *Understanding of the field* refers to the characteristics that students and lecturers feel are necessary for pursuing a career in Nature Conservation.

Once themes were identified, it was possible to analyse differences across the themes.

Differences across the themes were not uniform; in some themes, the data indicated relatively small differences, whereas in others the data indicated the gap more strongly. For example, under *knowledge for the course*, students understood that there was an expectation that they needed a foundation in biology and that there was an element of memorization involved in being in the programme, and staff gave similar responses; these issues were not explored further as the focus was the “gap.”

There were significant mismatches in the *attitudes to learning*, *understanding of the field* and the *literacy skills* that lecturers expected students to display. Even though students conveyed some understanding of these themes, it was not the same understanding that lecturers expected from them. What follows is a brief summary of the findings of differences under the themes: *attitude to learning*, *literacy* and *understanding of the field*.

Table 1: Patterns and themes of student and staff understanding of Nature Conservation

Questions	Lecturer patterns	Themes	Student patterns
What is learning in Nature Conservation?	<p>Enthusiasm and passion/Desires to be in the field/Is curious/Takes responsibility/ Persistent/Resilient/Goal driven/Ability to work in groups/Committed/Inquisitive/ Assertive/Takes initiative/ Works independently</p> <p>Ability to draw/Express themselves orally or in writing/Write and listen at the same time/Take notes even though they are given certain notes/Numeric proficiency/Basic comprehension and interest in reading/Writing skills/Computer literate/Read widely/Expand on knowledge received/Express themselves/Make arguments/Ability to discuss things and communicate/Ability to defend their point of view/Need to engage with their work</p> <p>Have own opinion on topics/Scientifically minded (analyse, be accurate, be able to discern between things, subtle differences/observant)/Interpretation of knowledge/Understand the world around them, a kind of ecological awareness/Should be aware of the linkages between different things/Apply it in their own context (does it make sense in their world?)/Initiative to immerse themselves in the field (volunteering)</p> <p>Good grounding in biology/rote learning in first year (basic concepts and terms that need to be learnt) necessary to use field guide book</p>	<p>Attitude to learning</p> <p>General university literacy</p> <p>Discipline-specific literacy</p> <p>Knowledge for the course</p>	<p>Focus on studying in the field and resisting peer pressure/Need time and special attention on subjects/Independent learning/Unwillingness to engage discuss in class/Learning can be alienating</p> <p>Read and understand notes/ Note taking/Summary writing/Reading/Referencing</p> <p>Act like a scientist/Different way of thinking/Research and observe/Scientific and formal writing/Specific presentation of knowledge/Critical thinking/Knowledge of scientific concepts/Live what you study</p> <p>Knowledge of history, law, etc./Laboratory skills/Knowledge of basics/Strong biology foundation/Keep up with current research and events</p> <p>Love of animals/Love of the outdoors/Love of science/Curiosity/Desire to learn more/Discover new things/Easy to grasp/Easy to understand/Make a difference/Protect animals/Nature is important/significant/Educating others/Protect environment/Desire to work with community/Be somebody</p>
What is Nature Conservation?	<p>Conservation and protection of natural resources: flora, fauna, soil, water/Management of people and natural resources/Office based/Hard, manual labour</p>	<p>Understanding of the field</p>	<p>Love of animals/Love of the outdoors/Love of science/Curiosity/Desire to learn more/Discover new things/Easy to grasp/Easy to understand/Make a difference/Protect animals/Nature is important/significant/Educating others/Protect environment/Desire to work with community/Be somebody</p>

A comparison of attitude to learning

The lecturers' expectation was to have students who were active, participated, negotiated and learnt practices; however, this was possibly not made overtly clear to students. Lecturers expected students to read beyond what they had been instructed to read in lectures and contended that students needed to construct a deeper understanding of academic knowledge and skills by themselves. Lecturers further elaborated on this point:

They need to be interested – you know in what is happening around them ... if they look out they can see an animal or plant whatever it is and understand. They need to have that curious eye for what's happening ... enquiring ... be independent ... open to arguing without quarrelling ... have a can-do-attitude ... be persistent ... resilient and be assertive. (Lecturer 2)

[They should] be curious, learn independently ... should have a love of the outdoors as their job requirements would require them to be outdoors. (Lecturer 3)

These were dispositions (enquiring and open to argument) and qualities (independent, resilient, assertive, can-do attitude) that lecturers wanted students to have. Students, on the other hand, generally took a more technical view of “working hard”. For example, one student believed that working hard meant to “do all your assignments and work”. Furthermore, students expressed the belief that “resisting peer pressure” and “taking time and special attention on subjects” were necessary attitudes for successful learning.

A comparison of general university literacy

Students generally understand that they are required to take notes while in class and that they are also expected to go over their notes:

She just gave us work the first day, lots of notes and we took it, she said you must study your work, you must study your work and then she gave us an introduction to the course it was fine ... (Student 2)

The lecturers' views on notes are somewhat different. There is an expectation that even though students need to pay attention and listen during lectures, they need to make additional notes, even though the lecturer might not indicate this. Students entering higher education may not have previously dealt with taking additional notes and therefore may be at a considerable loss in the new educational setting. Without proper instruction in ways of behaving, such as note taking, but also regular re-reading and review, students may lag behind in their learning. At the same time, lecturers may view this difficulty as something students should just know and their inability to exhibit it as a deficiency:

... take additional notes – which – by the way, I've noticed – students can't do anymore – generally – they cannot listen and write at the same time ... not just read through the notes but someone who goes to the library, picks out some relevant books, which we have given them the titles of – and does some further reading ... (Lecturer 1)

A comparison of discipline-specific literacy

Students understood that the course involved reading, although they struggled with the scientific concepts specific to the programme. Students also noted that even though these are issues that they struggle with, they are still expected to work on their own and develop opinions on the topics:

It is a very hard course to study especially if you don't like reading too much ... the language and some subjects are difficult ... because you don't actually understand; you must do it by yourself and use your own opinion so that they can know that you understand the work. (Student 2)

The issue of forming opinions about reading material could pose a problem to students, as the topics that they are required to read about on their own are topics that may be unfamiliar to them. The fact that they are reading these topics on their own may not allow for links to be made or the relevance to be gathered. Lecturers may not realise that they need to familiarise students with reading practices and also show them the relevance of the topic, and that this needs to be done in a structured manner.

Lecturer 1 elaborates that the reading that she requires from students goes beyond notes, textbooks, or recommended reading provided by academics, as it requires students to read in the field to keep abreast of current events and research. Although this lecturer would make overt the expectations that she had of students, there is also the expectation that students, once shown, would then carry on independently. She also shows that not only does she require students to explore their field further via reading, but also to develop ways of thinking about the topic and positioning themselves with regard to the topic. Lecturer 1 had tried inducting students into developing an appropriate reading practice, but at the same time she felt that once students were shown this, she expected them to do this independently, as illustrated here:

... get them to actually read ... I used to make them find newspaper articles on environmentally related topics of their choice, and they would then have to summarise it and give their opinions ... I would like a student to actually have his or her own opinion about an environmental topic – but to have your own opinion, you have to have some knowledge and therefore you have to read – you can't formulate it ... (Lecturer 1)

Furthermore, it appears that even though students may be given guidance in the form of, for example, handouts, they are not always aware of what the field involves:

... our lecturers will tell us, ok, this is how you are supposed to do it and they give us handouts, guidelines to follow ... With that kind of subject, it is kind of vague really, we never really get the whole this is what's expected from the subject (Student 2).

A comparison of understanding of the field

Lecturers were asked to explain their perceptions of Nature Conservation to gauge whether students' choice to pursue studies in the programme were concomitant with what the occupation entailed. They highlighted the fact that the field of Nature Conservation could be divided into conservation, management and specific work practices. The lecturers felt that students were not clear on what the field of study entailed.

Some students expressed a desire to pursue studies in this field because of their "love of animals and plants" and "love of the outdoors". They also expressed a curiosity and desire to learn and discover new things, as well as a love for science. They also felt a sense of social responsibility as they commented on wanting to contribute to the world by developing themselves through studying in the field, as providing a platform to make a change. This was also displayed through a particular understanding of environmental responsibility, for example a desire to "look after plants and animals". However, this is not necessarily what the programme is about, since the role of a nature conservation officer is, according to lecturers, often more concerned with management in order to control animal and plant populations, as well as the impact of human activity on the natural environment:

Nature Conservation is sustainable use. It's not preserving plants and animals. It is sustainable use, i.e. careful use and also conservation. Now preservation means in the strict sense of the word that you don't use it and we definitely use fauna and flora, soil and water for all mankind but also for the good of nature. So, it's not abuse or overuse or exploitation. It's sustainable use. But it goes beyond fauna and flora because it's also soil and water. One can put air in as well, then you have the five components. (Lecturer 3)

Lecturers felt that students did not have a proper understanding of what the programme entailed and only discovered this much later when out in the field. This is perhaps what lecturers need to acknowledge and directly share and engagingly teach to students from the outset.

Discussion

Boughey (2013) has outlined that the concept of discourse is very similar to what has become known as literacy in South Africa, as both concepts cover socially constructed formations of knowledge. Furthermore, discourses are necessarily different between school and higher education institutions as these are different institutions. This is apparent from the mismatches revealed in this study. According to Clark and Linder (2006), students newly entering higher education are often only familiar with an institutional discourse that they have acquired through school and, as such, may feel that replicating previous behaviour and thought in the new discourse is correct.

The areas in which there were more apparent mismatches were across the themes of *literacy*, *attitude to learning*, and *understanding of the field*. In terms of literacy, students knew that they had to display aspects of the literacy practices in higher education, but they did not display them as well as lecturers expected. Lecturers focused on the fact that students

did not read enough or lacked a desire to read in the field, especially when it did not form part of lecturers' instruction, which was necessary in order to keep updated about the field. Students stated that taking notes is important but lecturers feel that students do not know how to take notes properly. It may be suggested that students adopt a literacy skills model (Lea & Street, 2006) rather than enculturation to the field of study, which is what lecturers appear to want.

The theme of attitude to learning revealed that students and lecturers had completely different viewpoints. Lecturers were clear on the characteristics they wished students would display, while students were more focused on the fact that higher education required them to commit more of their time to their studies. Lecturers felt that students need to take "initiative" for their own learning or development and, significantly not be overtly passive but take positions and offer opinions. Lecturers felt that students need to be more independent as they would have to work independently in the field. Students were thus expected by lecturers to be more assertive and committed, while students generally felt that having a good attitude to learning meant resisting peer pressure and a focus on studying.

In terms of knowledge of the field, students mainly attached emotive reasons for studying nature conservation whereas lecturers felt that the role of nature conservation involved more than having affinities for flora and fauna, and that students did not fully comprehend what their studies entailed.

