5. Investigating the nature of epistemological access afforded by a first-year chemistry intervention programme: Towards a pedagogy of possibility!
   SUE SOUTHWOOD, DUNCAN SAMSON AND JOYCE SEWRY

14. Motivation of higher education students: A single student engagement case study
    COOKIE M. GOVENDER

24. Learning through transformation: A collaborative learning strategy
    VICTOR DOS SANTOS AND KAREN STEENEKAMP

36. Driving Lessons - supporting academic development in a private higher education space
    JOHN BALLAM

46. Learning outcomes in external programme reviews: A case study from Bahrain
    WAFA ABDULRAHMAN ALMANSOORI

55. Practitioners' Corner
    A developmental approach to an acceleration programme: An analysis of students' performance
    JULIE DOUGLAS

THE INDEPENDENT JOURNAL OF TEACHING AND LEARNING

Formerly The Journal of Independent Teaching and Learning
The Independent Journal of Teaching and Learning

The Independent Journal of Teaching and Learning is a peer-reviewed journal, which focuses on making a difference to educators at the primary, secondary and tertiary levels. It publishes original contributions of interest to researchers and practitioners in the field of education.

The following types of contribution will be considered for publication:

- research-based empirical, reflective or synoptic articles that would be of interest to the educational practitioner
- review articles that critically examine research carried out in a specific field
- discussion or advocacy papers suitable for publication in the section entitled ‘Practitioners’ Corner’
- book reviews that comprise a clear and concise evaluation of recently published books.

Editor-in-Chief
Professor Dolina Dowling BA; Dip Ed; Dip Sp Ed; APhS; MA; PhD.

Managing Editor
Marla Koonin BA Comm; BA Hons Journ (cum laude); MA Journ (cum laude); CPRP.

Editorial Advisory Board
Professor Carmel McNaught BSc (Hons); Dip Ed; MEd; PhD.
Professor Andile Mji BSc; HDE; BEd; MEd; DEd.
Professor Michael Glencross BSc; PGCE; BEd; BSc(Hons); MPhil; DPhil.
Dr Felicity Coughlan B SocSc Hons (SW); B SocSc Hons (Psych); MSc; DPhil.

Publisher
The Independent Journal of Teaching and Learning
is published by
The Independent Institute of Education (Pty) Ltd.
ADVTECH House
Inanda Greens Business Park
54 Wierda Road West
Wierda Valley, Sandton
South Africa
www.iie.ac.za

Disclaimer
The publisher and the editor cannot be held responsible for any consequences arising from the use of information contained in this journal. The views and opinions expressed do not necessarily reflect those of the publisher or the editor.

Address for correspondence
Professor Dolina Dowling
Editor-in-Chief
The Independent Journal for Teaching and Learning
PO Box 2369
Randburg 2125
South Africa
E-mail: editor@iie.ac.za
Contents

Volume 7 2012

1. Notes on contributors

3. Editorial
Dolina Dowling

5. Investigating the nature of epistemological access afforded by a first-year chemistry intervention programme:
Towards a pedagogy of possibility!
Sue Southwood, Duncan Samson and Joyce Sewry

14. Motivation of higher education students:
A single student engagement case study
Cookie M. Govender

24. Learning through transformation:
A collaborative learning strategy
Victor Dos Santos and Karen Steenekamp

36. Driving Lessons –
supporting academic development in a private higher education space
John Ballam

46. Learning outcomes in external programme reviews:
A case study from Bahrain
Wafa Abdulrahman Almansoori

55. Practitioners’ Corner
A developmental approach to an acceleration programme:
An analysis of students’ performance
Julie Douglas

64. List of reviewers
Wafa Abdulrahman Almansoori is a senior director in the Higher Education Review Unit of the Quality Assurance Authority for Education & Training (QAAET) in the Kingdom of Bahrain. She is also on the external reviewer register of the Oman Academic Accreditation Authority and has served on some of their audit panels. Wafa joined the Quality Assurance Project in 2007 and assisted in the development of the Higher Education Review System, participating in the pilot projects. Prior to her joining the QAAET, Wafa gained her doctorate in Electrical Engineering at Tufts University in the US and was a faculty member of the Department of Electrical & Electronics Engineering at the University of Bahrain. Her current research interests are in the field of quality assurance in higher education, teaching and learning and governance. Wafa was the recipient in 2007 of the ‘Anita Borg Change Agent Award’, US.

John Ballam holds a Bachelor of Primary Education degree from the University of South Africa, a further Diploma in Education and a Master of Philosophy in Applied Ethics from Saint Augustine College, South Africa. He started his career as a primary school teacher then moved into high school occupying the positions of head of department, vice principal and principal. After eleven years in secondary school education he left to develop a second career in the fields of organisational development and later academic development. John joined Varsity College, a division of The Independent Institute of Education, as an independently contracted lecturer in 2003, later being appointed as one of the first cohort of academic development coordinators in 2006. He was appointed as the National Academic Development Coordinator for Varsity College, a division of The Independent Institute of Education, in 2010. John’s research interests are active learning, academic development and organisational development. He has spoken at numerous conferences and conducted organisational development interventions within South Africa. In 2008 he was invited to share his research for his Master’s degree at The International Conference for Philosophy and Psychiatry in the US.

After an early career as a high school English teacher Julie Douglas graduated from the University of Natal Durban, South Africa in 1997 with a BA(Hons) in Psychology, and in 2000 with a Master of Education cum laude. She was a senior researcher at the Education Policy Unit - Natal, and since 2005 has worked as an independent research and evaluation consultant, monitoring and evaluating various school-based projects; and writing and researching in the field of language education. She has been lecturing in language and academic literacy at Embury Institute of Teacher Education and Vega School of Brand Leadership in Durban, a division of The Independent Institute of Education. Julie is a project leader of Talk English, a volunteer organisation where TEFL teachers give free English lessons for adults and children, mostly refugees from African countries and South African isiZulu speakers. Julie is currently a doctoral candidate at the University of Kwa-Zulu Natal studying the oral English teaching praxis of rural and township primary school teachers.
Cookie M. Govender holds a doctorate in Educational Philosophy. Her areas of expertise include: curriculum design; learning programme evaluation; assessment; education, training and development (EDT) management; organisational and employee development; and talent management. She is a registered Chartered Learning and Development practitioner with the South African Board for People Practices (SABPP). She has published both books and articles, the former including: Project Management in Education and Training (Van Schaik). Cookie is a lecturer at the University of Johannesburg, South Africa in the Faculty of Management.

Duncan Samson is currently a full-time researcher for the FirstRand Foundation (FRF) Mathematics Education Chair hosted by Rhodes University, South Africa. He holds two Master’s degrees, one in physical/polymer chemistry and the other in mathematics education. He recently received his doctorate with his research focusing on The Heuristic Significance of Enacted Visualisation. Duncan has previously worked as a research scientist in the industrial chemical field as well as having taught high school mathematics for a number of years. His present research interests include visualisation, pattern generalisation, enactivism and multiple solution strategies. Duncan is also an avid musician and plays the violin in a number of musical ensembles.

Victor dos Santos is a lecturer in the Faculty of Art, Design and Architecture at the University of Johannesburg, South Africa. He has over 15 years of experience in teaching industrial design students. Before becoming an academic he worked for various South African manufacturing concerns as an industrial designer, with projects ranging from liquid packaging solutions to furniture design and point-of-sale equipment. His commitment to providing a good education to future industrial designers meant that the design expertise developed in industry would be combined with his role as educator. He is currently supervising a master’s student in a community-centred design project. Other research work is focused on user-centred design approaches and design education.

Joyce Sewry has been teaching in the Department of Chemistry at Rhodes University, South Africa for 25 years, with her main focus on first-year teaching in General Chemistry. At the Honours level, she teaches Chemometrics and a course in Service-Learning. Her teaching is strongly influenced by the Community Engagement and Service-Learning work she undertakes in the field of Chemical Education in mainly disadvantaged schools. She is also very interested in the teaching of both Mathematics and Science at school. She was awarded the Vice-Chancellor’s Distinguished Award for Community Engagement in 2009 and the SA Chemical Industries award for Chemical Education in 2012.

Sue Southwood has worked in the field of educational development at Rhodes University, South Africa since 1995. Her master’s and doctoral work was located in the field of Mathematics Education, the latter focusing on the notion of ‘collaborative professional development’. Since 2009 she has been working with the Centre for Higher Education Research Teaching and Learning (CHERTL), where she now supports the development of effective spaces of learning in the context of the university, across diverse disciplinary contexts. She continues to focus on spaces of professional development, her current research attempting to identify impacts of a particular space of development and the implications for the future.

Karen Steenekamp is a senior lecturer at the University of Johannesburg, South Africa. Her expertise lies within the fields of Higher and Adult Education and Training. She holds a Doctor of Education degree in Higher Education and has supervised many Masters’ and PhD students in this field. She has experience in all domains of higher and adult education as she has been involved with colleges, a technikon as well as a university. She has also conducted training for the private sector which included adult and assessor training. Karen has published in national journals and is currently focusing her research endeavour on Teaching, Learning and Assessment in Higher and Adult Education, using Action Research as her preferred design type.
Challenges surrounding the massification of higher education are not confined only to South Africa but also concern governments, policy makers, and managers of higher education institutions globally. Indeed ‘Attaining and Sustaining Mass Higher Education’ was the theme of the Organisation for Economic Co-operation and Development (OECD) biennial conference in Paris in September 2012. The management of access - one of the sub-themes of the conference - is particularly important. This is crucial for successful higher education study, which is a major contributor to young persons fulfilling their aspirations, their future employability, and by extension leading prosperous and fulfilled lives. However, it could be argued that this sub-theme is even more important for South Africa as it continues with its national transformation project of society, and the important role that higher education is expected to play in contributing to the economic development of the country.

In 1994, the first democratically elected government as part of building an inclusive society decided that higher education needed to be expanded in the previously disadvantaged groups as they were under-represented in this sector. The imperative was to ensure that the population of higher education students reflected the demography of South Africa.

There was another imperative. This was to ‘... ensure an adequate supply of high-level human resources for social and economic development …’ (National Plan for Higher Education, 2001, Ministry of Education). The country needed to benefit from the intellectual capabilities of all its people. The target set at the time was for a participation rate in higher education of 20% in the 20-24 age group within the next 10 to 15 years. In 2000 the participation rate was 15% with approximately 578134 students, by 2010 this number had grown to 893024 (Department of Higher Education and Training provisional figures). Hence at first blush it looks as if the access target is well underway to being met.

However, advantages gained in the increased participation rate are undermined by high attrition and low throughput rates. If the national imperatives of equity and access are to be met, success cannot be de-linked from issues of access. The Human Science Research Council report on Student Retention and Graduate Destination (2009) found a 45% dropout rate of students who, by and large, came from low-income families. A considerable proportion of this high attrition is due to financial difficulties with loans and bursaries being insufficient to cover the full costs of higher education study. However, another, and equally fundamental reason, is ‘success’.

With 51% of young people being unemployed in the 18-24 age group and a graduate unemployment rate of 5% (Treasury Report, 2011), these stark figures show the importance of successful higher education study.
The Department of Higher Education and Training has clearly signalled the importance of access with success through its funding mechanisms, such as earmarked grants, and foundation and teaching development grants. But, these initiatives can only be a catalyst for ‘success’. Institutions themselves, whether public or private, need to embrace this challenge by developing and implementing mechanisms to facilitate student success.

In this seventh volume of The Independent Journal of Teaching and Learning (formerly, The Journal of Independent Teaching and Learning) the articles address the underlying theme with regard to massification, i.e. ‘success’.

The articles deal with ‘success’ in three ways: (i) pedagogical interventions to increase success rates; (ii) structural support mechanisms for academic staff to assist successful teaching, and (iii) the role that external quality assurance can play with respect to the measurement of learning outcomes of successful higher education studies.

The authors, in the first paper, focus on the scholarship of teaching and learning, and so investigate the nature of epistemological access through a first-year chemistry intervention programme. They describe an innovative approach to educational practice within the academy. The positive findings of this research suggest that this approach to learning facilitates student success as well as serving as a model for further research.

In the second paper the author starts with the premise that for students to be successful in higher education they need to be actively involved in their studies as well as to be self-motivated. To test the hypothesis, research was conducted in the implementation of a motivational intervention programme. The results of post-testing compared to pre-testing of students participating in the programme supported the hypothesis; students achieved higher academic scores as well as displayed a positive attitude to learning and assessment after participating in the motivational programme.

The third paper is also concerned with student success. The research, which involved 4th year industrial art and design students, explored the student experience of writing examinations as well as experiences within their studies that enabled learning as a process of transformation. The study showed that this is best brought about through collaborative learning, which also contributed to personal transformation.

In the next article the accent moves from teaching and learning interventions within the classroom to promote success to structural interventions within an institution through academic development coordinators. The author discusses the challenges facing an academic development coordinator within a performative higher education model in which student success is a critical feature.

In the fifth paper the author investigates the role that learning outcomes can play in external quality assurance programme reviews. Through a case study she shows that these external programme reviews have started a paradigm shift in which there is a move from input-based to outcome-based education. The use of learning outcomes is one way in which the appropriateness of student success can be measured.

Lastly, in Practitioners’ Corner, in efforts to ameliorate the risk of failure and meet the challenge of student success the author describes a pilot of a revised Acceleration programme. The findings show that students who participated in this programme performed better than those who did not.
ABSTRACT

This paper describes a study motivated by a general concern to capture innovative and effective practice in higher education, supporting a move towards a ‘pedagogy of possibility’, ‘understanding who we are and what we do’, opening up ‘new ways of being in the university’ (Boughey, 2010). The research seeks to investigate the nature of epistemological access afforded by a first-year chemistry intervention programme, with an ultimate aim of contributing to the development of effective spaces for learning in higher education. The study is regarded as dynamic in terms of its emergence from, and its intended contribution to, practice. The outcome of this somewhat emergent process not only suggests relevant and useful insights into educational practice in higher education but also offers an appropriate and meaningful model for conducting research in higher education. This research contributes to the field both pedagogically as well as methodologically.

INTRODUCTION

The intention of this paper is to contribute to the scholarship of teaching (Boyer, 1990) in a context where ‘reflection on and thinking about practice’ (Boughey, 2010) is encouraged and supported. It describes a study informed by a general concern to capture innovative and effective practice in higher education, supporting a move towards a ‘pedagogy of possibility’, ‘understanding who we are and what we do’, opening up ‘new ways of being in the university’ (Boughey, 2010). The aim of the study is to engage in research which seeks to understand and inform and to contribute ultimately to the development of effective spaces for learning in higher education. The study is regarded as dynamic in terms of its emergence from, and its intended contribution to, practice. The motivation was interest in understanding the efficacy of a specific context, with the intention of insight and understanding gained being used to inform and develop future practice both in the context of focus and beyond. The specific aim of this research project was to develop an understanding around how the teaching and learning context of an intervention programme in first-year chemistry [Chem1R] supported effective student learning, specifically in relation to affording or facilitating epistemological access.

The outcome, of a somewhat emergent process, not only suggests relevant and useful insights into educational practice in higher education but also offers an appropriate and meaningful model for conducting research in higher education. Echoing a participatory mode, claimed as an essential characteristic of the learning
and teaching context, the approach taken here is one not just of participation, but rather partnership. The context of higher education offers a space in which colleagues can collaborate on research projects from positions of equity in terms of the knowledge and skills they bring to the context. The contributions may be different but are not regarded as unequal. While the collaborators might be operating in different discipline arenas (higher education development, mathematics education, and chemistry), they share a common interest in research as well as practice, offering a strongly praxis-orientated milieu, conducive to rich and rigorous research. While this study has afforded insights into a specific case, it is anticipated that it will have resonance beyond it and encourage the proliferation and interrogation of further positive and constructive interventions supporting learning in higher education.

**RESEARCH CONTEXT AND BACKGROUND**

Over the past two decades, the South African higher education system has seen both expansion and restructuring. This has in part been an attempt to meet the imperatives of equity and redress in relation to past injustices, but it has also been a response to global demands in terms of development and massification. The expansion of the higher education system has seen a dramatic increase not only in terms of student enrolment, but also in the diversity of the student body. However, there is an urgent necessity that such expansion and widened access is not accomplished at the expense of quality and academic standards. As Bak (1998: 204) sums up, there is a requirement for higher education institutions to develop ‘teaching and learning strategies that will ensure an increased yield of quality students drawn from a large and diverse student body.’

The present study emerged in response to the identification of a unique situation exhibiting evidence of being successful in terms of its aim to support the throughput of first-year chemistry students who were unsuccessful in the preceding semester of their studies. The Chem1R programme at Rhodes University runs six months out of phase with the Chemistry 1 course. Unsuccessful students are afforded the opportunity to review the course content in the tutorial-like supportive environment of a smaller class. Due to the increased number of students being placed in the Chem1R programme in the second semester of 2009, a second person was appointed to assist with the teaching of Chem1R for the period July 2009 to June 2010. A team-teaching strategy was adopted by the lecturers involved, an uncommon approach in the institution. This led to an emergent and collaborative research project centred on investigating the nature of epistemological access afforded by the Chem1R intervention programme.

The lecturers involved in the team teaching both have formal qualifications in chemistry, but have different teaching backgrounds. Joyce has been teaching the chemistry support tutorials since 1989, has taught the Chem1R course since its inception in 1993 and is embarking on doctoral research in chemistry education. Duncan has been teaching mathematics at the school level since 2002 and is in the process of conducting research in mathematics education for his doctoral degree. Joyce and Duncan are also involved in the development of mathematics and science school teachers.

Both Duncan and Joyce were present at every lecture and tutorial. Each elected to introduce and teach the topics with which they felt most comfortable. Material would be introduced in a formal lecture-type setting and then problems would be set for the students to attempt either on their own or in collaboration with peers, as they preferred. During this time the two lecturers would circulate throughout the lecture venue to help individual students who were struggling with the work. The solution to each problem would be discussed amongst the students and then developed on the board (with student input) so that all students could see, and have the opportunity to contribute to, the solution process.

