The Journal of Independent Teaching and Learning

The Journal of Independent 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.

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Volume 2   *2007*

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Editorial

Dolina Dowling

Government, industry and business bemoan the shortage of high level skills in South Africa. Each complains about its own particular problems; for example, the lack of capacity of the State to deliver adequate social and health care, insufficient engineers in the construction industry or the scarcity of highly qualified accountants and managers in business. These major players would agree with the UNESCO World Declaration on higher education which states that 'Without adequate higher educational and research institutions providing a critical mass of skilled and educated people, no country can ensure genuine and endogenous sustainable development and, in particular, developing countries and least developed countries cannot reduce the gap separating them from the industrially developed ones.'

For South Africa closing the gap between prosperous countries and middle income countries like itself often must seem no more than an empty hope. Yet there are reasons not to despair. Firstly, South Africa has a number of well-managed institutions of higher learning both in the public and in the private sector and within which the three core functions of teaching and learning, research and community engagement are discharged with credibility.

Secondly, a considerable percentage of South Africa's GDP goes into higher education, which naturally raises issues of accountability. This, in turn, rightly puts pressures on institutions. Politicians and taxpayers want to know how well these funds are being spent. Are the highly skilled graduates and the responsible citizens that the country needs being produced?

Thirdly, not so long ago it seemed that public attention was on the research performance of higher education institutions, almost to the detriment of teaching and learning. This is no longer the case. The new policy environment with its roots in the 1997 White Paper 3, the Higher Education Act of 1997 and its amendments, the South African Qualification Authority (SAQA) as well as the establishment of the Council for Higher Education and its Higher Education Quality Committee (HEQC) have turned the spotlight onto the other two core functions of higher education institutions. Furthermore, the HEQC's responsibility for the accreditation of new programmes, its mandate to conduct audits on the quality assurance arrangements of institutions, and its annual programme reviews result in attention being given to the seemingly less glamorous but nevertheless important aspects of teaching and learning, such as assessment rubrics, pedagogy, access, and success and throughput rates. In this second volume of the *Journal of Independent Teaching and Learning*, there are a number of papers that focus on these issues.

Institutions have been taking note of the exponential growth in information and communication technologies and the opportunities that these present for enhancing teaching and learning. In the first article, the author

provides a case study of how a small contact teaching university is using new information and communication technologies to support the quality of the learning experience of its students. She provides a number of interesting insights into the challenges encountered. These may be of help to other institutions considering embarking on this route. The next author explores the usefulness of project-based learning in the curriculum. While the benefits for students (and for would-be employers) are outlined, she discusses the challenges it poses for academics, who are generally lacking in expertise in curriculum design. She suggests that good academic support staff ameliorate problems that may arise. In the third article, the author clearly demonstrates the valuable role that assessment rubrics play in making academic norms explicit.

It was noted earlier that South Africa needs to produce its own engineers, scientists and doctors. This is something that we read about in the newspapers almost on a daily basis. In considering access to higher education in mathematics and science, one author investigates the role that parental authority and involvement play in the success rates in the science subjects in the matriculation examinations. His findings point to further areas of fruitful study.

In the previous issue of the Journal the matter of academic integrity was discussed. Results from a comparative study on incidences of academic misconduct between American and South African students were reported upon. In the second part of this study, the author investigates the patterns of academic (dis)honesty in terms of gender, and between East African and South African students. His findings in both articles point to the need for higher education institutions to address this issue, perhaps through honour codes.

Lastly, the advocacy article in *Practitioners' Corner* highlights the need to change the traditional enrolment profile of students entering into design courses. The author considers the ways in which South African design would be richer if there was diversity in the profession. She also discusses the importance of the transformation of the design curriculum to include multiculturalism. Given South Africa's fragmented society, good arguments could be made for this to become a core subject in all programmes.

May 2007

Plotting a path along the eLearning – eDelivery continuum: reflecting on the uptake of new technologies

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ABSTRACT

The global forces of change – political, social, economic and educational - require that lecturers and students be Information and Communication Technology (ICT) literate and able to embrace the uptake of new technologies. eLearning is now prevalent in higher education and promotes the use of ICT literacies. Introducing eLearning at a university with a tradition of face-to-face teaching and learning has unique challenges. To incorporate new technologies into existing curricula requires a university to understand the highly varied skills of its lecturers and students in using ICTs. Encouraging lecturers to shift from using traditional pedagogy along a continuum of eDelivery to eLearning takes time and considerable commitment by an institution in terms of financial and human resources. This paper outlines and reflects upon the steps taken by a university in integrating a Learning Management System to enhance the learning and teaching experience at the institution.

BACKGROUND TO THE IMPLEMENTATION OF A LEARNING MANAGEMENT SYSTEM

Bond University (Bond) is a contact teaching, residential, private not-for-profit university situated on the Gold Coast in Queensland, Australia. The majority of Bond students enrol at the university because of the low teacher/student ratio, the high level of face-to-face contact with lecturers and classmates, and the personalized attention available to each student.

Bond currently only offers one programme in off-campus mode, the *MyBondMBA*, which is delivered in partnership with an offshore company in Japan. This programme uses 'Blackboard', and lecturers have reported on its ease of use for distance and offshore learners.

In 2006, Bond University decided to install the Blackboard Learning Management System (LMS). This was done for a variety of reasons, including streamlining delivery of subject materials, phasing out subject websites of varied style and functionality, providing the opportunity for enhanced teaching and learning experiences, and securing content and interactivity that had previously been viewable by anyone with internet access. The challenge for Bond was how to seize the benefits of an LMS largely devised for flexible or off-campus delivery of subjects whilst retaining and enhancing the learning experience of its students.

After a semester-long pilot phase, the system was rolled-out university-wide in the final trimester of 2006. The system was branded 'iLearn@Bond' or simply 'iLearn'. Lecturers and tutors at Bond were provided with appropriate training and on-going support in using iLearn. In order to evaluate the implementation phase,

three mechanisms were used; i.e., a student survey was administered, staff evaluations of training sessions were carried out, and lecturing staff were interviewed on how they used their iLearn subject sites.

This paper outlines the preliminary findings from these surveys. It then identifies some of the strengths of an LMS for a predominantly contact teaching university. In the last section it suggests ways in which staff development could be tailored to maximize the use of eLearning as a supplement to the face-to-face curriculum as well as to encourage lecturers towards the eLearning end of the eDelivery – eLearning continuum.
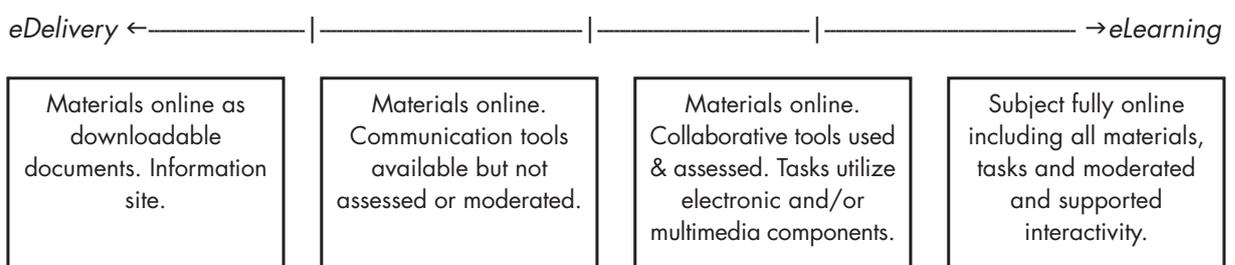
THE eDELIVERY – eLEARNING CONTINUUM

One of the strengths of an LMS is that it provides tools for developing, organizing and managing access to online content. This strength, however, tends to promote narrow pedagogies where instruction is based around the delivery of content in a transmission model, rather than a learner-centred, social-constructivist methodology (Gibbs and Gosper, 2006: 47). With this caution in mind, in a two hour 'Blackboard Basics' training session, facilitators equipped lecturers with the fundamental skills for setting up their sites, structuring the content into folders, posting announcements, creating discussion forums, as well as provided information on the basics of the control panel. Workshop participants were informed by Library staff about copyright implications for content uploaded. An Educational Designer provided an overview of site design and facilitated discussion on the use of iLearn as a teaching tool to enhance the learning experience.

Sims (2006: 3) suggests one of the key attributes of a computer-mediated environment is that it allows for explicit interaction at various levels: between the learner and subject content; the learner and other subject participants; learner and teacher; and the learner and the computer interface. In the light of this varied-level interaction it is the role of the workshop facilitators not only to contextualize the training such that the basic skills are learned, but also to ensure that there is adequate discussion about how learners might interact with the online tools, the content, and other participants in the online environment.

The concept of the 'eDelivery – eLearning continuum' was also presented in the workshops and much discussion ensued regarding what constitutes eLearning and eDelivery. The facilitators found that the participants in the basics training workshops all identified with the eDelivery end of the continuum as this was where their skills currently lay. Many expressed interest in furthering their knowledge on how to move into eLearning, and most recognized that as an on-campus institution, fully flexible delivery was not necessary unless it became part of the university's strategic plan to offer distance or off-campus programmes across all faculties.

An expanded version of the continuum can be represented in the following way:

eDelivery ←——————|—————————|——————|————————— →eLearning

Materials online as downloadable documents. Information site.	Materials online. Communication tools available but not assessed or moderated.	Materials online. Collaborative tools used & assessed. Tasks utilize electronic and/or multimedia components.	Subject fully online including all materials, tasks and moderated and supported interactivity.

There are naturally many intermediary areas between the four identified points above. Depending on the definition of 'eLearning' that individuals and/or institutions choose to adopt, plotting practice along this continuum will vary between lecturers and institutions. To move along the continuum, increased levels of

interactivity are provided in the online environment: interactivity between students; between students and lecturers; between students and static content; and students and learning objects. The more interaction that occurs online, the more the online tasks are integrated into the curriculum and the further towards the eLearning end of the continuum the curriculum moves.

WHERE IS BOND UNIVERSITY ON THE CONTINUUM?

An initial survey of 12 lecturers at the end of the semester of the first full roll-out of Blackboard aimed to identify where the lecturers saw the integration of technology into their curriculum in terms of the continuum, and how they thought their teaching may have been influenced by the implementation of iLearn. The survey participants were selected from a group of lecturers identified as actively using a subject site in semester three, and who used the sites in a variety of different ways. Participants were invited to engage in a one-on-one 20 minute interview with the facilitator to address a set of questions, and to provide any additional comments about eLearning and its integration into their curriculum (see Appendix One).

The first survey question asked the participants to identify themselves as 'a reluctant user of technology', 'an interested new user of technology', or 'an eInnovator' (comfortable with using technology and trialling new and interesting ways of integration). From the answers provided it was found that the spread was clustered towards the middle response of 'interested new user' with only one respondent identifying as a reluctant user. The reluctant user considered online learning to be superfluous to their subject - to do with speaking and acting - and thought that the technology would only be useful in providing basic announcements and the course outline to the students.

One lecturer who identified herself as an eInnovator made extensive use of the quiz tools, feedback mechanisms and group functions, and even went as far as to customize the announcements page so that both announcements and the discussion board postings were visible on one page. Another eInnovator used the group pages functionality in order to post student videos of teaching practice, which were available for peer review and which formed a small part of their overall assessment. In this way, the lecturer made full use of the multimedia capabilities of the secure online environment in order to foster a collaborative, non-threatening learning environment for the students. Interestingly, a third eInnovator defined themselves as such based on the fact they were willing to try new things, even if these were standard uses of the technology as opposed to higher-end implementation of more complex media. The lecturer stated: 'I am an eInnovator because I take the opportunity to use the tools in ways that I haven't yet used them' (Respondent C).

Another question in the survey asked respondents to define 'eLearning'. Only one lecturer saw eLearning as being solely an online activity for distance or non-contact learning. The rest of the participants' definitions ranged from broadly using technology to support teaching and learning, to quite succinct definitions of eLearning. Some examples are:
- 'eLearning is the eDelivery of education using information technologies to support the face-to-face teaching, by allowing learning to occur outside the classroom' (Respondent A).
- 'I am interested in Learning rather than eLearning – eLearning is a means to an end, not an end in its own right. It is a facilitative mechanism... it provides structured learning' (Respondent G).
- 'eLearning is individualized learning occurring via the internet and/or supported online learning via a University or School' (Respondent B).

Keeping in mind their own definitions of eLearning, survey participants were then asked to plot where they saw themselves on the continuum. Two of the eInnovators plotted themselves in the middle. A third identified himself as being at the beginning having only delivered content online this semester, but aimed to become

familiar with the technology in order to incorporate multimedia into his iLearn site the following semester. The rest of the respondents plotted themselves in the first quarter of the continuum at the eDelivery end. Of these, only one of the lecturers actually used the iLearn site for more than just delivery of content online. This lecturer, Respondent F, spent many hours designing online quizzes and test pools for end of semester examinations, set-up discussion boards for group work, and regularly used the announcements for enhancing the learning experience by posting links to sites and information that would be useful or interesting. With the exception of one respondent, the others were accurate in identifying where they sat on the continuum. Most used their sites for delivery of content materials, although some had varying degrees of student interactivity built into online tasks. In the process of plotting where they are now in the continuum, most lecturers also identified where they would like to be next year, all of whom indicated a point somewhere towards the centre of the continuum.

The features identified as most useful and most used by the respondents were overwhelmingly the communication tools such as discussion boards, announcements and email. The lecturers also indicated that the students identified these as being the most useful parts of the iLearn sites. However, from the student survey conducted at the end of 2006, it was clear that the students believed the lecturers were not using the communication sites to their fullest potential. Comments that occurred frequently in the student responses were that 'lecturers don't know how to use the discussion boards' and 'it would have been useful to use the discussion boards to ask questions about our assessment'.

Lecturer B used his site to house student projects delivered in digital format. The students were asked to film themselves in a practicum teaching situation, and then provide their excerpts to the lecturer, who placed these online for peer review and group critique of teaching practice. This formed only a small part of the online experience for the students, and will be expanded in further iterations of the subject. However, this lecturer identified the iLearn site as being very useful for delivering resources suited to the online medium such as PowerPoint slides, links to teaching resources that are electronic in nature such as revision games (Flash), and allowing for students to deliver projects that are digital in format and lend themselves to viewing online such as Photostories.

All the participants interviewed made some reference to the fact that the ability to deliver their content online - from subject outline to lecture notes – was extremely convenient. They recognized that this placed them in the eDelivery end of the continuum, but felt that there were time-saving and, in some cases cost-saving, benefits of online delivery of administrative materials and/or the core subject materials.

REFLECTING ON THE INCORPORATION OF TECHNOLOGY

The iLearn system has been discussed in training sessions at Bond as being just another tool in a teacher's toolkit. Like lectures, fieldwork, laboratory work, practicums and tutorials, a Blackboard site is another method to enhance the students' learning experience. Lecturers are encouraged to think of iLearn as a way to get students interacting with each other and with concepts and content. At this stage, with most lecturers still at the eDelivery end of the continuum, many have not thought about how iLearn can support their curriculum more broadly. Interviewees were asked to indicate how they thought the incorporation of an iLearn site into their curriculum changed their teaching (if at all) in relation to time, student satisfaction, task design and interactivity (between students, and students and lecturers).

TIME COMMITMENT

Gibbs and Gosper (2006) discuss the time demands of learning and teaching online, and draw on the literature of Palloff and Pratt (in Dabbagh, 2002) who estimate that online instruction requires approximately three times more preparation time than face-to-face instruction. Interestingly, the lecturers who were further

along the eDelivery – eLearning continuum reported that the development, maintenance and moderation of their iLearn sites were not time consuming. Those lecturers using the site for delivery of content found they had a much higher time commitment in ensuring all their folders, files, content and links were online and available on time. Lecturer C reported that there was a significant time commitment required for the initial set up of features, such as the assignments and gradebook, but in the long-term over the course of the semester, she found that her administrative load was reduced. Another interviewee also agreed that setting up assessment (quizzes) online was extremely time consuming, however, once the test pools were created, they could be reused (and revised) semester after semester thus decreasing the development time required previously in creating new tests. This is in accordance with Salmon's view (2000) that online activities are designed for efficiency, are reusable and improve the more they are employed.