Concluding remarks

Addressing the issue of improving the throughput of disadvantaged students involves addressing some of the gaps between students' understandings of university learning and what the university requires of them. Doing this could involve attention from academics to the enculturation model for literacy, in which university and programme practices are understood as distinct from students' prior experiences.

One interesting example of how to teach university discourses overtly in ECP science involves students in conducting home-based experiments with familiar materials and settings, but with a strong focus on scientific methodology, reasoning and argument (Ellery, 2011). Through doing these experiments in a structured and guided manner, Ellery claims that students can be effectively supported in moving between already held discourses to science-based ways of thinking that are appropriate for university study.

However, there are differences, too, in what was referred to as attitudes and knowledge of the field. These may also, in part, fit well with Lea and Street's (2006) enculturation model for literacy and speak to issues of identity as a Nature Conservationist and making meaning within the field of study, or what the authors refer to as academic literacy. The latter can particularly be seen where lecturers expect students to give opinions on conservation issues, a point that students also recognise but are not necessarily able to undertake.

In the more vocational field of Nature Conservation, an example of a task that could support the development of academic literacy can be related to the important course outcome to "demonstrate and apply knowledge of human influence on the ecosystem". Students could, for example, assess how residents in their area affect the ecosystem, whether

it is the dumping of waste or even the beneficial impact that recycling initiatives could have. Tasks such as these would be familiar and relevant to students and encourage them to engage with the disciplinary practices of Nature Conservation while, at the same time, being supported by lecturers. Furthermore, such tasks would involve students in making meaning, giving opinions, and even the exercise of authority (such local situations would not necessarily be known by lecturers); such tasks would constitute the appropriate representation of disciplinary knowledge within an academic literacies model.

References

- Bernstein, B. (1999). Vertical and horizontal discourse: An essay. *British Journal of the Sociology of Education*, 20(2), 157–173.
- Bouhey, C. (2008). Constructing foundation work: A critical discourse analysis of the 2006 submissions for funding. In: J. Garraway (Ed.). *Conversations about Foundation: The Foundation Event and Extended Curriculum Provision*, Conference Proceedings, Cape Town, 1–2 October 2007, pp. 1–13. Bellville: Fundani.
- Bouhey, C. (2013). What are we thinking of? A critical overview of approaches to developing academic literacy in South African higher education. *Journal for Language Teaching*, 47(2), 25–42.
- Clark, J. & Linder, C.J. (2006). *Changing teaching, changing times: Lessons from a South African township science classroom*. Rotterdam, The Netherlands: Sense Publishers.
- Dhunpath, R. & Vital, R. (2012). Alternative access to university. In: R. Dhunpath & R. Vital (Eds). *Alternative access to higher education: Underprepared students or underprepared universities?* pp. 1–24. Cape Town: Pearson.
- Ellery, K. (2011). Knowing, acting and being: Epistemological and ontological access in a Science Extended Studies course. *South African Journal of Higher Education*, 25(6), 1077–1090.
- Gee, J.P. (1990). *Social Linguistics and Literacies: Ideology in discourses*. London: Falmer.
- Gee, J.P. (1996). *Social Linguistics and Literacies: Ideology in discourses* (2nd ed.). London: Falmer.
- Lea, M. & Street, B. (2006). The academic literacies model: Theory and applications. *Theory into Practice*, 45(4), 368–377.
- Leibowitz, B. & Bozalek, V. (2015). Foundation provision – A social justice perspective. *South African Journal of Higher Education*, 29(1), 8–25.
- McKenna, S. (2004). The intersection between academic literacies and student identities. *South African Journal of Higher Education*, 18(3), 269–280.
- McKenna, S. (2010). Cracking the code of academic literacy: An ideological task. In C. Hutchings & J. Garraway (Eds). *Beyond the university gates: Provision of extended curriculum programmes in South Africa*. Proceedings of the January 2009 Rhodes University Foundation Seminar, Grahamstown, South Africa, pp. 8–15.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. London: Sage.
- 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.
- Slonimsky, L. & Shalem, Y. (2006). Pedagogic responsiveness for academic depth. *Journal of Education*, 40, 35–58.
- Thomas, D.R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, 27(2), 237–246.

RESEARCH ARTICLE

First-year seminar intervention: Enhancing first-year mathematics performance at the University of Johannesburg

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Abstract

South Africa has opened up access to higher education over the past 20 years. The massive increase in enrolments (with almost 70% first-generation students) substantially affects progress and graduation rates in Science programmes in higher education. First-year students in Science realise that university mathematics requires knowledge and skills that are not part of their academic repertoires. Science students at the University of Johannesburg register for a two-week, credit-bearing First-year Seminar (FYS). The research question that this paper addresses is: What is the relationship between the First-year Seminar and the mathematics performance of first-year students in Science? The specific purpose is to determine the relationship between: (1) students' school mathematics background; (2) the problem-solving skills sessions of the FYS; and (3) their first-year performance in mathematics. It was found that the FYS enhances students' ability to make a successful transition to university, with problem-solving ability acting as a fair predictor of performance in first-year mathematics. The empirical data was collected through a before-and-after test performed by the 2014 cohort with regards to students' attendance of the FYS. Notably, the data indicate that the value added by the problem-solving test can be applied to identify and engage students who have high probability of becoming students at risk (STARs).

Keywords

Higher education, teaching and learning, first-year student experience, mathematics performance, University of Johannesburg, South Africa.

Introduction

The South African higher education sector became more aware of the need for a dedicated institutional first-year experience (FYE) in 2009, when Stellenbosch University hosted a national FYE conference (Leibowitz, Van der Merwe & Van Schalkwyk, 2009, p. 3). Since then, the nature of first-year programmes and their possible role in academic

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success have been widely researched, in particular with respect to attempts to counteract possible negative influences of the secondary schooling system (Jacobs, 2010). Currently, approximately one in eight Engineering and one in four Science students graduates in the expected number of years (Council on Higher Education [CHE], 2013, p. 37). These throughput rates are a matter of national concern and impact on the country's economy.

South African higher education enrolments have grown by almost 90% between 1994 and 2012 (from 495 356 to 937 455) (CHE, 2013, p. 37). Unfortunately, however, low participation and high attrition rates prevail. Many students from diverse academic backgrounds were excluded due to the apartheid regime and are now accessing higher education institutions (HEIs) in pursuit of qualifications (Tait & Godfrey, 2001). This is particularly true for students enrolled for Science programmes (Giancola, Munz & Trares, 2008). The country's public schooling system does not seem to prepare students adequately for higher education (Jacobs, 2010), with inflated school marks and a lack of academic literacies being quite common (Nel & Kistner, 2009). More than 70% of first years have first-generation status (CHE, 2013, p. 45), generating additional challenges for these students, caregivers and first-year lecturers (Bowl, 2001).

It is almost as if the sector has come to accept that schools will not be able (at least, in the short to medium term) to prepare school-leaving students better for higher education, and especially with respect to Science programmes (Jacobs, 2010). Science faculties therefore design formal intervention programmes (Kift, 2008) to prepare their first-year students for academic and other institutional challenges. These programmes typically strive to enhance students' confidence levels by exposing them to an enabling environment aimed at the development of their coping mechanisms. This paper places a lens on such a First-year Seminar designed by the Faculty of Science at the University of Johannesburg (UJ).

The research question that this paper seeks to address is: What is the relationship between the aforementioned FYS and the mathematics performance of first-year students in Science? A specific purpose is to assess the import of students' performance in the problem-solving component of the FYS in relation to their first-year mathematics achievement later in their first year of study.

Transition and adaption

the transition of first-year students from school to higher education has been explored and interrogated at length in a number of studies, namely Briggs, Clark and Hall (2012), Jacobs and Jacobs (2013) and Kift (2009), amongst others. Science students are literally caught in a substantial "gap" between school and university education (Sappa & Bonica, 2008), mainly because the subject content of science programmes continues from where schools should have left off. Although Winterson and Russ (2009) encourage schools and universities to make the transition process easier, South African schools are typically challenged by a shortage of qualified teachers, poorly maintained facilities and a lack of resources (Jacobs, 2010). Spaull (2014) indicates that, in South Africa, only one in four mathematics teachers is sufficiently trained in mathematics.

Although school education authorities (e.g. Volmink, 2010) constantly deny that students' final marks might have been inflated, research-based interrogations by universities prove otherwise (Nel & Kistner, 2009). Without blaming the school, Briggs, Clark and Hall (2012) argue that students entering higher education make a personal investment using their cultural capital, which was accumulated through their prior education at school. Many students thus enter with a "currency" that might be foreign to the institutional culture. Lecturers need to identify and acknowledge this, while trying to support students to adapt to higher education expectations by exchanging their "currency" for relevant and required knowledge and skills.

The need for adaptation for a successful student "identity" is amplified when first-generation students enter the new higher education environment (Briggs, Clark & Hall, 2012). This first stage of transition (Huon & Sankey, 2002) occurs when students learn to behave like "real" university students (Fazey & Fazey, 2001). In fact, studies on student expectations and decision-making by Peel (2000) and Tranter (2003) reveal a discrepancy between the aspirations and the experiences of first-year studies. Students' lack of self-knowledge and uninformed decision-making relating to their choice of studies often lead to withdrawal and eventual dropout (Hillman, 2005; James, 2000).

First-year programmes

First-year transition has been researched internationally since the 1970s (Akerlind, 2005, p. 1). While dedicated structures and programmes are well established in the United States (such as the Centre for Academic Enhancement at the University of Georgia) and have gained ground in Asian, Australian and European higher education (Meyers & Ryan, 2008), South African institutions of higher education have been trying to convince faculty and governance structures that this is, indeed, part of their scope. Lecturer champions and a few supportive deans are still persuading other stakeholders that formalised orientation (induction) programmes for transitional students (Kift, 2008) are non-negotiable.

First-year programmes provide first-year students with support systems that focus on making the adjustment to university life easier. The internationally renowned scholar Vincent Tinto (2008, p. 14) has listed the vital institutional factors that enhance student academic success, namely that a student should: be socially and academically integrated; identify with peer groups (although Science students often feel alienated); be integrated into the institutional culture; and become an involved student.

At the University of Johannesburg, the Faculty of Science has been actively supporting first-year students since 2004. Increasing numbers of unsuccessful students, lecturers who kept on complaining about underprepared first-years, and growing institutional pressure to enhance student throughput were the main catalysts behind the launching of the Faculty's FYE (on an informal basis) in 2005. Four years later, a more formalised FYE programme was approved. The programme posits 10 principles, of which the following three are noteworthy: it is incumbent on the university to ensure that students are provided with enabling learning environments; the FYE is not envisaged as simply assisting students to pass, but as enabling as many as possible to achieve their full potential; and the challenge of

first-year teaching requires special expertise from the academic staff, who must in turn be assisted in meeting these challenges (UJ, 2009, p. 4).