The lecturers were both aware that because students had been placed in the Chem1R programme, it was highly likely that many would have a low chemistry self-concept, and some would not have adapted to the
‘culture’ of studying chemistry at university (Angel and LaLonde, 1998). Angel and LaLonde (1998) found that students who were not strong in mathematics and science benefit from advice and encouragement. It was thus recognised that it was important for students to feel comfortable to ask questions during the lecture time as well as while doing the problems and to feel comfortable to ask for, as well as offer, alternative explanations. Both lecturers also felt comfortable to offer alternative general explanations if they could see a different way of tackling a problem. Wherever possible, the context of the chemistry topic was explained, applications were deliberated and class demonstrations were conducted.

**CONCEPTUAL ORIENTATION**

The notion of ‘access’ has become a critical issue in higher education for the reasons outlined above. When discussing access, it is important to distinguish between what Morrow (2007) refers to as ‘formal access’ and ‘epistemological access’. While formal access relates to the various policies which allow for legal registration at an institution, epistemological access has to do with engaging students with the practices and specialised discourses of the discipline.

As Morrow (2009: 77) critically points out, formal access to higher education institutions is not on its own necessarily a sufficient condition for epistemological access. Intricately tied up with the notion of access is that of agency. Epistemological access is not something that can be delivered or transmitted to a passive student. Morrow (2009: 78) articulates the reason for this by describing epistemological access as ‘learning how to become a successful participant in an academic practice’. In the sense that each student is ultimately the agent of their own learning, so too are they the agent of their own epistemological access. There are of course any number of things that could aid the process, or make the process more effective, but at best this will only facilitate epistemological access, it will never guarantee it (Morrow, 2009). This study attempts to identify characteristics which ‘aid’ such access in a particular context.

As Bak (1998: 206) comments, the broadening of epistemological access is the domain of teaching and learning strategies. In addition, Bak makes the pertinent point that epistemological access needs to be coupled to the notion of ‘epistemological labour’, a concept that links closely with Morrow’s notion of ‘agency’. Thus, a critical aspect of facilitating epistemological access within higher education rests on the development of teaching and learning strategies that take into account a rapidly increasing student body drawn from diverse backgrounds (e.g. language, culture, quality of schooling, etc.) while at the same time maintaining academic standards and being respectful of learners’ efforts to achieve epistemological access.

**THEORETICAL ORIENTATION**

At the meta-level this research is underpinned by a critical realist orientation, recognising the layered nature of reality (Bhaskar, 1989). The focus of this paper is on the empirical layer. The purpose of the research is thus not to gauge the success of the intervention initiative per se, but rather to engage with the experiences of the individuals who were part of the intervention programme, the meanings they made of their experiences and how the experience might be contributing to their learning and supporting epistemological access. The research was consciously approached through a lens of redress and transformation. As Bhaskar (1989: 271) comments, at its core, ‘critical realism rests on the assumption that the accounts of the research participants are valid scientific data that can lead to consequential social transformation if properly interpreted.’ The intention is to understand in order to inform both inherent and potential transformatory realisations.

At the substantive level, the central concept of ‘learning’ is framed with reference to Illeris’ work around contemporary learning theory (2001). Illeris claims such theory rests on two fundamental assumptions. Firstly,
that learning involves two essential processes both of which ‘have to be actively involved if any learning is to take place’ (2001: 3): an external interaction process between the learner and their environment, and an internal cognitive process of acquisition and elaboration where new concepts are linked to already held understandings. Secondly, learning involves three dimensions: cognitive (knowledge and skills), psychodynamic (motivation, emotion and attitude) and social (communication and cooperation). Illeris’ triadal framework of dimensions offers an overarching framework for the multitude of learning theories which deal with different aspects of learning, positioning each in an overall ‘structure of the landscape of learning’ (2001: 1). Cognisant of the internal and external dimensions of learning, this triadic framework proved useful in informing the framing of the research reported in this paper.

**METHODODOLOGICAL ORIENTATION**

In situating the study in terms of the methodological orientation of this research, it could be described as *interpretive* in intention, *responsive* in motivation and development, *active* in terms of engagement and its potential for contributing to development, and *collaborative* in terms of process. As an ‘interpretive’ piece it seeks to understand the experiences of others, recognising the subjective and inter-subjective nature of the perspectives drawn on. While this does not negate a critical realist orientation to the study, it locates it clearly at Bhaskar’s empirical layer of reality. It is ‘responsive’ both as a reaction to a specific concern in a specific context and as a process which responds to what emerges, resulting in deepening layers of engagement and understanding. As an ‘active’ engagement, it echoes characteristics of action research in its reflective engagement aimed at improving rationality, justice and understanding of practice (Carr and Kemmis, 1986: 162), at the same time involving the researchers in a self-motivated quest for making meaning, a search for (and creation of) knowledge. Finally, the ‘collaborative’ nature of the research speaks to the participatory engagement of the three researchers, each making different, but not unequal, contributions. Two of the researchers were the lecturers responsible for co-teaching the Chem1R intervention programme, while the third was a Higher Education Development Practitioner (HEDP) working in the Centre for Higher Education Research, Teaching and Learning (CHERTL). The collaboration involved a process of mutual engagement, a deliberative and negotiative process in which each stage of the research was discussed, developed and carried out together. While the inter-subjective nature of such a study is recognised and celebrated, it is also argued that the collaborative involvement of all three researchers contributed to a richer and more rigorous engagement, leading to deeper and more richly textured understandings of the data, and affording stronger validation of the process and the emerging ideas.

**RESEARCH DESIGN**

*Data generation and analysis*

The data generation unfolded in three phases. An initial *anonymous questionnaire* was completed by the students focusing on their experience of learning in the Chem1R course context (2nd semester 2009), with particular reference to the team-teaching approach employed. These responses were collated and synthesised, a process which in turn informed the design of a simple framework for a *focus group discussion* which interrogated in more depth the central themes emerging from the initial data. The final phase, the *individual interview*, was designed to elucidate deeper insight and understanding relating to the specific context under investigation. Alongside these forms of data generation a process of *observation* was engaged in, where the HEDP sat in on a number of sessions and, without a predetermined schedule of any form, made informal notes focusing on the nature of the teaching and learning that was taking place.

The data generation tools (questionnaire, focus group discussion and interview frameworks) were developed collaboratively by the research team, allowing for greater critical and more holistic engagement. The
facilitation of the data generation was conducted by the HEDP. This was a deliberate part of the design, identified as important in creating distance between the students and the lecturers to ensure greater data validity, at the same time helping to avert the potential of the study being a self-validating project.

The analysis took the form of a multi-layered process focusing on the identification of emergent themes. The process of analysis led to the categorisation of three interweaving layers: themes (understanding, diversity and enjoyment), threads (enablement, interest, diversity of approaches and perspectives, attention, interaction, active engagement, comfort and support) and strands (cognitive, affective and socio-cultural). These were recognised as intimately linked, each regarded as having an influence in terms of facilitating epistemological access.

The following diagram (Figure 1) attempts to capture these different layers and suggest the dynamic interdependence between them.

**Figure 1**
Triadic framework of themes, threads and strands identified as facilitating epistemological access

A number of broad themes emerged during the initial analysis of the student responses to the questionnaire. These included a heightened sense of enjoyment and interest in the study of chemistry, improved levels of understanding and an appreciation for the diversity of the context afforded by the team-teaching model.
A strong thread running through the responses related to the manner by which the team-teaching approach was able to create spaces for greater individual attention and thus better enable understanding. The students particularly appreciated the more hands-on approach and the way in which one of the lecturers would move around the class providing one-on-one assistance to students while the other carried out the more formal aspects of teaching. Improved understanding was in part attributed to the dynamic engagement between lecturers and students. Furthermore, it was recognised that the level of attention and interaction were directly related to the adoption of a team-teaching approach.

There was also a strong appreciation and celebration of the diversity afforded by the team-teaching context. The students appreciated having different people teaching different things in different ways, offering alternative approaches and perspectives, all of which were cited as contributing to a broader and more thorough understanding, not only of the disciplinary knowledge but as one student articulated, ‘about learning and how I’m being taught’.

In general, the students expressed strong feelings about the method of team-teaching:

I believe that the ‘team’ allows for much better and effective teaching.

I think that ‘team teaching’ has been the best style of lecturing here at Rhodes.

It was even suggested that

this is how all subjects should be taught and not only be implemented after students have failed.

An analysis of the second layer of data, the focus group discussion, allowed the central themes which emerged from the first layer to be interrogated in greater depth. We were particularly interested in furthering our understanding of issues specifically surrounding the team-teaching model in order to gain deeper insights into the nature of the epistemological access it afforded.

A strong theme running through the responses related to the supportive nature of the tutorial-like environment of a smaller class in which students and lecturers are able to get to know each other to a greater extent. This not only assisted in creating a more comfortable learning atmosphere with a 'discussional' feel, allowing hesitant students to ask questions more easily, but was important in enabling more active engagement in the development of understanding and supporting affective domains such as confidence, enjoyment, motivation and passion.

Chemistry became more interesting and easy to understand.

We as students are really comfortable and relaxed.

They have made chemistry very exciting.

Having two lecturers, as opposed to just one, had a number of important practical benefits. Students recognised that the team-teaching model enhanced the level of interaction between students and lecturers as well as enabling the provision of greater individual attention, particularly when the class was engaged in working through example problems and exercises:

Having two lecturers makes it easier to get the individual attention we want.

It is as close to a one-on-one experience you can get in undergraduate.
Students also appreciated that the team-teaching approach made it possible to be 

...individually attended to in class while that particular section is being taught. 

thus enabling students to ask about their problem 

...straight away, and not have to wait until the end of the lecture. 

In relation to the thread of diversity, many of the responses concerned the advantages afforded by the differencing yet complementary backgrounds, viewpoints, experiences and teaching styles of the two course lecturers. 

By having different ways of explaining the same thing you are able to understand it better yourself and have more than one way to go about a certain problem. 

Students appreciated having access to different explanations, alternative ways of grasping concepts, and different approaches to solving problems, all of which led to enhanced communication between lecturers and students, and heightened understanding of important concepts. 

It helps me to understand every concept better because if I didn’t really understand how Mrs Sewry (Joyce) taught something then I can ask Duncan to explain to me in another way. 

In addition, having two lecturers with different but complementary teaching styles was cited as strengthening the class’s overall confidence towards the subject. 

A number of comments made during the focus group discussion led to a deeper appreciation of the complementary roles played by the two course lecturers. 

Duncan is more of a teacher and Joyce is more of a lecturer and people love that because there are things better explained by Joyce and some by Duncan and knowing that they are always there to explain helps with our understanding. 

Duncan has got a mathematical background and is very good with numbers and explaining them, while Mrs Sewry (Joyce) is very good with the theory … so their different strengths made the interaction and understanding better. You get to understand both theory and numbers clearly. 

In the light of Boughey’s (2005) call for collaboration between disciplinary and academic development expertise, it was recognised that this situation was quite unique in terms of the dynamic created by the two team members as a result of their specific backgrounds. One member of the team is a disciplinary expert while the other, although not an academic development practitioner, has not only background in the discipline but also has a background in the academic engagement of teaching and learning. Interview data suggested that the complementary backgrounds, experiences and approaches of the two lecturers might even be, at least in part, effective for some students in smoothing the transition from school classroom to university lecture theatre and the associated changes in mode of delivery, i.e. from classroom teaching to university lecturing. 

A further consideration suggested by the present research is that splitting a relatively large class into two smaller classes may not necessarily be the most appropriate course of action in terms of effective learning and teaching. Although it might be assumed that splitting a class into two smaller groups, each with their
own lecturer, would lead to greater individual attention and more meaningful student-lecturer interaction, this assumption does not recognise or appreciate the potential richness which could emanate from the complementary roles of two lecturers team-teaching a single large class.

Another interesting comment made by a number of students was that the team-teaching model adopted in the Chem1R course afforded the two lecturers the opportunity to present those sections of the course that they either particularly enjoyed, or which more closely resonated with their particular strengths. It was suggested that this enhanced the lecturer’s passion which in turn led to greater engagement and understanding on the part of the students.

These insights provide an image of experience from the perspective of the students. Observation of the learning space by the development practitioner offered a complementary image, confirming that generated by the students but also helping to elicit a much stronger sense of the context. Observation led to a deeper understanding and articulation of the context dynamics, supported by and manifest through the characteristics suggested by the students. Interpretation of these observations identified an interesting shift from what might be termed more traditional, reproductive approaches to learning, towards a more innovative, transformative approach (Biggs, 1978; Thomas and Bain, 1984; Mezirow, 2000). Despite the traditional physical layout of the lecture theatre in which the sessions were facilitated, the lecturers created the space for more dynamic and responsive engagement than would traditionally have been offered. Questions were asked of the students by the lecturers, and of the lecturers by the students. Solutions were discussed by both the lecturers and the students and different possibilities were offered and deliberated between the students themselves as well as between the lecturers and the students. Relations between the lecturers and the students were more dynamic; the students actively engaging in the learning and taking responsibility for their own understanding.

**CONCLUDING COMMENTS**

This study highlights the complexity of teaching and learning in higher education, suggesting important implications for the staffing of intervention programmes, (echoing Boughey’s (2005) concern in the foundation context) and pedagogical approaches adopted. Careful and critical deliberation around course facilitation has the potential to create enhanced learning experiences impacting on the cognitive, affective and socio-cultural domains of students, and thus influencing epistemological access. This study only touches the surface, acknowledging the complexity of the teaching and learning context. The challenge is not only to recognise, but to hold and work with that complexity if we are to enable epistemological access in our learning spaces and develop a ‘pedagogy of possibility’.

**REFERENCES**


Motivation of higher education students: A single student engagement case study

Cookie M. Govender - University of Johannesburg, South Africa

ABSTRACT

In order for higher education students to perform well academically, they need to be engaged and intrinsically or self-motivated. They require motivational programmes with tools and techniques to guide them to take responsibility for their learning, perform well at assessments and graduate successfully. Research was conducted on a group of higher education students to investigate whether the implementation of a specific motivational intervention programme called ‘Concepts for Academic Performance’ results in improved performance, responsible attitudes and increased throughput rate. The aims of the research were to engage and motivate students while instilling a positive attitude towards learning, and to measure if the motivational programme increases student throughput rate through improved performance. Both quantitative and qualitative data were gathered, analysed and compared at pre-test and post-test phases. The findings reveal that students achieved higher academic scores in their post-test versus their pre-test and that they developed positive attitudes to learning and assessment after experiencing the motivational programme.

INTRODUCTION

If higher education students are to graduate and successfully meet the ever growing demands of a rapidly advancing economy they must achieve academic success in all their registered modules within specified time spans. For students to perform well they should be self-motivated or intrinsically stimulated to take responsibility for their learning and academic achievement. Universities or institutions of higher education provide rich, fertile environments to investigate if motivational programmes instill intrinsic motivation to improve student engagement and successful performance. This paper presents the research that was conducted in a multicultural, multilingual, cosmopolitan higher education institution.

A sample population of 130 second year students ranging between the ages of 18-24 was chosen for this motivational investigation. According to Erikson & Erikson (1997), young adults in this age group are at the stage where they face the choice of intimacy versus isolation. Intimacy is a caring for oneself, loved ones, others, as well as life’s roles and responsibilities. It is achieved only if students commit to concrete affiliations ‘which may call for significant sacrifices and compromises’. Unfortunately, isolation is realised when the ‘fear of remaining separate and unrecognized’ sets in.

---

1 Date of submission 31 January 2012
Date of acceptance 13 June 2012
Based on the Erikson & Erikson prediction, this study was undertaken because although the majority of the students attended classes and tutorials, their assessment results revealed average to poor performance. Students seemed unenthusiastic, apathetic and unmotivated. The questions of ‘why?’ and ‘what will change the situation?’ arose during the course of delivery of lectures. The answers to these questions resulted in this experiential investigation undertaken to engage, enrich and motivate students to accept responsibility for their learning and simultaneously improve academic performance.

At the background of this study lie the many debates surrounding the concept of ‘student engagement’. Debates revolve around whether students are engaged or not, whether there is an interaction between learning and engagement, or whether the current definitions of student engagement are not too abstract (Axelson & Flick, 2011). This research study is concerned with finding effective, practical ways to engage students, evaluate the engagement at a particular level of higher education and measure whether providing enriching, motivational student engagement experiences results in improved academic performance. The research problem statement of this study is that the selection, and provision, of an effective enrichment and motivational programme may not improve student engagement and academic performance.

The objectives of the research are: firstly, to engage and motivate students while instilling a positive attitude towards learning, and secondly, to evaluate if the specific motivational programme employed is effective in increasing student throughput or graduation rate through improved performance. The value-add of this research is the insight gained when tapping into the authentic, real-life, lived experiences of students in order to create an intimate, motivational and enriching learning experience.

The literature review focused on student engagement and motivational enrichment programmes that sought to empower students to take responsibility for the way that they learn and for successful academic performance over the last three decades.

In the 1980s, Bremmer informed educators that ‘success is in the student, not in the university; greatness is in the individual, not in the library’ (Bremer, 1980: 23). Higher education, if it is to succeed in its mission, must invest in the success of the student experience more than in its other resources. In 1984 educators were informed that student behaviour or the way that students act, think and feel, are determined by the pictures they create in their minds. When students create better pictures, they make better choices and have better control of their lives (Glasser, 1984). By 1986 educators realised that they cannot forcefully pressure students to accept responsibility for their learning and assessment, especially if she or he does not feel satisfied during the learning experience (Glasser, 1986). Educators, therefore, must continually seek ways and means to ensure satisfied students with effective learning experiences. By 1988, successful teaching, learning and assessing belonged to those educators who created fun-filled, fulfilling and empowering learning environments and who ‘make it work for the learners’ (Jensen, 1988).