STUDENT SATISFACTION

The lecturers interviewed reported a variety of student reactions to their use of iLearn. As this was a new system at Bond, some students approached their iLearn tasks with apprehension. In general, students of the lecturers interviewed were happy with the technology and the ways it was used in their classes, despite some initial teething problems with some features, such as the digital dropbox. Lecturer H indicated that about ten percent of his students found that face-to-face interaction was better than the online counterpart and that the discussion area was 'too hard'. Lecturer A, however, reported that the students actively requested that the final examination be held online, and that they benefited from the online tests. This suggests two study areas for further research: the first, to correlate student satisfaction with the eLearning environment and tasks across a variety of subjects; the second, to measure the relationship between the amount of teacher support and moderation, and student engagement with the online learning environment.

TASK DESIGN

Experienced instructional and educational designers frequently see poor examples of both synchronous and asynchronous tools used in LMSs. As Dobbs and Gosper (2006: 50) note, these tools are often provided as standalone elements in a subject with little or no linkages to the other learning activities provided on the site. This was borne out in this study where half of the lecturers interviewed did not redesign or redevelop tasks for their online learning environment. Those who did incorporate new tasks into their curriculum included experiences such as new online assessments that were previously held in-class, critical practice exercises, peer reviews, case studies and tutorial exercises. All lecturers reported that these were as successful as their face-to-face counterparts, that time needed for creating these as online tasks was equivalent to their non-electronic versions, and that student satisfaction with the online versions remained high.

As a result of these findings, further training is planned for lecturers specifically focusing on redeveloping tasks for online engagement. Included in this training will be instruction on how to incorporate personalized student feedback, including self-assessment and self-evaluation. Sims in his proposed seven metrics of learner engagement (2006), points out that feedback should be positive and correctional where appropriate. LMS technology allows for very detailed feedback to be provided to learners, including links to reference materials, websites, and images. However for this to be effective, it is important to include training in writing appropriate, contextualized and informative feedback in workshops on revising curriculum to incorporate eLearning.

INTERACTIVITY

Only one lecturer interviewed reported that there were high levels of interactivity between the students on set topics on the discussion boards. Most lecturers claimed that the discussions occurring on their sites were

administrative in nature. This is a strong indicator that there is a need for lecturers to be given training and be provided with examples in eModeration techniques, such as the 5-stage model proposed by Salmon (2003). This would arm lecturers with the ability to scaffold conversations and promote the social construction of knowledge. Techniques in eModerating discussion boards could easily be transferred to moderating other communication media, such as blogs and wikis.

Some simple ways to promote productive discussion and interactivity online have been identified by Martyn (2005: 1), which includes a list of best practice elements:

- *requiring* student participation
- *grading* student efforts
- *involving* learning teams
- *structuring* discussions
- *requiring* a deliverable such as an assignment
- *posing* questions and scenarios such that students must incorporate their own experiences, and
- *relating* the discussions to the learning objectives of the subject.

By promoting these best practice elements in training workshops, staff development sessions or individual educational consultancies, it should be possible to increase the quality of online interactions.

At this stage of the introduction of an LMS at Bond, it seems that many lecturers are not yet ready to reflect on how iLearn has changed, or might in future change, their teaching practices. Lecturers interviewed were still coming to terms with the characteristics of the eLearning environment and the basic ICT skills required of them to function in the LMS environment. One lecturer remarked that his teaching had not changed, but the technology 'makes it easier to bring in nifty stuff. If an article is boring, I can find something interesting on the web and incorporate it in the site and in lectures. The iLearn technology is a convenient way for me to provide up-to-date and interesting material to my class' (Respondent H).

STAFF DEVELOPMENT AND FUTURE INITIATIVES

Given that the LMS environment and eLearning are still very new to a high percentage of staff at Bond, it is important to take steps to ensure that the university does not fall into the trap of using a powerful system poorly, that is, using the system as a place merely to store and retrieve electronic versions of subject content, without empowering lecturers and students to capitalize on the opportunities for interaction and the social construction of knowledge. Dobbs and Gosper (2006: 52) are correct in saying that teachers need to experience what the technology can do for their students as well as explore ways of improving learning through accessing and trialling the latest software tools. Deciding how far along the continuum the university moves will depend on what is determined as best practice for the Bond environment. The ideal blend of face-to-face, traditional teaching methodologies and eLearning technologies has yet to be defined, but many lecturers have expressed interest in exploring the integration of new media into their curricula beyond the features available in the Blackboard system.

To this end, Bond has set up a Web-Based Learning Sub-Committee, which convenes to discuss trials of new software and Blackboard Building Blocks as well as to make decisions about how to introduce new technologies to the institution. Currently, a trial of Campuspack LX is underway, which is a building block allowing tools such as blogs, wikis, podcasting, and searching to be integrated directly into Blackboard sites. The question remains though that if such a tool is purchased, how does the university ensure it does not simply support a transmission model of teaching and learning?

The suggestion in this paper is that the key lies in staff development and academic staff support. Firstly, staff development needs to be provided to educators, which models best practice of how the technology can assist students in achieving a subject's stated learning objectives. This will be done at Bond by providing lunchtime 'iLearn Show and Tell' sessions where lecturing staff demonstrate how they have incorporated eLearning into their curriculum and how they have measured (or intend to measure) the success of their eInnovations. Supporting this session will be the offering of hands-on eLearning workshops. These will include an online module for eModerating based on Salmon's 5-Stage Model (2003), and a face-to-face practical workshop where participants will analyze existing curriculum and identify where it could best be supported by the eLearning environment. In parallel with these workshops, technical hands-on training on using an iLearn site will be provided.

Bond has also established a group of faculty support staff whose roles involve, amongst other tasks, supporting faculty in using and administering their iLearn sites. The Teaching and Learning Services unit provides ongoing training and support to the group in the areas of technical training and troubleshooting system issues and errors. During the training the notion that uploaded content should be contextualized and supported by activities and interactions to enhance the students' online learning experience is emphasized. It is anticipated that by reiterating the importance of this concept that the university will develop a culture that views the system as an eLearning tool rather than a content delivery mechanism. Evaluation of revised curricula will be encouraged in order to promote an environment of reflective practice as new technologies are introduced and implemented into programmes and subjects.

STUDENTS AS DRIVERS OF TECHNOLOGY IMPLEMENTATION

As already noted, a student survey was run at the end of the first semester of iLearn's implementation. The survey clearly showed that students want technology to be used in their classes, particularly the use of the communication tools such as online discussion boards. Many students stated that the use of the iLearn system should be mandatory and that all lecturers should be trained on how to use all the features properly. This indicates that the student population may be more technologically knowledgeable than many of their lecturers who are still coming to grips with the basic functionalities of the system. However, as Sheridan (2006: 65) notes, often both students and lecturer have to undergo a steep technological learning curve. Not all students have had access to information technology. Some students may be at the early stages of understanding how to use the Internet, and the requirements of operating the online subject may frustrate or overwhelm them.

CONCLUDING REMARKS

There are many lecturers at Bond who are adventurous in their use of technologies and who would fall under the eInnovator category. Most lecturers, however, are taking small steps, and are focused on getting to grips with the technology, including the basics such as creating files and folders, and uploading content. Student frustration with this level of usage is high; hence Bond needs to develop mechanisms to ensure that lecturers further their understanding of eLearning, how to use the technology, and how it can enhance the learning experiences of students.

Interestingly, those lecturers interviewed who identified themselves as being eInnovators and engaging in true eLearning (as defined by themselves and the literature) found that their time spent online administering and teaching their subjects was far less than those who identified themselves as being on the lower end of the continuum and whose subjects were largely content delivered online. It seems that effective task and activity design and using technology to facilitate the eLearning experience may be less time consuming than delivery of weekly PowerPoints, lecture notes and using the system as a content repository.

It is important that lecturers engage in reflective practice in order to keep their teaching programmes relevant and delivery optimal. Considering ways of integrating new technologies into their curricula by rethinking task or activity design is an important first step in moving along the continuum from eDelivery to eLearning. It also provides fresh challenges to students who are eager to have their learning experiences enhanced by emerging technologies. Lastly, educators should play an active and determining role in the development of the next generation of learning technologies (Gibbs and Gosper, 2006). This would also ensure that the provision of a rich learning environment is at the top of eLearning agendas, and would move educators further away from the eDelivery end of the continuum.

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Interview Questions

1. Of the following, how would you describe yourself in terms of your uptake of technology in teaching & learning:
    a.   An eInnovator
    b.   An interested new user of technology
    c.   A reluctant adopter of technology.

2. How would you define eLearning?

3. In relation to your iLearn sites, where do you think your adoption of technology sits on the following continuum:

    ←——————————————————————————————————————— →
    eDelivery   eLearning

4. What features of Blackboard do you find most useful & most used by your students?

5. How do you think the incorporation of Blackboard into your curriculum has changed your teaching (if at all) in relation to:
    a.   time
    b.   student satisfaction
    c.   task design
    d.   interactivity?

Arguments for implementing project-based learning

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ABSTRACT

This paper focuses on the value of project-based learning for addressing the challenges of 'policy driven curriculum change', in an attempt to foster inter- and cross-disciplinary teaching and learning, and the integrated assessment of learners. This exploration was undertaken at the Durban University of Technology (DUT). This is an institution grappling with several challenges, including the demands of current higher education legislation, national quality assurance criteria, and the merger of two former technikons with significantly different resources, cultures and staff racial profiles. DUT is also facing increasing pressure for curriculum integration and teaching, learning and assessment methods designed to improve learner performance. Working within this framework, and a transformational outcomes based approach to curriculum design, some departments within DUT are exploring the introduction of project-based learning as a methodology that provides opportunities for learners to become actively engaged in classroom and workplace learning, working on real interdisciplinary projects with genuine constraints and parameters in order to transform learning, thus ensuring that learners are more critically literate, independent and articulate.

INTRODUCTION

Higher education institutions are faced with the challenges of transforming approaches to curriculum development as well as teaching and learning strategies to meet the changing needs of society, the economy and the learners. The systemic education reform instituted in South Africa since 1994 has had a significant impact on the funding, structure and practices within the public higher education sector. For this reason, many institutions are considering learning approaches that, with careful management, development and implementation, will improve the quality of learning within institutions. While the focus of this paper is on the ongoing exploration of a project-based learning approach, it needs to be viewed within the broader landscape of change currently underway.

PROJECT-BASED LEARNING

The writer's advocacy of project-based learning, both for classroom and workplace learning, rests on its capacity to address some of the major curriculum challenges: integrating theory and practice, interdisciplinary communication and collaboration, implementing outcomes based approaches, and preparing learners experientially for life. This paper will attempt, very briefly, to explain the writer's view of the ways that project-based design, project identification, implementation, delivery and assessment enable educators to address some of these issues.

There seems to be a range of descriptions of project-based learning. A broad view is provided by von Kotze who describes it as 'situated learning through which meaning is created from the real activities of daily living and working, and knowledge is created in and through working together with a common purpose' (2003: 10). The writer's view is that project-based learning is an approach that moves away from classroom practices of short, isolated, educator-centred lectures and instead emphasizes learning activities that are long-term, interdisciplinary, learner-centred, and integrated with real world issues and practices; providing opportunities for learners to apply and integrate the learning at authentic moments in the project process, instead of in isolation or in an artificial setting. It maximizes learner decision-making and initiative throughout the course of the project – from topic selection to design, process, production, and presentation decisions. Furthermore, clearly defined and well-designed authentic projects undertaken in the classroom or workplace should build in opportunities for learners to plan, revise and reflect on their learning and provide chances for educators, workplace experts, supervisors and mentors to fill the varied roles of coach, facilitator, co-learner and build relationships with learners. Integrated projects also provide opportunities for educators to build relationships with each other, workplace stakeholders and with those in the larger community.

Project-based learning not only provides opportunities to review and redesign mainly content-based curricula, and largely traditional teaching and learning practices, but also shapes graduates who are better prepared for the world of work and lifelong learning. However, before identifying and designing projects, it is necessary to focus on the bigger picture, which is curriculum design.

QUALIFICATION AND LEARNING PROGRAMME DESIGN

Project-based learning requires thoughtful involvement with curriculum design. Outcomes based curriculum design is a fairly complex process that challenges some of the more traditional curriculum development approaches that are currently practised.

Until early 2004 former technikons used a convenorship system for qualification design and registration, which meant that for a particular qualification, one technikon took responsibility for co-ordinating the qualification design process. Although the process was intended to include all technikons offering the qualification, this was often not the case, and the convening technikon department worked alone (or with its own industry stakeholders) to design the qualification. In a changing system requiring each institution to design and submit its own qualifications for registration and Department of Education approval, the issue of staff curriculum development capacity needs to be given attention. The national qualification design approach has meant that academic staff have focused their attention on teaching and learning and in many instances have not considered curriculum development to be part of their core function. Add to this, the move away from input-focused, subject-based curriculum development towards an outcomes based approach and the challenge becomes even greater. In the collaborative design of outcomes based curricula, it needs to be ensured that programme learning outcomes avoid Burke's criticism that they are inimical to education and the higher forms of training, being highly behaviouristic, lacking concern about the process of learning and inhibiting flexibility and spontaneity (Burke, 1995: 32). The term 'competence' in outcomes based education or competency models has been accused of narrowness, focused on action with little attention to the understanding or moral value of the action (Oberholzer, 2001: 156). However, within the South African system it is very clear that competency has to include application of knowledge, skills and values.

Burke, a British educationist, outlines an outcomes model that, if properly used in curriculum design and practice, would negate many of these criticisms and result in increased educator involvement in curriculum development and improved student learning. He claims that the way outcomes are specified will shape the processes of learning and its content. Also, the outcomes statements, while not prescribing the learning

programme, promote 'active forms of learning by requiring students to demonstrate a range of cognitive and interpersonal and practical skills, as well as an understanding of the principles which govern them' (Burke, 1995: 33). Burke goes on to state that individuals need to manage their own learning experiences in a manner that 'recognizes where they start from, their preferred styles and modes of learning, and the time and opportunities they have for learning' (1995: 34). He argues that his outcomes model, rather than being behaviouristic, is designed to promote intellectual autonomy and the ability to think critically. He also states that it is directed to liberating and empowering the individual rather than controlling or modifying behaviour (*ibid*).

Proponents of the South African outcomes based approach would also raise these arguments in its *defence*. There is, however, a danger that if educators do not fully understand the outcomes based approach or take ownership of it, and do not write integrated outcomes statements (including knowledge, skills and attitudes), learners will be faced with sets of highly technicist and mechanistic outcomes that become checklists against which their performance is measured. With the majority of learners being school-leavers drawn from a diverse range of cultural, educational, socio-economic backgrounds, there is an increasing recognition that all learning programmes should seek to encourage them to become critical, independent, lifelong learners. Programmes should have embedded within them the South African Qualifications Authority's (SAQA) defined critical cross-field outcomes, which have been established to enhance the full personal development of each learner and 'the social and economic development of the society at large' (SAQA, 1997: 6).