Lecturers and senior students in the Faculty of Science have been engaging with first-year transition in two formal structures in the last decade. The First-year Seminar (FYS) and the First-year Academy (FYA) focus on the entering students and the lecturers teaching them respectively. The FYA has been developed to give mainly first-year lecturers the opportunity to discuss and contemplate similar challenges they may encounter while teaching vulnerable and highly expectant first-year students. The FYA also provides a platform for very necessary peer and senior support in teaching and learning.

The FYS in the Faculty of Science occurs two weeks before formal classes commence, and seeks to assist first-year students with their transition to higher education. The programme involves students (from all study areas) who are enrolled for science modules (such as mathematics, physics and chemistry); it includes workshops in laboratory skills, mathematical problem-solving and academic literacy for science in its curriculum. FYS students also participate in sessions on time management and study skills, and are introduced to various support services on campus. They get to know the campus as soon as possible by competing in groups in an “amazing race” game, modelled on the reality television show. Groups receive a map of the campus and are expected to visit indicated points of interest. Upon completion, the groups present photos (on their smart devices) as evidence that they have, indeed, visited the specific points of interest. This allows them to get to know the campus in a fun and exciting way as well as to cooperate with fellow students.

Pascarella and Terenzini (2005), as well as Keup and Barefoot (2005), find that the active participation of first-years in an FYS has a huge positive effect on their ability to make the adjustment from school to university as well as on retaining them until their second year of study. The FYS allows students to become aware of and recognise the level of their personal academic skills. The Seminar also creates a safe learning environment that provides students with relevant learning opportunities geared to the development of essential skills for the various disciplines in Science. Erickson, Peters and Strommer (2006), and Pascarella and Terenzini (1991; 2005) all agree that FYS programmes have the capacity to create an environment in which students can develop the critical thinking skills needed for their intellectual growth.

The core components of the programme include three focused modules in language, mathematical problem-solving and laboratory skills development. The first component is five (two-hour) sessions focusing on academic literacy (language). Bowl (2001) emphasises that non-traditional students may struggle to write scientific reports and essays; these language sessions serve as opportunities for the students to learn how to improve their reading and writing skills with a specific focus on Science modules. The second component is five (two-hour) sessions focusing on solving mathematical problems with a special focus on bridging the gap in content knowledge from school to university. The third component comprises of three (two-hour) laboratory sessions, in which students are introduced to the Chemistry, Physics and Biology laboratories and are familiarised with various items of laboratory equipment used for different experiments – many of the first-year Science

students come from rural schools and have never been introduced to laboratory work.

Carefully selected staff present sessions in various disciplines (Mathematics, Physics, Life Sciences, Chemistry and Geography). Winterson and Russ (2009) point out that students have to become accustomed to various learning styles, referencing techniques, as well as note taking. Research and the writing of academic essays and reports are an integral part of higher education studies. The first-years also participate in a session with the Science librarian, where they tour the library and draft a short essay, having to use the Internet, an academic journal, a Science textbook and an electronic database.

The Faculty of Science established its FYA in 2007. It serves as a community of practice for lecturers of first-year students, thereby promoting Ernest Boyer's Scholarship of Teaching (and Learning) (Boyer, 1997). The FYA undertakes research into the strategies and the roles of lecturers in dealing effectively with transitional students (Jacobs & Jacobs, 2013). Adaptions to academics' customary roles are recommended and the Academy acknowledges that changes in role expectations may lead to role ambiguity and conflict among the lecturers, to the potential detriment of the faculty. However, appropriate lecturer behaviour and duties and also expected competencies have to be identified and developed if the faculty continually wants to enhance the academic success of its growing number of transitional students.

Research method

this paper analyses the test results from a purposive (convenience) sample of 360 of the 1 060 students who were also enrolled for a specific module in first-year Mathematics (Mathematics 1A). Before and after the 2014 FYS, all participants (first-year students) completed a test, with 25 multiple-choice questions containing items on language, mathematics and laboratory content. All sample members participated in the pre- and post-FYS test in problem-solving and their school mathematics results were available.

A demographic analysis of the participants indicates that just less than one in four is female; slightly more than one in five had English as the primary home language; and 80% are Science students, with the remainder being enrolled for Engineering. The data were collected and aimed at determining the students' content knowledge in respect of laboratory, language and problem-solving (quantitative literacy) skills. Respondents were requested to complete the test upon the first day of arrival and the same test was administered on the last day (of the two-week programme). Student's final school (Grade 12) and end of first semester results in mathematics were also captured. Descriptive statistics, cross-tabulations and frequency distributions were conducted via the Statistical Package for the Social Sciences (SPSS, version 22).

In 2014, the pre- and post-tests on the three above-mentioned constructs were administered for the first time. The 2014 investigation thus served as a pilot study and its reliability will be determined in the near future. Specialist lecturers in respect of the three test components designed the test items; this ensured the content validity of each item.

Research findings

The sample of 360 first-year students presented the following scores (all percentages): for pre-FYS problem-solving, $M = 45.44$, $SD = 19.444$; for post-FYS problem-solving, $M = 62.86$, $SD = 18.188$; for school (Grade 12) mathematics, $M = 73.18$, $SD = 10.173$; and for first-year Mathematics (MAT1A), $M = 48.74$, $SD = 1.663$. These scores are further analysed in the three tables that follow.

Table 1 presents a cross-tabulation of Grade 12 versus first-year Mathematics (MAT1A) scores at various intervals.

Table 1: Cross-tabulation: Maths Grade 12 versus MAT1A marks

MAT1A	Mathematics in Grade 12					Total
	59% or lower	60–69%	70–79%	80–89%	90% or higher	
49% or lower	6	76	69	19	3	173 (48.0%)
50–59%	2	44	50	27	4	127 (35.3%)
60–69%	1	4	15	20	4	44 (12.2%)
70–79%	0	1	1	8	1	11 (3.1%)
80% or higher	0	0	0	2	3	5 (1.4%)
Total	9 (2.5%)	125 (34.7%)	135 (37.5%)	76 (21.1%)	15 (4.2%)	360

Table 1 indicates that 46.4% (167) of the students who scored 60% or more at school scored less than 50% (which is a “fail”) for mathematics at the end of the first year’s first semester. It is more noteworthy that three students who scored 90% or more for Mathematics in Grade 12 failed the subject at university. As already mentioned, the predictive value of school mathematics results is not necessarily credible.

Table 2 presents a cross-tabulation of post-FYS problem-solving and first-year mathematics (MAT1A) scores in various intervals.

Table 2 reveals that 32.5% (117) of the students who scored more than 60% in the post-FYS test obtained less than 50% (i.e. a “fail”) for university mathematics. It seems as if students who scored less than 60% for the post-FYS problem-solving test have a greater probability of not passing the MAT1A course.

A comparison of pre-FYS versus post-FYS problem-solving marks, in accordance with students’ results in MAT1A, is presented in Table 3.

Table 2: Cross-tabulation – post-FYS problem-solving versus MAT1A marks

MAT1A scores	Post-FYS problem-solving scores						Total
	0%	20%	40%	60%	80%	100%	
49% or lower	2	11	43	66	50	1	173 (48.0%)
50–59%	1	2	16	53	52	3	127 (35.3%)
60–69%	0	0	6	10	27	1	44 (12.2%)
70–79%	0	0	0	6	5	0	11 (3.1%)
80% or higher	0	0	0	3	2	0	5 (1.4%)
Total	3 (0.8%)	13 (3.6%)	66 (18.1%)	138 (38.3%)	136 (37.8%)	5 (1.4%)	360

Table 3: Pre- and post-FYS problem-solving scores in accordance with MAT1A marks

MAT1A marks	n	Mean (%) (Pre-FYS problem- solving)	Mean (%) (Post-FYS problem- solving)
49% or lower	173 (48.0%)	39.31	57.92
50–59%	127 (35.3%)	48.73	65.71
60–69%	44 (12.2%)	57.73	71.36
70–79%	11 (3.1%)	50.91	67.27
80% or higher	5 (1.4%)	53.33	73.33

In Table 3, the increase of pre-FYS to post-FYS scores in all five intervals is clear. The mean pre-FYS problem-solving score of the “fail” group (i.e. students who scored less than 50% for MAT1A) improved by 18.6% in the post-FYS test. It can be deduced that students with higher post-problem-solving results have a fair chance of passing MAT1A. Thus, the increase in the mean post-problem-solving results from the pre-solving test results serve as a good predictor of the success or risk of failing MAT1A. Hence, lecturers could apply such results to help identify students who have a strong probability of becoming students at risk (STARs).

The analysis indicates that students with higher post-problem-solving results had a greater probability of passing MAT1A, although many factors could possibly influence the success in MAT1A. The problem-solving module exposed students to what is expected at higher education level, and adds value to understanding success in higher-level mathematics.

Concluding comments

This paper attempted to determine whether there is a relationship between the Faculty's FYS and the performance in Mathematics of its first-year students. It was found that there is definite connection between students' scores on the problem-solving component of the FYS and their achievement in Mathematics in the first semester. Although no causality is implied or can be deduced, first-year students' problem-solving capabilities seem to have substantial predictive value in respect of their performance in Mathematics. This finding elevates the contribution and pertinence of the Faculty's FYS.

The FYS test could increasingly be viewed as a predictive instrument for identifying students at risk of not succeeding. The timing of the FYS (at the beginning of the academic year) has the additional benefit of making available vital information about first-year students in Mathematics, six weeks before first official assessments are conducted. Altogether, then, participation in the FYS must be seen to have a positive influence on students' ability to make a successful transition to university.

The modules of the FYS that focus on mathematical problem-solving, academic language and laboratory skills assist in bridging the current gap between school and university education. Further research along the lines explored in this paper could enable the university, the Science Faculty and first-year students to address transitional challenges much sooner (within the first three weeks of the academic year) by providing appropriate analysis and support where needed so as to ensure first-year academic success.

References

- Akerlind, G.S. (2005). Academic growth and development – How do university academics experience it? *Higher Education*, 50, 1–32.
- Bowl, M. (2001). Experiencing the barriers: Non-traditional students entering higher education. *Research Papers in Education*, 16(2), 141–160.
- Boyer, E. (1997). *Scholarship reconsidered: Priorities of the professoriate*. New York: Carnegie Commission.
- Briggs, A.R.J., Clark, J. & Hall, I. (2012). Building bridges: Understanding student transition to university. *Quality in Higher Education*, 18(1), 3–21.
- Council on Higher Education (CHE). (2013). *A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure*. Pretoria: Council on Higher Education.
- Erickson, B.L., Peters, C.B. & Strommer, D.W. (2006). *Teaching first-year college students*. San Francisco, CA: Jossey-Bass.
- Fazey, D. & Fazey, J. (2001). The potential for autonomy in learning: Perceptions of competence, motivation and locus of control in first-year undergraduate students. *Studies in Higher Education*, 26(3), 345–361.
- Giancola, J.K., Munz, D.C. & Tares, S. (2008). First- versus continuing-generation adult students on college perceptions. Are differences actually because of demographic variances? *Adult Education Quarterly*, 58(3), 214–228.
- Hillman, K. (2005). *The First Year Experience: The transition from secondary school to university and TAFE in Australia*, Longitudinal Surveys of Australian Youth, Research Report 40, Australian Council for Educational Research and the Australian Government Department of Education, Science, and Training.