In the 1990s, the action learning model (Phillips & Ford, 1996) seemed to offer some student satisfaction by presenting high-level thinking and learning with a process model for achieving their learning outcomes. Educators could finally create fun learning experiences that aim for every student to create positive, successful mental pictures of their individual daily learning experiences. At the onset of the new millennium, the call was for realising higher levels of student engagement and success via three essential learning outcomes to be achieved in higher education classrooms: intellectual skills, practical skills, and individual and social responsibility (Laird, Chen & Kuh, 2008). Simultaneously, undergraduate student engagement activities, especially inquiry-orientated activities, were found to result in positive gains for developing general education, personal aspirations, science and technology, vocational preparation and intellectual skills (Shouping, Kuh & Shaoqing, 2008).
By 2010, research investigations were focused on what types of high level student engagement activities are most likely to promote student achievement to achieve twenty-first century learning outcomes (Pike, Kuh & McCormick, 2010). Educational leaders were made aware of the dangers of ‘one size fits all’ student engagement programmes and were requested to consider the effects of factors, such as age, generational status, gender, social learning spaces, technology and subject-specific peer mentors (Gibson & Slate, 2010; Tison, Bateman & Culver, 2011; Matthews, Andrews & Adams, 2011; Brett, 2011; Power, Miles, Peruzzi & Voerman, 2011).

At an academic level, the emphasis was still on best practice learning programmes that explore Bloom’s three learning domains, i.e. cognitive (mental), psychomotor (physical), and affective (emotions) domains. The call was also for lecturers to employ Anderson and Krathwohl’s learning model to impart four types of knowledge, i.e. factual, conceptual, procedural and metacognitive knowledge. For each knowledge area, students should be assessed in the six cognitive processes as follows: remember, understand, apply, analyse, evaluate and create. In addition, lecturers, trainers and educators need to be more ‘reflective practitioners who continually strive to understand and improve how students learn’ (Killen, 2010).

According to the 2002 annual National Survey of Student Engagement (NSSE) conducted in the US, students learn more when they are intensely involved in their education and when they are asked to think about and apply what they learn in different settings (Mark & Boruff-Jones, 2003). The NSSE survey questions were designed to measure whether educational practices are effective in these five areas: academic challenge; active and collaboratively learning; student interactions with faculty; enriching educational experiences; and supportive campus environment.

Of these five effective educational practice areas, it is interesting to note that students in South Africa scored ‘enriching educational experiences’ as the lowest with an overall score of 22% as reported in the South African Survey of Student Engagement (SASSE) report of 2010 (Strydom & Mentz, 2010). The SASSE also states that higher education institutions can influence improved throughput rates and be the drivers of student success if they positively improve the student experience through quality teaching, learning and social cohesion.

As can be seen from the above although the literature presents a strong call for student engagement, enrichment and motivation, the question of whether a motivating, enriching student experience at higher education level will motivate students to change their attitude and improve their academic performance still remains unanswered.

**RESEARCH DESIGN AND METHODOLOGY**

The objectives of this research are two-fold: firstly, to select and implement an effective student engagement enrichment programme in order to improve student attitude towards learning; and secondly, to measure if the student engagement programme increases student throughput or graduation rate through improved performance. The research questions are as follows: what type of motivational programme will effectively engage students towards embracing positive attitudes and accepting responsibility for their learning?; and will delivery of the motivational programme result in improved academic performance?

The research design selected for this investigation is a mixed-methods research case study using both quantitative and qualitative measurement instruments for data collection and analysis. The rationale for choosing mixed-method for this research study include triangulation (need to converge and corroborate the results), development (use of findings of both quantitative and qualitative methods to inform the research conclusions), and expansion (expanding the breadth and range of this research study by using different methods for different inquiry components) (De Vos, Strydom, Fouche & Delport, 2011).
The case study approach was selected to examine the effectiveness of a specifically selected motivational programme that incorporates two types of enrichment interventions: a general lecture-based, nurturing presentation style; and a specific once-off four hour presentation by an external facilitator. The approach is tightly structured so that detailed knowledge can be gained of the selected interventions or treatments and its impact on student achievement can be measured accurately (Hofstee, 2006).

Research participants
The research population consisted of 130 second year diploma male and female students between the ages of 18 and 24. Ethical approval of the investigation was obtained from the student participants, staff and management before the motivational programme was delivered. The total population of 130 was invited to attend and participate in this student engagement programme. Of the 130 in the population, 52 students participated in the research student engagement programme. The total sample population that participated was thus 47.6% of the research population.

Measuring instrument
The measuring instruments used in this study are the two semester tests and the researcher participant observation narratives. At a quantitative level, the test scores measured improved academic performance from the first (pre-test) to the second test (post-test). At a qualitative level, participant observation measured student attitudes before the motivational programme and the changed attitudes towards positive responsibility for learning after the interventions.

Research procedure
Ethical approval was obtained from all the stakeholders for the research design, measuring instruments and the use of the selected motivational programme before the motivational programme was implemented. Pre-test scores of a semester 1 test were recorded for all 130 students. In a parallel process, the attitude, behaviour and general feelings of participants who attended lectures were recorded in terms of their approach to their learning and their acceptance of responsibility for their learning prior to the intervention being administered. The motivational programme consisting of general motivational activities during lectures and a once-off four hour presentation session called ‘Concepts for Academic Performance’ (CAP), was then implemented. Thereafter, the post-test scores were recorded for a semester 2 test and compared with the pre-test scores. Simultaneously, the attitude and behaviour of those students who attended lectures and the CAP session were recorded and compared to previous recordings in terms of improved attitude and responsibility for learning.

Data analysis
This research is a case study linked to the basic single-system design. Both on the quantitative and qualitative levels the data gathered were analysed using the pre-and-post-test method. The design is a one-group pre-test-post-test design as follows: O1 X O2. A single pre-test rating (O1) was recorded for the group of students. Students were exposed to the motivational programme consisting of the general and specific interventions (X=treatment). A single post-test rating (O2) for the same group of students was recorded after the treatment (Shadish, Cook & Campbell, 2002).

Using the quantitative method, this study statistically measured a semester 1 test results (pre-test) with a semester 2 test results (post-test) after the delivery of the catalyst general and specific motivational interventions. Using the qualitative method, the students were observed and their attitude change was compared from one of unenthusiastic, apathetic and unmotivated approach to learning (pre-test) to attitudes of interest, commitment and responsibility for learning and assessments (post-test) after attending the motivational programme treatment.
Selecting the student enrichment programme

A two-pronged enrichment intervention was selected as the ‘treatment’ for this motivational programme case study: general intervention and specific intervention. The general intervention was delivered at every lecture to students who attended classes. The specific intervention was delivered at a once-off four hour session. This enrichment programme was selected based on the premise that providing enriching educational experiences as a complementary learning opportunity will augment their academic programme (Strydom & Mentz, 2010). Student engagement is recognised as those educationally purposeful activities and participation that lead to student growth and development. The two key components of student engagement are the amount of time and effort students put into their academic studies and other educational activities, and the types of learning opportunities the institution provides that lead to student success (LaNasa, Olson & Alleman, 2007). The decision to select the general and specific enrichment interventions was based on these student engagement criteria: deep approaches to learning, active classroom practice, awareness of personal intelligence, improvement of practical or psychomotor skills, and understanding of one’s self through individual and social responsibility (Laird et al., 2008; Shouping et al., 2008).

General enrichment intervention

All students who attended class during weekly lectures and tutorials were exposed to the general enrichment intervention of this motivational programme. The lecturer delivered the general intervention via affirmations, mind maps and a caring value chain. Table 1 below describes these general motivational activities.

Table 1: 
General motivational activities for higher education student engagement

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affirmations</td>
<td>Weekly</td>
<td>Statements of intent called ‘affirmations’ were presented to students that over time are felt and experienced by the students. For example, at the end of every lesson, students’ chorus: ‘I am intelligent. I am smart. I will pass this module quickly and easily.’</td>
</tr>
<tr>
<td>Mind Maps</td>
<td>Semester</td>
<td>Students draw and submit colourful, graphic mind maps that capture the key words of their Learning Guide and selected chapters of their prescribed literature/ text book. Mind maps assist students to remember and recall the essential content of their learning programme.</td>
</tr>
<tr>
<td>Caring Values</td>
<td>Daily</td>
<td>Lecturer promotes and encourages a caring, inquiring and problem solving attitude via positive statements, instructions, conversation and approach. The principles of respect, trust, potential, multiple intelligences, learning preferences, integration of diversity and appreciative rewards are fostered over time.</td>
</tr>
</tbody>
</table>

Specific enrichment intervention

The specific enrichment intervention was delivered by an external facilitator and proprietor of the motivational programme called ‘Concepts for Academic Performance’ (CAP). CAP was designed to boost significantly student thinking, feeling and reflection by increasing awareness of accelerated learning techniques and instilling feelings of high esteem within themselves. This cognitive, psychomotor and affective enrichment intervention asks and answers the question: Why do some people succeed while others fail? The answer lies in awakening a consciousness to student internal, innate, intrinsic locus of control called ‘self-motivation’. The topics included in the intervention are as follows: the four stages of consciousness;
know yourself; the human brain; imagination; problem solving and creative thinking; speed reading; mind maps; mind management; memory skills; responsibility; goal setting; stress; successful achievement; and accelerated learning.

Table 2 below describes a sample of the concepts of the specific enrichment intervention to which the students were exposed.

**Table 2:**
*Sample of CAP intervention*

<table>
<thead>
<tr>
<th>Concept</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consciousness</td>
<td>The four stages of consciousness include the unconscious, sub-conscious, semi-conscious and conscious phases. Students were made aware of these states of consciousness: unconsciously conscious (do not know we do not know), consciously unconscious (know we do not know), consciously conscious (know we know), and consciousness (automatic).</td>
</tr>
<tr>
<td>Know yourself</td>
<td>Awareness of experiences and personal realisation of perception as truth, fantasy and belief. Students were made aware of their internal and external focus of attention and locus of control. Self-esteem, love, peace and happiness were explained and emphasised as needs, desires and satisfaction states.</td>
</tr>
<tr>
<td>The human brain</td>
<td>The student brain was explained as a micro replica of the macro universe. It is the instrument through which the human spirit manifests as human behaviour. Students experienced the brain as a data bank of thoughts, feelings, creativeness and potential. Students were taught to stimulate their left-right hemisphere interconnection and the brain’s front and back capability.</td>
</tr>
<tr>
<td>Imagination</td>
<td>Students experienced how and why imagination is more important than knowledge by experimenting with their mind perception, belief and resulting achievement.</td>
</tr>
<tr>
<td>Problem solving and creative thinking</td>
<td>Students were taught to think creatively about their problems and prepare their minds to review, browse, ask questions, plan and create solutions.</td>
</tr>
<tr>
<td>Speed reading</td>
<td>Students were taught the technique for speed reading and coping with information overload and time constraints.</td>
</tr>
<tr>
<td>Mind maps</td>
<td>Mind maps are a creative technique for easy information storage and retrieval. Students had to write key words/concepts of topic with ‘hooks’ on each word that stimulated whole brain synergy.</td>
</tr>
<tr>
<td>Mind management</td>
<td>Students experienced how to relax their minds and visualise mind-body, will power and intelligence sensations and memories.</td>
</tr>
<tr>
<td>Memory skills</td>
<td>Students were taught to store information, remember it and recall knowledge. The technique of memory hooks or pegs and association of words and phrases to activate long term memory was practised.</td>
</tr>
<tr>
<td>Brain-based learning</td>
<td>Students were encouraged to maximise their unlimited potential to learn and achieve. They identified their learning style/s, intelligence, potential and ability. They were taught to use movement, fun, games, music and colour to stimulate brain synergy and develop a super memory.</td>
</tr>
</tbody>
</table>
The objectives of this research were to select and implement a student enrichment programme that engaged and motivated students to accept responsibility for their learning, and to measure if the programme resulted in improved student performance. The interpretation of results after the implementation of the motivational programme, especially the CAP specific intervention, reveals that the research purpose was achieved. The research findings are detailed below as quantitative and qualitative findings.

Quantitative pre-test and post-test findings
At a quantitative level, the findings reveal a significant increase in academic performance for the students who embraced the general and specific enrichment interventions. Individual results increased for 57% (30 of the 52) of the students who participated in both interventions. The increase in academic performance scores for 57% of the research participants in the post-test range from 4% to 35%.

Three students (10%) scored a performance increase of between 31% and 35% in the post-test versus the pre-test results. Four research participants (13%) achieved between 26% and 30% increase. Three participants (10%) achieved an increase of between 21% and 25% and a further three students’ (10%) performance increased by between 16% and 20%. Ten participants (33%) scored a performance increase of between 11% and 15%. Six participants (20%) scored a performance increase of between 6% and 10%. One student scored an increase of between 1% and 5%.

Table 3 below presents a comparison of semester 1 results (pre-test) with semester 2 results (post-test) for a sample of students who participated in this motivational programme.

Table 3:
Sample pre-test and post-test results of students who participated in the motivational programme

<table>
<thead>
<tr>
<th>Student (BOL11B1)</th>
<th>Pre-Test (Semester 1 results/100)</th>
<th>Post-Test (Semester 2 results/100)</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (11)*</td>
<td>68</td>
<td>75</td>
<td>7</td>
</tr>
<tr>
<td>2 (13)</td>
<td>56</td>
<td>62</td>
<td>6</td>
</tr>
<tr>
<td>3 (14)</td>
<td>68</td>
<td>82</td>
<td>14</td>
</tr>
<tr>
<td>4 (21)</td>
<td>52</td>
<td>75</td>
<td>23</td>
</tr>
<tr>
<td>5 (24)</td>
<td>42</td>
<td>72</td>
<td>30</td>
</tr>
<tr>
<td>6 (34)</td>
<td>52</td>
<td>80</td>
<td>28</td>
</tr>
<tr>
<td>7 (38)</td>
<td>46</td>
<td>81</td>
<td>35</td>
</tr>
<tr>
<td>8 (46)</td>
<td>64</td>
<td>71</td>
<td>7</td>
</tr>
<tr>
<td>9 (60)</td>
<td>46</td>
<td>79</td>
<td>33</td>
</tr>
<tr>
<td>10 (68)</td>
<td>66</td>
<td>79</td>
<td>13</td>
</tr>
<tr>
<td>11 (73)</td>
<td>64</td>
<td>68</td>
<td>4</td>
</tr>
<tr>
<td>12 (81)</td>
<td>54</td>
<td>68</td>
<td>14</td>
</tr>
<tr>
<td>13 (89)</td>
<td>56</td>
<td>72</td>
<td>16</td>
</tr>
<tr>
<td>14 (94)</td>
<td>56</td>
<td>76</td>
<td>20</td>
</tr>
</tbody>
</table>
### Qualitative pre-test and post-test findings

Participant observation was the qualitative data collection method. At the pre-test phase, prior to implementation of the motivational programme, students were observed to be apathetic, despondent, disinterested, under-performers and they were not committed to class attendance or successful academic performance. During mid-semester, after the implementation of the motivational programme, individual students began to display added interest in class attendance and successful completion of learning activities. Furthermore, critical reflection thinking and a personal commitment to studies were beginning to emerge.

Groups of students began to display improved relationships, respectful communication and established a supportive climate for learning from and with each other. Affirmations were chorused with conviction at the end of each class. Mind maps were used regularly and viewed as fun learning activities. Students also embraced the caring value chain for themselves and their peers. A positive, responsible attitude and behaviour towards their learning was observed at the post-test phase. Furthermore, the participating students began to articulate a desire for successful academic achievement.

### Research Validity

This research was conducted in a fair and reliable manner. All students in the research population were invited to engage with, and participate in, the general and specific enrichment interventions. Since these were self-selecting students, this could have influenced the number of students who participated in the research.

---

**Student (BOL11B1) | Pre-Test (Semester 1 results/100) | Post-Test (Semester 2 results/100) | % Increase**

| 15 (108) | 63 | 88 | 25 |
| 16 (109) | 38 | 65 | 27 |
| 17 (112) | 76 | 85 | 9 |
| 18 (116) | 76 | 85 | 9 |
| 19 (118) | 60 | 71 | 11 |
| 20 (119) | 58 | 69 | 11 |
| 21 (120) | 52 | 64 | 12 |
| 22 (126) | 34 | 60 | 26 |
| 23 (139) | 66 | 78 | 12 |
| 24 (142) | 78 | 87 | 9 |
| 25 (145) | 62 | 83 | 21 |
| 26 (148) | 50 | 62 | 12 |
| 27 (149) | 68 | 82 | 14 |
| 28 (152) | 56 | 71 | 15 |
| 29 (155) | 27 | 61 | 34 |
| 30 (170) | 50 | 68 | 18 |

*Data in parenthesis in column 1 refers to student identity.*
All stakeholders were consulted and ethical approval was secured on the use of the selected motivational programme and the pre-test and post-test measuring instruments. The validity of the research method, the selected motivational programme, the measuring instruments, the findings and the inferences made from the pre-test and post-test analysis were ensured in that this research measured what it said it would measure. However, further research of this nature should improve internal validity by comparing the research results to that of a control group.

**CONCLUSION**

Six conclusions were arrived at in this research case study. The selected motivational programme was effective for student engagement and for providing an enriching learning experience for the research population. The motivational programme improved student attitude, created a positive learning environment and increased student responsibility for learning and achievement. Student academic performance and throughput rates improved significantly at the post-test phase compared to the pre-test scores. Students seemed more satisfied, were more attentive and responsive, and reflected on their learning after participating in the general and specific motivational programme. Students were less reluctant to abdicate responsibility for learning and more willing to negotiate positively the process of how to achieve the module learning outcomes. Students used affirmations and mind maps consciously, and showed appreciation for the caring, andragogy (adult learning) methodology.

Two suggestions arise from this motivational investigation of student engagement. Firstly, higher education students, specifically first-year students, should be exposed to continuous motivational, enrichment activities so that they understand, accept and exhibit a responsible learning attitude at the beginning of their campus life. Secondly, educators, especially tertiary lecturers, should continuously find ways to motivate, enrich and engage students to enhance their academic learning experience within the classroom. The recommendation for further research is that this research case study should be repeated using both an experimental and a control group.

**REFERENCES**


Learning through transformation: A collaborative learning strategy

Victor Dos Santos, University of Johannesburg, South Africa
Karen Steenekamp, University of Johannesburg, South Africa

ABSTRACT

This article describes how art and design students within a higher education institution in South Africa are able to learn through transformation during the periods leading up to, and eventually writing, year-end examinations. The description is related through data generated by means of a focus group interview with five purposefully selected participants which was then followed up by one individual interview with a sixth participant. These interviews essentially adopted a qualitative research paradigm from which the contextual phenomenon embodied in an end-of-year examination could be investigated. The data collected yielded that participants felt that the most effective learning strategy involved group or collaborative learning. Collaborative learning as described in this paper can provide supportive structures that not only facilitate learning but go a long way to help realise personal transformations. More importantly, collaborative learning was explored as being a critical marker in determining that Transformative Learning (TL) had indeed occurred, even though TL as a pedagogical tool had never been applied.