It is the writer's contention that a well-designed outcomes based curriculum would facilitate the implementation of project-based learning that transforms the way learners learn, that is more relevant to learners, and that ensures that learners are more critically literate, independent and articulate. Project-based learning would help to make learning relevant and meaningful to learners by exposing them not only to everyday work but also to new experiences, and by uniquely motivating learners through engaging them in their own learning and enabling them to pursue their own interests and questions and make decisions about how to find answers and solve problems. It must be ensured that the outcomes developed are those that encourage a 'deep approach to learning', a term borrowed from the work of Marton (in Brown and Atkins, 1991: 62) and described as a holistic approach to knowledge and learning. It is also important to provide opportunities for learners to engage in active learning in different contexts and to ensure that there is space for significant unplanned learning to be recognized and credited. A collaborative and collegial approach to curriculum design needs to be fostered through which academic staff work in programme teams, involving other stakeholders in the process, within and across areas of expertise, 'subjects' and related disciplines to facilitate integration and make meaningful the learning that will occur.

WORK-INTEGRATED LEARNING

Stakeholder participation in curriculum design and the implementation of new approaches is obviously important within project-based learning programmes. Currently each DUT academic department offering qualifications is required to have an advisory board with representation from professional bodies, employers, learners, alumni and other stakeholders, though in reality some are more active than others. One of the functions of the advisory board is to provide input into the design and structure of the learning programme, including exit points, learning outcomes, and duration and form of workplace learning. In order to gain their support and commitment, there will need to be a concerted campaign of institutional and faculty advocacy for project-based curricula. As it is, many employers believe that a skills gap exists between what is required in the workplace and what is currently being provided by higher education institutions (de Lange, 2000: 87). If employers recognize that new approaches will benefit not only the learners but also themselves, it should be possible to draw those employers into the process, value their input, strengthen relationships with them, and involve them in both the design of curricula and the identification of projects.

Clearly, one of our greatest challenges in transforming curricula and adopting less traditional approaches lies in our relationships with work organizations. As the value of workplace learning is increasingly acknowledged and placed more centrally within our curricula, educators need to 'engage with the world of work in a more sophisticated manner than ever before' (Boud and Garrick, 1999: 1). Although the need for new knowledge and understanding is increasingly being recognized within the world of work, in the South African context many workers have had very little formal education, and so workplace resources are being used to improve literacy, numeracy and skills through learnerships and skills programmes situated in the general and further education and training bands of the National Qualifications Framework. It is evident that if a project-based learning approach is to be adopted, with workplace learning at the heart of the programme, the participation of work organizations in providing more flexible workplace placements for learners, increased supervision and guidance, as well as input into the curricula, including project design, implementation, management and assessment, will be crucial to success. Educators need to improve ways in which they interact with work organizations by promoting the advantages of approaches that will benefit not only the learners, but will contribute to the organizations themselves, so that companies are fully invested in participating in the learning and teaching process. By extending the idea of workplaces as learning organizations, and in the design of workplace learning within higher education, we can push back the traditional 'limits' of knowledge, skills and values for which academic credits can be awarded.

South African universities of technology have an important role to play in dispelling the long-held view in some quarters of the higher education sector, that its workplace learning components are not based on sound learning principles, are not rigorous, and do not lead to learning that is 'of equal value' to that which takes place over an equivalent time-span within an institution. In the past, technikons have gone some way towards contributing to this opinion, because in many fields of learning the outcomes for experiential learning (usually sandwich placement of learners, in which the learners spent up to one year in the workplace) were not integrated into the learning outcomes of the programme; assessment criteria were not clearly defined; learning strategies were not articulated; and assessment was based on task completion checklists within logbooks, a supervisor's report, minimal observation by institutional staff, and in only some cases, a couple of assignments. Clearly if workplace learning is to be at the heart of the learning programme, or an integrated part of the programme, current curriculum approaches and implementation should be reviewed and transformed so that the value of learning in the workplace is seen as being valid. Additionally, it would be worthwhile if the workplace experience was seen as providing kinds of learning that are legitimate in their own right rather than as experiences that augment and support what is taught in higher education institutions (Billett, 2002: 27).

Billet advocates the development of a workplace pedagogy that will develop robust vocational practice in individuals, thereby enabling learners to transfer and apply their learning in new and different environments. In order to do so, Billett further proposes that the use of guided learning strategies to make meaningful the learning through participation in everyday workplace activities, although useful for refining and reinforcing what is known, is not sufficient. The writer's view is that learning projects with well-designed outcomes, assessment criteria and learning strategies would address Billett's contention that educators need to extend the capacity of learners to construct knowledge by planning their engagement in novel activities, gaining guidance from co-workers, and being able to access practice in key activities to increase and/or transform their vocational knowledge, skills and values (*ibid*).

The implementation of project-based learning would also address a number of concerns regarding the quality of work-integrated learning assessment. One of the major criticisms of South African university of technology learning programmes has been that workplace assessment is not sufficiently rigorous and that the principles of assessment (including validity, reliability, fairness, practicability) are not adequately applied. For our institution at least, the writer agrees with the statement that educators 'pay surprisingly

little attention to the assessment traditions and practices of experiential education' (Cates and Jones, 1999: 78). With the development of learning outcomes and assessment criteria for experiential learning that are aligned with, and embedded in, the outcomes for the whole learning programme, there should be 'direct and explicit links between all planning, teaching and assessment decisions and the significant outcomes that students are ultimately to achieve' (Killen and Hattingh, 2004: 72).

SECURING BUY-IN

Once an outcomes-based curriculum has been designed, a crucial phase of the process is the identification of suitable projects. It is vital to have 'buy-in' and input from a broad range of stakeholders. This ensures that the projects are at an appropriate level for the learners, are practicable and the outcomes achievable, and can encompass the development not only of discipline-specific skills but also skills required for related disciplines, and skills for life. This will assist with the identification of wide-ranging projects that avoid narrow focus and that can be implemented across a variety of workplaces. There is no doubt that many, if not most, learning projects would be *problem-based*. Examples of problem-based learning implementation described in Boud and Feletti's book (Ross, 1997: 28-35), confirm that within a project-based approach, problem-based learning design is frequently included.

In project implementation, the focus must be shifted from content-based teaching to participatory, activity-based learning. This makes learning more meaningful and relevant to learners by integrating activities both within and across disciplines, and creates a balance between the development of both technical and other skills that will benefit learners in their careers and in furthering their own lifelong development. It is, however, both unrealistic and unfair to assume that a new approach to curriculum design will automatically result in transformed teaching and learning practices. An outcomes based approach places different demands on educators' pedagogical skills (Burke, 1995: 34). If projects are to be implemented successfully, with varied teaching, learning and assessment strategies and active learning taking place, a great deal of institutional commitment, with staff development and support must be offered. This would encourage academic staff to reflect on their own practice; to uncover their own personal epistemologies; to recognize the way these personal theories affect their own practice; and, if necessary, to change or refine their practice.

The successful implementation of alternative approaches like project-based programme design and implementation will, to some extent, depend on academics' understanding of the essence of the change, their ownership of it, their commitment to and involvement in the process (Powell, 1999: 106), and their development of firmer links and connections with employers. This has been affirmed by Fullan (1996) in his description of networks which he describes as 'a set of strategies including multilevel staff development, ways to share ideas, of building partnerships with other stakeholders, and commitment to development and improvement'.

STAFF OVERLOAD

There are, however, many obstacles that stand in the way of successfully transforming curricula within an environment in which systemic reform is causing increased overload, described by Fullan as a barrier to education reform caused by the many planned and unplanned changes with which educators must constantly contend (1996, 421). Educators are being faced with what Fullan describes as the 'subjective' and 'objective' realities that constitute the meaning of change for those who are participants. The 'subjective' reality acknowledges change as a 'serious personal and collective experience characterized by ambivalence and uncertainty' (Fullan, 1982: 32). Within DUT, a merged institution of two former technikons with significantly different resources, cultures and staff racial profiles (Chalufu, 2002: 129), many academics have viewed the merger process as one fraught with conflict, tension and uncertainty. This perception is

supported by Jansen's view that nationally the impact of mergers 'has been devastating for the emotional and professional lives of all staff' (2002: 172). Staff members at DUT have expressed a sense of inadequacy and frustration in the face of all the innovations and changes that are being imposed upon them. There are insecurities amongst many about their future employment prospects at the institution, as DUT is completing a process of faculty restructuring and programme rationalisation. Also, many academics are experts in their field of study, but have no qualifications in education or knowledge of education theory. Without a sound understanding of the philosophy and principles underpinning outcomes based education, academic staff are intimidated by the flood of educational terminology and the acronyms that have accompanied the introduction of the new system, and are unconvinced that the outcomes based approach has anything valuable to offer.

With regard to the 'objective' realities, discussions with academics have revealed that many are having difficulty making sense of the proposed reforms. Fullan (1996: 421) refers to this as 'fragmentation', which is a barrier to education reform that occurs when the pressures for reform seem disjointed and incoherent. It has been argued that those who proposed both the national and institutional reforms have no idea of the other challenges and changes facing educators. These challenges include having to contend with larger classes, increased teaching and marking loads, and inadequately prepared learners. There is thus a resistance to the reforms as, understandably, people do not want to be taken from their comfort zones and thrown into a zone of uncertainty (Powell, 1999: 107). It would be unfortunate if the potential of project-based learning was unrecognized amid these ancillary pressures deriving from changes in policy and curriculum.

QUALIFICATION AND LEARNING PROGRAMME DESIGN

Institutional restructuring and transformation in higher education is informed and driven by a suite of policies, regulations, and papers, including the Higher Education Act (1997), which outlines the broad policy framework for higher education. The Act states that the higher education system is to be planned, governed and funded as a single national co-ordinated system, that institutions and programmes are to be restructured and transformed to 'respond better to the human resource, economic and development needs' of the country (Department of Education, 1997b: 2). The fundamental principles underpinning this process of transformation are those of equity and redress; democratisation; educational development; quality; effectiveness and efficiency; academic freedom; institutional autonomy; and public accountability.

These systemic changes have enormous implications for universities, which have operated with a large measure of institutional autonomy, and for the former technikons, now universities of technology, which have also enjoyed some measure of autonomy in the past. Besides the institutional restructuring process that is currently seeing the merging of several higher education institutions, there are implications for qualification design and learning programme development. Higher education institutions have to ensure that their curricula are responsive to the national and regional contexts and have to 'demonstrate how they meet national policy goals and priorities' (Department of Education, 1997a: 13). Secondly, institutions have to facilitate horizontal and vertical mobility by restructuring qualifications so that they incorporate adequate routes of articulation, and comply with the awaited Higher Education Qualifications Framework. Most importantly, institutions are also required to transform curricula so that they are outcomes based. The introduction of an outcomes based education and training system, was an attempt not only to address the principles underpinning the transformation of education and training, but also an effort to balance market-driven education and training needs through the acquisition of measurable competencies, with a focus on building the capacity of individuals for lifelong learning and ongoing contribution as citizens to society at large. This impacts not only on the design of qualifications and the development of learning programmes but also requires a review of teaching and learning practices.

While there are opportunities to transform higher education, in terms of its shape and size, as well as in respect of the programmes offered and the ways in which they are offered, the enormous challenges to staff and to institutional resources of the many changes, including the merger process that is underway, cannot be ignored. The policy documents relating to mergers remained silent about what should happen to the curricula (Mfusi, 2004; 101), so within the national framework, it remains the function of each institution to align its programmes with national requirements, merge curricula from previously separate institutions, design outcomes based programmes, implement outcomes based teaching, learning and assessment practices, and design and implement foundation programmes for under-prepared learners. The way is clearly open for the implementation of project-based learning.

INTERDISCIPLINARY COLLABORATION

Project-based learning entails transformation of classroom teaching and learning strategies. In DUT teaching venues, a great deal of instruction has consisted, and in many cases still does consist, of the transfer of knowledge from the educator to the learners who are not encouraged to contest knowledge (McKenna and Sutherland, 2006: 19), which is seen as stable. The content to be mastered by learners has been defined *a priori* by the educators or by those involved in curriculum design. There has also been a strong focus on study within single academic disciplines and professional studies. Although this has 'promoted the discovery of new knowledge, problem solving in the real world requires designs based on interdisciplinary and transdisciplinary approaches' (Ntshoe, 2003: 61). Ntshoe, citing Berger (1995), describes interdisciplinary design as close interaction between two or more disciplines involving communication of ideas; mutual integration of organizing concepts, methodologies, procedures, epistemology and terminology; joint data organization and team teaching (2003: 61). Armsby suggests that workplace learning is 'evolving its own epistemologies and hybrid methodologies' (1999: 41). However, the process for developing methodology for collaborative projects is complex because 'more than one person's specialist knowledge is impacting on the chosen methodology and on how that methodology evolves in the ensuing project'. Armsby does go on to say that despite these complexities and the difficulty in managing collaborative projects, it is 'extremely beneficial in terms of developing learning and achieving successful outcomes' (1999: 39). To assess the quality of learning in a project-based approach effectively, the assessment criteria should be known to learners and both process and outcomes-oriented formative and summative assessment methods should be used. An important feature of project-based learning, through which assessment activities not only capture learners' understanding of concepts and content, but also document and promote the development of real and working world skills, reflect learning over time as progress, is documented throughout work on a project. Rather than assessing learners' competence in successfully completing a number of discrete observable tasks, which is currently common practice, realistic projects made up of activities that capture the holistic richness of practice, would facilitate assessment of the forms of knowledge, skills and values, workplace complexities and diversity that form part of workplace learning. Project-based learning enables learners to build real mastery by providing constructive feedback, and allows learners to revise their work and incorporate new understandings. It also presents opportunities for multiple data collection methods to assess learner achievement, as not only can a variety of assessment strategies, methods and tools be used, but also assessors can be drawn from the institution, the workplace and amongst the learners who can participate in the assessment process in ways not typically supported by more traditional learning approaches. Through the documentation of learners' decisions, revisions, and initiative, assessors (and learners) will capture valuable material for assessing student work and growth.

CONCLUSION

While there can be little doubt that within our new democracy, education and training policy transformation has been necessary to address the societal and educational inequities created by apartheid, there remains a gap between policy-making and implementation which continues to be very challenging to bridge.

Institutions of higher learning need to produce a professional workforce that contributes to the economic development of the country. Institutions also have an obligation to develop well-rounded independent learners who contribute to research, development and innovation within their discipline. Project-based learning is an approach that could go a long way towards bridging the gap between policy development and its operation.

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Assessment rubrics as a means of making academic expectations explicit

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ABSTRACT

Students, particularly those at first year level, are often unaware of what assessment practices are valued in higher education. Assessment rubrics are one means by which lecturers can make clear to their students what is expected of them before they undertake the task. But rubrics perform other functions too: they force educators to reflect upon and articulate what will 'count' in the task that they set, and that make explicit for moderators what outcomes the task is designed to elicit and the criteria by which its demonstration will be judged. They also provide a basis for discussion between the moderator and assessor about what it is that is being valued. This article looks at the various functions of rubrics and considers some of the limitations thereof. The article draws on data from interviews with lecturers and questionnaires completed by students who have used assessment rubrics.

INTRODUCTION

Students are frequently uncertain about what is expected of them in an assessment. The marks they receive often do not tally with those anticipated. There is clearly a gap between the lecturer's expectations and the assignment, report, presentation or test answer produced by the student. This article considers the use of assessment rubrics as one means of making the literacy norms of academic assessments more overt within the broader outcomes based education context. This, in turn would bridge the gap between the expectation of lecturers and students.

Rubrics are useful for two main reasons, both of which are explored here. Firstly, rubrics help to articulate the discipline specific assessment norms of the task. Secondly, they form a critical link between assessment and learning by foregrounding the purpose of the task and how the educator defines quality. This study provides an overview of the theory behind rubric construction, with particular reference to literacy norms. It is based on the experiences of six lecturers and an analysis of twenty-seven students' responses to rubrics, gathered by questionnaire (see Appendix A).

'RUBRICS, WHAT ARE THEY?'