- Huon, G. & Sankey, M. (2002). The transition to university: Understanding differences in success. Paper presented at the 6th Pacific Rim First Year in Education Conference: Changing Agendas, University of Canterbury, Christchurch, New Zealand, 8–10 July.
- Jacobs, M. (2010). A framework for the placement of university students in science programmes. Unpublished doctoral dissertation, University of the Free State, Bloemfontein.
- Jacobs, M. & Jacobs G.J. (2013). Role perceptions of Science academics who teach to first year students: The influence of gender. *Journal of Institutional Research*, 19, 33–45.
- James, R. (2000). How school-leavers choose a preferred university course and possible effects on the quality of the school–university transition. *Journal of Institutional Research*, 9(1), 78–88.
- Keup, J.R. & Barefoot, B.O. (2005). Learning how to be a successful student: Exploring the impact of first-year seminars on student outcomes. *Journal of the First-Year Experience and Students in Transition*, 17(1), 11–47.
- Kift, S. (2008). The next, great first year challenge: Sustaining, coordinating and embedding coherent institution-wide approaches to enact the FYE as “everybody’s business”. First Year in Higher Education Conference, Hobart, Australia.
- Kift, S. (2009). Articulating a transition pedagogy to scaffold and to enhance the first year student learning experience in Australian higher education. Final Report for ALTC Senior Fellowship Program, Queensland University of Technology, Brisbane.
- Kimmins, L. & Stagg, A. (2009). Creating confidence: Developing academic skills and information literacy behaviours to support the precepts of tertiary academic performance. Proceedings of the 4th Asia Pacific Conference on Educational Integrity (4APCEI), New South Wales, Australia. Retrieved 19 May 2016 from http://eprints.usq.edu.au/6150/1/Kimmins_Stagg_AV.pdf.
- Leibowitz, B., Van der Merwe, A. & Van Schalkwyk, S. (2009). Introduction – Perspectives on the first-year experience. In B. Leibowitz, A. van der Merwe & S. van Schalkwyk (Eds). *Focus on first-year success: Perspectives emerging from South Africa and beyond*, pp. 3–11. Stellenbosch: Sun Media.
- Meyers, N. & Ryan, Y. (2008). *Commentary on first year curriculum case studies: Staff development perspective*. Queensland University of Technology, Brisbane: Australian Learning and Teaching Council.
- Nel, C. & Kistner, L. (2009). The National Senior Certificate: Implications for access to higher education. *South African Journal of Higher Education*, 23(5), 953–973.
- Pascarella, E.T. & Terenzini, P.T. (1991). *How college affects students*. San Francisco, CA: Jossey-Bass.
- Pascarella, E.T. & Terenzini, P.T. (2005). *How college affects students: A third decade of research*, Volume 2. San Francisco, CA: Jossey-Bass.
- Pascarella, E.T., Pierson, C.T., Wolniak, G.C. & Terenzini, P.T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *The Journal of Higher Education*, 75, 249–284.
- Peel, M. (2000). “Nobody cares”: The challenge of isolation in school to university transition. *Journal of Institutional Research*, 9(1), 122–134.
- Sappa, V. & Bonica, L. (2008). Cooperative Learning and Support to the school to higher education transition: An integrated research-intervention aimed at first year Psychology Students. Paper presented to IAIE-IASCE Conference Cooperative Learning in Multicultural Societies: Critical Reflections, Turin, 19–22 January.
- Spaull, N. (2014). Matric 2013 in retrospect: Selected findings and discussion. Presentation at the UJ/Kagiso Trust Education Conversation, 19 February, University of Johannesburg.

- Tait, H. & Godfrey, H. (2001). Enhancing the student experience for direct entrants to the penultimate year of undergraduate degree programmes. *Journal of Further and Higher Education*, 25(2), 260–265.
- Tinto, V. (2008). Access without support is not opportunity. *Inside Higher Ed*. Retrieved 19 May 2016 from www.insidehighered.com/views/2008/06/09/tinto.
- Tranter, D. (2003). “Fish out of water”: Students from disadvantaged schools and the university experience. Paper presented at Creating Spaces: Interdisciplinary Writings in the Social Sciences Conference, Australian National University, Canberra.
- Volmink, J. (2010). What can we learn from the NSC results? Presentation at IIE Forum, Varsity College, Sandton, Johannesburg, 21 February.
- University of Johannesburg (UJ). (2009). *Proposal for the implementation of a First Year Experience (FYE) programme at UJ*. University of Johannesburg Senate, internal document.
- Winterson, J. & Russ, M. (2009). Understanding the transition from school to university in music and music technology. *Arts and Humanities in Education*, 8(3), 339–354.

INTERVIEWS AND DIALOGUE

Teaching and learning and the first-year experience: Interviews with Brenda Leibowitz and John Gardner

Gugu Wendy Khanye*

Introduction

The South African National Resource Centre for the First Year Experience and Students in Transition (SANRC) conducted interviews with two leading scholars in the field of teaching and learning – Brenda Leibowitz and John N. Gardner – in order to begin a conversation about the role of teaching and learning in the first-year experience (FYE). Both interviews were conducted in August 2015 by Gugu Wendy Khanye, and were designed to elicit insights about the effectiveness of teaching and learning support for first-year students in the higher education system, from both a national and international perspective.

Brenda Leibowitz is the Chair in Teaching and Learning at the University of Johannesburg (UJ), having previously served as the Director of Teaching and Learning at Stellenbosch University. Leibowitz's work in the area of social justice and the scholarship of teaching and learning (e.g. Leibowitz, 2010) is well read in South Africa and inspires and enriches the academic field of teaching and learning and student learning and development.

John Gardner is currently Senior Fellow and Distinguished Professor Emeritus at the University of South Carolina (USC) as well as the President of the John N. Gardner Institute of Excellence in Undergraduate Education. In his role as founding Director and Senior Fellow at the National Resource Centre for the First-Year Experience and Students in Transition, Gardener has engaged in a range of teaching and learning activities and initiatives including advising, facilitating, mentoring and developing new research topics.

Interview with Brenda Leibowitz

Khanye: *In one of your seminars you presented on “The roles of values and concerns in Professional Academic identities”. In closing, you ended by saying “Society doesn’t change that much. Social differences remain, inequality persists.” In the South African higher education space, can the scholarship of teaching and learning contribute towards establishing equilibrium of the three above-mentioned aspects? Elaborate.*

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Leibowitz: There are waves of change in society – waves of wealth, times when society is more impoverished. We never reach a time when things are absolutely perfect or even excellent. In relatively egalitarian societies, there is some inequality. South Africa is one of the most unequal societies in the world; we have one of the highest Gini coefficients in the world, which is the gap between the richest 10% and the poorest 10%. In an article in the *Journal Higher Education Quarterly*, David Cooper [2015] discusses “South African Higher Education as a stalled vs. skewed revolution”. It appears that the racial inequalities still exist but have moved to be more class-based. The fact of the matter is that there have been huge changes in higher education since 1990/1994. There is a large task to be achieved, with some room for celebration but more concern and hard work.

Simon Marginson [2015] states that we have had the notion that education and higher education can change social inequality and therefore serves as an equaliser or provides for social mobility. The hard fact of the matter is that society changes, education/higher education is not the key lever in creating social inequality. However, education must obviously play its role as well as it can. Given this, there is a huge job for educators to make higher education as accessible as possible and as effective in various ways. In terms of teaching and learning, the primary responsibility of learning rests with students and lecturers/academics to make that learning possible or to make it such that students can exercise that responsibility. Furthermore, there is a huge role in the sector for student counsellors and individuals working in support divisions. It is a distributed responsibility and there is a role for managers, DVCs [deputy vice-chancellors], rectors and all staff. Everyone has a role to play.

The role of Scholarship of Teaching and Learning [SoTL] within this matrix depends on a few things: (1) it needs to be an effective scholarship, relatively rigorous and relatively informed by data, theory and prior reading of what others are doing, and be systematic; and (2) what is extremely important is that it is a scholarship that is underpinned by a vision of social justice, it is not just any kind of scholarship.

Khanye: *Carpenter and Curran [2013] have come to agree that “academics have a core role to play in the student experience during and beyond the higher learning phase”. What do you believe is the actual role of academics and should academics be directly involved, or is this the role of the institution?*

Leibowitz: Every grouping within the institution has a role to play, e.g. the vice-chancellor and deputy vice-chancellors need to lead the institution, they need to make it possible for academics to flourish and to teach as well as they can. Academics need to be part of crafting the vision of the institution. One can make a distinction between management and leadership within the institution because it is the leader who helps to provide a sense of the way forward, but it is the manager that makes the environment conducive.

Research conducted has shown that when academics work hard and are really flourishing, it is the general conditions, the interpersonal relationships between staff and also in the lecture halls, that make a difference in encouraging and discouraging academics, so they too have a huge role to play. Support divisions such as Academic Development

Centres and Centres for Teaching and Learning also have a role to play, whether it is in providing formal courses and workshops, which research has been proven to play an important role in an academic's professional development, or whether it is in supporting academics in more informal ways. There is a synergy between what academics learn from formal workshops/ courses, plus this broader issue of the environment in which they teach and from which they learn a huge amount.

Ron Barnett speaks about the "will to learn" (2007): that it remains the students' responsibility to learn, but they tend to learn when the environment is more conducive, more encouraging, if there is something exciting that they get the point in learning. It is thus the responsibility of the academic to show students what the learning is that is so exciting and so important, and to a lesser extent but very important, that learning is possible. If the student feels that they cannot learn, it is beyond them, then they also will not learn. As academics, we create the opportunity for students to learn. It can thus be summarised to be called an "ecology" within the institution, everything in the process interacts.

Khanye: *It is often said student learning occurs more outside the classroom than in the classroom. If this is so, do you believe that good teaching practice makes a difference in student learning?*

Leibowitz: Yes, there is an interesting complementary relationship between formal learning and informal learning, where informal learning occurs mainly outside the classroom, while formal learning is the result of the taught curriculum. They balance because the formal curriculum can set off like a catalyst: if you learn something exciting from the taught curriculum, the student may have an interest to follow it up on their own. In the instance of an informal environment, it can be a drag because if there is nothing there that supports what is happening in the formal environment the counter messages coming from there can limit the effect of the formal learning – then growth does not occur. A "savvy" lecturer thus takes cognisance of what is happening in the informal learning environment and taps into it and inducts students into that formal world. Ensuring the student gets into the world of formal learning is dependent on the student – a minority of students are truly self-starters.