INTRODUCTION

As part of a broader study this paper discusses the important aspect of collaborative learning in the context of student experiences related to written examinations at an art and design department within a higher education institution (HEI) in South Africa. Traditionally, this department implements end-of-year, written examinations as a method of summative assessment for its theoretical subjects. The problem at the inception of the study was that although the process of examination was generally well-understood by departmental lecturers, students’ experiences of written examination still remained largely unknown. To assist in the description of these experiences the theory of Transformative Learning (TL) as discussed later was utilised. The intention was, therefore, to seek out synergies between the experiences that participants’ could potentially describe and the concepts that feature in TL theory.

The unknown experiences that students had of written examinations at the department were important to the study as it was felt at the time that the prevalent ‘techno-rational’ approach to assessment in art and design education focused primarily on objectivity, process and procedures (Orr, 2006: 79). The ‘techno-rational’ approach to assessment, according to Orr (ibid), emphasises the technical issues of delivering year-end summative assessments and largely ignores students’ lived experiences thereof. The quantitative nature of investigating student experiences of examinations at the department was devised

1 Date of submission 31 January 2012
Date of acceptance 13 June 2012
at institutional level and did not involve any qualitative means to engage with students on the issue. It was more about timely delivery and whether lecturers had met all the institutional criteria to present an appropriate examination paper. The evident approach to investigate summative assessment meant that lecturers at the department had not attempted to investigate fully or understand students’ experiences of previous year-end written examinations.

Another contributing factor to the lack of understanding observed in the department was seen to be the position of relative power occupied by lecturers. The power associated with lecturers at the department is partly a result of the modernist influences attributed to the ‘industrial’ environment of the discipline. These modernist influences stem from the educational approach of the Bauhaus which was the first educational institution to offer a course that was relevant to industrial design practice (Heskett, 1984: 100). In the Bauhaus context, there were no teachers or pupils, but rather masters, journeymen and apprentices (Gorman, 2003: 99). This hierarchy is still evident in current industrial design education in that lecturers are the masters and students are the apprentices or journeymen. Therein, lies a strict code of conduct and students learn by practical example. This approach to teaching is suited to an industrial workshop environment, where discipline is crucial for various reasons, varying from the adherence to safety standards, to maximising productivity. This industrial environment, therefore, requires a certain degree of control in order for it to operate in a predictable machine-like manner. As such, ‘disciplinary power’ (Jardine, 2005: 42-43) that is essential for this control, provides the barrier to open communication between students and lecturers, not only suppressing enquiry into student experiences of aspects of the course that affect them daily, but making the ability to investigate problems experienced on a student level more difficult.

The research aim was to investigate the experiences of written examinations through the descriptions of the participants (Creswell, 1994: 11-12). This paper provides an insight into the experiences described by students and particularly those experiences that allowed them to learn through transformation by collaboration with others within the context of an industrial design education. Therefore, the problem that was addressed in the study entailed the investigation of the students’ experiences of examination as a summative assessment method for theoretical subjects by being cognisant of the way in which students learned through transformation. The study was, thus, informed by the theory of TL which provided the basis from which students’ lived experiences were described.

**LEARNING THROUGH TRANSFORMATION**

To investigate students’ experiences of written examinations the theory of TL was mostly utilised as a comparative lens and to enhance descriptions of student experiences. The theory of TL was therefore utilised to assist in describing students’ lived experience of the phenomenon in question, but more importantly in relation to their specific discipline. In higher education and more appropriately industrial design education the focus should not only be about enhancing skills, but more importantly about producing people who can see problems and envisage new ways to solve these problems (Harvey & Knight, 1996: 7).

In current industrial design education a transformation has already occurred and the shift is not about gratifying the self; instead, an appreciation of different points of view different to a designer’s own must be cultivated. Loewey (2008: 6) lists these new perspectives under technological concerns, user considerations, environmental concerns and social concerns. As such, TL as a theory reflects similar concerns and it would be ideal to find evidence in the data that this approach to teaching and learning is apt in a fast changing discipline. Industrial design, as a discipline, has itself transformed over a period of time and it is evident that a skills-based approach to pedagogy, although not completely redundant, should not be the sole preoccupation of the discipline. The discipline ideally should not be constrained by consumerism, but rather focus on considering the other, be they a community or an individual in need.
The theory of TL involves an individual process of change and self-generation. Change or more appropriately, transformation ideally takes place through questioning assumptions, values, beliefs and considering different points of view. This qualitative change can be described as a cognitive transcendence (Harvey & Knight, 1996: 7). Transformative learning in the context of industrial design education requires that certain TL ideals be attained. Firstly, both students and lecturers need to be actively engaged and committed to learning before any TL can be claimed (Reid & Solomonides, 2007: 27). Students are not only required to maintain engagement with their studies and lecturers, but must also engage with their respective profession. This is important as real world problems are closer to them (the students) if they actively pursue engagement with the profession outside the structure of the institution. In other words, if students do not engage with, or seek, other perspectives outside their own, TL in the context of an industrial design education would be difficult to attain.

The ‘engagement’ being proposed in this regard is an idealistic term that best describes various relationships that students may develop in the process of learning. These vary from the students’ relationship with the institution, programme, peers, lecturers, tasks, profession, industry, etc. (Reid & Solomonides, 2007: 28). Engagement is a result of the commitment that students undertake to pursue learning that is meaningful to them as individuals. In the case of industrial design students, meaning would be a difficult aspect to describe as it varies from one individual to the next. However, what is important is that there is evidence of a commitment that results in engagement which is relative to the meaning that is sought by the individual student. This relies on individual student motivation and interest to learn, which should be promoted by the lecturers concerned (Reid & Solomonides, 2007: 28). Indications of academic engagement are evident when a student displays a willingness to be thorough or organised and enter ‘deeply’ into learning through his or her own will (Reid & Solomonides, 2007: 28). Meyer & Land (2005: 386) propose that there is a certain ‘threshold’ that needs to be attained, before epistemological and ontological transformations are experienced. Therefore, TL is viewed as a result of an experience where the threshold is the driver or motivation required to achieve deep, meaningful learning.

Such a ‘threshold’, as proposed by Meyer & Land (2005: 386), is an indication that within a transformative phase of learning, transformation will only occur at a ‘certain point of entry’. That point of entry could be described as the opportunity for the individual student to take ownership of knowledge and become part of the professional community. This process could be viewed as a ‘rite of passage’ that each individual student needs to ‘move through’ to become part of the design community. This movement, as experienced by students, could be indicative of the personal success that is sought by individual students, through their willingness to learn. One of the key transformative goals of educators (including industrial design lecturers) is to ‘socialise’ students into the professional design community (Cranton & King, 2003: 34). The socialisation process requires that students’ awareness of themselves or self-perception in relation to professional requirements mature with time, and that, to be part of that community, students must reach a threshold in their learning process. Mezirow (2000: 8) argues that, although transformative learning is an individual process, it does have strong social implications. These implications not only require that students relate their learning to broader community issues, but to issues that are specific to their profession and how they as students can find benefit in learning collaboratively.

If we relate the term ‘threshold’ to TL theory, we begin to hit on the notion of what Mezirow terms a ‘disorienting dilemma’ (2000: 22). In Mezirow’s terms, disorienting refers to a lack of orientation or direction in terms of the choices needed to solve the dilemma. A dilemma suggests a problematic state of affairs. Adults experience many types of dilemmas throughout their lives. Dilemmas by their very nature require that adults make choices and these choices are not always easy to discern. These choices must be made in order to avoid any negative implications for the individual. Therefore, a dilemma is not an easy event to navigate as an adult. However, the learning potential that is derived from such an experience
is invaluable to the individual’s development. By making a decision, adults put forward an action that will end up in a set of final outcomes that may be necessary in order to solve a problem. According to Mezirow (1991: 161), taking action is an integral dimension of TL. From that experience, adults would have derived deep or intimate learning because of the attention that was focused on the issue or problem. In other words, learning happens regardless of whether or not the experience of the dilemma is good or bad. Transformative learning, in this respect, is problem solving at its best, which occurs through redefining the problem (Mezirow, 2000: 20).

The concept of a ‘disorienting dilemma’ was seen as critical to the study for various reasons. First, the event of the written year-end examination was investigated in terms of whether or not it was experienced as a disorienting dilemma by students. Examinations are regarded as important milestones that need to be attained by students whilst being engaged in the act of a formal education. It has been argued that, for transformative learning to occur, dynamic action in the form of a ‘journey of the self’ is required (Dirkx, 2006: 20). The journey, in the case of the study, is the learning experience that students undergo before they can be accepted by the professional community to which they aspire. This journey, therefore, not only suggests a personal development, but also a deep social engagement and collaboration with others within the same context (Dirkx, 2006: 19). During that journey, certain milestones need to be attained so that learning can be validated as having occurred for individual students. This validation is usually undertaken through the process of assessment.

As meaning is seen to exist within the individual, validation can only occur through communication or interaction with others operating in a similar context (Cranton, 2006: 23). Communication with others with regard to the process of an examination relates to the existing relationship between the student and the lecturer. It is understood that in many instances in HEIs the examiner is a different person to the lecturer. However, in this context the lecturer is also the examiner and therefore there is an existing relationship of which to be cognisant. It is the lecturer who best understands the individual in terms of the discipline and it is the lecturer who carries out the teaching and subsequent assessment. The lecturer in a sense is the critical link between industry and students aspiring to gain entry into their respective professional practice. Validation in the context of an industrial design education can only truly occur if such a relationship is already established.

To foster TL requires that students be taken out of their ‘comfort zones’ (Davis-Manigaulte, Yorks & Kasl, 2006: 27) and this can only be done by placing problems en route to each individual’s development through learning. Examinations, therefore, embody a learning problem which is a useful method to remove students from their developmental comfort zones. This pressurised situation has an ability to focus student attention on meaningful learning that is needed for the display of self-appropriated knowledge and understanding in the context of their intended discipline. Cranton (2006: 20) demonstrates that recent developments of TL theory have been inclined towards the encounter with a disorienting event and a subsequent questioning of assumptions. Similarly, in the study undertaken, the encounter with the disorienting dilemma and the exploration of the resultant learning ideals necessary in the context of industrial design education, were critical to establish whether or not examinations provided the impetus in the TL experience. There is much evidence from literature to suggest that examinations can be considered to be a disorienting event. One of the key themes of current TL research is that transformative learning is initiated by a disorienting dilemma (Cranton, 2006: 52). However, the disorienting event as described by Mezirow (2000: 21-22), Kappel & Daley (2004: 84), Cranton (2006: 71), and Taylor (2008: 6) is not only seen as one singular dramatic event (epochal), but can also be described as a series of progressive transformations happening over a period of time (incremental), but which still result in TL.

In considering the disorienting dilemma as a critical part of the study the following questions needed to be asked: how could the experience of examination as disorienting dilemma best be described? Could
these experiences be described as epochal or incremental transformation? Are these transformations in any way related to the context of an industrial design education? The experiences of a dilemma are varied as there is an individual dimension of which to be cognisant. Students are individuals and they perceive experiences differently. Therefore, it would be important to utilise appropriate research methodology that valued both the individual and the group as the participants from which the study could benefit.

**METHODOLOGY**

The success of the study was dependent on the ability to describe students’ experiences of summative assessment in the form of year-end written examinations. These experiences were to be compared to the ideals of TL theory and if the comparative results were in any way different or similar to a transformative learning experience. As it was the intention of the study to investigate students’ perceived experiences of the phenomenon of written year-end examination, a qualitative research approach was utilised. Phenomena or events are understood as mental processes characteristic of an interpretive paradigm taking place within social contexts (Henning, van Rensburg & Smit, 2004: 20). It was within this interpretive paradigm that frames of reference were sought from which the meaning was shaped. The enquiry attempted to understand the meaning of the experience as the knowledge gained through an inductive mode of enquiry (Merriam, 1998: 4). The enquiry required that the perspectives of the participants be drawn using detailed interviews (Denzin & Lincoln 1994: 5). However, of even greater importance was the fact that the interpretation of the data was to be undertaken in relation to the envisaged theoretical framework of transformative learning. Therefore, the social dimension related to students’ experiences was investigated from the personal accounts of individuals who had lived through the phenomenon of written examinations.

The typical qualitative data collection instruments that were used in the study were audio-recorded focus group discussions and an individual interview. By utilising qualitative data collection instruments, participants were encouraged to answer open-ended questions that were designed to elicit open discussion. The qualitative research approach allowed for the interpretation of the phenomenon in question based on the manner in which the participants communicated their meaning. The inclusion of two data collection methods also allowed for more than one interpretative practice; this was necessary so as to augment the quality of the study.

The study followed a phenomenological design, which is a qualitative research design found in human and social science research (Creswell, 1994: 11-12). The students’ experiences of written examinations at the Department of Industrial Design were investigated as the phenomenon in question. In phenomenological studies, human experiences are investigated through the descriptions of the participants being studied (ibid). Therefore, in the context of the study, the lived experiences of students with regard to written year-end examinations at the department were investigated and described.

The study also sought to find common themes that enabled an exposition of the range of meanings related to the phenomenon in question (Struwig & Stead, 2001: 226). The exploration of common themes allowed for the identification of a ‘common essence’ within phenomena (Kvale, 1996: 53). Phenomenology was found to be an appropriate research design for dealing with participants’ experiences. The intention of the research was an attempt to understand the qualitative diversity of the participants’ experiences and to explain the meanings of those experiences as they related to the ideals of TL. The term ‘experience’ was viewed as the act of living through the specified event, which was termed the ‘lived experience’ (Henning et al, 2004: 33). The event of the written examination was, therefore, understood as the specific period of activity and described as the ‘situated activity’. The students’ experiences of examinations were, thus, seen as an event or a phenomenon that is part of the learning process and it is an activity situated at the Department of Industrial Design. The theory of TL was also utilised as the lens through which experiences were analysed.
The participants were purposefully selected from the student body at the Department of Industrial Design. Purposive sampling seeks appropriate participants that fit the researcher’s criteria (Henning et al., 2004: 71). The criteria for participants to be selected for the study required that they be students in their fourth year of study. The main reason for this choice was based on the understanding that this group of students had collectively gathered more lived experience of examinations at the department than any other year group; they had three years of examination experiences at the department. The purposeful sampling strategy can also be described as homogeneous sampling, as the study dealt with a subgroup with similar backgrounds (Struwig & Stead, 2001: 99; Krueger, 1988: 18). Furthermore, purposeful sampling was utilised to select ‘information rich’ participants (Struwig & Stead, 2001: 122; Merriam, 1998: 61; Maykut & Morehouse, 1994: 45).

As a qualitative approach was used in the study, a relatively small sample of participants was utilised to investigate the phenomenon in the specific context. The number of students invited to participate in the study was six, as this was the total number of students in that particular year group. However, this modest number of participants is seen by qualitative researchers as suitable for conducting an effective focus group, assuming that participants are homogeneous (Gray, 2004: 323; Krueger, 1988: 18). Because of the qualitative nature of this study, data were collected by verbal means. This is termed ‘overt data’ (Struwig & Stead, 2001: 100). The data collection methods employed were typical of a qualitative enquiry, as the focus was on eliciting verbal data. The aim of the methods was, therefore, to generate ‘rich and holistic data’ (Merriam, 1998: 78).

In the context of the study, questions posed during the focus group were used to stimulate interaction between participants, discuss issues they considered important and assist in eliciting the participants’ experiences of the phenomenon in question (Barbour, 2007: 2). The purpose of the focus group was to generate multiple perspectives from the participants within a predetermined time limit (ninety minutes) and with maximum transparency. To substantiate the focus group interview data, individual interview data were also utilised. The reason for this related to the outcomes of the focus group interview in that focus group discussions were useful in eliciting further questions for personal discussion (Struwig & Stead, 2001: 100). The participant that failed to attend the focus group interview due to illness was invited back for an individual interview. This session presented the opportunity to interview a participant that was not affected by group opinion and had not been part of the focus group interview. It had been observed that during the focus group interview, dominant participants highlighted certain issues that were later picked up by the other participants. Interviewing a participant on his own was an effective strategy to elicit data that were either going to confirm or contradict data that were previously generated by the focus group.

Through utilising the above data collection methods, the horizons of individuals and group were expanded through the verbal exploration of the unknown. This ensured that the methods did not lead to forced or false conclusions as there was no agenda within the research (Valentine & Ivey, 2008: 164). The main focus was on the experienced meaning of the participants’ life world. The phenomenological perspective of the data collection methods enabled access to participants’ experiences of the phenomenon (Kvale, 1996: 53). The data collection methods were guided by the phenomenological ideals of listening without prejudice, allowing participants to relate accounts of their experiences, allowing verbal accounts to unfold without interruptions and allowing for interpretative listening to multiple perspectives (Kvale, 1996: 135).

Formal data analysis occurred after all the interview transcripts were completed. The interview transcripts were typed verbatim because raw data could not be summarised or rephrased to be grammatically correct, as this was considered to be methodologically inaccurate (Ryan & Bernard, 2003: 279; Struwig & Stead, 2001: 169). Participants readily used language that described actions or tasks that designers typically use in their daily routine. Participants also referred to processes and materials unique to the discipline of industrial design. During the transcription process, it was realised that familiarity with the
participants made for easier separation of voices, which was important when seeking clarification and exploration during the data analysis process (Barbour, 2007: 60). It was also realised that, whilst in the process of transcription, analysis was already taking place (Struwig & Stead, 2001: 169).

The process of ‘hands-on’ transcription resulted in familiarity with the data which was useful for further recall (Barbour, 2007: 79). During analysis, instances were recalled that were interesting during the interview and allowed for the concept or idea to be allocated to a voice. These recollections became precious finds within the context of the research. Replaying sizeable portions of the recordings and comparing them to the initial transcription allowed for more accurate description of what was actually being communicated during the interviews (Barbour, 2007: 79; Silverman, 2003: 354). This strategy was employed with good effect during the transcription process and, albeit arduous, was vital to the outcome of the research.