For most educators, a rubric is a printed set of scoring guidelines (marking criteria) for evaluating tasks (a performance or a product) and for giving feedback. They are often in table format, where the criteria by which a task is to be assessed are specified and marking is made explicit. The actual layout varies from assessor to assessor with some lecturers simply stating the criteria, while others choose to indicate levels of attainments of the various criteria. In some cases the weighting of the assessment marks is more

or less specified against the criteria and in others, the weighting is according to the assessment task sub-sections.

Rubrics have three sets of readers: examiners, moderators and learners. Rubrics perform different functions for each set of readers. For the educators who develop the task, rubrics are a way to express what is meant by quality, what exactly is being assessed and whether the criteria are in line with the target outcomes. Rubrics form a critical link between assessment and learning by specifying the criteria of quality in the mind of the educator. Educators are often encouraged, through the process of detailing the assessment criteria in an assessment rubric, to question critically their assessment task design and its link to the course outcomes. The students were very clear in their questionnaire responses that rubrics play a function for the assessor as much as for the learner. Rubrics were described as guidelines for marking and as setting standards:[1]

- 'I myself can see the marks and the way to get them so it makes the lecturer mark fairly.'
- 'It shows what is required and the lecturers had to mark according to that as well.'
- 'It is a form of guide also for the lecturer to understand so it is not because of whether he like you or not.'

Other assessors, such as external examiners and moderators, also read rubrics. For this group, rubrics function to set standards of quality and ensure that marking occurs according to common criteria. The explicitness of the criteria, as stated in the rubrics, increases the consistency of marking across a range of assessors and thus improves reliability. Rubrics are also useful where the moderator is commenting on the validity of the assessment task itself because the rubric articulates the criteria by which performance of the outcome will be judged.

The third target audience of assessment rubrics is the learners. For learners, rubrics function to make aspects of the 'hidden curriculum' overt so that learners are very clear when completing an assessment task exactly what will 'count'. As one student put it, 'We can see what we must really do to get the marks.'

'WHY SHOULD WE USE THEM?' EXPOSING THE HIDDEN CURRICULUM

Outcomes Based Education (OBE) shifts the assessment pendulum from norm-referenced assessment towards criterion-referenced assessment. Student performance is thus judged against specified criteria, rather than against the student's peers or according to a student's position within a normal distribution of marks. While this is a continuum, and many assessments involve some aspects of both criterion- and norm-referencing, OBE brings a definite move towards the explicit assessment of performances of target outcomes. Rubrics can help us in this endeavour by clarifying for students exactly what is expected of them.

Assessment rubrics should explain what will 'count' in the assessment task. They prevent what O' Donavan *et al.* (2000) refer to as the 'connoisseur' model of assessment, or as one lecturer in this study put it 'The "I know it when I see it" model of marking.' As one lecturer explained 'I know with a gut feel if an essay is well written. The [work with academic development staff] has helped me pinpoint what exactly I'm looking for. I'm able to use some of these in my assessment rubrics.'

Ideally, this even includes the criteria of the 'hidden curriculum' where academic writing practices, such as linear structure, emphasizing relevance, avoiding digressions, abstaining from repetitions, and so on, 'which are characteristic of preferred Anglo-Celtic discourse structures' (Nightingale, 1988: 75) are clearly articulated to students.

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[1] All quotes are verbatim.

Unfortunately this rationale for assessment rubrics is also unpractical and is often cited by detractors as arguments against their use. Firstly, if every assessment rubric expressly identified every writing practice expected in the assessment task, the rubric would be a completely unwieldy tome. Secondly, most assessors are not aware of how their own discipline's writing practices function and would therefore be unable to state these in a rubric. I will discuss these arguments in more detail before indicating how rubrics can, nonetheless, act as useful tools.

As Angelil-Carter (1995) points out specific academic practices are highly valued by lecturers but often in an unconscious manner and they are rarely made explicit to students. As educators we are not particularly adept at unpacking the academic norms which we have acquired and which we now expect of our students (Winberg, 2002). Many academics have taken on their discipline's norms and practices to the extent that 'disciplinary matrices…are more than just intellectual coigns of vantage but are ways of being in the world' (Geertz, 1985:155). In other words, academics may see their norms of writing, reading, thinking, knowledge construction *et cetera* as the obvious 'logical' or 'commonsense' ways of undertaking these activities.

The particular practices constructing an academic discipline can be considered as being made of discourses. Once any discourse becomes dominant, popular and/or elevated, it becomes framed by its users as 'obvious' and without any ideological or political implications. It may thus be 'obvious' to us that students need to avoid slang or abbreviations in a written report, or that they should construct their report according to a chronological order, or that they should not make personal judgments on the moral aspects of the topic. Unfortunately because these practices are based on normalised discourses, they are usually not explained to students, because they have assumed what Fairclough (1989) describes as 'commonsense' or 'natural' status.

Gramsci (1971) asserts that the dominance of one social class over another, 'hegemony', is achieved through the ability of the socially powerful group to project their way of seeing the world as both appropriate and unquestionable. 'Each Discourse protects itself by demanding from its adherents performances which act as though its ways of being, thinking, acting, talking, writing, reading, and valuing are right, natural, obvious, the way good and intelligent and normal people behave' (Gee, 1996:190). In the case of assessment in higher education, these demands have gate-keeping implications. Those students, who fail to take on the discipline's valued ways of behaving, fail their courses. Since assessment tasks are the major gate-keeping mechanism for success in higher education, a lack of transparency in assessment criteria can be seen as a means of ensuring the exclusion of students who do not bring with them, or do not easily acquire our valued academic practices.

It is acknowledged that there can be great difficulty in making overt the academic practices that we value but of which we are unconscious. As these practices are unconscious, lecturers are often unable to do much more to make norms clear in their assessment rubrics than state 'Spelling and grammar - 5 marks' or 'Times New Roman font size 12'. I propose that awareness-raising of how discipline specific practices function should be a prime focus of staff development. Co-construction of assessment tasks and rubrics by lecturers and academic development practitioners can be one forum through which academics can be made more aware of how their academic practices function while simultaneously making these practices more overt for students.

'WHY SHOULD WE USE THEM?' ASSESSMENT AS LEARNING

Another aspect of assessment within the system of OBE that can be partially addressed by rubrics is that of assessment as part of learning. In many cases, assessing is only summative; students are unclear as to the requirements for success and they receive little feedback other than a mark. In these cases, the purpose of assessment is simply to plot students' progress. As a result, assessment plays very little role in improving

students' understanding of concepts or practices. Rubrics help to show students what is valued in the discipline and what behaviours they are expected to demonstrate. Furthermore, as a feedback tool, rubrics assist the assessor in determining which issues need improvement. Ideally, student assessments are returned with completed rubrics, which include developmental comments that help the students to understand 'the ways of knowing' in the discipline.

One issue that arose in interviews with lecturers about the use of rubrics was the need for students to be fully informed about the function of rubrics. Students need to be inducted into the use of rubrics so that they can see the connections between the assessment task instructions and the rubric (these are usually printed together) and the way in which their submission will be assessed. Lecturers reported that students would not use rubrics to guide them in preparing an assessment task unless the rubric had been explicitly discussed in class. Furthermore, they were of most use where the rubrics were used as the mode of feedback.

Rubrics function as feedback forms for learners by identifying areas of the assessment where the learner has not met a stated criterion. In many cases the assessment feedback is given on the rubric that students can read to discover the characteristics of their assessment task. This is often augmented by comments in the text and a general comment at the end of the rubric. In an ideal situation, this 'assessment as learning' loop is completed when the learner resubmits or re-performs the task, using the feedback on the assessment rubric as a developmental tool. The feedback is thus used by students wishing to resubmit their assessment tasks, something that they are usually only allowed to do once per task. Lecturers who used the rubrics for this purpose were clear that the reworking of the assignment was greatly improved when problem areas were pointed out through a rubric.

The students who completed the questionnaire commented on the role of the rubric in providing them with feedback in cases where they were permitted to resubmit. 'It helps you be aware of where your strengths and weaknesses are and gives you an opportunity to respond accordingly'; 'As I went through my work to improve the rubric helped me to see where to correct.' In large classes however, detailed feedback and opportunities for resubmission are rarely given, but rubrics with the unmet criteria highlighted or underlined provide at least a modicum of explanation to the student. One lecturer explained the process she follows:

- 'I give students back their assignments with a mark and an indication on the rubric about what outcomes they didn't meet. That's just a tick – did they meet each one or didn't they. Then I write just a sentence or two at the bottom of the rubric about what the main problem was. I always try to write something positive too. Then they have one week to hand it back again if they want to. Simple rules – they can't hand back in if they haven't handed in the first time because I must already have a mark for them. Also they must hand in their rewritten work with the completed rubric attached. So I can just focus if they have made some improvements. I can tell you their work is so much better when they do this. And I think they learn how to write assignments generally. I wish someone had done this for me when I was studying.'

LINK BETWEEN RUBRICS AND OBE

Lecturers explained that in the first few times they designed rubrics, they found them quite a challenging task. As one lecturer admitted, 'I really didn't know how to do it. Not just how to make a rubric but also to think about what I really wanted [the students] to do.'

Unfortunately very few lecturers work within OBE and have thus not reflected on the outcomes of their programme. Without this first stage, it is impossible to devise assessment tasks and rubrics aimed at articulating the criteria for assessing the demonstration of particular outcomes. Many assessments still function to test recall and rubrics are very difficult to write in these cases because they inevitably become model answers.

There are subjects that by their nature have a very prescribed format for acceptable answers and a slim selection of possible correct answers, such as early level Maths. But generally there are always numerous ways of responding in an assessment task. The rubric should attempt to itemise for students the means by which we will judge their performances rather than prescribe the answers we expect of them. Students (and academics) need to see the rubric as an integral part of the course design. In as much as assessments need to be aligned to course outcomes, the rubrics need to be devised as a means of assuring this alignment and making it overt.

The students were articulate in their description of rubrics as a tool for the planning of assessment tasks. They commented that 'It is much more easy for us to get work done correctly and neat', and 'I can mark my own work according to the rubric'. Students indicated that they used the rubrics to guide them in their assessment tasks before submission of the task: 'I looked at important ways of doing it before a mistake can drive my work to be incorrect'; 'I can see what is required of me before I wrote'.

One of the main functions of an assessment rubric is to articulate the discipline specific assessment norms of the task. This necessitates the development of rubrics by each discipline and for each task. While many educators use generic rubrics, one for all essays for example, these are less likely to include the specific requirements of the particular task or to articulate the specific norms of the discipline. The problem with generic rubrics is that one cannot assume that skills can be taught generically and transferred from one domain to another (Breier, 1998; Luckett, 1999).

Students need to be inducted into the use of rubrics. Despite all the lecturers reporting that they had discussions of the rubrics prior to their use, in the questionnaires one group of students indicated that they did not readily understand or identify with the terminology used in criterion descriptions. Eight students also called for simpler wording in the rubrics.

Unfortunately, the students in this study all reported that rubrics were only used in one course. This practice was not reinforced elsewhere. Ideally lecturers across programmes should discuss the extent to which they would use assessment rubrics and the kinds of practices that they would be valuing through their rubrics so that they could collectively hone in on areas that need development.

Most higher education practices are not taken on by students simply by having been exposed to their articulation in an assessment rubric. The assessment rubric alone cannot make overt all the subtle expectations of higher education, especially in the case of foundation year students who lack the metadiscourse of education. In these cases, scaffolded tasks and discussion of exemplars of work are more useful. But the use of criterion-referenced assessment rubrics can go at least some way towards making the tacit, hidden norms accessible to all.

The South African Qualifications Authority (SAQA) stipulates that the Critical Cross-Field Outcomes should be infused in all qualifications across all levels of the National Qualifications Framework and demonstrated in integrated assessment tasks. Integrated assessments provide lecturers with the opportunity to work as a team and to discuss their expectations across subject divisions. 'Integrated assessments provide opportunities for learners to demonstrate applied competence which means foundational competence (knowing that), practical competence (knowing how) and reflexive competence (knowing how you know that)' (Luckett, 2001). If the assessment rubric is drawn up by the assessment development team at the same time as they develop the assessment task, there will be more transparency for everyone involved as to what is to be learned in the assessment process. In this case a rubric can assist the team as a development tool.

Assessment rubrics, however, should not be lauded as some kind of solution to all assessment problems. As O'Donavan *et al.* (2001: 75) point out about criterion-referenced assessment generally '[It] appeals

to our notion of equity and fairness, it is not without its pitfalls, not least of which is the potential for multiple interpretations of each criterion and grade definition by both individual staff members …and students.' The problem is that in the process of providing sufficient detail for students to differentiate between grades on the rubric, the rubric becomes overly complex. It takes practice to determine which factors are useful to itemise for students and which prove confusing.

The twenty-seven students who completed the questionnaire about rubrics were all very much in favour of the use of rubrics and saw their value in enhancing both the standard of their own work and in ensuring validity in assessment. In their responses to the questionnaire, the students expressed a need for more scaffolding into the use of rubrics, 'To improve rubrics, they must give more information on how, what and where to [use them]', 'my suggestion is that you explain to the classes more on how to use the rubrics'. The students were also clear that, while the rubrics were very useful, they were not a wonder-tool. Rubrics do not of course result in perfect student assignments, as one student pointed out 'I still have spelling and grammar errors.'

Students perceived rubrics as ensuring that the completion of an assessment task was a learning activity. The rubric was seen to 'make it clear why we have to do this thing and then how we have to do it if you want good marks.' The rubrics were seen to increase the workload by providing details as to the standard of work expected by the assessor. As one student wrote, 'I did not have problems with the rubric but I used it and so I take a bit longer to complete my work.' All twenty-seven students agreed that working from rubrics would be beneficial across all subjects and all assessment tasks.

Staff development is needed about the process involved in designing rubrics and in using them to mark. One lecturer told us the following:
- 'We have used assessment rubrics for portfolio completion in all the courses run by my department. However, not all lecturers have understood the way in which they are used, giving marks far higher than the relevant descriptors. The reason given was that this was the first time students had submitted work and that they did not want to dishearten students with low marks. This unfortunately undermined the purpose of a rubric as there was no correlation between the descriptors and the marks awarded.'

POTENTIAL OF RUBRICS TO FORCE CONFORMITY

One of the criticisms of OBE generally, and the use of assessment rubrics in particular is the predetermined nature of that which will be elicited in assessments. In setting out the rubric the lecturer specifies exactly what will be rewarded with marks in the students' assignment. But what of the unexpected responses that creative students may develop? These replies may be true to the requirements of the task but quite outside of the ways we expected the students to respond. Our assessment rubrics should not be so specific as to exclude the innovative 'out the box' type response. Some rubrics are so specific that they lead to conformity rather than development. One lecturer gave a detailed example of the sort of problem that can arise:
- 'I had a problem in the way I wrote a rubric for an essay. I gave marks for an introduction and stated exactly what was needed in the introduction – an explanation for the reader what the essay was about, why smoking is a health issue, and how it would be structured, what would be dealt with in each section – psychological, physiological, and so on. I also had a clear mark for each section after that and stated what I wanted in each. And then marks allocated for referencing *et cetera*. This was to help the students who had never written an academic essay before. But it didn't work for one student who wanted to write a completely creative response to the topic. I agreed to her request to write it as fictitious extracts from diaries and letters. I'd never ever have expected that. She met the purpose of the assignment but never met any of the mark allocations of the rubric – or hardly any. I just tossed the rubric and gave her an "A".'

It is important that our rubrics develop the practices we want in students rather than simply outlining the response we require. We want to value an engagement with concepts rather than requiring students to slavishly reproduce the surface structures of academic texts without engaging in claims to knowledge that are the cornerstone of academic literacy (Geisler, 1994; McKenna, 2004).

One lecturer spoke with great enthusiasm about the use of assessment rubrics for peer assessment. While peer assessment has been applauded as another way of making students aware of what is expected in assessments, most students are unable to mark each other's work in meaningful ways. Providing students with rubrics is one way of facilitating this process. 'I discuss the rubric with them when I hand out the task, then on the due date they use a rubric to mark each other's work. Each piece is marked separately by two students. Sometimes I just use that mark but perhaps only for a small weighting or just a formative mark. But sometimes they can then take the peer feedback and rework it for handing in the next day if they want to and then I mark it using the same rubric.'