Khanye: *Teaching has been compromised by pressures upon academics to pursue research; moreover, the reward system for academics has favoured them doing research over good teaching. Would you say that teaching and research are sometimes incompatible? Can one be both a great teacher and a great researcher?*

Leibowitz: There are examples of individuals who are both a great teacher as well as a great researcher. For example, Carl Wieman, an American physicist and Nobel laureate who has advised extensively on teaching and learning matters, set up a Science teaching centre. Having served on the board of the Council on Higher Education (CHE) and Higher Education Learning and Teaching Association of Southern Africa (HELTASA) teaching and excellence awards, I have been aware that there are individuals who are excellent teachers as well as excellent researchers, thus it is possible to be both. There are no two ways about it, although this may be a minority as it requires a lot from you.

Some people are excellent teachers in the traditional sense in that they teach well intuitively, and do not really spend much time in professional development or conducting research on their teaching. But it is becoming increasingly difficult to get the label “excellent teacher” without doing some research on your teaching – which is a challenge.

But anybody who has pride in their work and teaches should be good at it, so logically there should not be a clash between teaching and research. There are numerous examples in the country. One professor of Mathematics nominated as having made an impact on top-performing first-year students at the previous university where I worked, said that he became an excellent teacher from conducting more research in his field because it allowed him to go to conferences and network with others who have a strong understanding of the subject. That further allowed him to “see the wood from the trees”, i.e. to distil what is the essence of the subject and use that in teaching. He is an example of someone who goes to great lengths for their teaching, spending a great deal of time preparing his lectures, fine-tuning his notes on Blackboard, and obtaining feedback from his students. With regard to the balance between being both an excellent teacher and an excellent researcher, there is a difference in the case where you have a huge teaching load and it is difficult to be a good teacher. This is a challenge faced by many institutions in the country where teaching loads are much higher, so that would mitigate against being good at both or having enough time to devote to both, so it is not about quality necessarily. There is also a neoliberal approach of throwing money and incentives, which in some instances skews the view of the profession because when you can get more funds through research and there is pressure for research, it could lead to a neglect of teaching. Research from a project I have led on professional development at eight South African universities has shown that at each of the eight institutions documents and academics attest to research being pushed and incentivised, thus resulting in the skewed effect. On the other hand, some universities are also starting to incentivise teaching through their promotional systems.

If you see teaching as scholarship, then you would conduct research on your practice because we must be systematic and scholarly and engage in debate about something we do, whether it is about teaching or the discipline, it does not matter. Higher education needs to view an academic career as an integrated one.

Khanye: *The focus of the work of the SANRC is the first year of study and the succeeding transition within higher education. Active teaching and collaborative learning is a key goal in the teaching and learning space. Given high student numbers and large classes, is it possible to create an active and engaging learning environment for large classes during the first year?*

Leibowitz: Yes definitely, in my experience, I have come across numerous academics that are excited about their teaching, and in interviews and conversations have given great examples of handling large-class teaching. A great deal of academics are in fact positive about teaching “large classes”. There are two meanings of “engagement”. There is the notion of engagement where the lecturer creates opportunities for the student to engage actively in their own learning, to be active about their learning and to succeed academically.

But the second meaning of “engagement” is encouraging students to engage more actively in the community, the outside world, and with social issues. In my view both are extremely important. For academics, to have an impact and engage the students both inside and outside the classroom, it is critical to understand what is being done during the lecture, what assignments are required of students and the influence of what students do outside the lecture, depending on what they have learnt and apply in tutorials and other situations.

For the first-year specifically, there are four main elements that stand out as highly important for me: firstly, the notion of cognitive or affective contact, being able to acknowledge the first-year student and establishing meaningful contact – “I see you”. Secondly, the cognitive scaffolding and creation of bridges for the student into the knowledge – an assignment structured specifically to ease the student into comprehending the theory, providing building blocks required to do the assignment; showing students the rules of the discipline and allowing them to practise the learnt rules. Thirdly, experiential learning. I believe learning is not only about formal and cognitive processes, it is more modern theory around embodiment and affect; you want students to feel the new concepts and ideas and grow with them, especially for students who have not had good schooling. You cannot just teach formally and according to the rules and precepts, because it becomes superficially acquired; it needs to be owned and acquired and integrated. Your passion needs to be evident, as a lecturer, if you show enthusiasm, that you are excited by the knowledge and see its relevance, some of that ought to infect the students. You model being a professional, being a scholar to students, and lecturers need to be “polished”. The fourth and final theme has to do with more immeasurable attributes; we often talk about students as “them” as if they are something different from us – we need to see ourselves as learners and model to the students what we would want them to be.

Khanye: *“The Role of Values and Concerns in Professional Academic Development” seminar that you gave at the University of the Free State is based on the autobiographies of three academics working in the field of academic development. It explored the possibilities of critical reflection for creating agency and enabling conditions for students and staff in higher education. Please can you share three key findings from this research? How can teaching and learning contribute to creating enabling conditions for the first-year experience?*

Leibowitz: The seminar has led to a paper by Leibowitz, Garraway and Farmer (2015): “Influence of the past on professional lives: A collective commentary”. The paper was based on critical and social realism. The research suggests the importance of biography, and that your prior experiences do not necessarily determine what you become, but they do provide enabling opportunities for your next stage of development. How one interacts with one’s immediate environment makes the next stage possible. An example would be a situation which is challenging and forces you to respond creatively and critically. This might make it easier when you need to be critical or creative in future situations. Similarly, for students, their biographies influence how they learn but these do not entirely determine what happens next, it just makes certain things easier or more difficult.

Reflexivity is another theme. It suggests that when you do find out about yourself, your values and how you got to be where you are, you extend this reflexivity to your educational experience, thinking more carefully and understanding the enabling factors. This should enable you to strategise how to proceed more effectively, thoughtfully, or ethically. The third finding is around the importance of values, as all human activity is influenced by our values, including our teaching and learning. We need to be sensible, as Rudyard Kipling said: “God give me the strength to change what can be changed, to accept what cannot be changed and to know which one is which”.

Departing thoughts: I imagine the SANRC as a resource providing support more broadly in the field of higher education. This is an opportunity to provide resources that practitioners and researchers can draw on.

Interview with John Gardner

Khanye: *FYE programmes and activities are often conducted independently by different stakeholders at universities. Who are key stakeholders that should be collaborating across institutions to make FYE programmes and activities a more collaborative effort and experience?*

Gardner: Over the past 40 years, increasingly, much of the leadership has been taken by academic leaders, and so ideally institutions need to have partnerships between academic administrators, student services administrators, and faculty, because they have more contact with new students, people that do assessments, institutional research; most importantly, partnerships with students themselves; and, moreover, with the top leadership of the institution (rector or vice-chancellor). It is also very important to have partnerships with the government agencies as they have an interest in terms of what is happening in universities to help those beginning university studies. Alumni should also have a vested interest in anything that is good for students, and so they too should be involved. There are also financial investors who can invest in education, like corporate leaders, foundations – for example what the Kresge Foundation is doing in South Africa around promoting access and success in higher education and graduating the next generation of knowledge workers, because they are interested in student success work. There are multiple stakeholders and of these some are more important than others; and no work on the first-year experience is going to proceed beyond a certain level of effectiveness without the faculty, the faculty have to be involved in this because they stay longer in institutions – and, unlike administrators, have greater opportunities for contact with students.

Khanye: *Research and theories around “student involvement” and “student engagement” have come to play an integral role in the structuring of first-year experience programmes for supporting students in the 21st century. Are these theories still critical in initiating structured FYE programmes; are there new theories in the field to consider?*

Gardner: This has in recent times become a real challenge, because the dominant thinkers that provided the theoretical base for this work are all “ageing white men” – as in the work

of Alexander Astin on Student Involvement Theory, which was first published in 1984, and other theorists of that time like George Kuh whose key focus is on Student Engagement and emerged around 2000 through the first administration of the National Survey for Student Engagement [NSSE], which is now used internationally. The NSSE has been used to document the effectiveness of a number of what George Kuh has come to call “high-impact practices”, and that I would like to think is attention-getting and very effective. There are all kinds of ongoing research and new studies, but I cannot think of anyone that has achieved the prominence of Astin, or Kuh, or Vincent Tinto with work on the student integration model (1975) – and myself, and hence the problem of the ageing white men with insufficient successors in the wings, let alone already on the stage.

The real challenge is to be able to have the length of time and the research effort to see if a lot of the strategies that these scholars have advanced will be as effective with the changing college student body of the 21st century – students who are much more engaged in using technology for their learning, who are much less likely to be full-time, and are more likely to be on-campus residential students. Much of the early work of the researchers was done on middle-class and upper-middle-class, traditional college students, and so we are still very much in the process of seeing how long this established work will be validated with the newer types of student now in higher education.

The jury is out – although my own sense is that the core ideas of prominent scholars have a great deal of universal validity; I have seen them work and in all kinds of institutional settings. Some of the things espoused – like some of the involvement strategies put forward by Astin – are very difficult to implement with students who are above the traditional age and have children and do not live on campus; but if you look at the work of Tinto – the theory on academic and social integration – we know that is very influential with non-traditional learners as well. So, it remains to be seen. The area we know least about is the use of technology and distance education (online education) and how we are going to adapt these long-standing theories to that growing delivery system.

Khanye: *Extensive research has been conducted around the concept of high-impact practices (HIPs). HIPs have been found to lead to increases in important student outcomes such as engagement, academic achievement, deep learning and student persistence and retention [Kinzie & Evenbeck, 2008]. What challenges and opportunities are associated with implementing HIPs in the first year?*

Gardner: Challenges in these instances are very similar to challenges you would have starting anything. The real challenge is where the resources are coming from, and most institutions – because of the conditions of the world economy and government priorities – are not getting a lot of new money and are calling for the redistribution of existing money. This means that when you need money to start something new, you have to take it from existing units – which usually results in resistance. There are a number of internal political challenges faced by institutions, also most of the HIPs involve faculty and there are certain challenges like getting the faculty to do things they are not doing now. Most fundamentally, most institutions have tried some if not all of these HIPs, but they offer them for smaller

groups of students, often what we call “boutique programmes”, rather than bringing them to scale. An example would be having a first-year seminar and targeting certain students for the first-year seminar but not offering it to all of the students. I would argue that the first-year seminar can be valuable for all students because it deals with the normal, traditional adjustments to higher education. To offer the first-year seminar to the entire intake class in small groups is a very big resource commitment, so again the challenges shift from an experimental pilot to a fully institutionalised initiative.