As the aim was to develop an argument grounded in the data, the analysis process utilised the constant comparative method or technique (Gray, 2004: 214; Henning et al, 2004: 115; Charmaz, 2003: 249; Babbie, 2001: 361; Strauss & Corbin, 1998: 79). This was an inductive method of research where the data generated were utilised to induce themes from the captured text (Ryan & Bernard, 2003: 275; Struwig & Stead, 2001: 170). It commenced with ‘line-by-line’ reading of the initial transcript while simultaneously listening to the recording so as to ensure that any notable information during transcription had not been omitted. This also allowed for talk and text to make sense and in some cases small changes were made, especially when participants repeated words or phrases more than two or three times. A final printed version of the raw data in the form of the transcript was then made available for coding.

Coding involved a process of breaking down data into manageable segments and identifying those segments (Dana & Yendol-Silva, 2003: 90). In addition, the process of coding the raw data entailed careful reading and required highlighting actions, assumptions and consequences (Ryan & Bernard, 2003: 275). The identification process required that units of meaning be selected with a highlighting pen. Meanings were derived from words, sentences and paragraphs and a simple coding system was devised to identify the unit of meaning. This code was not only devised to retain participant anonymity, but it ensured that it related directly to the line on the transcript and the meaning that it embodied (Struwig & Stead, 2001: 171). Identification codes were written on the side of the transcript next to the line where the unit of meaning originated and then transferred alphabetically on computer as new codes developed. This method allowed for a fair degree of control and retained the clarity required when assigning new codes. Codes were then analysed and interpreted in the specific context of the research questions and in conjunction with other codes.

Codes were systematically grouped into similar categories which were further developed into broad themes. Both similarities and differences were grouped and placed in a category (Strauss & Corbin, 1998: 79). A composite picture gleaned from the coded data had thus been built as a result of grouping the unitised data (Struwig & Stead, 2001: 171; Merriam, 1998: 179). The inductive process of theme construction was necessary so as to capture recurring patterns from the coded data. Coding involved not only defining and categorising the data, but it also involved finding new perspectives from the data (Charmaz, 2003: 258). As such coding remained analytical and a ‘theoretically saturated activity’ (Ryan & Bernard, 2003: 276; Silverman, 2003: 356).

THE TRANSFORMATIVE DIMENSION OF COLLABORATIVE LEARNING

The study revealed that students used group collaboration to enhance their learning and that learning through verbal communication in class or outside the class further contributed to communal learning. The value of collaborative learning is depicted in the following comments:


...that’s why it’s been helpful in terms of studying in a group like (in the) last few years... (Participant 6: 2010).

...I think the other thing which also, influences a class or a group is the way they communicate between each other... (Participant 5: 2010).

...we are all friends we share our information and we learn a lot more... (Participant 4: 2010).

Students seemed to motivate one another through group dynamics, by sharing workload and assisting each other in grasping new or difficult concepts. The ‘me first’ attitude changed during the course of three years at university into one of building relationships with one another and furthering community values that enhanced personal growth and learning (Coker & Coker, 2010: 7). Learning in groups, according to Boyd (1989: 467), can provide supportive structures that not only facilitate learning but help to realise personal transformations. Cranton (2006: 163-164) explains that, in supportive learning groups, there is commitment to the group’s goals, loyalty, responsibility within the group, good communication, an acceptance of other opinions and the ability to endure frustration. According to the participants, the learning group was not only about work but also incorporated group socialising which was important to establish a place for the individual within the group. This idea was best explained by participants in the following ways:

...the class meets each other outside the classroom atmosphere, so they can relax and talk about other things, not just what have you studied... (Participant 5: 2010).

So, I agree with Participant 5 by saying that the external part of it is actually very important as well, because, when you know your peers, you actually accept their input... (Participant 2: 2010).

As such, the following participant felt that through enhanced peer interaction between the various year groups they had created a collaborative learning community:

...we help them ... with pleasure and they (are) willing to help us and that’s creating like an industrial design community, within the university... (Participant 2: 2010).

Relationships within learning groups facilitate the ‘engagement’ necessary for students to develop their own learning. These relationships include not only relationships with the institution, peers and lecturers, but also relationships with their subjects, profession and industry (Reid & Solomonides, 2007: 28). Through the development of communal approaches to learning, a commitment is formed between those that are engaged in this process of learning. This commitment is a result of the individual students’ willingness to learn, interest in the subject being studied and the support received from both fellow students and lecturers (Reid & Solomonides, 2007: 28). These aspects were all evident in the study. However, engagement does not occur overnight; instead, it is something that is nurtured and which takes time to develop before it becomes a truly effective means by which individuals learn. The realisation that this engagement had occurred was best summed up as:

...I mean this is awesome, we are all learning from each other (Participant 2: 2010).

At this point in the argument, it is important to note that learning was not attributed to the act of writing the examination; this was expressed clearly in the following manner:

I don’t think it (examination) proves that you know. It just proves that you can study it (Participant 4: 2010).
In the following participants’ opinions, constructive learning had already taken place mostly through lectures and class discussions that opened up various topics and reinforced new ideas:

…I think the actual lectures …… where we were taught ………everything, that’s what I go away with, in industry that’s what I’m going to relate to (Participant 1: 2010).

I agree with Participant 1, in a sense that for me, the exams haven’t taught me as much as everything else throughout the……course. I got most of my information from actually conversing with the lecturers or my fellow students… (Participant 2: 2010).

Preparation for examinations required that students work in groups to facilitate learning. The prior knowledge that was developed through an academic year had a positive impact in terms of the way in which students approached learning for examinations. As such, it becomes clear that the students perceived experiences of examinations at the department were not credited for contributing to their development. While it was established that there were enough instances of transformative learning, these were not directly linked to the phenomenon of the written examination. It appeared from the data that the ‘little’ events and processes along the way towards examination and ultimately towards the practical application of theory contributed to individuals’ learning through transformation.

The transformation of the individual was also not seen as sudden, but instead took time to occur. Participants described examinations in terms of their personal development within the field as part of a process of maturation and learning within the context of industrial design education. Participants used words such as ‘obstacle’ or ‘hurdle’ to describe the transformative experiences of examination in the following ways:

I see exams as just a little obstacle in the road, you know you need to get through it and you need to pass it. But you carry on with your journey (learning) after that (Participant 3: 2010).

I see it as maybe a hurdle to overcome, in order to be able … to prove that I know the information. I already do feel like I do know it, but it has to be a part that you actually show that you have some knowledge or understanding of what’s being taught… (Participant 6: 2010).

These comparisons indicated that examinations were one of many other such impediments along the way towards personal development. Examinations, nonetheless, held an important position on the path towards personal development. The concept of a ‘disorienting dilemma’ was evident from the findings of the study (Mezirow, 2000: 22). However, examination could not be described as contributing to epochal transformation, but was described as part of a series of ‘progressive transformations’ happening over a period of time (Taylor, 2008: 6; Cranton, 2006: 71; Kappel & Daley, 2004: 84; Mezirow, 2000: 21-22).

CONCLUSION

At the outset of the study, the intention was to seek out students’ experiences of the phenomenon of written examinations and to ascertain whether these experiences represented an ideal learning experience that allowed for the transformation of the individual. Therefore, the aim of the research was to elicit the students’ experiences of written examinations as a critical component of transformative learning.

What was found was a group of individuals motivated by one another and ready to enter into their professional practice, all of whom could be described as transformed and undergoing transformation. They embody the progressive action of transformative learning that will never really end for these individuals. However, for these participants, transformation was not a result of writing examinations, but instead, examinations provided the intricacies or ‘obstacles’ on the way to their personal development as industrial
designers. They have undergone what Dirkx (2006: 20) refers to as the ‘journey of the self’. This journey not only speaks about ‘obstacles’ and ‘hurdles’, but also mentions the attainment of milestones along the way in the form of personal development, deep social engagement and collaboration with others within the same context (Dirkx, 2006: 19). Examinations are, therefore, part of a valuable means by which TL is fostered, beyond the constraints of the classroom. It brought students together in groups that achieved far more in terms of developing transformed attitudes towards each other as individuals and which extended their appreciation for the discipline of industrial design.

Nevertheless, it is also important for lecturers to help realise the personal development of the individual student to achieve their own learning objectives, be they personal or social, in conjunction with lecturers’ objective to help students become autonomous thinkers (Wiessner & Mezirow, 2000: 348). It is also worthwhile to note that although TL as a teaching and learning theory was not formally applied in the department, it is apparent that elements of this approach could be adopted in future. Ideally, TL could be utilised as an appropriate pedagogical tool. The adoption of a TL approach may reinforce an understanding of the responsibility that industrial design as a discipline has in society.

REFERENCES


Driving Lessons – supporting academic development in a private higher education space

John Ballam, Varsity College, Durban, a division of The Independent Institute of Education, South Africa

ABSTRACT
At Varsity College (VC) and throughout the divisions of The Independent Institute of Education, academic developers are known by the title of ‘Academic Development Coordinators’. This paper reflects critically on the development of this role. Some of the critical insights gained in this role are examined, from the author’s initial appointment as an academic development coordinator based at one of the regional campuses, and then subsequently as the national academic development coordinator in which academic leadership is provided for the regional campus academic development coordinators. Thereafter three pertinent issues are explored with which the newly evolved role still grapples. Firstly, the unconscious ignorance of the complexity embedded within this role. Secondly, there is the profound shift in awareness that occurs in academic identity, from that of subject expert to a teaching and learning professional managing an academic culture. Finally, there exists the issue of how to manage sensitively an academic developer within the context of the institution’s performative education agenda.

INTRODUCTION
Academic development has a formalised professional history of some fifty years (Frazer, Gosling & Sorcinelli, 2010: 56), although there is a much longer informal history. The heartbeat of academic development rests in the tacit practices associated with teaching and learning. At The Independent Institute of Education (The IIE) the primary focus of academic development is to improve the quality of teaching and learning. It is increasingly the case that students in higher education in South Africa as elsewhere in the world are wanting teachers, with the formative pedagogical practices they bring and not lecturers as purely ‘information downloaders’ (McMillan, 2007: 213). This call to focus on the quality of teaching and learning with its many permutations has subsequently been echoed by many voices within higher education in Africa and South Africa (Luckett, 2007).

Academic development coordinators have been in place for six years at VC, a division of The Independent Institute of Education (hereinafter referred to as ‘VC’). The posts are located in a private higher education environment within a unique performative educational model. The term ‘performative’ when applied to the higher education context is ubiquitous. Its proponents tend to see it as a positive call for higher education...
to get down to the business of the delivery of quantifiable education provision. Its critics have a rather more jaundiced view. They see performative education as the spawn of the neo-capitalist enterprise (Ball, 2003). Academic development coordinators at VC have had to navigate their way through this ideological dialectic in private higher education, as have other academic developers globally.

This paper begins by providing a brief overview of the structure of VC. It then describes the research methodology used followed by a brief synoptic overview of some of the complexities of academic development that have been extensively documented in the scholarship of teaching and learning literature (SoTL). Thereafter, three pertinent issues are explored with which the newly evolved role at VC has had to grapple. These are: firstly, the unconscious ignorance of complexity involved in the role documented internationally in the scholarship of teaching and learning literature; secondly, what it means to change one’s academic identity from subject expert to a teaching and learning professional; and finally, the implications of sensitively managing an academic development coordinator within the context of the institution’s performative education agenda.

AN OVERVIEW OF VARSITY COLLEGE’S ACADEMIC DEVELOPMENT STRUCTURE

VC is one of the tertiary divisions of The IIE (http://www.iie.ac.za). The IIE is a wholly owned subsidiary of ADvTECH Limited, a listed company on the JSE. VC has a twenty year history. It has eight national campuses, namely, Pretoria, Midrand, Sandton, Cape Town, Port Elizabeth, Pietermaritzburg, Durban North and Westville (Durban). Each campus offers tuition for the upper LSM (living standards measure) groups for a selection of undergraduate degrees and diplomas as well as a Chartered Accounting qualification. Until 2012 the degree programmes offered were University of South Africa qualifications. The IIE has now launched two of its own degrees. The diplomas offered are in the main IIE qualifications.

The national campuses range in size, the larger campuses can accommodate between one and two thousand students, the smaller campuses around eight hundred students. Class sizes on each campus range between eight to fifty students. Two thirds of the student population are registered for undergraduate degrees, the other third for various diploma courses. Internal surveys conducted by VC, as well as subsequent academic support-based interviews with students and on occasion their parents, suggest that students enroll at VC, as opposed to one of the public universities, for diverse reasons, the dominant one being the emphasis the institution places on high quality supportive student engagement by lecturers and the student support teams. Each campus accommodates a student support team consisting of full-time lecturers, academic developers (usually two or more per campus), a Student Relationship Manager (SRM) who is either a counselling psychologist or a social worker, a librarian, a careers centre coordinator, programme champions (who track student success in the various academic programmes) and a vice principal: student support tasked with coordinating the team. In addition, there are two national positions - national academic development coordinator (ADC) and a national SRM whose task it is to ensure the strategic operational consistency of the respective positions across the eight national campuses as well as provide capacity building activities for staff occupying regional positions. The national post holders report to the national academic manager, and the vice principals for student support report to their campus principal. The ADCs on each campus in conjunction with the vice principal: student support are responsible for managing the teaching and learning environment and developing the teaching and learning culture.2

2 It should be noted that over 90% of VC’s lecturers are not full-time employed academics but independently contracted academics and professionals. This presents a unique set of developmental challenges.
This paper draws from part of an ongoing qualitative research project into the role of academic development at VC. It involves multiple sources of data (see Table 1). It would be naive to claim a high degree of objectivity in producing this limited small scale study (Ottewill, Shephard, & Fill, 2002: 57-58). However, small scale highly specific qualitative studies do incrementally advance the evolution of the broader teaching and learning debate in higher education (Bamber, 2008: 114). This particular multifaceted action research methodology was selected in order to conduct an in-depth analysis of the role’s ‘tacit knowledge’ (Craig, 2009: 191).

Table 1:
Data Sources

<table>
<thead>
<tr>
<th>Data Sources</th>
<th>Methodologies used to collect data</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 ADCs employed at the time</td>
<td>Unstructured individual interviews&lt;br&gt;Regional workshops with each ADC team&lt;br&gt;Monthly teleconferences with the 7 national ADC campus based teams</td>
<td>2 per ADC&lt;br&gt;3 for each of the 3 regions (9 workshops in total)&lt;br&gt;12</td>
</tr>
<tr>
<td>34 independently contracted lecturers</td>
<td>Anonymous structured questionnaire selected by convenience sampling</td>
<td>Once</td>
</tr>
<tr>
<td>15 students</td>
<td>Unstructured interview of randomly selected students.</td>
<td>Once</td>
</tr>
<tr>
<td>2 vice principals: student support (formally ADCs)</td>
<td>Unstructured interviews selected by convenience sampling</td>
<td>Once</td>
</tr>
<tr>
<td>3 Heads of Department</td>
<td>Unstructured interviews selected by convenience sampling.</td>
<td>Once</td>
</tr>
</tbody>
</table>

The project, as with any research project faced certain contextual challenges and limitations. The first was how to define the pre-suppositional platform upon which academic development rests at VC. This study therefore adopts the framework of consultative service provision as a congruent starting place in the light of where VC is located on Goslings’ platforms for academic development. These are: educational consultant, educational researcher, and educational manager (Gosling, 2009: 13). Secondly, the interviews and focus groups with the ADCs were conducted by the author after he had been contracted in a developmental/managerial position to oversee this portfolio nationally, reporting to the National Academic Manager. This naturally raised issues around power, transparency and confidentiality with the interviewees. It was agreed with all the participants at the outset of this research that all the individuals’ viewpoints would be held in the strictest confidence. The author tried hard to negotiate the five ‘research aporias’.3 The paper reflects only the views of the author.

---

3 The term ‘aporias’ in this context refers to complex ethical paradoxes that bedevilled, in this instance, research in a higher education institution within which the researcher is employed, and in particular where the researcher is researching other employees’ behavioural patterns (Williams, 2009: 215-219).
Academic development is susceptible to being seen as the shallow harvesting and duplication of ‘best practice’ surface pedagogical techniques, which can lead to it being given short shrift by subject experts because of its lack of epistemological and theoretical gravitas (Rowland, 1998). However, human practices are vastly complex phenomena, not always superficially transferable from one person, organisation or culture to the next (Erlandson and Beach, 2008: 415). Despite a growing body of practitioners who are now applying rigorous empirical and theoretical frameworks to this emerging and rapidly professionalising field, there are still those who call it into question (Boshier, 2009: 2). Academic Developers are faced with a theoretical cacophony. What is the purpose of academic development? Is it to encourage lecturers to become reflective practitioners (Erlandson and Beach, 2008: 417); build communities of authentic educational practice (Viskovic, 2006: 332); facilitate the growth of the scholarship of teaching and learning amongst HE practitioners (Healey, 2000: 183); develop lecturers’ critical thinking and teaching skills (Brookfield, 1995) or is it to assist educators to develop learning communities? (Palmer, 1998: 106-113).

Epistemologically if academic developers choose to locate themselves within modernism or even late modernism, the developing and emerging world can cry foul (Harvey & Stensaker, 2008), as this is seen as the spawn of the neo-liberal globalising performative educational agenda, or a lack of understanding of South African diversity issues (Thaver & Mählck, 2008). Critical modernism cannot ignore the strident voices of neo-marxism and feminism, which form part of the justice and redress debates surrounding the politics of recognition (Mighty, Mathew, Ouelett, & Stanely, 2010; Higgs & van Wyk, 2006). In the postmodern space epistemological relativism is celebrated (Steinnes, 2004: 271), but it is still a profoundly uncomfortable place for most educators (Min, 2005: 844-847) who are looking for secure ontological purchase points to inform their practice (Steinnes, 2004: 274). Postmodernism and critical educational theory have called into sharp focus the inescapable question of power and the values of who has the power (Gosling, 2010: 98-100).