The same lecturer spoke of her use of students to develop the rubrics. Her students were postgraduate diploma students but she was of the opinion that where students were accustomed to using rubrics, they could assist in developing them regardless of the level of study. 'We discuss the task in class and what would make a good assignment and what would be indicators of a poor assignment. The students then draw up the rubric and I get it typed up for them. So they decide what should be valued and get marks and what would be considered sloppy or unacceptable. It makes for far fewer arguments afterwards!'

CONCLUSION

This paper has highlighted the benefits of using rubrics to make explicit the expectations of each assessment task. While rubrics bring with them dangers of predetermining student responses and the unwelcome potential to force conformity, they also have the potential to induct students overtly into the practices of their discipline. Rubrics can help students to engage more deeply with the often unexpressed norms of academic work and thereby assist them in navigating this gate-keeping mechanism of higher education. Rubrics are not the solution to the challenges of assessment but can go some way towards exposing exactly what it is that we require of our students. In constructing rubrics, academics are forced to articulate their requirements and consider exactly what will and what will not count when marks are allocated. This opens the doors for debate not only between assessors and students but also between examiners and moderators.

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Thank you for taking this time to tell me a little bit about how you have used assessment rubrics

in your _____ class.

Completing the questionnaire is voluntary – you can return it blank if you do not want to fill it in. You are requested to complete this questionnaire anonymously and to write your honest and personal opinions in as much detail as possible. Whatever you share may be used for research and can help us to become better lecturers in the future.

1. What are assessment rubrics for?

    _____
    _____
    _____

2. What was most useful about having assessment rubrics?

    _____
    _____
    _____

3. What was not useful or what should be changed about assessment rubrics?

    _____
    _____
    _____

4. Please provide additional comments about the use of assessment rubrics at university level.

    _____
    _____
    _____

Relations between perceived parental authority and involvement, and high school science students' goal orientations and achievement

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ABSTRACT

This paper describes the relations between perceived parental authority and involvement, and high school science students' goal orientations and achievement. Participants were 247 (62%) girls and 154 (38%) boys, with ages ranging between 16 and 29 years (M = 18,8, SD = 1,95). All were Grade 12 mathematics and science learners from 10 high schools in the Eastern Cape. The internal consistency reliabilities of scores for the scales used in the study were acceptable: 0,96 (Parental Authority Questionnaire), 0,85 (Parental Involvement Scale), 0,93 (mastery orientation) and 0,88 (performance orientation) for the Goals Inventory. The results indicated, contrary to reported studies, that no relationship existed between achievement and the study variables. Perceived parental involvement was positively associated with both the mastery and performance goals. The goal orientations were negatively associated with authoritarian parents, that is, those who valued unquestioned obedience. No statistically significant gender differences were found. The implications of the findings for the teaching and learning of mathematics and science are discussed and suggestions for further research outlined.

INTRODUCTION

South Africa has throughout its history experienced shortages of suitably qualified professionals with mathematical and scientifically oriented qualifications. The *status quo* is compounded by the low numbers of students who write and pass matriculation examinations in mathematics and science in relation to other subjects. Such low numbers, of course, mean that very few students register at institutions of higher learning with prospects of qualifying as accountants, doctors, engineers, teachers, or scientists. Government has proposed a number of good initiatives aimed at addressing this problem. Examples include: the Dinaledi schools of excellence; and the recent introduction of mathematics for all learners from Grade 10 to Grade 12, albeit at different levels of difficulty. About these innovative changes, the Minister of Education (Honourable Pandor) stated '[The] education sector has reacted by increasing the number of specialist schools in maths and science from 102 to more than 400. The curriculum has been redesigned to ensure increased proficiency in numeracy…' (*Mail & Guardian*, 2005). However, much more is required; South Africa is greatly in need of a concerted research effort that is aimed at finding solutions to the problem.

In this country, the matriculation year (Grade 12) in many respects represents a watershed in the lives of many young South Africans. This is because performance in the national examinations at that grade determines whether a student will gain entry into highly selective university courses, other institutions of higher learning, or will have employment opportunities. It is important, therefore, that investigations into variables that could affect a student's performance in examinations be constantly evaluated. This ensures

that students' future prospects are not unnecessarily hampered by factors that could be addressed in good time. Research in South Africa has documented issues relating to parents and their children's schooling activities (Grobler, 2005; Smit and Liebenberg, 2003). Such research has determined the role that parents play in ensuring children's success. Such a role is critical because, 'knowing how parental involvement in schooling results in better achievement may improve parents' knowledge of how to become effectively involved in their children's education' (Hill and Craft, 2003: 81). Also, having parents involved is in the interest of the school because it lightens the teaching burden.

THEORETICAL FRAMEWORK

The theoretical framework introduced here is intended to integrate relevant literature and research findings with the questions the present study aims to answer. In so doing, literature related to the different variables investigated in this study is outlined. Such literature forms the basis for the hypothesized relationships forming the thrust behind this investigation.

GOAL ORIENTATION

Achievement goal theory was developed within a social-cognitive framework, where the focus is on the aims or purpose that are pursued or perceived in an achievement setting (Midgley *et al.,* 1998). Here the focus is on how students think about themselves, their tasks and their performance (Ames, 1987). Research in the area of goal orientation has focused on mastery and performance goals. In the mastery goal orientation, students are reported to be interested in learning new skills and enhancing their understanding (Gonzalez, Holbein and Quilter, 2002). Harackiewicz and Elliot (1993: 904) have argued that 'mastery goals promote a preference for optimal challenge, positive affect associated with effort, and persistence in the face of failure…'. The mastery goal (Ames and Archer, 1988) has also been described by other researchers as a learning goal (Dweck and Leggett, 1988) or a task-involved goal (Nicholls, Patashnick, and Nolen, 1985). Performance goals (Ames and Archer, 1988; Dweck and Leggett, 1988) on the other hand, are also known as ego-involved goals (Nicholls *et al.*, 1985). In performance goals, students are more concerned with proving their ability or avoiding negative judgments of competence (Gonzalez *et al.*, 2002). Performance goal oriented students are merely concerned with normatively high performance that leads to maladaptive behaviour like self-aggrandizement, lack of persistence and learned helplessness (Meece, Blumenfeld and Hoyle, 1988; Blumenfeld, 1992). Compared to mastery goals, performance goals are shown to lead to challenge avoidance, negative emotional states and helplessness (Ames, 1984; Butler, 1987; Elliott and Dweck, 1988).

A number of factors such as, academic self-efficacy, self-handicapping strategies and affective responses have been reported to influence, or are influenced by, goal orientation (Anderman and Maehr, 1994; Pintrich and Schunk, 1996). The self-efficacy construct has its roots in Bandura's (1981: 200) social learning theory, which defines beliefs about self-efficacy as 'judgments of how well one can execute courses of action required to deal with prospective situations…'. A great attribute of self-efficacy is the effect it has on individuals' efforts and performances in a task. This has been shown to be so important that it has the potential of wiping out differences in ability (Pervin and John, 1997). Students with low self-efficacy are particularly vulnerable to achievement anxiety and will tend to avoid difficult tasks (Bandura, 1993). Related to this, it has been reported that students who follow mastery goal and performance-approach orientations tend to reflect positive self-efficacy and affect while those following performance-avoidance orientations reflect negative self-efficacy and affect (Wolters, Yu and Pintrich, 1996). Self-handicapping is a strategy that is employed by students in order to avoid showing why they were incompetent in a particular learning task. This strategy includes the use of procrastination, purposely not trying or attempting a task, or finding and providing excuses for not learning (Smith, Sinclair and Chapman, 2002). It has been argued that self-handicapping is related to performance-avoidance goals because it reflects students'

anxieties about their academic performances (Molden and Dweck, 2000). What this highlights, is the fact that students who are self-efficacious tend to perform well on specific tasks; cope much better with anxiety, depression and helplessness; set higher goals, which they follow through to accomplishment; generally recover quickly from failure; think and plan more strategically than those who are not [self-efficacious] (Bandura, 1995, 1997).

PARENTAL AUTHORITY

Baumrind (1971) proposed three distinct prototypes of parental authority, namely, permissive, authoritarian and authoritative parenting. Permissive parenting relates to parents who allow children to undertake unassisted decision-making by adopting a *laissez faire* attitude in the upbringing of their children. Such parents are non-demanding, non-controlling and are less likely to impart punishment to children than their other counterparts. Permissive parenting is reported to result in children who lack self-reliance, have little tolerance for frustration and are less likely to persist in learning tasks (Gonzalez *et al.*, 2002). Authoritarian parents thrive in, and value, unquestioned obedience. They generally maintain control, will define children's behaviour and will use punishment to ensure strict compliance. Authoritarian parenting is reported to encourage children's dependence on authority figures to make decisions for them. Such children are also less likely to engage in exploratory and challenge-seeking behaviour (*ibid*). Authoritative parents, on the other hand, fall in between the two extremes. Such parents are usually firm, clear and will be demanding in most ways in dealings with their children. This parenting style is characterized by rationality, flexibility and a communicative mode that affords give-and-take situations (Buri, Louiselle, Misukanis and Mueller, 1988; Buri, 1991). It has been argued that authoritative parenting results in self-reliant, independent, achievement oriented and self-controlled children compared to other parenting types (Baumrind, 1971, 1982).

AIMS OF THE STUDY

Educators generally expect that students involved in an interesting and enjoyable learning activity will have goals for what they want to accomplish. Students may generate their own goals, or they could be influenced by other people, such as parents, teachers or other students. No empirical data has documented South African science students' perceived parental authority and involvement with respect to their goal orientations and achievement. Here, the study variables were goal orientations, achievement, parental authority and parental involvement. The aims of the present investigation were therefore to establish, (a) what relationships existed among the study variables; (b) which variables predicted which goal orientation; and (c) whether gender differences existed among the students.

METHOD

Participants

Participants were 401 mathematics and science learners from 10 high schools in the Eastern Cape. All were in their matriculation (Grade 12) year of study. This was a convenient sample because learners participated as a result of their teachers acceding to a request to participate. There were 247 (62%) girls and 154 (38%) boys, all with ages ranging between 16 and 29 years (M = 18,8, SD = 1,95).

Measures

First, students were asked to provide biographical information about themselves and their parents. Second, a questionnaire combining three instruments was used to collect data relating to parental authority, parental involvement as well as student goal orientations. The instruments were the Parental Authority Questionnaire, the Parental Involvement Scale and the Goals Inventory.

Parental Authority Questionnaire

The 30-item Parental Authority Questionnaire developed by Buri (1991) measures parenting in terms of authoritarian, authoritative and permissive styles described by Baumrind (1971). A typically authoritarian item statement was 'Whenever my parent(s) told me to do something as I was growing up, they expected me to do it immediately without asking any questions.' A typically authoritative statement was 'As I was growing up, once family policy had been established, my parent(s) discussed the reasoning behind the policy with the children in the family.' Finally, a typically permissive item statement was 'As I was growing up my parent(s) did not feel that I needed to obey rules and regulations of behaviour simply because someone in authority had established them.' Here, students rated their responses on a 5-point scale (1: Strongly Disagree, 5 Strongly Agree). In terms of this questionnaire's internal consistency reliability, acceptable alpha values ranging from 0,74 to 0,87 were reported by Buri (1991). Also, the author reported that the questionnaire showed acceptable discriminant and criterion-related validity.

Parental Involvement Scale

The Parental Involvement Scale, developed by Mji and Mbinda (2005) consists of 8 items in which students were asked to indicate how active their parents were, 'in helping with homework when asked, attending school programmes, watching the student in sports or other extracurricular activities, helping the student select courses, and knowing what the student is doing in school' (Steinberg, Lamborn, Dornbusch and Darling, 1992: 1271). In constructing the scale, it was hypothesized that it measured students' perceptions of parental involvement with regard to *curricular* and *extracurricular* activities. A typical *curricular* involvement item asked students to indicate 'How active are your parents in seeing to it that you do your homework before you go to bed.' On the other hand, a typical *extracurricular* involvement item asked students to indicate 'How active are your parents in participating in the school's governing council.' In answering the scale, students rated their perceptions on a 4-point scale anchored by 1: Never involved and 4: Highly involved. Internal consistency reliability of the scale, measured by Cronbach's (1951) coefficient alpha was found to be an acceptable 0,82 (95% CI, 0,77 to 0,85). Face validity, determined through principal components analysis indicated a two-factor solution (curricular and extracurricular involvement) as previously hypothesized (Mji and Mbinda, 2005).

Goals Inventory

The Goals Inventory is a 25-item scale developed to measure students' mastery and performance orientations (Roedel, Schraw and Plake, 1994). A typical mastery orientation item was 'Personal mastery of a subject is important to me.' On the other hand, a typical performance orientation item was 'I feel angry when I do not do as well as others.' With respect to reliability and validity of the inventory, the authors reported acceptable alpha values of 0,80 (Mastery) and 0,75 (Performance) as well as adequate support for convergent and divergent validity.

Achievement

In the present study, achievement related to students' matriculation results that were published in a local newspaper (*Matric Supplement*, 2003). The published results were deemed appropriate because the researcher could not obtain the official version from the relevant education authorities. With respect to achievement, 212 (53%) of the sample failed and 161 (40%) obtained a school-leaving certificate. The rest, comprising 18 (4%), obtained a pass with endorsement, 7 (2%) an endorsement with merit and 3 (1%) senior certificates with merit.

Data Analysis

All analyses were carried out using SPSS. In doing this, computed statistical methods were scale reliability, intercorrelations among different variables and regression analysis. In the regression analysis, two stepwise regression analyses were computed where mastery and performance goals were the criterion variables. Data relating to information about the parents were also analyzed.

RESULTS

Parental information

Among the participants, more learners lived with their 'mothers only' than anyone else. In fact, about 160 (40%) reported that they lived with their mothers, 139 (35%) lived with both parents, 19 (5%) with fathers, and 81 (20%) with other relatives such as grandparents. With respect to parental education most parents had some secondary education or less, 212 (62%) mothers and 107 (55%) fathers. Only 25 (8%) mothers and 17 (8%) fathers had a degree or higher qualification.

Scale Reliability

In the present study internal consistency reliability was calculated using Cronbach's (1951) coefficient alpha. All internal consistency coefficient scores from the measures used had acceptable values. For the Parental Authority Questionnaire, the alpha value was 0,96 (95% CI 0,95 - 0,97), which was similar to scores ranging from 0,75 to 0,85 reported by Buri (1991). The Parental Involvement Scale had an acceptable internal consistency reliability score of 0,85 (95% CI 0,.83 - 0,.87) which, following guidelines for clinical significance, is good (Cicchetti, 1994). On the Goals Inventory, the internal consistency reliability score was an acceptable 0,93 (mastery orientation) and 0,88 (performance orientation), which were comparable to those reported for the two subscales (Roedel *et al.*, 1994).

Correlational analyses

Correlational analyses were performed to examine whether relationships among variables could be established. *Table 1* reveals the emergence of a pattern of relationships among the variables. It is noticeable that learners' achievement had no relationship with all the other variables. Learners' mastery goals were positively correlated with performance goals and parental involvement. These were, however, negatively correlated with authoritative and authoritarian parenting. Learners' performance goals were also positively correlated with parental involvement while they were negatively correlated with authoritarian parenting.