This challenge relates to another challenge: that frequently HIPs are started by someone that is innovative, gets some support, and is well regarded, but often these HIPs become so identified and affiliated with that one person that should they leave the institution, or get promoted, or retire, then the question is: What happens to the HIP? The real challenges relate to scaling up: getting more people involved and making them a part of the basic way to do business – instead of offering learning communities for 20 or 30% of the first-year students, you put all first-year students in learning communities. To institutionalise anything, a case should be presented to build support and build allies with those who will support the initiative, from the top down. A lot of it has to do with who ends up being the proponents for these HIPs; if the HIPs are advocated for by well-respected internal leaders, they are more likely to be supported.

Khanye: *In your early work, you are cited by various researchers and practitioners in higher education as saying “Many institutions have adopted programs designed to provide a ‘rite of passage’ in which students are welcomed, supported, celebrated, and eventually assimilated into the campus” (Gardner, 1986). What are fundamental theories that support the notion of creating a “rite of passage”?*

Gardner: These would come especially from several of the disciplines that have most extensively studied rites of passage – mainly anthropology and sociology. But you know, there are several centuries now – dating back to the nineteenth century – of research on groups that have highly structured processes for inducting new members into the group; and those processes are generally rituals that are repetitive actions often accompanied by music, dance, and other physical activities that have certain sacred symbols that are displayed and accompanied by songs or chants, and are typically designed by older people to move younger people forward into the next stage of life in society. Rites of passage are designed to teach people how to function at the next stage of life, whether it is to be a hunter, a fisherman, a homemaker, or a mother. Societies have had these rites of passage for thousands of years; it is just that in recent decades we have been paying greater attention to the importance of these rituals in higher education for how they bond students together and to the institution. The rituals further support students and how they increase student enthusiasm for being at the university and how they teach the traditions of the university to students so that they feel some sense of historical connection and affiliation.

The book by Vincent Tinto (1987) *Leaving College* drew extensively on anthropological research to look at this whole concept of integration and how people get integrated into groups. In my own work, when I led the University 101 programme at the University

of South Carolina it was an effort to integrate new students, younger students, into the university – and we coupled it with a number of ceremonies and rituals such as holding convocation, getting all students to read the same book and have discussion groups around that book, providing on-campus tours for students to explore facilities, and all these constitute a cumulative set of rituals. We still have a document called the Carolinian Creed – it is a statement of six core values that have been widely emulated around the world, and on the first day of class we would have this poster with the Carolinian Creed on it, and get each student to sign their name to it, to make a commitment to honour the Carolinian Creed. So those are all different kinds of rituals, and of course in higher education there are other rituals in social groups including secret societies and pledging, athletic rituals, soccer, and so on. Those are all examples of ritualistic behaviour.

In the classroom, students would feel less anxiety and more comfortable if we did something earlier in the term to get them to bond with other students; such activities as giving them assignments that they can do in pairs, trios, or larger groups – anything to make the classroom experience a less individualistic one, less lonely, less autonomous. Also the use of rites of passage in the classroom are more “get acquainted” techniques and pedagogies that can work, early on, to break down some of the barriers for students. In the South African context, I have observed thousands of young people come from rural areas whose indigenous language was neither English or Afrikaans, but were required to learn to use one of these two languages at university, and were mixing with very diverse cohorts of people – one can but only imagine how challenging that is; so anything that can be done to make students who are not first-language English or Afrikaans-speaking feel more comfortable and at home, affords a proactive approach.

Khanye: *Given your long-standing experience and acquired knowledge in the field of first-year experience, what role do peer leaders play with regard to HIPs leading to transformational learning experiences during the first year?*

Gardner: There is a great deal of research that has been done relating to several of the questions at hand: one question is, that within the higher education environment – everything that makes up the ecology within the university – what elements of the university have the greatest influence on what students decide to do, the choices they make, who they are going to be with, and how they are going to spend their time? And when it comes to major life decisions, is the faculty the greatest influence, or advisors, residence hall staff, parents, siblings, and/or friends? Who has the greatest influence on students in higher education?

We know, factually, that the greatest influence is exerted by other students; students are hugely and easily influenced by their peers. Now in some ways that is a good thing, because students will do things to help students get off to a good start and make good choices; but on the other hand, students sometimes do things to their fellow students that are not really a good thing, they do not always serve as the best example. So what we are realising is that we should not act as if this matter of student influence is not of importance. We should not

leave it to chance; we should try to leverage how students influence students. That means institutional managers should be involved in picking high-performing students and putting them into roles of responsibility and leadership, giving them training and supervision and reward for working with their peers/mentees. It is really a way of translating into action the consensus and research findings in higher education over the past 50 years that show that students have greater influence on each other than any other source of influence; and so now the role of peer leaders is to try to address that.

In the United States, peer leaders are used very extensively; for example, in residence halls, advising initiatives and first-year seminars. Of course, peer leaders are also being used in various forms of informal instruction such as in teaching labs in science courses, and language courses – this has been a long-standing practice for decades and we know through research that it is effective. So this is very promising. We are broadening our effort in using students to conduct courses like laboratory sciences; we are using peer leader influence both in the class as well as outside the class. I personally was the first in my institution to make use of peer leaders in the first-year seminar class and I found it really meaningful to the students; and now in the institution there are over 200 sections of our University 101 course making use of peer leaders. The idea and concept of a support group, which is in effect a group of people that are having a major life transition in common, is a group that is led by someone who also had the challenge but has survived the challenge and flourished in spite of the challenge – the support group is a universal concept and higher education professionals should lend themselves to it and how it feeds into theories of student development and success.

In closing, South Africa got into exploring the work around FYE during the 1980s and many South African academics came to visit the University of South Carolina in the mid-eighties and we kept our doors open for your country to learn from our existing research communities. We have seen an extraordinary amount of change compressed into the country in a remarkably short period of time, but what South Africa is demonstrating is the universality of the applicability of the concept of the first-year experience, which can and will help more. The key is to get more public policy in terms of what government does to support the different types of initiatives that would help first-year students.

References

- Astin, A. (1984). Student Involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297–308.
- Barr, R.B. & Tagg, J. (1995). From teaching to learning – A new paradigm for undergraduate education. *Change Magazine*, 27(6), 12–25.
- Barnett, R. (2007). *The will to learn: Being a student in an age of uncertainty*. Maidenhead, UK: SRHE and OUP.
- Carpenter, D.S. & Haber-Curran, P. (2013). The role of research and scholarship in the professionalisation of student affairs. *Journal of Student Affairs in Africa*, 1(1&2), 1–9.
- Cooper, D. (2015). Social justice and South African university student enrolment data by “race”, 1998–2012: From “skewed revolution” to “stalled revolution”. *Higher Education Quarterly*, 69(3), 237–262.

- Gablenick, F., MacGregor, J., Mathews, R.S. & Leigh-Smith, B. (1990). *Learning communities: Creating connections among students, faculty and disciplines*. San Francisco, CA: Jossey-Bass.
- Gardner, J.N. (1986). The freshman-year experience. *The Journal of the American Association of Collegiate Registrars and Admissions Officers*, 61(4), 261–274.
- Kinzie, J. & Evenbeck, S.E. (2008). *Setting up learning communities that connect with other High-Impact Practices*. Washington Center, Learning Community Summer Institute.
- Kuh, G. (2003). What we're learning about student engagement from NSSE. *Change*, 35(2), 24–32.
- Leibowitz, B. (2010). Towards SoTL as critical engagement: A perspective from the "South". *International Journal for the Scholarship of Teaching and Learning*, 4(2), 1–5.
- Leibowitz, B., Garraway, J. & Farmer, J. (2015) Influence of the past on professional lives: a collective commentary. *Mind, Culture and Activity*, 22, 23–26.
- Marginson, S. (2015). Is higher education reinforcing inequality? *University World News*, Issue No. 376. Retrieved 18 November 2015 from www.universityworldnews.com/article.php?story=20150714011947146#Va5dI02icJU.citeulike.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89–125.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: The University of Chicago Press.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *Journal of Higher Education*, 68(6), 500–623.

BOOK REVIEW

A. Funston, M. Gil & G. Gilmore (Eds). (2014). *Strong starts, supported transitions and student success*. UK: Cambridge Scholars Publishing.

Reviewed by Birgit Schreiber*

Frameworks for extended support in foundation programmes have recently been critiqued as focusing on an othered, separated and identified group of students while leaving exclusionary practices unchallenged in the mainstream of the university (Bozalek & Leibowitz, 2015). Various African researchers (Akojee & Nkomo, 2007; Kioko, 2010; Ndebele, 1995; Vilakazi, 1986) support the argument that institutional practices, pedagogies and structural issues premised on notions of assimilation require re-visioning in order to shift student persistence rates.

These sentiments expressed by African authors are cogently echoed by the Australian researchers, collected in *Strong starts, supported transitions and student success*. The editors Andrew Funston, Miguel Gil and Gwen Gilmore have attracted innovative thinkers and novel practitioners who reflect on their work in the transition, retention and persistence spaces. Collectively, the chapters argue for a systemic and collaborative approach to changing systems and cultures, programme designs and pedagogies in order to “acknowledge the totality of the students’ learning experience” (p. 15).

Gil builds on Kift, Nelson and Clark’s (2010) concept of “tradition pedagogy” (p. 15) and distinguishes between the integrative-assimilative approaches to support that aim at integrating students into the status quo of higher education, and the “adaptive” model that “assumes that students come with different degrees of cultural and social capital that need to be valued and fostered as true strengths” (p. 16). Each chapter in the book underscores this fundamental theme of student-centred principle, which is the outstanding value of this interesting book.

The chapters discuss cases studies, explore challenges and showcase scaffolded designs to system-wide frameworks for embedding “transition pedagogies” into the mainstream of universities. Various chapters respond directly to Tinto’s observation that “most institutions have not yet been able to translate what we know about student retention into forms of action that have led to substantial gains in student persistent” (p. 146) and discuss approaches

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and practices that shift persistence rates in the students within these “whole-of-institutions” approaches that focus on the FYE stages and are “key to the attrition puzzle” (p. 149).

For me, one of the most exciting chapters is Brian Zammit’s “Embedding a third-generation transition pedagogy: The role of core foundation units”, in which he explores debates on attrition and argues that it is not monocausal. Transition pedagogy is premised on the acknowledgement of socio-cultural incongruencies, combined with curricular and co-curricular articulation as well as institutional culture and climate issues, and proposes a model that shifts persistence rates. Citing Kift *et al.* (2010), he applies the third-generation transition pedagogy to the case study in this chapter.

This book contributes to the scholarship on concepts of persistence, success, attrition and institutional culture and opens critical debates on pervasive and systemic issues that often impair progress. Add-on, short-term and other such insular interventions remain impotent at challenging the exclusionary status quo. The authors provide cogent examples, cases and evidence to lend weight to the argument that institutional efforts and systemic collaborations are probably the most potent methods of addressing the broad concerns of persistence and success. “Whole-of-institution” (p. xi) approaches, also called collegial and systemic (Reason, 2009), are the most effective in terms of triggering substantial shifts towards enhancing students’ chances of persistence (Reason, 2009).