There is a further complication for academic developers in the South African context with the post-liberation call to transform and contextually Africanise the university by recognising previously excluded forms of indigenous wisdom (Higgs and van Wyk, 2006: 85-89) as well as embracing the rich sense of communal humanitarianism found in the African philosophy of Ubuntu. On a more pragmatic level there is the need to address the levels of equity, justice, ‘underpreparedness’ (Bradbury, 2001), funding (Wangenge-Ouma, 2010) and educational inequality that the apartheid regime left as its acrimonious legacy. And there are very real concerns amongst many academics, voiced as early as 2001 that the present ANC government’s commitment to the type of social transformation necessary is ineffectual and being hijacked by the global neo-liberal agenda (Waghid, 2001).

Internationally the field is starting to professionalise (McDonald & Stockley, 2008: 214) and could be said to be arriving at last at the end of its healthy ‘identity crisis’. Rowland, for example, in 2007 observed that 22 of the 69 journal articles from 2001-2006 published in The International Journal for Academic Development focused on questions surrounding the identity of the academic developer. He surprisingly, did not regard this as professionally narcissistic (2007: 9). Theoretically, academic development might be just

4 Woods (2005: 431-358)

5 Postmodernism is a complex philosophical and social phenomena encompassing a wide diversity of thinking. At its heart lies the notion of the radical contingency of the human experience coupled to the radical relativising of all metaphysical truths, epistemologies and value systems (Caputo, 1992:48).
The Independent Journal of Teaching and Learning - Volume 7 / 2012

beginning to find a home in the emerging philosophy and science of complexity theory. Here it can find the epistemological gravitas and breadth to give voice adequately to the polyvocality that the discipline demands (Reid & Marshall, 2009). Its malleable contexts and tacit practices could be characterised as ‘elastic practice’ (Carew, Lefoe, Bell & Armour, 2008: 60-62) who argue convincingly that academic development should be guided by a contextually bound pedagogical pragmatism.

SOME LESSONS LEARNED ABOUT ACADEMIC DEVELOPMENT AT VC

I now turn to three key issues which the ADCs and I identified as we set about implementing academic development in this privatised HE environment.

An ignorance of the pedagogical complexities of academic development

As the role of academic development matured at VC its practitioners became aware that they were initially blind to the complexities with which they were dealing. Part of this blindness was directly related to the lean VC operational environment which meant that ADCs carried large teaching loads leaving little time to engage with SoTL. This continued until 2009 partly because ADCs resisted management trying to reduce their lecturing loads - these were initially seen as their badges of authenticity amongst the lecturers. In conjunction with this, entrepreneurial pioneering cultures, like VC, develop a fast-paced intuitive pragmatism that initially regards critical self-reflection, particularly of an academic theoretical nature, with a jaundiced eye. Research of any kind requires a certain degree of isolation from the daily cut and thrust of lecturer and student interaction, in terms of reading and writing at the very least.

In small to medium size organisations/campuses it is quite clear that academic developers remain in the primary role of developers, amongst lecturers as ‘critical friends’ (Shortland, 2010: 301-302) who can assist them to develop their practice. To this end, in these smaller institutions, academic developers cannot afford to be seen as office bound, to the extent that managers and researchers can, and still remain perceptibly credible with the lecturers and students. ADCs need to be in touch with what is happening in the corridors, lecture rooms, libraries, and e-learning spaces. This interpersonal connection, as emotionally taxing as it can be, is where the primary recognition of their organisational authenticity is found.

On the other side of this coin, there is the difficult but necessary need to develop the strategic organisational consciousness the role requires. Individuals and organisations learn because they are able to listen empathetically and respond to the demands of their environments. Listening implies not only meeting with individuals and groups but also accurately measuring, generating and analysing organisational data. In the early days of this position, ADCs were given additional tasks by their management if they were seen to be reading or analysing information. Unconsciously this was not perceived to be ‘work’ whereas face-to-face contact with students or a lecturer was. This is now changing. There is a shift towards a more reflective academic culture.

There is also the issue that academic developers are often required to acquire disciplinary knowledge of the faculties with which they work. They ultimately have to learn the deeper disciplinary discourse around these faculties, with the basic epistemological premises, the communication expressions used, the disciplinary culture and the teaching and learning knowledge in the discipline (Taylor, 2010). Initially, this was not consciously engaged with, at best it was seen as a luxurious add-on; in the worst cases ADCs were completely ignorant of this debate.

The question then in these highly performative teaching, as opposed to research, environments, is how available can an academic developer be, to whom and at what cost? There is the short-term value that can be gained by always being available to see the next at-risk student or struggling lecturer, versus the longer term gain of academic developers being able to detach themselves temporarily from what is urgent,
to attend to what is strategically important. Internationally, it is recognised that participation in the SoTL debate is a critical component in the development of academic developers, (Hoessler, Britnell & Stockley, 2010: 81). However, if one ranks the forces that have the greatest impact on the daily life of an academic developer and the goals of the programmes with which they are associated, the picture looks quite different, i.e. lecturers’ needs, (students’ needs), educational leaders’ agendas, and lastly the reading required for engagement with SoTL (Sorcinelli, & Austin, 2010: 31-33). Teaching in these performative academic cultures, means making peace with this searing tension between reflection and action which constantly challenges both the individual’s and organisation’s integrity.

**A change in academic identity**

The second issue concerns academic identity. At VC the ADC role took high performing expert teachers, who were adept at dealing with the complexity of classroom management, and then exposed them to the much fuller complexity of having to develop a robust pedagogically accountable culture of teaching and learning within their respective branches. This jump was considerable. McDonald characterises it as “… finding a way to blend multiple identities into the concept of educational developer’ (2010: 43). Initially academic developers regard themselves as subject experts, ironically though, because their primary focus has always been teaching and learning, their publication output does often not support this claim. Colleagues, who have a stronger research agenda, have a publication record. This trend was reflected at VC, where of all the present ADCs interviewed only one self-identified as a teaching and learning expert first and then a subject practitioner, and there are no ADCs with large publication records. Some studies indicate a two to four year process of socialisation is needed to embrace fully this role and break with previous academic identities (ibid: 42). What has to be learned is that, ‘you never lose your classroom it just changes.’

Finally, there remains the divisive issue of where an academic developer’s academic allegiance lies (Jawitz, 2009: 250). The majority of academic developers still originate from the ranks of subject teachers. They have deep affective and cognitive ties to their disciplines, which do not include formalised pedagogy. In many instances these academic disciplines have become deeply embedded in their own narrative identities. Furthermore, many of their peers and subordinates accept them on the bases of these identities, viewing pedagogy as an ancillary light weight ‘add on’. Some authors are now beginning to talk about a career turning point that occurs, where academic developers have to make a hard choice about what will become their major focus (Gosling, 2010: 94). At VC we have discovered that like all major choices, this shift is a process that occurs within individuals as they operate in this role. The VC culture provides very strong recognition for the managerial and developmental aspects of the ADC role (promotion and compensation) and relatively weaker strains of recognition for scholarly research and development.

**Managing pedagogical sensitivity and institutional demands**

The third issue is to do with managing pedagogical sensitivity and institutional demands. It is acknowledged that academic development exposes its practitioners to a voyage of personal and collaborative discovery that is not always comfortable or predictable. In order to be effective the VC ADC has had to have a large degree of ‘pedagogical sensitivity’. This can be defined as the advanced ability to detect proactively the potential disconnections between students, lecturers and the educational system in which they participate.

The flip side of this sensitivity is that for conscientious ADCs it is very easy to feel overwhelmed by the host of issues that need attention. Human beings, unlike research papers, cannot be conveniently filed away for another day! As any systems practitioner is aware, she will see greater levels of depth and complexity, which call for more ownership; people have to be guided to learn how to manage this internal ‘fire’ that

---

6 This pragmatic insight was given to me by the present Academic Manager of VC which greatly assisted me in my own identity transition.
gaining insight ignites. Performative private HE environments continually attempt to improve throughput as well as pass rates. Student retention is directly linked to student support (Young, Glogowska, & Lockyer, 2007). It is very important that this issue is strategically managed so that recently recruited ADCs are not overwhelmed.

In this regard the stress that ADCs experience at VC could be regarded as that of the associate professor status at other higher education institutions in South Africa, and as at least one recent South African study has demonstrated this could be the most stressful career period (Barkhuizen, & Rothmann, 2008: 332). Although an ADC might not carry the associated stresses of publication and postgraduate supervision, their lecturing loads, as well as the number of lecturer and student engagements more than compensate for this.

ADCs need their roles and identities nurtured by their management. The ‘softer’ issues of personal development such as attaining deeper levels of psycho-social integration, academic reading, and the sharpening of their strategic thinking skills, need as much attention as the ‘harder’ skills associated with academic administration. If this is not done career ‘burn out’ in this position is inevitable.

THE ROAD AHEAD - CONCLUSION

If one looks at Gosling’s analysis of the academic developer’s role as that of educational consultant, educational researcher and educational manager (Gosling, 2009: 13), it would seem that the VC ADC should constitute a hybrid of consultant and researcher in terms of our organisation’s needs and structure. The major chord that holds rich polyvocality remains the quality of teaching and learning (Gosling 2010: 92-94), which necessarily translates into the short-term pragmatics of job and career development, long-term into developing ‘glocal’ citizenship that will nurture the development of civil society.

In the small to medium private HE space over-utilisation, intensive multi-tasking, and a lack of reflective space can lead to academic developers burning out, coupled to them not utilising or participating in more critical and reflective practices, e.g. SoTL. Managerial support, alongside administrative support and well run IT systems can in these instances go a long way to mediating these systemic pressures. Globally, it has been noted by numerous practitioners researching this field that academic development is a very challenging educational space to inhabit (Bamber 2008: 107-108]). For VC academic developers, the challenge is how to develop a sharp strategic focus on the teaching and learning environment at local campus level, while remaining in touch nationally and internationally with developments in this exciting field.

The multiplicity of career entry points, theoretical positions and interdisciplinary engagements, have led to the unfortunate perception that anyone can become an academic developer (Harland & Staniforth 2003: 28-31). The author’s own experience and research in this field has led to another conclusion; namely, that academic development, as a form of organisational development, requires a special type of person and not just ‘anybody’. Only individuals with a highly developed interpersonal skills’ matrix coupled to a deeply integrated pedagogic coupled to andragogic sensitivity will have longevity within the field of academic development, especially when exposed to the full blast of organisational complexity. The competencies required to be an effective ADC at VC appear to be rooted in a radical form of pedagogic vocationalism, whose humble teleology is not located in a messianic sense of nation building, ideological liberation, nor an aggressive marketing mentality. Rather the VC ADCs needs to be self-motivated to assume full responsibility for the ‘excitement of the learning encounter’ as Praeg (2006: 347) states:

... we can only bear responsibility when we do not defer to it. Part of the excitement of the learning encounter, then, is that it demands of us to take responsibility for an experience that is at once exhilarating, frightening, comforting, terrifying, and liberating.
REFERENCES


Learning outcomes in external programme reviews: A case study from Bahrain

Wafa Abdulrahman Almansoori, Higher Education Review Unit, Quality Assurance Authority for Education & Training, Kingdom of Bahrain

ABSTRACT

This paper considers the role that learning outcomes play in the programme reviews conducted by the Higher Education Review Unit (HERU) of the Quality Assurance Authority for Education & Training (QAAET) in the Kingdom of Bahrain. The findings of the 12 bachelor programmes reviewed in the field of Business Administration reveal that almost all of those programmes have developed programme intended learning outcomes (ILOs). This, in most cases, is the result of the programme review framework developed and used by the HERU of the QAAET to review the programmes offered by higher education institutions operating in the Kingdom of Bahrain. There is evidence that the conducting of programme reviews has started a paradigm shift, moving programmes from an input-based approach towards an outcome-based approach. An outcome-based approach to programme design, delivery, assessment and evaluation will inevitably be of more significance as the Kingdom develops its National Qualification Framework, which is due to be implemented by the year 2014.

INTRODUCTION

The last decade of the 20th century witnessed a global paradigm shift in higher education whereby it changed from teaching to learning that is outcome focused, and where students became the centre of the learning process (Al-Mudhahki, 2010). This shift has influenced the way internal and external quality assurance processes are implemented (Adamson, 2010). Learning outcomes have provided a means for both education institutions and quality assurance agencies through which the actual learners’ achievements can be evaluated and measured and hence provide a ‘genuine measure of the value of education’ (Maher, 2004: 47).

This paper highlights the role that the use of learning outcomes play in the programme reviews conducted by the Quality Assurance Authority for Education & Training (QAAET) of the Kingdom of Bahrain and to provide a critical analysis of the findings of those reviews. This is imperative as the Kingdom develops its National Qualification Framework which will be outcome-based and is planned to be implemented by the year 2014.

1 Date of submission 15 January 2012
   Date of acceptance 13 June 2012
During the 1990s and beyond the number of students seeking access to higher education in the Kingdom of Bahrain increased dramatically. This placed a great pressure on the national university, University of Bahrain, increasing the number of its student intake from 9,665 in the academic year 1998–1999 to 18,773 in the academic year 2002-2003 (CIO, 2012). In response to growing demand for access to higher education and as a result of the general privatisation policy adopted by the Bahraini government, it made the unprecedented decision to open higher education to the private sector. This led to an exponential growth in the number of higher education institutions and a wide diversification in the range of programmes offered and, hence, a significant increase in the number of higher education graduates. Currently there are 12 private and two public higher education institutions operating in the Kingdom of Bahrain. The Higher Education Council (HEC), established by the Higher Education Law in 2005 and operating under the umbrella of the Ministry of Education, is the regulatory body responsible for licensing the private higher education institutions. At the time of this paper, institutions (both public and private) are responsible for the development of the structure and content of their study programmes, with minimal requirements, such as total credit hours, imposed by the HEC on the private providers. Maintaining the quality of the outcomes of programmes offered by those institutions has been a source of considerable concern to the government, the public and the marketplace, especially with the absence of an independent body reporting on the quality of these offerings.

In response to this concern, and as a part of a wider education reform process overseen by the Education Reform Board, the QAAET was established in 2008, as an independent body mandated, pursuant to Article 4 of Royal Decree No. 32 of 2008, amended by Royal Decree No. 6 of 2009, to ‘review the quality of the performance of education and training institutions in light of the guiding indicators developed by the Authority’ (Gazette, 2008: 10).

To fulfil its mandate of reviewing the higher education provision in Bahrain, the Higher Education Review Unit (HERU) of the QAAET developed two review frameworks: the institutional review framework and the programme review framework. The institutional review framework ‘evaluates the effectiveness of an institution’s quality assurance arrangements against a pre-defined set of quality indicators’ while a programme review is a ‘specialised exercise, which focuses on the quality assurance arrangements within existing learning programmes’ and reports on whether the programme meets minimum standards (QAAET, 2009b: 54). Launched six months apart, the two review frameworks complement each other. An analysis of the review results goes some way in providing a comprehensive picture of the status of higher education in the Kingdom. One of the main objectives of conducting programme reviews is to ‘provide decision makers … with evidence-based judgements on the quality of learning programme’ (QAAET, 2009a: 9).

OUTCOME-BASED LEARNING

As higher education was opened to the private sector, international trends such as massification, hosting of international branches and to a lesser extent increased student diversity developed rapidly in the Bahraini higher education sector. Considering the wide range of differences in the way these newly developed higher education institutions operated, including their delivery, teaching and learning, and assessment methods, the QAAET adopted the definition of quality as ‘fitness for purpose’. In both review frameworks, external reviews are conducted by an independent panel of peers. However, the process is guided by the institution’s own self-evaluation against a pre-defined set of indicators. Hence, the process respects the autonomy and identity of the programme and the institution while applying externally determined indicators. This provides a system that is ‘based on explicit reference points using learning outcomes and competencies, levels and level indicators, subject benchmarks and qualification descriptors’ (EHEA, 2005: 76), as its main features. An approach that has been adopted by a number of countries, such as
Australia, New Zealand, the United States and South Africa, over the last two decades (Jarvie, 2003; McNaught, 2009; Adamson, 2010; CHEA, 2011; De Jager & Nassimbeni, 2005).

The description, formulation, measurement and evaluation of learning outcomes have emerged amongst the most pressing topics for higher education institutions, quality assurance agencies, and research institutions (Gallavara, 2008). The QAAET review frameworks, for both institutional and academic programme reviews, place much emphasis on learning outcomes. Whilst the institutional reviews evaluate the internal quality assurance system used by the institutions to ensure that programme and course learning outcomes are developed, evaluated and reviewed properly for all their offerings, and that there are consistently implemented policies used to measure students’ achievements of those learning outcomes; it is in the programme reviews where the appropriateness and the level of students’ achievements of those outcomes are evaluated by the peer reviewers.

Learning outcomes are statements of what learners are ‘expected to know, understand and be able to demonstrate at the end of a period of learning’ (Adam, 2009: 2). The introduction of learning outcomes in programme development and evaluation has ignited a wide range of debate amongst academics. Searle & Mckenna argue that using learning outcomes as a measure for the quality of programme delivery and outcomes could hinder academic freedom and ‘ignore the learning that emerges from educational encounters which have not been pre-determined, but which might be every bit as important’ (Searle & Mackenna, 2007: 108). Allais also maintains that while learning outcomes could play some role in providing guidelines for designing learning programmes, they cannot provide a basis for the programme design or for the comparison of qualifications (Allais, 2006). Adamson, on the other hand, suggests that incorporating learning outcomes in the measuring tools of the programme reviews enables both the institution/programme being reviewed and the reviewing authority to have a common language (Adamson, 2010), which should in turn lead eventually to a more efficient and effective review process (CHEA, 2011). This is emphasised by Boughey who argues that the use of outcome-based education leads to the construct of curriculum and assessment alignment and hence provides institutions, and, the author argues quality assurance and accreditation agencies as well, with ‘a tool which can be used to ensure that students’ learning needs are met and standards are achieved’ (Boughey, 2012: 18). Maher also suggests that the adoption of this learning paradigm ‘puts the learner at the heart of the educational process’ (Maher, 2004: 47). A setting, she argues, that is favoured by both educators and students.