Table 1
Intercorrelations among Achievement, Mastery and Performance Goals,
Parents' Education, Parental Involvement and Parental Authority

		1	2	3	4	5	6	7	8	9	10
1	Achievement										
2	Mastery Goal	0,09									
3	Performance Goal	0,08	0,89**								
4	Mother's education	-0,08	-0,05	-0,08							
5	Father's education	0,06	0,04	-0,01	0,65**						
6	Curricular involvement	0,01	0,56**	0,55**	0,31**	0,14*					
7	Extracurricular involvement	-0,01	0,50**	0,52**	0,07	0,10	0,70**				
8	Permissive parents	0,01	0,06	-0,01	0,07	0,03	-0,10*	0,02			
9	Authoritative parents	-0,04	-0,13**	0,01	-0,12*	-0,13	-0,02	-0,06	0,10*		
10	Authoritarian parents	-0,06	-0,13**	-0,18**	-0,01	-0,04	-0,07	-0,08	0,04	0,28**	

*p < 0,05

** p < 0,01

Regression analyses

Table 2

Stepwise regression analysis showing the final model with Mastery Orientation as a dependent variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
2	0,34	0,12	0,10	4,29		
		Sum of Squares	df	Mean Square	F	P
	Regression	330,03	2	165,01	8,95	0,000
	Residual	2526,11	137	18,44		
	Total	2856,14	139			
		Unstandardized Coefficients		Standardized Coefficients	t	P
		B	Std. Error	Beta		
	(Constant)	36,96	1,53		24,22	0,000
	Gender	2,37	0,75	0,25	3,14	0,002
	Father's education	0,68	0,27	0,21	2,57	0,011

Stepwise regression was computed to establish the variables that predicted the criterion variables, mastery and performance goals. Here, the variables included in the correlational analysis were used to determine a model for each criterion variable. *Table 2* shows the final model, which indicated that learners' gender and father's education predicted mastery goal scores. These two variables explained a moderately significant proportion of variance in mastery goals, $R^2 = 0,12$, $F(2, 137) = 8,95$, $p < 0,05$. With respect to gender, although girls had relatively higher mastery goal mean scores ($M = 42,4$, $SD = 14,2$) than boys ($M = 40,3$, $SD = 17,3$) this difference was not statistically significant.

Table 3

Stepwise regression analysis showing the final model with Performance Orientation as a dependent variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	0,19	0,04	0,03	3,84		
		Sum of Squares	df	Mean Square	F	P
	Regression	80,21	1	80,21	5,45	0,021
	Residual	2030,73	138	14,71		
	Total	2110,94	139			
		Unstandardized Coefficients		Standardized Coefficients	t	P
		B	Std. Error	Beta		
	(Constant)	19,27	0,45		42,32	0,000
	Achievement	-1,51	0,65	-0,19	-2,33	0,021

Table 3 shows the regression model for performance goals. It may be observed from this Table that learners' achievement predicted performance goal scores. Here, achievement explains a moderately significant proportion of variance in performance goals, $R^2 = 0,04$, $F(1, 138) = 5,45$, $p < 0,05$.

CONCLUSIONS

These findings provide a sense of what the situation is with respect to the variables tested here and research conducted elsewhere. Contrary to other studies, no relationship was established among the study variables with achievement. This is surprising because relationships between achievement and parental authority (Steinberg *et al.*, 1992), parental involvement (Flouri and Buchanan, 2004) and goal orientations (Vrugt, Oort and Zeeberg, 2002) have been documented. Mastery goals, which are embraced by students who are interested in learning new skills, had positive associations with parental involvement. This result was expected because parents, who take a keen interest in what their children are doing at school, would be expected to encourage them to focus on specific career choices for example, which inherently influences learning goals positively. The positive influence on learning goals is also substantiated by the fact that students with mastery goals associated negatively with authoritarian parents who expected unquestioned obedience. Performance goals, which are about avoiding negative judgments of competence, were similarly, positively associated with parental involvement but negatively associated with authoritarian parenting. These findings are consistent too, because such students are likely to be positively influenced by involved parents but not by those who laid down the law with no questions asked. In fact authoritarian parents would be expected to question and judge competencies, which would not be welcome among performance goal oriented students.

An interesting finding was the fact that the father's educational level predicted the mastery goal orientation. This was found to be interesting because 19 (5%) participants indicated that they lived with fathers only, while a majority (40%) lived with mothers. Perhaps this suggests that the presence of an educated father figure is necessary if students are to embrace a mastery goal orientation. The regression model also indicated that the performance goals were predicted by achievement. Performance goals relate to students who are concerned with proving their ability. That 53% of the participants failed the matriculation examinations seems to suggest that performance goal oriented students are at risk of not performing well. This finding has very important implications for teachers and school counsellors because, if students espousing this goal orientation are identified as early as possible, then appropriate counter measures may be implemented to help re-orientate them. No statistically significant gender differences were established in the present study. A pleasing aspect of this finding is the fact that it dispels the notion that mathematics and science are essentially male dominated domains (Glencross *et al.*, 2000).

The results notwithstanding, it should be mentioned that one limitation was the fact that a qualitative component of the study was not included. In such a component, a better understanding of how the students related with their parents' authority may have been elicited. The qualitative component would have allowed for a more global perspective of the other variables' influence on the goal orientations. The qualitative study would have allowed also for cross checks, for example in identifying students categorized as performance goal oriented. This is an issue that a further study could address. Future studies could investigate the role of parental educational level to discern clearly why the father's educational level predicted the mastery goal orientation. Lastly, another area of study could be to investigate the role of achievement with respect to the performance goal orientation.

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Gender differences in academic integrity: East African and South African university students

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ABSTRACT

The objective of this study was first to explore the prevalence of academic integrity in East African and South African universities. Second, it was to examine the gender differences in academic integrity for each one of the four countries and overall gender differences in the entire sample which comprised 393 men and 347 women with a total of 740 participants. The findings showed that academic dishonesty was a common phenomenon both in East African countries and in South Africa. The level of academic dishonesty was comparable to what has been reported in other countries such as the UK and USA. From the findings, four patterns of academic dishonesty gender differences emerged. In the first category, there was no gender difference, whereas in the second category, the difference was such that women engaged in academic dishonesty more than men. In the third category, there were more men engaged in academic misconduct than there were women, which was more consistent and predominant than was the case with women. Fourthly, in the overall results for each country and the entire sample, there were no significant gender differences in academic dishonesty.

INTRODUCTION

Higher education institutions, such as colleges and universities, regard academic integrity as a premium in all their academic endeavours. In view of this, it is a given that both students and academics will uphold the principles of honesty, trust, fairness, respect and responsibility. Academic integrity goes beyond mere avoidance of dishonesty, but entails conscious intent to apply intellectual honesty, which is in compliance with academic excellence. Commenting on academic dishonesty, Park (2003: 471) states that 'There is mounting evidence that students cheating in general and plagiarism in particular, are becoming more common and more widespread' to the point that it has reached an epidemic level (Alschuter and Blimling, 1995).

According to Gerdeman (2001: 1) 'Cheating on exam, plagiarizing, falsifying bibliographies, turning in work done by someone else, receiving improper assistance on assignments, and intentionally facilitating cheating on the part of others are commonplace in American higher education.' Academic dishonesty has become such a prevalent problem that it qualifies for the status of an epidemic (Park, 2003). Academic dishonesty has become an ever present problem which eludes solutions (Symaco and Marcelo, 2003). In fact many university students regard cheating as a normal event in academic institutions and as such they do not see anything particularly unusual about it (Symaco and Marcelo, 2003). Cheating among university students in the past 50 years has escalated to the point that students who have not engaged in such behaviour are a minority and an exception rather than being the norm (Cummings, Maddux, Harlow

and Dyas, 2002). In a study of internet use in the UK, for example, one in every two students stated that they would definitely engage in plagiarism if only to avoid getting a failing mark (Underwood and Szabo, 2003a). It has been reported that 60% of the students in the USA and the UK admit engaging in cheating (Moon, 1999). In a study of 6000 American university students drawn from 31 universities, one in every two students admitted to having engaged in academic dishonesty (McCabe and Trevino, 1996). In another study consisting of 1800 American students selected from nine universities, over 70% of the respondents admitted cheating in examinations and written assignments (Underwood and Szabo, 2003b). According to Davis *et al.* (2005) some research findings have reported that academic dishonesty ranges from 40% to 82% of the students sampled.

Academic dishonesty has been a subject of interest not only in the USA and UK, but also in many other countries including; South Africa, Ethiopia, Nigeria, Canada, Russia, Germany, Austria, India, Pakistan, Bangladesh (Teferra, 2001; Lupton and Chapman, 2002; Brown and Emmett, 2001; Mwamwenda and Monyooe, 2000; McCabe and Trevino, 1996; Hanson, 2003; Kennedy, Nowak, Ragburaman, Thomas and Davis, 2000).

From the review of literature on academic dishonesty, there is ample evidence that there is widespread academic unfair practice. In the USA, it is reported that academic dishonesty is in excess of 70%. Such behaviour has been researched and reported for the past century resulting in over 200 journal articles (Lupton and Chapman, 2002). According to Cummings *et al.* (2002) some studies in the USA have reported that for every four students, three admit to having engaged in academic misconduct in one form or other at one time or other.

In the UK studies have shown that on average, more than 50% of university students reported that they had engaged in academic dishonesty (Mwamwenda and Monyooe, 2000; Newstead, Franklyn-Stokes and Armstead, 1996; Franklyn-Stokes and Newstead, 1995). In a study of South African students at Walter Sisulu University, there was clear evidence that academic misconduct was a common practice, not only in response to the questionnaire, but also on the basis of observations of the researchers; who were members of teaching staff (Mwamwenda and Monyooe, 2000). Students acknowledged in their responses that they had cheated by not acknowledging the original author or source of information used, using false references, not acknowledging joint work, misplacing library reference books and journals and using false medical certificates for missed tests/assignments, examinations (Mwamwenda and Monyooe, 2000).

In Russia, it was reported that more than 80% of the students interviewed said they had cheated by using crib sheets during examinations, looking at other students' work while in an examination, using lecture notes in the examination, copying from another student's homework, buying term papers and engaging in plagiarism (Lupton and Chapman, 2002). In a comparable study of Russian and American students, 55% of American students admitted cheating compared to 64% of Russian students (Lupton and Chapman, 2002). While Russian students did not think it was bad to cheat, American students thought otherwise. Partly on this belief, Russian students had a greater propensity to engage in academic dishonesty.

Teferra (2001) argues that academic dishonesty is not an unfamiliar phenomenon in Ethiopia, as there have been reports on irregularities such as stolen examinations, answers for sale, collusion of invigilators, impersonation, copying from other students without or with their consent as well as exchanging worksheets. In a study of 60 Ethiopian academics that were either in the country or had been in the country, 60% reported they had caught students cheating in examination sessions (Teferra, 2001). About 25% reported having witnessed at least five students engaged in academic dishonesty. Overall close to 90% of those who participated in the study reported having detected students cheating. Only 6 of the 60 academics reported no incidence of academic dishonesty.

GENDER DIFFERENCES IN ACADEMIC INTEGRITY

Research studies on academic integrity have been inclusive in terms of gender and only a small proportion has singled out gender differences as a point of focus. In view of the interest of this study, some of these studies are cited as part of the literature review.

In her study of gender differences in academic integrity, Whitney (2001) showed that women and men cheat at the same rate and that the main difference is that women report a greater degree of negative attitude towards cheating than their counterparts. Similarly, Crown and Spiller (1998) argue that studies on men cheating are likely to be as many as there are studies showing no gender differences. On the other hand, Underwood and Szabo (2003b) in their study of academic integrity concluded that male participants had a tendency not only to condone academic dishonesty, but also to engage in such behaviour. Symako and Marcelo (2003: 2) reported that men were more involved in academic dishonesty than women especially when doing seatwork; 'To many men looking at someone else's work is a common habit if not a natural thing to do.'

Gerdeman's research (2001) on university students' cheating behaviour indicated that there were significant gender differences in which 85% of the men and 79% of the women said they participated in academic dishonesty. Tibbetts (1999) in a study of 598 university students reported that there were significant differences between men and women with the former showing greater intentions to cheat than was the case with women. In an African study based on Ethiopians, two positions were presented, the first one being that women cheat less than men, while the second position was that academic dishonesty occurred irrespective of one's gender (Teferra, 2001).

Hogan and Jaska (2005) studied academic integrity among 300 students registered for a compulsory course in Information Systems drawn from a large university with a student population of 20 000. In a questionnaire of nine statements, most male participants responded with a 'yes' to most of the statements; showing their active involvement in academic dishonesty. This led to the conclusion that males have a higher level of propensity to engage in academic misconduct (Hogan and Jaska, 2005).

In an extensive review of literature, Athanasou and Olabisi (2002) analyzed eighteen studies on gender differences in academic integrity. They concluded that men engage in academic dishonesty to a greater degree than women. In the 18 studies reviewed, 12 showed more men than women engaged in academic dishonesty. There is, therefore, some balance of evidence that there are gender differences in academic integrity and that such differences predominantly point to men as being more involved in academic dishonesty.

ADVOCACY FOR ACADEMIC INTEGRITY

Academic dishonesty is not only incompatible with principles of education, but also erodes academic standards and integrity (Mwamwenda and Monyooe, 2000). Lupton and Chapman (2002) argue that academic dishonesty cannot be condoned on the following grounds:
- It devalues the educational experience.
- It leads to inequitable grades/marks.
- It is a misrepresentation of what the student has learned and can use following graduation.
- The academic qualification obtained is of a dubious nature.

Similarly, Park (2003) reaffirms that academic misconduct poses a serious challenge to academic integrity as well as a threat to institutional quality assurance. The credibility of a university is essential for the recognition of its degrees within the country as well as outside countries where its graduates may seek

employment or wish to pursue further studies (Teferra, 2001). This cannot be realized when dubious standards are practised with the condonation of the institution.

According to the University of Washington (2005) a number of reasons advanced against academic dishonesty are as follows:
- In many ways it hurts the university community as it undermines academic principles.
- Students who are honest feel frustrated by the unfairness of cheating which is not discovered and therefore not meted the appropriate punishment.
- Cheating leads to skewed scores favouring those who are cheating and disadvantaging those who worked hard and yet their marks are lower than those who cheated.
- Cheaters deny themselves of the knowledge they would have acquired by genuinely learning it.
- The university image and value of qualifications offered are questioned when prospective employers and community gather that students cheat to get such qualifications.

MAINTAINING ACADEMIC INTEGRITY

Many years ago, Chinese punished cheating by death for both the examinee and examiner (Lupton and Chapman, 2002). While no one would advocate such a measure as a way of maintaining academic integrity, the point is made that academic dishonesty is a serious matter that ought to be given attention to deter it from being a common phenomenon in institutions of higher learning. Park (2003) emphasizes that academic dishonesty must be addressed and punished where detected as a way of bringing it under control. In Ethiopia, cheating behaviour is punished by annulling all examination results or dismissing the misbehaving student from the university (Teferra, 2001). Similar methods dealing with academic dishonesty are used worldwide with varying degree of success. In response to the alarming rate of academic dishonesty at university, North American universities devised various ways of combating this terrible scourge.

HONOUR CODES

At the University of Duke North Carolina, a Centre for Academic Integrity Consortium of 200 universities was established. In this centre the emphasis is placed on the fundamental values of academic integrity such as honour, trust, fairness, respect and responsibility (McCabe and Pavela, 1997). At this Centre, students are given exposure to what is meant by academic integrity and why it is important in their academic work. This is concluded by encouraging them to sign a pledge to the effect that they will uphold the principle of academic integrity by ensuring that they will not knowingly engage in cheating behaviour of any form. Through the few years that the honour codes have been in operation, a significant difference has been observed. 'Nonetheless, there is mounting evidence that students in institutions with academic honour codes view the issue of academic integrity and treat cheating behaviours in very different ways to those at institutions without honour codes. Academic honesty is higher and levels of self-reported cheating are lower in institutions that have honour codes' (Park, 2003: 483).