The book is a collection of chapters that offer critical insights into, and expand, the scholarship about FYE. The chapters begin with Funston, Gil and Gilmore exploring the constructs and assumptions embedded in FYE discourses, and encourage the reader to review assumptions about the role of higher education within discourses of equity, access and participation. FYE is sometimes viewed in instrumentalist terms about retention of “indigenous” or “previously disadvantaged” groups of students, and Funston, Gil and Gilmore challenge this view as assimilationist and present the “whole-of-institution approach”, which highlights the importance of “executive led and holistic approaches” (p. 15), culture and climate shift within institutions.

Through critical reflection, scholarship, research and insightful narrative, the editors and authors do not offer simplistic solutions but illuminate the profound challenges in employing transformative strategies truly to transform higher education. Each chapter offers a detailed case study to illustrate how transition pedagogy manifests in FYE spaces, thus impacting institutional change. This is perhaps the one area in which this book may have been more explicit. There is little exploration of how the FYE, even if re-thought in radical terms, changes the overall traditional practices of mainstream senior years in the undergraduate and postgraduate sector.

Overall, the book is an extremely valuable resource for anyone in higher education who is committed to the complex tasks of realising the ideals of higher education as an equaliser.

References

- Akoojee, S. & Nkomo, M. (2007). Access and quality in South African higher education: The twin challenges of transformation. *South African Journal of Higher Education*, 21(3), 385–399.
- Kioko, J. (2010). Foundation provision in South African higher education: A social justice perspective. In C. Hutchings & J. Garraway (Eds). *Beyond the university gates: Provision of extended curriculum programmes in South Africa*, pp. 76–96. Proceedings of the January 2009 Rhodes University Foundation Seminar.
- Kift, S., Nelson, K. & Clark, J. (2010). Transition pedagogy: A third generation approach to FYE – a case study of policy and practice for the higher education sector. *The International Journal of the First Year in Higher Education*, 1(1), 1–20. Doi:10.5204/intjfyhe.v1i1.13
- Ndebele, N. (1995). Maintaining domination through language. *Academic Development* 1(1), 3–5.
- Reason, R. (2009). An examination of persistence research through the lens of a comprehensive conceptual framework. *Journal of College Student Development*, 50, 659–682.
- Vilakazi, H. (1986). The need for a revolution in education. Proceedings of the Aspects 7 ASP Conference, University of Natal, Pietermaritzburg.

BOOK REVIEW

Bitzer, E. (Ed.). (2009) *Higher education in South Africa: A scholarly look behind the scenes*. Stellenbosch: Sun Press.

Reviewed by Annsilla Nyar

It may be asked why a book on higher education in South Africa, published in 2009, is included for review in a 2016 edition of the *Journal of Student Affairs in Africa (JSAA)*. There are a couple of reasons why this book merits a review in 2016. Many of the chapters in the book provide contextualisation of issues covered in this SANRC FYE Special Edition of the *JSAA*. Another reason for reviewing the book is that the book in its entirety allows for some critical thoughts on burning issues animating the field of higher education in South Africa and the extent to which the content of the book, being a text on higher education, does justice to them. This is of particular relevance given the current proliferation of student protest and the turbulent state of South Africa's higher education environment.

This book can be used as a useful resource for all education scholars and practitioners. Any reader, whether a layperson or higher education specialist, is bound to appreciate the 'scholarly behind the scenes' perspective of the field. It is particularly appealing because of its line-up of diverse contributors, some of whom are key figures in South Africa's higher education sector and have the necessary gravitas to 'sell' the book. It is divided into six thematic sections: higher education policy; normative and epistemological issues; teaching, learning and the curriculum; professional development; structures and governance in higher education; and higher education research agendas. The different contributions are well arranged to reflect this structure.

In terms of thematic coverage, it is certainly not expected that a single text on higher education in South Africa can do justice to the multiplicity of debates and issues animating the sector or comprehensively analyse every aspect of higher education. To this end, a study of the state of higher education over the two decades of democracy in South Africa is currently underway under the auspices of the Council on Higher Education (CHE); the CHE report is expected to be published in 2016. However, when a book covers relatively sprawling academic terrain, it is always a curious matter to see how a reasonably balanced coverage of all the diverse issues under its ambit is ultimately achieved. Therefore, it is a

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point of concern that the book robustly embraces some key issues and concerns in the field of higher education in South Africa (policy analysis, the kinds of knowledge being produced, curriculum design, etc.) and underplays others (student access and success, affordable education and concerns about the kinds of graduates exiting the system). For the purposes of the work of the South African National Resource Centre for the First-Year Experience and Students in Transition (SANRC) in promoting student retention and success, specifically in the first year of study, a focus on the matter of student success would have been a welcome addition to the book. The centrality of the matter of student success to higher education in South Africa is exemplified in educational wastage statistics in terms of dropping out, non-completion and delayed completion of degrees. These statistics represent a tragic loss of human potential that has been lost to South Africa and underline the SANRC's contention that issues of student success should rightly be at the centre of South Africa's higher education agenda. The matter of student success is scarcely addressed in the book.

It is also curious that the concept of transformation, within which the matter of student success is deeply embedded, is not fully critically examined in the book. It is difficult to escape the salience of transformation and its relationship to matters of race and racism in the higher education sector, the realities of which continue to rage and fester to varying intensities in the national higher education environment and manifest in the form of waves of disruptive, and often violent, student protests in South Africa's universities. Some space could have been allotted within the book to matters of student finance and the pressures faced by universities to make university education affordable to students. More broadly, the overall content of the book would have benefited from some conceptual direction as to the current and future path of transformation in higher education in South Africa, as well as key exigencies such as the need to eliminate discrimination, change the demographic make-up of the academy, increase affordability and implement institutional cultures that are not alienating for black students. It is understood that changing demographics, improving pass rates and graduation rates, and pursuing and achieving race, gender and disability equity goals are important aspects of transformation. However, transformation is a much more expansive phenomenon, connecting to every aspect of the higher education environment, and a book on higher education in South Africa cannot hope to escape such complex, fraught and perhaps intractable issues and debates.

There are some chapters in the book that address the issue of transformation, albeit in different ways, such as Jansen's dense and challenging chapter on the curriculum ("The curriculum as an institution in higher education") and Leibowitz's insightful argument about positioning teaching and learning from a social justice perspective ("Towards a pedagogy of possibility: Teaching and learning from a social justice perspective"). However, the matter of transformation, and/or race, is not explicitly drawn out at any point in the book. A positioning for the issue could have been well located in Le Grange's contribution about the space of transformation and "supercomplexity" (Barnett, 2000) in which the contemporary South African university is currently located. Le Grange usefully critiques the kinds of knowledge being produced in South Africa's universities, but limits the analysis

of transformation to that of the processes of research and journal publication. A single chapter that engages with ontological and epistemological issues in all their complexity – and the consequent implications for research, methodology, scholarship, learning and teaching curriculum and pedagogy – would have been a welcome addition to this book.

In summary, the relative absence of important areas of analysis in the collection of contributions divests the book of a contemporary feel in terms of the broader contexts and concerns in which it places itself and perhaps even speaks to some blind spots within the academy itself. Is higher education scholarship perhaps missing the mark in some ways? Key scholarship in the field of higher education in South Africa ought to be grappling with some of the most important challenges of the time, for example making university education affordable for South Africa's students and ensuring that educational success is within the reach of every student. The sense of higher education as a site of contestation and struggle is not fully reflected within the book, detracting in some ways from a balanced treatment of the field of higher education in South Africa.

Reference

Barnett, R. (2000). *Realising the university in an age of supercomplexity*. Buckingham: Open University Press.

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Faeeqa Jaffer is a masters graduate from the Faculty of Education at the Cape Peninsula University of Technology, Cape Town. She is based in the Faculty of Applied Science at CPUT, where she lectures Communication Skills to first-year students in the Analytical Chemistry, Marine Science and Nature Conservation programmes. She also acts in an advisory capacity to the content lecturers in these programmes with regards to student support and integrated assessments.

Dr Jennifer Keup is the Director of the National Resource Center for The First Year Experience and Students in Transition, USA, where she provides leadership for all operational, strategic and scholarly activities of the Center in pursuit of its mission "to support and advance efforts to improve student learning and transitions into and through higher education". Her primary responsibilities include short- and long-range planning; oversight of programme development and implementation; supervising a professional and graduate student staff of 17 people; policy, personnel and budget management; and serving as a liaison and representative of the National Resource Center to the Center's constituents and the higher education community at large. In this capacity, she leads a team of professionals who coordinate the Center's conferences and continuing education, publications, research and assessment activities, public relations, and resource development. Jennifer also serves as an affiliated faculty member in the Department of Educational Leadership and Policies in the College of Education at the University of South Carolina, where she teaches graduate courses, advises students and serves on thesis and dissertation committees.

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Tracey J.M. McKay has over 20 years of experience in teaching in Higher Education. She has a number of teaching qualifications and four teaching awards. She has supervised eight MSc students to completion and has 21 accredited publications to date. She is currently a Senior Lecturer at UNISA and is writing up her PhD in Adventure Tourism. Her research interests include the school commute, private schooling, teaching and learning in Higher Education, Adventure Tourism and Environmental Management.

Prof. Teboho Moja is Clinical Professor of Higher Education at New York University. Her teaching experience includes high school and university levels. Teboho has held key positions at several South African universities, including being appointed chair of the Council of the University of South Africa. She has held positions as professor extraordinaire at the University of Pretoria, the University of Johannesburg and the University of the Western Cape, and has been visiting professor at the University of Oslo (Norway) and University of Tampere (Finland). Teboho was instrumental in setting up the Centre for Higher Education Transformation (CHET) in South Africa and is currently serving as the

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Annzilla Nyar is Director of the South African National Resource Centre for the First Year Experience and Students in Transition (SANRC). She is an academic and researcher with extensive experience in the higher education sector. Prior to joining the SANRC, she held the post of Manager: Research and Policy Analysis at the former Higher Education South Africa (HESA), a coalition of 25 public universities in South Africa (now: Universities South Africa). Before HESA, she worked as Senior Researcher at the Gauteng City–Region Observatory (GCRO), a partnership between the University of the Witwatersrand, Johannesburg, the University of Johannesburg, and the Gauteng Provincial Government (GPG). Annzilla holds a masters degree in Political Science from the University of KwaZulu-Natal (UKZN). Her last article is “Nation-Building, Africanism and the 2010 FIFA World Cup: What did they do for social cohesion in post-apartheid South Africa?”, published in *Transformation: Critical Perspectives on Southern Africa*, Volume 85, 2014.