Whilst the author agrees that using learning outcomes as the only indicator to evaluate the quality of an offering could limit the learning experience and put an undesired emphasis throughout the learning experience on the achievement, and only the achievement, of a pre-defined set of outcomes, these outcomes used as a part of a holistic programme evaluation framework, do provide a reference point that ensures, once achieved, a minimum academic standard of the graduates. Moreover, programmes can be benchmarked nationally and internationally. This is of high importance as the international trend is moving towards developing and implementing national qualification frameworks that are based on the attainment of pre-defined learning outcomes and level descriptors. It is within this context that this paper considers the use of learning outcomes as one of the main indicators for reviewing and evaluating the quality of a given programme and its academic standards. Furthermore, as the Kingdom of Bahrain continues with the development of its national qualification framework, which is similar to those of the United Kingdom and South Africa, an outcome-based approach will become of increasing significance.

The QAAET in developing its Programme Review Framework gave a prominent role to learning outcomes in both Indicator 1: Curriculum and Indicator 3: Academic Standards of the Graduates. It was deemed important to evaluate the extent to which students learning needs are identified and met as this is a strong indicator of academic standards being achieved. It is worth mentioning here that the scope of this paper is limited to the use of learning outcomes in the development, delivery and assessment of course content and is not concerned with the wider aspect of teaching and learning. It is to the former that we now turn.
Cycle-1 of the programme reviews conducted by the HERU of the QAAET was launched in January 2009 and ended in May 2012. This cycle was based on a sampling process whereby the reviews were carried out nationally for a particular field of study and degree to ascertain whether the minimum standards are being met (QAAET, 2009a: 10). The reviews were based on the following four indicators:

- **Indicator 1 - Curriculum.** The programme complies with existing regulations in terms of the curriculum, the teaching and assessment of students’ achievement; the curriculum demonstrates fitness for purpose.

- **Indicator 2 - Efficiency of the programme.** The programme is efficient in terms of the use of available resources, the admitted students and the ratio of admitted students to successful graduates.

- **Indicator 3 - Academic standards of the graduates.** The graduates of the programme meet acceptable standards in comparison with equivalent programmes in Bahrain and worldwide.

- **Indicator 4 - Effectiveness of quality management and assurance.** The arrangements in place for managing the programme including quality assurance, give confidence in the programme (QAAET, 2009a: 11-13).

It is worth mentioning that each indicator has a set of sub-indicators that must be satisfied and that these sub-indicators cover not only the learning outcomes and their achievements but also *inter alia* the depth and breadth of the curriculum and its delivery modes and methods.

The review process starts with the institution conducting a self-evaluation of its programme based on the above four indicators and their sub-indicators, followed by a site visit conducted by a panel consisting of peer reviewers. The output of the review is a report drafted by the panel and moderated and adopted by the QAAET that contains the review’s main findings (QAAET, 2009a). The report undergoes different stages of internal moderation and quality assurance until it is submitted to the QAAET Board for approval and finally to the Prime Ministers’ Court, after which it is published on the QAAET webpage.

**USING LEARNING OUTCOMES IN PROGRAMME REVIEWS**

The QAAET programme review handbook explicitly expects that higher education institutions have an outcome-based curriculum where intended learning outcomes (ILOs) are clearly stated at both programme and course levels and the teaching, learning and assessment methods are geared towards achieving the course and, hence, the overall programme learning outcomes. Amongst other sub-indicators, the *Programme Review Handbook* (QAAET, 2009a: 11-12) states:

- Intended learning outcomes are expressed in programme and course specification.

- Teaching and learning approaches are adopted which support the attainment of aims and intended learning outcomes.

- There is a clear link between what is assessed and the programme aims and intended learning outcomes.

- Academic standards are clearly stated in terms of aims and intended learning outcomes for the programme and for each course.

- Benchmarks and internal and external reference points are used to determine and verify the equivalence of academic standards with other similar programmes in Bahrain and worldwide.

- The achievements of the graduates meet programme aims and intended learning outcomes, as expressed in final results, grade distribution and confirmation by internal and external independent scrutiny.
For the purpose of the review, the QAAET defines intended learning outcomes (ILOs) as

... the outcome-related definition of knowledge, understanding and skills which the institution intends for its programmes. They should be mission-related, capable of measurement (assessable) and reflect the use of external reference standards at appropriate level (QAAET, 2009a: 61).

On the submission of the self-evaluation report, the higher education institution is expected to submit programme specifications that include: a ‘summary of programme main features and learning outcomes that a typical student is expected to achieve and how ILOs are approached, assessed and achieved across contributing courses’ (QAAET, 2009a: 17).

Prior to the site visit, the review panel examines the appropriateness of the programme and course ILOs and their relations to the programme aims and objectives. During site visits, review panel members (international and regional peers), scrutinise samples of student course work and assessments, discuss teaching and learning and assessment approaches with faculty members, and interview students to assess if there is a shared understanding between faculty members and students as to what is expected that students should have learned by the end of each course and by the end of the programme. The panel members interview alumni and employers to evaluate their satisfaction with the attainment of the learning outcomes of the programme. Alumni and employers’ satisfaction surveys are also examined when available although these have still not been developed for most programmes. Hence, the small number of interviewees has meant the information received from those interviews is of limited use. Cohort portfolios and students achievements, on the other hand, proved to be of more use.

**MAIN FINDINGS**

To date, the HERU of the QAAET has completed the institutional review of the 14 higher education institutions and reviewed a total of 30 programmes distributed across three fields of study, namely: Business Administration (Bachelor: 12, MBA: eight programmes); IT (Master: five programmes); Law (Bachelor: five programmes). The review of these programmes comprised Cycle-1 of programme reviews. As stated above, the cycle started in January 2009 and ended in May 2012 when a new review cycle called ‘Programmes-within-College Reviews’ was adopted, which allows for the simultaneous review of all programmes (bachelor and master levels) offered within a given college of each institution operating in the Kingdom of Bahrain.

This section of the paper analyses the findings of the reviews of the 12 bachelor programmes reviewed in the field of Business Administration (BBA) with regard to the existence and the use of ILOs and their relation to teaching and learning and assessment methods and benchmarking. The site visits for the 12 programmes were conducted between January 2009 and January 2010. Since then four re-reviews and three follow-ups of these programmes have been conducted. The review reports of these programmes are published on the QAAET website (http://en.qaa.edu.bh/reviewreports.aspx).

The findings discussed below are extracted from the published reports. The BBA programmes have been selected because they were the first programmes to be reviewed nationwide and are offered by 12 out of the 14 institutions operating in Bahrain. Moreover, the outcomes of the follow-ups and re-reviews of these reports give an insight on how the use of the outcome-based approach has or has not evolved within these programmes. This analysis provides an illustration of the challenges which might be faced by Bahrain and other national systems developing qualification frameworks and a concomitant move to an outcome-based education system.
In the coming paragraphs the author discusses the status of these programmes in relation to the development and usage of learning outcomes both on a programme and course level to inform programme development and delivery and the attainment of these outcomes. The discussion below looks at reports as an aggregate and does not segregate them and evaluate individual programmes.

Almost all 12 programmes reviewed had, at the time of the site visit, developed programme intended learning outcomes (ILOs). However, the levels and stages at which the ILOs were at, varied significantly. The programme ILOs of two of these programmes were at an embryonic stage consisting of short statements that were closer to programme objectives with no clear descriptors. In two others, the programme ILOs mainly related to knowledge and understanding with limited reference to skills. In other programmes, the ILOs were more related to individual courses than to the programme as a whole, i.e. there were overarching learning outcomes on the programme level. However, follow-ups and re-reviews of these programmes showed a significant improvement in the way programme ILOs were developed and articulated. Five of the reviewed programmes had clearly stated and well-articulated programme ILOs with balance between knowledge and understanding, cognitive and analytical skills, subject and transferrable skills, and the expected graduate attributes being clearly linked to the learning outcomes.

On the individual course level, course ILOs were properly developed and mapped to programme learning outcomes in three of the reviewed programmes. Whereas in the other two programmes that had properly developed programme ILOs, the course ILOs in one of them needed to be reviewed in order to differentiate between ILOs related to knowledge and understanding and those related to the development of subject specific skills. In the other programme, course ILOs did not reflect the course level. In the other seven programmes, course ILOs ranged between being not developed or developed for some of the courses. In most cases there was no clear distinction between learning outcomes related to knowledge and understanding, cognitive and analytical skills, and transferable skills. Moreover, the developed course ILOs in some of the programmes were highly general and courses in different levels had the same ILOs without clear reference to establishing depth of study across different levels of curriculum. The newness of applying learning outcomes and the usage of reference tools such as Bloom’s Taxonomy (Bloom, 1956) without clear contextualising of the outcome appears to be one of the reasons for such misalignment. Mapping of course ILOs to programme ILOs is expected to reveal the contribution of an individual programme, once completed successfully, to the attainment of the programme outcomes. With such mapping being absent or done hastily, the contribution of any course to the overall programme cannot be assessed or measured.

It is hoped that, like many other countries, the use of learning outcomes for programme evaluation will lead to curriculum reform for programme offerings in the higher education sector such that it would reflect student competencies in disciplinary knowledge, thinking and transferable skills (De Jager & Nassimbeni, 2005). While the follow-ups and re-reviews showed some limited progress in the development of course ILOs and level descriptors associated with them, one of the main concerns that still persists is the lack of proper mapping of course and programme ILOs. This could be due to the fact that most of these programmes and courses were developed without learning outcomes and that the development of the learning outcomes came at a later stage and in response to an external demand, i.e. the QAAET. The follow-ups and re-reviews showed limited development in this area, most significantly in the engagement of faculty members in developing the learning outcomes and course descriptors. This seems to have created a healthy debate amongst academics towards the benefits/shortcomings of the usage of learning outcomes in course design, delivery and assessment.

Students’ approaches to learning differ according to their past experiences and current context. Therefore it is expected that institutions will develop teaching and learning ‘policies and practices with the explicit view of student learning in mind’ (Barrie & Prosser, 2003: 155). In almost all reviewed programmes
teaching and learning policies were at an embryonic stage with a simple general statement of the teaching philosophy of the institution, if they existed at all. Only four of these programmes had clearly developed teaching and learning schemes drawn out to address the course ILOs. The follow-up and re-reviews, however, revealed a progression in the development of teaching and learning methods. In most of these programmes, there was evidence of course documents being developed to include the use of various teaching and learning methods. While some of these documents are still far from clearly linking the teaching and learning methods to the learning outcomes expected to be achieved by the learners, it is this movement and debate amongst faculty members that will provide the seed for future development of an outcome-based learning system (Boughey, 2012).

Assessment has proven to be one of the main problematic areas within these reviews. For an assessment to be effective ‘there needs to be an agreement of what is being assessed and how, and against what criteria’ (De Vries, 2009: 3). The findings of the reviewed programmes reveal the extent to which assessment is focused on the identified course and programme ILOs. Except for three of the reviewed programmes, the reports show that institutions generally do not possess the requisite knowledge to evaluate whether the students are fulfilling the learning outcomes of the course, let alone the overall learning outcome of the programme, and the other non-explicit outcomes. This was still persistent throughout most of the follow-ups and re-reviews conducted for the BBA programmes. There were no formal mechanisms within the management of these programmes to assess the extent to which programme or course learning outcomes have been achieved by students. Learning outcomes can be integrated relatively easily into review frameworks if institutions have fully implemented learning outcomes (Gallavara, 2008). However, the lack of appropriately framed learning outcomes, both at programme and course level, makes the task of assuring the quality, effectiveness, fairness and rigorousness of the assessment more difficult both for the external reviewer and for the institution itself.

With the absence of a national qualification framework, benchmarking becomes a challenging exercise. Once the Bahrain National Qualification Framework is implemented in 2014, there will be a common ground for the higher education institutions and programme providers on the one hand and the QAAET and licensing and accrediting bodies on the other. In the meantime, institutions are expected to compare their respective ILOs against internationally well-accepted standards for the field and level of study (Adamson, 2010). Thus, the QAAET evaluates the mechanism used by the programme management team to benchmark their programme learning outcomes against national and international norms for similar programmes or professional standards. Only four of the reviewed programmes showed varying levels of such activities. In almost all the other cases, a faculty member or a committee consisting of a number of faculty members were assigned the task of developing programme and course ILOs without a clear frame of reference or benchmarking requirements.

As stated earlier, in most programmes the ILOs were developed only recently in response to the QAAET programme review requirement rather than through natural development and collegial discussion amongst faculty members. This, in addition to the lack of appropriately framed learning outcomes at both programme and course level, has led to the lack of understanding, among faculty members, of the reasons behind the development of these ILOs thus hindering the role of ILOs in curriculum development and delivery. During follow-ups and re-reviews, however, there was evidence of such debates being raised amongst faculty members in a number of these programmes. This was seen in the documents submitted by the institutions and the way in which faculty members engaged with review panel members. It is hoped that this will create a foundation for a full national debate as the Kingdom sets the stage for implementing its national qualification framework.
CONCLUSION

This paper has shown that higher education institutions recently have engaged in developing and formulating learning outcomes for their programmes offerings. This, in most cases, was brought about by the programme review framework developed and used by the HERU of the QAAET to review the programmes offered by higher education institutions operating in the Kingdom of Bahrain. An analysis of the findings of the programme reviews, follow-ups and re-reviews conducted for the 12 bachelor programmes in the field of Business Administration reveals that the development of programme and course learning outcomes are at the early stages for most of these programmes. Only three programmes showed a mature stage of using learning outcomes in the delivery, assessment and benchmark of their offerings. There was evidence, however, throughout the reviews, of an increased awareness of the need to move to a student-centred approach and a willingness to work with quality standards. The published reports show that these reviews indicate that a paradigm shift is underway, moving the design, delivery and assessment of higher education programmes into an outcome-based approach. The effect of this shift is expected to become more evident during the second cycle, Programmes-within-College Reviews, launched in May 2012 and which will cover all programmes at bachelor and master levels offered by higher education institutions operating in Bahrain.

REFERENCES


A developmental approach to an acceleration programme: An analysis of students’ performance

Julie Douglas – Vega School of Brand Leadership, Durban, a division of The Independent Institute of Education, South Africa

ABSTRACT

Acceleration was a course first offered in 2005 through the Vega School of Brand Leadership, a division of The Independent Institute of Education, in South Africa to undergraduate marketing and advertising students who were identified as weak writers or at risk of failing their first year of study. This paper describes the pilot process in Durban of a change in delivery for the Acceleration Programme (AP) in Semester 1, 2010, and compares the results of AP students with those of others in their year. Analysis showed the AP group performed best which prompted further analysis and comparison of marks within the first-year cohort. Qualitative data were collected from students and lecturers to deepen understanding of the AP process and to assist future decisions about the programme.

INTRODUCTION

The Acceleration Programme (AP), originally designed in 2005, was a supplementary course for undergraduate marketing and advertising students at the Vega School of Brand Leadership, a division of The Independent Institute of Education (hereinafter referred to as ‘Vega’), in South Africa, who were at risk of failing their first year of study. This paper describes the pilot of a new AP, revised in 2010, according to coursework demands and students’ needs.

Originally students followed a structured, TEFL-oriented manual, designed for EL2 speakers. In the new programme they were coached to write assignments using a developmental, process approach. Average assignment and examination marks for those who regularly attended the AP exceeded the average year mark. Students recommended for the AP but who did not attend averaged somewhat lower, while borderline students not invited to attend the AP averaged the lowest of all groups.

The original structured course did not suit all needs and as non-compulsory meant some selected students attended sporadically and others never. It was debated in 2010 how to select students, how to determine their needs and what form the programme should take. As a result an incentive was offered to regular attenders. They could submit a draft of a selected coursework assignment to the AP lecturer for comment. This draft was reviewed and returned without a mark, but comments focused on constructive individual feedback to help students develop their writing and polish their essays. To give depth to the quantitative data, lecturers were interviewed and focus group discussions were held with Acceleration students. The ensuing data are discussed in the paper.

1 Date of submission 14 January 2012

Date of acceptance 5 June 2012
BACKGROUND

The AP course was originally designed to support Vega students at risk of failure who were mainly speakers of English as an additional language, disadvantaged by their schooling in township or rural schools, and described by Hosking, Mhlauli and Berhe (2008: 5) as being ‘at a linguistic disadvantage’. In the first two years that AP operated, most Durban students fitted the expected profile of black L2 English speakers. A course was designed, informed by teaching English as a foreign language (TEFL) principles and a manual was produced that was used on all Vega campuses. Material focused mainly on basic English grammar and structure, with an introduction to reading techniques and academic writing principles, such as planning and editing. It only touched on more sophisticated skills of critical judgement and argumentation. In effect, the AP course was generic and like many of its kind, carried little synergy with the students’ disciplinary coursework tasks (Jacobs, 2005: 475).

It did not ultimately suit the needs of students, nor did it provide an easy link to their required assignments, especially when the nature of the students in Durban changed considerably, and most black students selected to attend the course were from ex-model C schools, and spoke and wrote English as fluently as their EL1 peers. It became obvious that poor academic literacy was the problem, the needs were for academic writing skills rather than language and much in the course and manual was not appropriate for such students. Increasingly lecturers designed and followed their own strategy, using the material from the coursework manual as a resource when needed.

The original AP was informed by the underlying assumption from Apartheid and early post-Apartheid years that student problems were largely due to them being speakers of languages other than English (Boughey, 2002). Access or bridging courses tended to focus on what Boughey (2008:15) described as grammatical ‘surface features’ of English, not context specific to the discourse of academic English. Christie (1985) cited by Boughey (2008) drew the distinction between the understanding of language first as a means of communication, resulting in courses that focus on language, as was the case with the original Vega AP, rather than the integration of language and sense as part of making meaning, with language then viewed as a tool to: ‘make sense and order of our experiences of the world around us’ (Boughey, 2008: 15). Hence the rules and conventions of language, important for academic success, are integrated in the focus on making meaning and expressing ideas. Emig (1977) had proposed the process approach to writing that informed the revised AP, where a student should be coached in their writing as a means of deepening their learning, and where the academic writing process might be viewed as an heuristic to learning itself (Emig, 1977: 122). This process approach which supported students primarily in making meaning through their writing had become lost in many South Africa academic writing courses, when their purpose of induction into academic writing became secondary to focus on the correct structural standards of English (Boughey, 2008).