In an Ethiopian study (Teferra, 2001) the majority of respondents indicated that cheating can be controlled through academic awareness. It was further proposed that more institutional commitment was crucial to the control of academic dishonesty. Introduction of an honour code was yet another measure to be considered in the control of the irregular behaviour. It was also suggested that examinations must be set in such a way that they are less prone to cheating such as may be the case with essay writing. McCabe and Trevino (1996) point out, those institutions which have established honour codes experience less cheating than is the case with institutions without it. According to Lupton and Chapman (2003: 24) 'Instructors should educate students on the virtues of not engaging in cheating and the penalties for cheating, with the hope that this will reduce the incidences of academic dishonesty.'

WHY STUDY ACADEMIC INTEGRITY

It is important for educators to understand academic dishonesty as practised by students as such knowledge will enable academics to communicate with students regarding the serious educational implications of such behaviour (Mwamwenda and Monyooe, 2000; Ashworth, Bannister and Thorne, 1997). Studying academic dishonesty familiarizes all those concerned with higher education with the practice and therefore appropriate measures can be put in place to control the occurrence of such behaviour.

It was with this in mind that the present study was undertaken. It sought to determine the extent to which East African and South African university students maintain academic integrity in their academic endeavours in pursuit of their higher learning. The study also aimed at comparing and contrasting the extent to which academic dishonesty is prevalent among university students on the basis of their gender. It was expected that the findings of this study would be similar to what has been reported in the literature on academic integrity and that in all probability men would be more involved in academic dishonesty than women.

METHOD

Sample

The participants of this study comprised 393 men and 347 women totalling 740. These participants were university students in Kenya, South Africa, Tanzania and Uganda at the following universities: Nairobi, KwaZulu-Natal, Dar es Salaam, and Makerere. They were registered for degree programmes in Education in preparation for a teaching career. The breakdown of the sample is displayed in *Table 1*.

Table 1
Distribution of participants according to country.

Country University	Kenya Nairobi	South Africa KwaZulu-Natal	Tanzania Dar es Salaam	Uganda Makerere
Men	58	120	71	144
Women	46	145	32	124

Procedure

During lecture time, students were requested to fill in the answers to the questionnaire which took them about twenty minutes. Participants were asked to respond with a 'no' or 'yes' response. As soon as they completed the questionnaire at the end of the set time, they were handed in.

Questionnaire

The questionnaire started with a preamble which stated as follows: 'This questionnaire aims at determining the behaviour of university students as regards writing assignments, research papers, tests, and examinations in pursuit of academic or professional qualification.' The students were asked to tick under 'yes' or 'no' against the appropriate statement showing whether at one time or other, they had engaged in the described behaviour. In addition, participants were asked to indicate their gender and date of birth. For the purpose of confidentiality, they were forbidden from revealing their identity in any way. This was adhered to by all participants.

The questionnaire comprised 16 statements covering most of the activities university students engaged in while at university. The objective for each statement was to detect whether academic integrity is strictly observed and maintained. The questionnaire was the same as those used in similar studies carried out in many countries and numerous times. The questionnaire had to be similar given that the scholarly activities students engage in are of a universal nature.

Scoring

Scoring was simple and straightforward. For each participant both 'yes' and 'no' responses were counted against each statement and then tabulated for all the participants.

Results

On the basis of the tabulated scores, for each of the 16 statements, the total number of 'yes' responses was identified and scored as an essential element for statistical analysis. The total score was converted into a percentage to determine the magnitude of the participants who engaged in academic dishonesty. This is displayed in *Table 2*. Having calculated the percentage for each statement, an overall percentage was calculated for all the statements and the entire sample as displayed in *Table 2*. *Table 3* shows the chi-square of the differences between men and women in academic integrity.

Table 2 below shows the performance of male and female university students on a country to country basis. In the Kenyan sample, the performance of both male and female participants was similar in a number of ways. For example, in response to allowing one's coursework to be copied by another student; copying from a publication without acknowledgement; and misplacing reading material in the library; both male and female students were equally involved.

On the other hand, there was a difference in their responses to paraphrasing material without acknowledgement, where 72% females and 59% males admitted having done so, which was statistically significant ($x^2 = 3,8$, df=1, p<0,05). In copying from another student during examination, 24% males and 9% females acknowledged having engaged in such behaviour. This difference was statistically significant ($x^2 = 4$, df=1, p<0,05). Identical percentages held true in producing false medical certificates for extension or exemption for assignments not done on time ($x^2 = 5,5$, df=1, p<0,05). A difference was also noted in taking into the examination unauthorized notes with 40% males and 20% females having engaged in such behaviour ($x^2 = 6$, df=1, p<0,05). Another area where there was a difference was having access to information relating to a pending examination with 14% males and 2% females acknowledging it ($x^2 = 5.4$, df=1 p<0,05).

In terms of differences in academic integrity, only in one area out of five, failing to acknowledge source of material, did females outscore male students ($x^2 = 3,8$, df=1, p<0,05), whereas in the remaining four areas, males had higher scores than female students. These results lend support to the hypothesis that in general, female students engage in less academic dishonesty than male students.

In the case of South African students, performance of both males and females was similar in paraphrasing without acknowledgement; allowing others to copy one's work; copying coursework material without acknowledgement; copying another student's work with their knowledge; doing another student's work for him; and lying about medical certificates. However, gender differences were noted in fabricating references, with 36% males and 26% females admitting having engaged in this type of academic dishonesty ($x^2 = 5,4$, df=1, p<0,05). Further differences were noted in copying other students' work ($x^2 = 4,4$, df=1, p<0,05); misplacing material in the library for subsequent easy access ($x^2 = 4,7$, df=1, p<0,05); gaining advance information on examinations ($x^2 = 5,6$, df=1, p<0,05); premeditated collusion to share information during examination ($x^2 = 6,2$, df=1, p<0,05); and lying about medical or other circumstances to get special consideration ($x^2 = 13,6$, df=1, p<0,01).

As noted, more males admitted having engaged in this behaviour. It would appear that in all other areas, there was no difference in academic integrity between the two sets of sample.

Table 2
Performance (%) of Kenyan South African Tanzanian and Ugandan university students on academic integrity questionnaire

N = 104 Kenyans; N = 265 South Africans; M = Males;
N = 103 Tanzanians; N = 268 Ugandans F = Females

STATEMENT	Kenyans M	Kenyans F	South Africans M	South Africans F	Tanzanians M	Tanzanians F	Ugandans M	Ugandans F
1. Paraphrasing material from another source without acknowledging the original author.	59	72	28	25	46	41	56	57
2. Allowing own coursework to be copied by another student.	69	70	18	23	24	19	62	58
3. Fabricating reference or a bibliography.	55	63	36	26	45	31	60	53
4. Copying material for coursework from a book or other publication without acknowledging the source.	55	57	20	17	31	21	55	45
5. Copying another student's course work with their knowledge.	52	48	21	15	24	19	56	57
6. Ensuring the availability of books or journal articles in the library by deliberately mis-shelving them so that other students cannot find them, or by cutting out the relevant article or chapter.	21	20	14	08	42	31	32	18
7. Submitting a piece of coursework as an individual piece of work when it has actually been written jointly with another student.	24	28	17	12	28	16	52	51
8. Doing another student's course work for them.	28	24	07	12	08	06	40	38
9. Copying from a neighbour during an examination without them realizing.	24	09	03	01	25	16	32	38
10. Lying about medical or other circumstances to get an extended deadline or exemption from a piece of work.	40	20	03	01	21	13	09	14
11. Taking unauthorized material into an examination (e.g. cribs).	14	02	13	06	23	13	13	10
12. Illicitly gaining advance information about the contents of an examination paper.	16	11	05	04	14	13	18	26
13. Copying another student's coursework without their knowledge.	59	49	08	02	28	13	37	46
14. Premeditated collusion between two or more students to communicate answers to each other during an examination.	59	49	08	02	28	13	37	46
15. Lying about medical or other circumstances to get special consideration by examiners (e.g. the Exam Board to take a more lenient view of results; extra time to complete the exam).	03	00	13	07	25	19	24	18
16. Taking an examination for someone else or having someone else write an examination for you.	07	02	03	01	07	06	10	15
Overall Percentage	33	30	14	12	26	19	38	37

Table 3
Chi-Squared critical values for Gender by Country in Academic Integrity

STATEMENT	Kenyans χ^2	South Africans χ^2	Tanzanians χ^2	Ugandans χ^2
1. Paraphrasing material from another source without acknowledging the original author.	3,8*	2,5	15,0**	1,03
2. Allowing own coursework to be copied by another student.	0,44	2,7	15,0**	1,85
3. Fabricating reference or a bibliography.	2,0	5,4*	17,7**	2,60
4. Copying material for coursework from a book or other publication without acknowledging the source.	1,4	2,5	15,5**	3,93*
5. Copying another student's course work with their knowledge.	1,5	4,4*	15,0**	0,65
6. Ensuring the availability of books or journal articles in the library by deliberately mis-shelving them so that other students cannot find them, or by cutting out the relevant article or chapter.	1,4	4,7*	15,7**	8,5**
7. Submitting a piece of coursework as an individual piece of work when it has actually been written jointly with another student.	1,6	3,7	11,8**	1,3
8. Doing another student's course work for them.	1,5	3,0	16,4**	1,5
9. Copying from a neighbour during an examination without them realizing.	4,0*	2,3	15,0**	2,5
10. Lying about medical or other circumstances to get an extended deadline or exemption from a piece of work.	5,5*	3,3	14,8**	1,8
11. Taking unauthorized material into an examination (e.g. cribs).	6,0*	3,7	12,5**	2,6
12. Illicitly gaining advance information about the contents of an examination paper.	5,4*	5,6*	15,9**	0,94
13. Copying another student's coursework without their knowledge.	1,8	1,9	15,9**	3,84*
14. Premeditated collusion between two or more students to communicate answers to each other during an examination.	1,8	6,2*	17,3**	3,81*
15. Lying about medical or other circumstances to get special consideration by examiners (e.g. the Exam Board to take a more lenient view of results; extra time to complete the exam).	3,7	13,6**	15,2**	5,8*
16. Taking an examination for someone else or having someone else write an examination for you.	0,26	2,6	14,8**	2,9
Overall Percentage	19,9**	42,76*	245,13**	20,65**

* Significant p < 0.05
** Significant p < 0.01

The Tanzanian sample was different from all other countries in that for all the 16 statements, the gender differences were statistically significant at p<0,01 with male participants showing the least level of academic integrity.

A different pattern emerged with the Ugandan sample in which there were differences and similarities between the way male and female participants performed. Similarities emerged in the following areas: paraphrasing without footnoting; fabricating references; copying other students' work; doing coursework for another student; copying from another student during examinations; lying about medical certificates; taking unauthorized material into the examination.

In five areas gender differences occurred. These were: copying materials from a publication without acknowledgement: 55% males and 45% females (χ^2 = 3,9, df=1, p<0,05); misplacing library materials to ensure availability of information required: 32% males and 18% females (χ^2 = 8,5, df=1, p<0,01); premeditated collusion between students to exchange answers during examination (χ^2 = 3,81, df=1, p<0,05); and lying about medical or other circumstances to get special consideration (χ^2 = 5,8, df=1, p<0,05). In each one of the areas of differences more males than females were academically dishonest.

Table 3 above shows the grand total of how the respondents from the four countries performed. In all four, the gender differences were statistically significant at p<0,01.

Table 4 shows the level of academic integrity irrespective of gender. The differences were statistically different with Uganda leading in lack of academic integrity, followed by Kenya, then Tanzania, with South Africa commanding the lowest level of academic dishonesty. Stated differently, South Africa commands the highest level of integrity followed by Tanzania, the lowest level of academic integrity prevailing in Uganda followed by Kenya.

Table 4
Chi-Squared critical values on country by country for Academic Integrity

	Kenya	Tanzania	Uganda
South Africa	1392 **	14,8 **	495 **
Tanzania	15,2 **		
Uganda	1233 **		

Significant p < 0.01

In summary, there were differences observed in different areas of academic dishonesty, whereas in other areas there was none. Where differences were observed, it was female participants who conclusively scored less except in one incidence where women scored more than men. However, in the overall analysis of the entire sample country by country as well as all the countries combined, there were significant gender differences in academic integrity. Analysis based on each country showed that both Kenya and Uganda experienced a high level of academic dishonesty. South Africa had the lowest level of academic dishonesty, whereas Tanzania fell in between.

DISCUSSION

In view of the importance of academic integrity and the worldwide practice of academic dishonesty, the present study undertook to explore the extent to which cheating on the basis of gender is a common phenomenon in East African and South African university students. The pattern of the findings that emerged

was an interesting one. To begin with, it was confirmed that both in East African countries and in South Africa, academic dishonesty prevails to the extent that it calls for measures to bring it under control.

From a country by country analysis, three patterns emerged in which in some areas there were women who scored higher than men and the converse also was true. There was yet a second pattern in which men outperformed women in cheating. Equally true, there was a third pattern in which there were no gender differences in academic dishonesty.

In Kenya, women cheated more than men in paraphrasing without acknowledging the source and fabricating references. On the other hand, men cheated more than women in copying answers from another student in an examination; lying about medical certificates to get an extended deadline or exemption from assignments; taking unauthorized notes in the examination; having advance knowledge of the pending examination; and making prior arrangements to exchange answers during the examination. For the remaining areas, there were no gender differences.

For the South African sample, there was not a single set of dishonesty behaviours in which women scored higher than men. The same could not be asserted about men who outperformed women in the areas of: fabricating references; misplacing reading materials in the library; and securing advance information about a pending examination. For the rest of the remaining areas no gender differences were observed. The overall performance showed that 14% men and 12% women engaged in dishonesty behaviour.

For Tanzania, the performance of women was similar to that of South Africa where there was not a single area in which women outperformed men. However, men cheated more than women in all areas. The overall gender difference was statistically significant. Overall the percentage of participants who cheated was 26% men and 19% women. The gender difference was the largest of the four universities.

The pattern for the Ugandan sample was similar to that of Kenya, but different from that of South Africa and Tanzania where men consistently outperformed women in academic dishonesty. Women outperformed men in the following areas: copying another student's work without their knowledge; exchanging answers during examination. Men cheated more than women in: copying materials from publications or books without acknowledgement; mis-shelving library materials for future use. For most areas, there was no gender difference between men and women. Overall the rating for academic dishonesty showed a statistically significant difference.

The findings of this study confirmed a number of previous reports as reflected in the review of the literature. There is no question that academic dishonesty is a common phenomenon both in East African and South African institutions of higher learning. The rate at which this is prevalent is comparable to many other countries worldwide. On the other hand, it is important to note that both Kenya and Uganda experienced the highest level of academic dishonesty, while South Africa had the lowest level, Tanzania had a medium level of academic dishonesty.

On the basis of 16 statements of the questionnaire, there were gender differences in academic dishonesty for all the four countries with men outperforming women. However, there were cases in Kenya and Uganda in which women engaged in more academic dishonesty than was the case with men. Gender differences were most pronounced in the Tanzania sample where more consistently and predominantly men cheated more than women. Though the level of academic dishonesty is substantial, it is smaller than what has been reported in the UK and USA as well as other countries.

It is interesting to note that the findings of gender differences in academic integrity fall into two categories, namely, those reporting no differences and those indicating that men cheat more than women. There are hardly any studies in which women are reported to cheat more than men, thus demonstrating that academic dishonesty is predominantly a problem of male university students. This too has been supported in the present study. For the majority of participants there were no gender differences in academic dishonesty. The findings also showed that where there were gender differences, men cheated more than the women did which confirmed what other studies have reported (Symako and Marcelo, 2005; Underwood and Szabo, 2003b). However, this did not concur with Whitney (2001) and Crown and Spiller (1998) who concluded that there were as many women cheating as there were men.