Estherna Pretorius is currently the FYE Coordinator in the Faculty of Science at the University of Johannesburg (UJ), South Africa. She obtained her masters degree in Biodiversity and lectures in Life Sciences for teachers. Her research focuses on enhancing teaching and learning of first-year students in Science and she manages the FYS in Science (incorporating Engineering, Education and Health Sciences students). She is engaged to George Ehlers (a medical doctor).

Dr Birgit Schreiber is Senior Director of Student Affairs at the University of Stellenbosch, South Africa. Prior to that, she was the Director of the Centre for Student Support Services at the University of the Western Cape (UWC) in Cape Town. She holds a PhD from UWC. Birgit has published in national and international academic journals on student support and development, has presented research papers and keynotes at national and international conferences and has given lectures at the UC Berkley, the University of Leuven (The Netherlands) and the University of Oslo (Norway). She was a visiting scholar at the UC Berkeley, where she was involved in their Student Affairs department. She has also been involved in various quality-assurance panels reviewing student affairs at South African universities and taken part in the national review of the South African Survey of Student Engagement (SASSE) tool. She has been a member of the national executive

of various national professional organisations, including the South African Association of Senior Student Affairs Professionals (SAASSAP), and currently serves on the Executive of the Southern African Federation of Student Affairs and Services (SAFSAS). She is also the Africa Regional Coordinator of the International Association of Student Affairs and Services (IASAS). She is a founding member of the Editorial Executive of the *Journal of Student Affairs in Africa*.

Dr André van Zyl has a masters degree in Strategic Management and a PhD in Higher Education. His main research focus is in the area of student success, with specific focus on first-year students. André was responsible for initiating the First Year Experience initiative at UJ and he has spearheaded the setting up a National Resource Centre for the FYE in South Africa. The SANRC is now fully functional and housed on the APB campus of the UJ. He has been working at UJ since 2004 and has worked as a Learning Development facilitator, FYE coordinator and, since late 2012, as the Director of the Academic Development Centre.

Dr Dallin George Young is the Assistant Director for Research, Grants, and Assessment at The National Resource Center for The First-Year Experience and Students in Transition. He coordinates all the research and assessment endeavours of the National Resource Center and facilitates and disseminates three national surveys: National Survey of First-Year Seminars, National Survey on Sophomore-Year Initiatives, and the National Survey of Senior Seminars/Capstone Courses. He obtained his Doctor of Philosophy in College Student Affairs Administration degree from the University of Georgia in 2012. He oversees a number of research collaborations and grant opportunities between the Center and the national and international higher education community, as well as across the University of South Carolina (USC) campus. He coordinates the distribution of the Paul P. Fidler Research Grant, a competitive national grant that recognises the development of research investigating the experiences of college students in transition.

Thank you to our reviewers

The *JSAA* Editorial Executive wishes to thank the peer reviewers of Volume 3 of the *Journal of Student Affairs in Africa* for their time and expertise in evaluating and helping to select and improve the manuscript submissions we received.

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Conference Announcement: Sanrc Fye Conference 2016

A Practitioner's Perspective: Toward a Critical Understanding of FYE Practice and Strategies to Support Academic Success in the First Year and Beyond

The South African National Resource Centre for the First Year Experience and Students in Transition (SANRC) was established in 2014 with a Teaching Development Grant (TDG) from the Department of Higher Education and Training (DHET). The main purpose of the SANRC is to improve student success in South Africa by developing and disseminating scholarship, research and best practice in the field of student transitions and success.

The SANRC will be hosting its second annual FYE Conference on 25–27 May 2016 at the Southern Sun O.R. Tambo International Airport, Johannesburg, South Africa. The broad theme of the conference will provide South Africa's FYE knowledge community with a reflective space for critically examining and understanding FYE practice and strategies in both a South African and global context. As the FYE gains increasing traction worldwide, it becomes ever more imperative to interrogate the work being done in South Africa. The conference is a golden opportunity to highlight the experiences and observations of FYE practitioners working hard on the ground to facilitate academic success and retention for South Africa's students, with an eye to certain marginalised and under-represented student populations such as historically disadvantaged students, students with disabilities, international students, first-generation students, LGBT students, etc. Importantly, the conference will examine evidence of learning outcomes and assessment as well as general implications for best practice for FYE work in our specific educational contexts. Ultimately, this conference looks to ensure that our efforts as an FYE community are theoretically aligned and best configured to support a fulfilling experience for students in the first year and beyond.

Registration opens on 1 March 2016. More information about the conference can be obtained from the SANRC website: <http://sanrc.co.za>

The SANRC contact person for any queries related to the conference is Ms Andani Ramulongo on 011 559 1002 or aramulongo@uj.ac.za.

Call for papers



Vol 4 Issue 2 2016
Open call

Submissions are invited from student affairs practitioners and researchers in student affairs and higher education studies. The *Journal of Student Affairs in Africa* is seeking contributions for its Volume 4 Issue 2 (2016). The Editorial Executive of the *JSAA* welcomes theoretical, practice-relevant, and professional-reflective contributions from across the scholarly field and professional domains of student affairs and services that are relevant to the African higher education context. Details of the scope and focus and editorial policies of the Journal can be found under 'JSAA About' on the Journal's website www.jsaa.ac.za. Particularly welcome are:

- Case studies and comparative studies of innovative practices and interventions in student affairs in the context of African higher education (e.g. in career development, citizenship development, community engagement and volunteering, counselling, leadership development, residence management, student sport, teaching and learning, student engagement, student governance and politics, as well as all aspects of student life);
- Conceptual discussions of student affairs and development, and key enablers and inhibitors of student development in Africa;
- High-level reflective practitioner accounts of an empirical, normative or conceptual nature. By this, we mean both critical-reflective accounts of practices as well as personal reflections which can provide the building blocks for future case studies and the development of grounded theory;
- Explorations of the nexus of student affairs theory, policy and practice in the African context and beyond; and
- Syntheses and explorations of authoritative literature, theories, methodology and professional trends related to student affairs in Africa.

The Journal also publishes relevant book reviews and professional and conference reports and notices from scholarly associations and institutions.

Please email the Journal Manager, Dr Thierry Luescher, with any queries or suggestions for contributions (Email: jsaa_editor@outlook.com). To send us a manuscript for consideration, please register as an author and consult the submission guidelines on the Journal's website (www.jsaa.ac.za). Manuscripts can be submitted directly to the Journal Manager via email. The *JSAA* is a peer-reviewed publication and adheres to the ASSAf Guidelines for best practice in scholarly publishing. The Journal is committed to assisting emerging scholars and professionals in developing promising manuscripts to the point of publication.

The **closing date** for receiving papers to be considered for Volume 4 Issue 2 is 30 June 2016.

Please note: There are no processing fees or page fees. No costs accrue to authors of articles accepted for publication.



The International Association of Student Affairs and Services was officially founded on March 1, 2010. The purposes of IASAS are to:

- Strengthen and diversify cooperation among individuals and organizations in the student affairs and services field worldwide.
- Promote the student affairs and services profession at the international level through advocacy with governmental and higher education organizations, networking and sharing information among practitioners and student groups, and encouraging high quality preparation and professional development programs.
- Provide a platform for the improvement of multi and intercultural communication and understanding.
- Promote the welfare of students in higher education worldwide through collaboration with international governmental and non-governmental organisations and addressing such issues as access, retention, quality, student rights, and the cost of higher education.

IASAS utilizes technology for conducting most of its activities. This includes such applications as the IASAS website, email, internet and video conferencing, and social networks, etc. Occasional face-to-face meetings are held in various locations around the world and in conjunction with existing meetings of international, national, and regional groups whenever possible.

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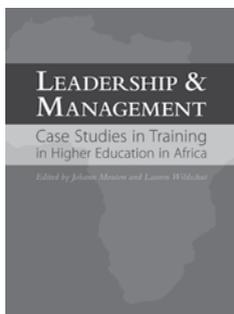


The book *Student Politics in Africa: Representation and Activism*, edited by Thierry M. Luescher, Manja Klemenčič and James Otieno Jowi (2016), publishes the second part of research conducted by emerging and established African higher education researchers of the Africa-wide project “Student Representation in African Higher Education Governance”. The first part of the research was published in the issue “Student Power in African Higher Education” of the *Journal of Student Affairs in Africa*, Vol. 3 Issue 1, 2015.

The book *Student Politics in Africa: Representation and Activism* provides a 21st-century baseline review of the international theories, African context and current state of student politics and governance in a cross-section of countries and universities in sub-Saharan Africa, along with longitudinal accounts of the way student politics has evolved since the student movements of the 1960s in Anglophone and Francophone Africa.

“This is an excellent book and will be the benchmark on its topic for a considerable period. It focuses on a theme that has not been much discussed in the literature and is very important for policymakers and the academic community to think about.”

Professor Philip G. Altbach, Emeritus, Boston College



There has been a resurgence of interest in training programmes for higher education leaders and managers at African universities in recent times. Although there have been a few cases of evaluation studies of such programmes in Africa, a more systematic review of the lessons learnt through these programmes has not been done. This book aims to document and reflect on the learnings from intervention programmes at three African higher education councils.

The book commences with an introduction that sets the historical context. The remainder of the book is divided into three main parts. Part One consists of two chapters: a review of African scholarship on university leadership and management, and the history and landscape of higher education leadership and management training in Africa. Part Two presents the documentation and lessons learnt from the three country initiatives that were part of CODESRIA’s HELM project. Part Three consists of two chapters: the first describes, in detail, the monitoring and evaluation process that ran concurrently with the implementation of the country training programmes, and the second reviews the uptake and impact of these programmes. *Leadership*

and Management: Case Studies in Training in Higher Education in Africa (2015) is edited by Johann Mouton and Lauren Wildschut.

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Submissions

Please register as an author and read the Author Guidelines at www.jsaa.ac.za. Submissions must be made by email to the Journal Manager at jsaa_editor@outlook.com.

The *JSAA* typically has themed issues. However, submissions that fall within the general scope and focus of the Journal can be made at any time and may be published irrespective of the overall theme of the Journal. Particularly encouraged are open-theme manuscripts that address the following:

- Case studies of innovative practices in student affairs in the context of African higher education (e.g. in teaching and learning, residence management, student governance, student counselling).
- High-level reflective practitioner accounts.
- Explorations of the nexus of student affairs theory, policy and practice in the African context and beyond.
- Conceptual discussions of student development, and key enablers and inhibitors of student development in Africa.
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- **Book reviews** should be between 800 and 1 000 words in length. Competent reviews of key student affairs books are published at the discretion of the Editorial Executive.
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Research articles and professional practitioner accounts

Open submissions Indexed Peer reviewed

Campus dialogue/interview section

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Open submissions Indexed Peer reviewed

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