Baruthram & McKenna (2006: 496) point to the many different conventions of teaching Academic Literacy (AL), ranging from the rules and conventions that govern language to ways of understanding the context and strategies for understanding, discussing, organising and producing texts. The successful drafting process they described with students from Durban University of Technology went beyond delivering a course in AL and relied strongly on ‘lecturers skills to respond to students’ writing’ (ibid) and to help students find the meanings they want to make. They point out that this required an understanding that meaning is constructed through language and rules that constrain language go far beyond those of spelling and grammar. This places the lecturer in the position of writing coach and mentor, which in turn leads the language and structure of their writing to improve.

Since its inception, the Vega AP was fraught with debates on how to select students, how to determine their real needs, how to promote attendance without making the course compulsory, and what direction
and form the course should take. Since attendance was not compulsory, some selected students never attended AP and others attended only sporadically. This is not unusual (Yeld 1986, Palazzo 1987, Foggin 1991). The course was run prior to assignments and examinations at the end of the term, and some students, not having had feedback through marks, did not believe that they needed the AP. Other students, academically stronger and not identified as needing AP, wanted to attend the course.

Early in 2010 it was decided to offer an incentive to AP students who regularly attended. They could submit a draft of their Critical Studies assignment to the AP lecturer, who would comment on meaning primarily but also technical issues such as structure, coherence, presentation, referencing and sense-making. From this they could revise the assignment before handing it in to their Critical Studies lecturer. The support was more akin to coaching and mentoring individuals and groups of students rather than lecturing per se. It required a particularly informal and participatory approach that relied on an empathetic student-lecturer interaction and relationship. The process resulted in assignments that, according to the course lecturers, showed more thoughtful understanding of the subject matter and were also more technically polished. This was also reflected in the high marks discussed in this article that were subsequently achieved by AP students.

THE 2010 AP PROCESS

Students selected for AP were identified as the weakest in their cohort, most at risk of dropping out or failing the first year of study. However it was difficult to convince them that AP was a supportive resource rather than an extra demand on them particularly as the AP had not been obviously linked to their mainstream coursework and examination requirements. When they were working under pressure, during tests and around assignment deadlines, AP attendance fell away, usually by those students with the weakest focus and poorest time management skills. AP lecturers on all Vega campuses complained about the irrelevance of some prescribed content, and because AP was not compulsory, the poor attendance at lectures. All believed the AP should be more closely linked to skills required for specific coursework tasks rather than a general course to improve academic literacy and writing skills.

In Semester 1, 2010, it was decided that the AP should work more closely with the Critical Studies and Brand Strategy modules since both required extended, theory-based writing tasks. Students were coached through the stages of writing their assignments. Individual mentoring took place while assignments were being drafted. Students were encouraged to give drafts of assignments to the AP lecturer for review before revising, editing and finally submitting them to the course lecturer. Accordingly the AP lecturer consulted course lecturers to understand their requirements and to determine what help students needed most to present a good assignment in their subject.

From the understanding that making meaning was the primary objective and using their assignments as a starting point, students were briefly and incidentally introduced to the building blocks of planning and writing, principles of ‘Plain English’, and their objective to communicate clearly and coherently with a reader. As part of the development process students were directed and guided to read their course material more effectively, so that they were grounded in the content required for assignments, as described by Hendricks & Quinn (2000: 456):

To gain some insight in how to use the voices of others and to integrate their own voices into their writing.

This had the added effect of moving students away from the negative focus on referencing and avoiding plagiarism towards the understanding that their own knowledge construction relied on the work of expert predecessors and was part of a broader stream of understanding.
Since the course started several weeks into the semester, theory was put into practice immediately. The development process commenced with students interpreting as a group what the lecturer required, then brainstorming potential content and planning the form of the essays in pairs or small groups. They were required to focus intensely on the work at hand. Through critiquing and supporting each other and learning revising and editing skills, they were ultimately helped to review critically their own work. In effect students were coached using a developmental approach, where they were immersed in the process of assignment writing as described by Emig (1977) in order to develop the academic literacy required for this level of study.

**METHODOLOGY**

The research for this paper was not pre-planned. However, curiosity about the results of AP students compared to their peers drove the process, advanced by the discovery that most AP students had achieved a reasonable mark and some, a very good result for their first Critical Studies assignment. Marks were collected from other groups of first-year students and averages were calculated in an attempt to quantify the situation. Then students and lecturers were interviewed to try to understand the nature of the success and reasons for it. Steps in the research process included:

- Students’ marks were collected for the Critical Theory assignment in Semester 1, 2010, and the average mark was calculated for the group.
- An average was taken of the entire set of marks for the full 2010 first-year cohort.
- Marks were averaged for those students recommended to follow AP who did not attend the course.
- Marks were averaged for borderline students who had not been asked to attend AP.
- Marks for each group were compared with those of the year cohort as a whole.
- Students and lecturers were interviewed to triangulate quantitative data and explain the differences between groups and why some AP students were able to produce such good assignments.

The immediacy of information, simplicity of the research task and accessibility of data allowed both quantitative and qualitative analysis. The small numbers of students suggested basic statistical analysis of their marks. Each set was scrutinised for exceptional outlying marks, as well as for other indicators of trends such as clustering, or the mode for the range of marks. The findings are presented below.

**FINDINGS**

Twelve of the 20 students initially selected attended AP regularly and so were given the opportunity to hand in a draft of their Critical Studies assignment to the AP lecturer. Assignments were returned to students without a mark. As agreed with course lecturers no judgement was made about the content, but comments were made on structure, presentation, sense-making and referencing. Since the same lecturer marked all the assignments, an underlying assumption was of adequate internal validity and reliability.

The average final assignment mark for the 12 regular AP attendees (Table 1) was compared with the average mark from the eight selected students who did not attend the course (Table 2). AP attendees scored an average of 54.2%, which was higher by 2.7% than the non-attendees’ average of 51.5%.

<table>
<thead>
<tr>
<th>Student</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>N=12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark</td>
<td>76</td>
<td>65</td>
<td>58</td>
<td>56</td>
<td>55</td>
<td>54</td>
<td>52</td>
<td>51</td>
<td>50</td>
<td>47</td>
<td>44</td>
<td>42</td>
<td>Av=54.2%</td>
</tr>
</tbody>
</table>
From the 38 students identified as needing AP, 20 deemed most in need were selected for the course. Marks from those selected for AP were compared with the other 18, identified but not selected (Table 3). Their average was 50.72% which was lower than AP attendees by 3.48%, but also lower than AP selected non-attendees by 0.78%.

Finally, the average mark from the entire cohort of 89 students gave a further benchmark against which AP attendees could be measured. AP attendees scored 54.2%, which was 0.47% higher than the year average of 53.73% (Table 4).

An independent researcher held a focus group interview with six students who attended AP regularly. All believed AP helped them improve academically and gave them basic skills for using language that they had either forgotten or were not taught at school. According to students:

I’d been out of school for a while so rusty and had forgotten how to write essays … I needed the basics we learnt about … I liked the small group… very supportive and felt free to talk about difficulties … it helped because I passed everything
It helped with academic writing and what it means … for example style and referencing

Acceleration taught me to reduce the blabber and get to the point … so we learned how to say things in a shorter way … to trim down our writing

I learned to break down questions … to look at questions in more detail to understand what is being asked … and paragraphing … I used to mix everything up but learned how to organise information better

All students judged the course as relevant to their needs because it dealt directly with assignments. All believed the small supportive group to be effective and responded well to the practical approach. They appreciated being able to surface problems which could be discussed and addressed together, such as interpreting their lecturers’ requirements and practical guidance for responding to an assignment brief.

The Brand Strategy and Critical Studies lecturers were also interviewed for their perspective on the effectiveness of AP. The Brand Strategy lecturer had been least involved with AP. However, he felt it would be useful to work together with the AP lecturer during the rest of the year and for AP students to be supported when preparing their assignments for his module.

The Critical Studies lecturer was most knowledgeable because AP students submitted a draft of her assignment to the AP lecturer for review. She perceived a distinct qualitative difference between those who attended AP and those who did not:

Students who attended Acceleration had a better ability to structure their essays, their grammar and spelling were better and they seemed to have a better grasp of the brief … that (others) found difficult to get their heads around.

When asked how else AP assisted them, she described their ability to approach and break down questions into something that was more understandable to them. She also described the knock-on effect she had noted:

They also developed a skill to approach the questions in a logical, calm manner and to structure the essay in a similar way … this I could see further reflected in their exams.

**DISCUSSION**

This research was not conducted in previous years, and therefore the new approach to AP cannot be compared to earlier ones. However, this does not detract from the positive outcome of the pilot course. The results are encouraging. The main change was that instead of following a generic, manual driven course, the lecturer supported the process of assignment writing by coaching students to perform a specific task. The approach was needs driven, determined by a specific assignment brief, and students who attended the course regularly could submit a draft of their assignment to the AP lecturer for review and comment before final submission to their Critical Studies lecturer.

The strategy used was coaching and mentoring rather than lecturing per se, and as Baruthram & McKenna (2006) point out, this relies to a large extent on the lecturer for its success. A similar coaching process is currently used in many tertiary institutions, since most have moved away from the common generic approach designed to assist students disadvantaged by language and education. Baruthram & McKenna (2006: 496-497) call the approach:

As writer-respondent intervention … which moves from a remedial focus… to a drafting-responding focus (that) allows for feedback to be given during the process of writing, that is, in the draft stages.
(and) students are motivated to use feedback because they begin to see the process as a way of improving their mark.

They describe how feedback given at the end of the final assignment is often ignored or misunderstood.

The attitude of students to AP is important in that some respond immediately, whereas others do not engage with the process and struggle to see its significance, seeming arrogant or taking it lightly. This is indicative of their lack of understanding of the more professional way of operating required at tertiary level, and for such students the non-compulsory nature of AP allowed them to easily opt out.

A main challenge was to convince students initially to attend the course and then to keep them engaged and attending, despite the pressure of other deadlines and tests. Although the incentive offered was a new approach with a very effective outcome for most of the 12 students who followed the process, attendance was still sporadic with some often arriving late to the lecture. Of the initial 20, eight students did not attend sufficiently to follow the drafting process. This was reflected in their comparatively lower marks for the Critical Studies assignment. While the differences in percentages for these groups were small, they are a significant indicator of the improvement achieved by regular attendees, especially since their average mark was higher for the year as a whole, notwithstanding that students selected for AP initially showed the weakest writing skills in the cohort, and were deemed to be at most risk of failure within the first-year group. This makes their achievement all the more impressive.

A further factor to be considered is the transfer of skills learned through AP to other academic tasks such as time management, reading techniques, multiple drafting, editing for content, style and correctness of language, and examination performance, all of which were mentioned by lecturers and students as outcomes from attending AP (Hosking et al, 2008: 7).

The success of the new AP approach can be attributed to three factors: collaborating with other lecturers, coaching students as they wrote their assignments, and commenting on their work with a formative intent. These are common sense approaches for any course intended to improve academic literacy, and indeed where success is the prime objective. However, few lecturers are able to use this approach because large numbers in their groups mean they would spend many hours reading and providing feedback to students. The work is extremely labour intensive, particularly when, as advocated by Baruthram & McKenna (2006: 505), students are allowed to submit multiple drafts of their work. Nevertheless, as Van der Slik & Weideman (2008: 370) point out there is an ultimate cost-effectiveness of such an approach, due to:

- The saving that it would bring about for the Higher Education system, as well as for individual institutions and for parents in cases where interventions increase throughput rates.

Certainly borderline students were rescued from failure or from dropping out of the course. While several first-year Vega students did drop out during or after their first semester, none were AP attendees.

While comprehensive developmental marking is perhaps too labour intensive to be offered by a lecturer to 100 or more students, it was possible in the smaller AP group. The process provided a powerful learning experience for students who came to understand the necessity of drafting and editing to make their meaning clear and learned the skills and effort required as undergraduate students to achieve high marks.
CONCLUSION

For Vega, the developmental approach to AP was a pilot project and therefore embryonic, and though effective in many ways, it still needs further research and development before it can be formalised as an institutional strategy. In reality it is one approach among many in South Africa, and indeed internationally, that is being employed to help bridge the gap between school and university, and to provide a safety net for students who are at risk of failure.

The step away from the previous generic, manual-driven course is in line with developments in other universities, and therefore strategies used elsewhere should be examined further to help determine the optimum form for AP. Certainly the process used in the pilot AP approach was effective and productive. An approach that suggests itself from this pilot could be a shorter, more intensive core course for basic writing and academic literacy skills, strongly linked to assignment preparation. This could be supported by appointment slots for more intensive, individual coaching rather than the type of writing support, drop-in centres established in some universities.

A strategy must be developed to ensure attendance by those students who are identified as vulnerable to failure. So far the approach has been to avoid stigma and any semblance of punishment for AP students, which was one reason for avoiding making attendance compulsory. However, by their nature, a portion of AP students resist engagement with their studies generally. For them the AP course, by demonstrating and modelling effective ways to operate as an undergraduate student, and building in opportunities for success, could engender a more mature attitude to their coursework and assignments. It is perhaps overly idealistic to expect such students to apply themselves to AP through their own volition, and, therefore, in addition to supplying an incentive for attendance, a repercussion for non-attendance should perhaps be adopted.

This small piece of research and the reflections it generated indicate that consideration of a more strategic approach to AP would not only better prepare students at risk of not meeting the requirements of tertiary-level study, but also benefit the institution by reducing the attrition and failure rate for first-year students.

REFERENCES


Foggin, C. (1991) ‘A description and assessment of the recent ASP initiatives at the University of Durban Westville with particular reference to the programme in the Faculty of Arts’ Proceedings of the 5th Annual Conference of the South African Association for Academic Development, University of the Witswatersrand, Johannesburg, 5-7 December.


List of reviewers

We thank the following people who contributed to the review process of this 2012 edition of the journal:

- Professor C. Boughey (Rhodes University, South Africa)
- Professor E.C. du Plessis (University of South Africa, South Africa)
- Professor J. Garraway (Cape Peninsula University of Technology, South Africa)
- Professor G. Gordon (University of Strathclyde, Scotland)
- Dr E. Harrison (Durban University of Technology, South Africa)
- Professor C. Jacobs (University of Stellenbosch, South Africa)
- Dr G. Kotzé (Independent Institute of Education, South Africa)
- Professor S. McKenna (Rhodes University, South Africa)
- Professor A. Mji (Tshwane University of Technology, South Africa)
- Dr S.M. Moeng (North-West University, South Africa)
- Professor J. Muller (University of Cape Town, South Africa)
- Dr A. Naidoo (Tshwane University of Technology, South Africa)
- Professor R. Newton (Robert Gordon University, Scotland)
- Professor S. Schoeman (University of South Africa, South Africa)
- Dr D. Steyn (Tshwane University of Technology, South Africa)
- Dr C. Thomson (Rhodes University, South Africa)
- Professor A.C.M. Webb (Rhodes University, South Africa)
Notes for contributors

Manuscripts should be sent to the Editor. They should be typed in double space, in A4 format, in MS Word and should not exceed 5000 words in length, excluding tables, figures and references. Manuscripts may be submitted by e-mail or on a CD. Tables and figures must be typed on separate sheets and not included as part of the text. Their positions should be indicated in the manuscript. They should be numbered by Arabic numerals. Each manuscript should be accompanied by a title page and an Abstract of 100-150 words on a separate sheet. Manuscripts not conforming to these requirements will not be considered for publication.

The full postal and e-mail address of the author should be included on the title page. Proofs will be sent to authors if there is sufficient time to do so. They should be corrected and returned within 48 hours of receipt. The editor reserves the right to publish without proofs having been signed-off by the author.
The Independent Institute of Education (The IIE) is South Africa’s largest, most accredited, registered private provider of higher education. Through its six brands and 22 campuses it offers more than 60 of the leading accredited higher education qualifications in fields as diverse as brand building, accounting, public relations, sport development and software development. In fact, all key areas of study in Business and Management, Applied Humanities (including many design fields), Information Technology and Leisure are offered by The IIE’s brands. These qualifications vary from Higher Certificate to Honours degree level and also include a range of Short Learning Programmes.

The IIE also has joint venture agreements with, but not limited to, the American Public University (APUS), the African School for Business Studies Pty (Ltd) (ASBS), the Open University (OU), the University of South Africa (UNISA) and the University of Pretoria (UP). This, coupled with various partnership and endorsement agreements with leading organisations and professional bodies, adds to the status of The IIE as the largest, most accredited registered private provider of higher education in South Africa.

Highly respected and recognised higher education brands make up The IIE - these are Vega, Varsity College (VC), Rosebank College (RC), Design School Southern Africa (DSSA), Forbes Lever Baker (FLB) and College Campus (CC). These brands have campuses across the country; qualifications which are offered on the campuses are directly linked to their mission and target student market. This means that students on each campus will be able to study with other students with similar interests and ambitions. As of 2013, The IIE will also be offering its first distance qualification, thus providing further accessibility to students.

The IIE has a strong central national academic and quality assurance team based in Sandton that provides academic leadership for the sites and qualifications across the country. The team is also responsible for the registration, curriculum, quality of delivery, and assessment and certification (graduation) of all the qualifications, meaning that students on a campus in one city receive an educational experience that is guaranteed to match that which is offered in any other city; this experience includes the same access to key academic resources and facilities.

Each campus adds to this academic base with its own specific group of well-qualified lecturers who are subject-matter and discipline experts, and collectively have a wealth of knowledge and industry-based experience in the areas in which they teach and which accompanies the individualised student support that the campuses give. An IIE student is, therefore, rounded both academically and socially, thus maximising student success.

The IIE offers its students an opportunity to register on a campus and with a brand that resonates with their personal ambitions and needs while also offering the security, quality assurance and recognition that comes from being part of the country’s premier, respected private higher education institution.

The IIE is a founder member of the Private Higher Education Interest Group (PHEIG), which is an association of private higher education institutions which are dedicated to developing and protecting the reputation and quality of private higher education in South Africa. The Independent Journal of Teaching and Learning is one of the many ways in which The IIE is ensuring academic leadership within the higher education landscape of South Africa and, in particular, in private higher education.

For more information about The IIE, its academic opportunities, qualifications offered and campuses, or the PHEIG, please go to www.iie.ac.za or email contact@iie.ac.za.