What is unique in the present study is that in some areas of academic integrity, women were not only as actively involved in dishonesty, but were also doing so more than men, thus challenging the dominance of men in the realm of academic dishonesty as generally perceived. The present findings are of special importance as they add knowledge to what is happening in African institutions of higher learning, which has been rather scarce for a variety of reasons, some of which are a lack of interest in such research as well as the confidentiality maintained in most African universities based on fear of bringing the name of the university in disrepute (Teferra, 2001).

CONCLUSION

One would want to assert that in dealing with academic integrity, there is no level, no matter how small that would be considered acceptable. In view of this, the level of academic dishonesty observed in the four African countries is unacceptable, as it is in direct contradiction with high academic standards and excellence. Any form of academic cheating is a direct attack against academic integrity (Hogan and Jaska, 2005). Graduates are conferred their respectful qualifications as a confirmation that they have met the level of academic standard and excellence expected of them by the university, government, private sector and society at large. Academic misconduct circumvents the level of academic excellence, thus allowing students who have not made the grade to graduate and join the labour market for which they are ill-equipped (Hogan and Jaska, 2005). This state of affairs devalues the degree in the labour market and deprives legitimate graduates of their duly earned recognition.

It can be argued that in the battle against academic misconduct, the interests of honest students are not included (Underwood and Szabo, 2003a). Such students do their own work and comparatively work harder and yet their marks are lower than those who cheat. Students are entitled to fairness in the manner they are assessed. It therefore follows that 'When teachers turn a blind eye to plagiarism, it undermines that right and denigrates grades, degrees, and even institutions' (Underwood and Szabo, 2003a). Academic misconduct places non-cheating students at a disadvantage as they are placed on an uneven playing field (Lothammer, 2005). Moreover, it takes away the essence of learning expected of university students worldwide. Teferra (2001) advances the view that the credibility of a university is essential for the recognition of its degrees within the country as well as outside countries where its graduates may seek employment or wish to pursue further studies. This cannot be realized when dubious standards are practised with the condoning of institutions of higher learning.

In view of this, it is important for educators to understand academic dishonesty as practised by students, as such knowledge will enable academics to communicate with students regarding the serious educational implications of such behaviour (Ashworth, Bannister and Thorne, 1997). 'Instructors should educate students on the virtues of not engaging in cheating and the penalties of cheating with the hope that this will reduce the incidences of academic dishonesty' (Lupton and Chapman, 2003: 24).

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The importance of cultural exposure for designers

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ABSTRACT

The need to have diversity in the design professions has long been recognized. Despite continuing efforts of design schools to attract a diverse student profile the results have been slower than anticipated. This matter is considered in this paper. Another issue that is not adequately addressed in South African design schools is that of the transformation of the curriculum. To a large extent, theory is Eurocentric and there is little attention paid to the nature of South African society. This paper explores the idea of 'multiculturalism' being a core subject within design education. It concludes that this would not only produce designers who are empathetic with their target audience but would also contribute to a greater understanding between South Africans.

INTRODUCTION

As South Africans, we have often taken a somewhat perverse pride in how complex our society is. It is with a macabre delight that we talk about our population of approximately 48 million people being made up of some 8 different cultural groups speaking 11 official languages and practising many different religions. We have first and third world infrastructures, incredibly diverse literacy levels and ethnic affiliations and we are in the process of re-inventing ourselves as a nation and a new democracy. How complex, how colourful, how diverse we pride ourselves in being.

We are also a nation characterized by misunderstanding and crossed communication wires. An experience that crystallized the reality of our cultural differences took place for me when watching the much heralded movie 'Tsotsi' in a Sandton cinema last year. It was very disconcerting to sit with an audience whose reaction to the film was so at odds with my own. Where scenes were the most poignant, tense or violent, the predominantly black audience laughed. There was laughter through killings, thoughtless violence and heightened emotional tension. Not only was this reaction unfathomable, it led to feelings of disquiet, dislocation and downright irritation. Weeks later an article in the *Sunday Times* newspaper (2nd Feb 2006) written by Justice Malala clarified this seeming paradox. It was not that the audience had misread the film or misunderstood the content; it was simply a coping mechanism that black communities have adopted as a way of dealing with the trauma, violence and difficulties that characterize their everyday lives. It seems to have become a response to ongoing oppression, of having to deal with brutality, disappearances and loss of dignity; a kind of 'if you can't beat it, laugh at it' philosophy.

Malala wrote 'It made me realize that all those people were not laughing. They had forgotten how to cry' (*ibid*). This offered some clarification of this particular situation, namely, why the response to a stimulus

was so different to my own and at odds with scenes being played out. Whilst Malala's explanation was enlightening it also highlighted how our experiences serve not only to separate us but can often contribute to prejudice and antagonism; two traits that all too often surface within South Africa in our cross cultural dealings.

Within our everyday life, the polarizing of cultures is still happening in South Africa. Students choose to socialize mainly with others from similar backgrounds, residential areas are predominantly culturally defined; the proposed fusing of cultures to form the 'Rainbow Nation' has to a large extent not happened. This dislocation that we have from one another, as noted above, often results in ongoing misinterpretation of each other. This dislocation also impacts on how well one can function as a designer in South Africa.

The point that is being addressed here is how inadequately the South African reality of diversity and multiculturalism is integrated within design education curricula. Design, fundamentally, is about creating solutions for people. This involves analysis of problems and harnessing of creative impulses to create innovative and meaningful solutions, but equally important is catering to a specific purpose or need for a targeted audience. In South Africa, a multicultural society in which the majority of the population is black, there is a dearth of black designers. Given that the majority of designers in South African are white and that design schools still attract a largely white population, the question arises: how do we ensure that design in South Africa is not merely a reflection of a Eurocentric world view? How do we ensure that design, whether it be in advertisements, fashion, the interior of buildings, is reflective of, and appropriate to, the culture of our different race and ethnic groupings in South Africa? This paper suggests that the second aspect of design is not well enunciated, i.e. having meaning for the audience. Two solutions present themselves, firstly, to enrol more black students in design schools, and secondly, to revise the curriculum to include 'multiculturalism' as a core subject.

EXISTING THEORY MODELS

Courses in design schools are primarily practical with emphasis being placed on equipping students to deal with creativity and the process of designing. Much time and energy is spent on familiarizing students with problem solving techniques, production methods and honing technological and digital skills. Besides occasional briefs that engage with the challenges relevant to our society, the other part of designing - that which takes into account who the design intends to serve, receives little attention. The theoretical content for most courses is where these issues are critically underemphasised.

As important as certain skills are to designers, so is an ability to be aware of how design sits within a critical framework. To meet this end, courses include subjects such as Design History; here the emphasis is placed on dominantly Eurocentric content, often with a bias towards the arts. This can be ascribed to two things. Firstly, the lack of available textbooks that deal with design within an African context, and secondly, the huge impact that Europe and America have had on the development of design. Hence the signals that are being inadvertently sent to students are that anything of importance from a theoretical context is from another continent. This could be seen to smack somewhat of colonialism where only foreign cultures are perceived to be of any worth.

Other theoretical content that may be covered in the design curriculum involves theories of communication, marketing and semiotics, which are also valid foundations for design (particularly communication design). Whilst examples cited during these lectures may be South African, the texts from which they are predominantly taught are once again from Europe and America. Undeniably, these theoretical subjects can contribute towards more holistic thinkers and help to create designers who are more critically aware. The relevance of these courses is not under dispute; the point that is being made is that nowhere in these theories is the South African context being addressed.

Communication theory often forms part of design courses, one of the essential attributes of designers is that they need also to be good communicators. Basic communication theory contends that effective communication takes place if you not only understand what you want to say and how you want to say it, but who you want to address. This takes us back to the 'who you want to address' component as discussed earlier. Present theoretical input into our design courses seems to address the former two criteria, but little is being done to address the latter.

THE FORM OF CULTURAL EXPOSURE NEEDED

As the intention of this paper is to point out the importance of cultural exposure, some discussion is necessary about the interpretation of the word 'culture'. Often 'culture' is addressed in course content where emphasis is placed on debates around cultural studies. Discussions typically centre on a modernist or post-modernist rejection, or embracing of, indigenous cultures, anthropology and social theory. Furthermore, culture is often discussed as a static entity, something attached to history. Alternatively it is seen as a representational veneer attached to communications, which is then criticized for being inappropriate and token. The multiculturalism that appears relevant for design educators to address is the everyday habits and practices of the many different peoples in South Africa. We need to address the diverse needs of the South African community many of whom live in a 'foreign' or alien culture to each other. Due to the unhappy legacy of South Africa, the lack of exposure to different cultures during children's formative years has typically resulted in individuals being misinformed, distanced and often unintentionally intolerant of others whose upbringing and set of norms are different from their own.

WHERE THESE CONCLUSIONS COME FROM

To test these views, questionnaires were sent out to twelve design educational institutions nationwide in May 2006. The institutions approached were a range of private and public tertiary design schools and universities that offer a choice of design courses across different disciplines. The intention of the questionnaires was to ascertain the existing race and ethnic profile of student bodies within the schools and to see whether this had changed markedly in the last years. Due to confidentiality issues at many of the schools, the response was poor. It consisted of six completed questionnaires. The answers provided showed there was a ratio of 83% white to 17% black within the student cohort. Or to put it another way, of 1487 students enrolled at the institutions that responded, 268 were either African, Asian or Coloured students.

Further research was subsequently conducted using a different methodology, semi-structured interviews conducted either by telephone or face-to-face sessions with senior lecturers in seven different design departments around the country. The interviewees were attached to Pretoria University, University of the North West, Durban Institute of Technology, Greenside Design Center, Vega Cape Town and Durban, University of Johannesburg, and Nelson Mandela Metropolitan University. The focus of the interviews leaned more towards the field of Graphic Design as opposed to the other design disciplines. These semi-structured interviews proved more fruitful than the questionnaire model. Common threads emerged among design educators. These were as suspected: the difficulty of attracting and graduating black students; the lack of South African focus in course content and related to this, the lack of transformation within design curricula. To put it succinctly, the reality of the situation within our design education departments or institutions is that the student body is still predominantly white and that little focus is placed on multiculturalism within course content.

For years it has been recognized that we need to attract more students from our diverse cultures into the design professions. Most colleges have implemented concerted drives showing the importance of design as a career in an attempt to attract high calibre students into the field. Requests have come directly from industries whose need for black designers to fill Black Economic Empowerment (BEE) requirements are

critical, and more importantly, because black designers in the workplace could facilitate a better level of communication and understanding between the industry and consumers due to the similarity of their backgrounds. It could also be argued that having high quality designers from the spectrum of the cultures in South Africa would have a positive effect on the socio-economic development of South Africa. Unfortunately few schools have shown an increase of black student enrolment over the last few years. Hence South Africa is not tapping into its vast diverse array of potential talent.

From the semi-structured interviews it was found that a large number of black students within our schools speak English or Afrikaans as a first language. The question might be posed whether such designers would in fact be any better equipped to communicate effectively with or understand the needs of, say, the Sowetan community than their white counterparts. It could be further argued that while enlisting black designers to speak to black people may provide the empathy and understanding of the culture that the design seeks to serve, it also keeps culture exclusive and unattainable to other cultural groupings. These are issues that would benefit from research and debate.

Given that the drive to attract black students into design has been largely ineffective, and given that for good social reasons South Africans need to know and understand the culture of all the people who live in the country, the second solution mentioned above seems appealing: i.e. to change the curriculum so that all design students have an understanding of what it means to live in a multicultural society like South Africa. This would serve the economic needs identified earlier and would also be a social good, in that graduates would be effective and empathetic communicators who embrace the diversity of all the people of South Africa.

THE WAY FORWARD, PERHAPS

It is always easier to point out the problems in a situation as opposed to offering solutions. Here are some thoughts to ponder in terms of possible future recommendations:

- South Africa's multicultural profile is incredibly diverse. Any attempt to try to educate designers about *all* the rituals, practices and behavioural characteristics attached to these groupings is well nigh impossible. Culture is also mobile and changeable so the risk would be that something that is taught today would be outdated tomorrow. The approach to multiculturalism that is suggested in this paper is one that promotes an embracing of *understanding* as opposed to *criticism* and *fascination* with diversity and as opposed to *frustration*. One of the ills confronting our society at this stage in our history is the lack of mutual respect and an antagonistic approach to difference, along the lines of 'if you are not like me, you are against me'. This is a mindset that needs to be confronted and attempts made to change it.

- Vega Schools are introducing Ulimi Lwami Centres (Language Laboratories) on all three campuses. The main intention of these centres is to encourage the use of copywriting in indigenous languages and to offer opportunities for students to learn the rudiments of a language other than their own. Part of the Ulimi Lwami initiative is also to hold cultural sensitivity workshops that will go some way to address many of the issues that have been mentioned in this paper. These include simple fundamentals matters such as: the significance behind complicated handshakes, how to behave appropriately at a Zulu funeral, which aspects of a culture is it permissible to have fun with and what is sacred. These courses are now a compulsory element for all our design and communication students.

- To promote transformation by making designers 'acultural' when they solve creative problems. The notion that only those from similar cultures can design appropriate solutions for them needs to be nullified. A neutral voice needs to be adopted whose tone can be adjusted to suit the culture that is being addressed. This involves more un-teaching than instruction. Students need to be made aware of how much of their own make-up is culturally biased so that they are aware that what they see as being

being 'normal' is actually a social construct. To create a clean canvas onto which designs can be painted means that students gain an understanding and a recognition of how culturally constructed we are as individuals.

- South Africans are in a unique position, ours is a new country still finding its feet on the world stage and within its own borders. The role that design can make in consolidating and improving the country's future is huge and yet it seems that we have not adjusted our curricula in any significant way to address these issues. A more pro-active approach needs to be adopted in going forward. As designers our brief should be to formulate courses that fit the needs of our consumer (students) that take into account the needs of the changing marketplace (the industry that our students will be entering) and equips them with the wherewithal that will enable them to function ultimately better as designers (to have a fuller understanding of the audience for whom they are designing).

CONCLUSION

Developed countries have cultures that have deep historical roots. People in countries, such as China, England, Japan and Europe live their culture simply because it surrounds them and is part of their everyday life. It is accepted and intrinsic. Our tendency is rather to ignore our culture because of South Africa's troubled past. There is very little culturally that we can depend on, refer to or even enact or depict without being offensive to someone. Due to this factor, our indigenous cultures, including Afrikaans, are at risk of being lost due to neglect. Culture in South Africa can be criticized as being token, a surface treatment or veneer attached for the benefit of tourists and investors, it is extrinsic, an 'add on'. But culture is not monolithic, static and in the past, it is malleable and in the process of being formed. Culturally, the country seems somewhat vague, in limbo, yet dynamic and open to change and transformation. What we need to do is plant the seeds for a new culture but to have some degree of respect for what has been, we need to start somewhere; 12 years into democracy and we are still as South Africans culturally rootless.

As educators we need to take an active part in this process, not necessarily to dictate how it happens but to nurture and promote the embracing and development of our multiculturalism. There are few texts that we could use as appropriate blueprints for teaching this challenging subject area. South African cultures tend to feature in coffee table books with appealing photographs of ethnic rituals. Little has been written to serve as sources for understanding the 'everydayness' of these cultures as opposed to the more extreme or exotic manifestations. This needs to be addressed as a matter of urgency. Furthermore, if we start treating other cultures with more respect, we can serve as examples about how South Africans should be treating each other. We have always tended to see the cultural practices of others not just as different to our own but more often in opposition. If we achieve nothing more than a subtle shift in that mindset, we will have achieved much. If we continue to ignore our vibrant and colourful differences, we risk become acculturated, indifferent and bland and these are adjectives that are the very antithesis of all that is South African.

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. The overall style for abstract, titles, headings, figures and references should be in accordance with that of the American Psychological Association (APA 2004, 5th ed. Style Manual). 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.

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