



Developing successful graduates and improving throughput rates: expanding core business in higher education

Report from a colloquium held at the University of the Western Cape on 26 May 2009

Jointly organized by the Rural Education Access Programme (REAP) and the Centre for Student Support Services at UWC

A colloquium was held at UWC on 26 May 2009 to initiate discussions around the findings of a research study conducted for REAP in 2007/8. The full report, *Factors that facilitate success for disadvantaged higher education students: an investigation into approaches used by REAP, NSFAS and selected higher education students*, is on REAP's website – www.reap.org.za. The colloquium was intended to summarise key issues arising in the research study, highlight a number of initiatives that have already begun at selected Higher Education Institutions (HEIs) in the Western Cape and encourage debate on the ways and means of improving institutional responsiveness to disadvantaged students.

Key issues that emerged from the colloquium

Important points for higher education institutions (HEIs) to consider for improving student throughput are that:

- Low-income students are more likely to begin higher education academically under-prepared than those from more affluent backgrounds.
- Beginning higher education with fewer academic resources than their peers, these students are less likely to complete their degree programmes.
- No long-term solution to the problem of retaining and graduating under-prepared low-income students is possible unless institutions find a way to address their holistic experience (Engstrom & Tinto, 2008:47).

Key themes that emerged from the presentations and discussions were as follows:

- Tracking and monitoring student progress, especially that of first-year students, is vital in identifying those that are at-risk of failing or dropping out.
- Technology can be used in creative ways to enhance teaching and learning, for tracking and monitoring, and for research-based strategic planning.
- A strong sense of personal identity, and a sense of belonging in the institution, facilitates students' learning.
- Building communities of learning, especially small group learning, promotes a sense of belonging for disadvantaged students and the development of a strong personal identity.
- A range of learning spaces provides opportunities for important learning outside the classroom.
- A wide range of activities/interventions is needed to address student needs holistically.
- These activities and interventions need to be integrated within the academic curriculum and the total student experience.
- A coherent, institutional response, with systemic integration of programmes and interventions across the entire institution, is needed for real transformation to enable student success.
- Students need to be educated so they can contribute to society and be "nimble" and "adaptable" in responding to multiple, rapidly changing local and global challenges.
- Student success is a shared responsibility



The proceedings commenced with an introductory address by Prof. Brian O'Connell, Rector of UWC, who warned that the current state of affairs in South African HEIs was more serious than just getting students to pass: we must create an educated nation that can lead the African renaissance by developing the intellectual and technological competencies on which we can build our future. An alarming observation was that communities that cannot afford to buy books tend not to have access to facilities for borrowing books either, effectively eliminating them from the knowledge economy. He emphasised that the world is facing unprecedented challenges and, if South Africa and Africa are to move forward into the future, we need to adapt quickly and nimbly to meet these challenges in the context of an ever-growing global knowledge economy. "The world's intellectual power is growing in Japan, China and India, and if we do not find a way in the shortest possible time to light the nation's fire to becoming educated, and develop a powerful, modern learning culture, we will not endure". Universities need to model a modern learning culture to the nation and, "if we don't succeed in getting these young people ('disadvantaged' students) through university, who have faced extreme impediments to get here, but whose behaviour does not equip them for the challenge, then this country will be in desperate trouble."

Prof. O'Connell's address was followed by a brief review of the REAP research study and its findings and thereafter by presentations of three initiatives, by UWC, UCT and SUN respectively, that are aimed at improving student throughput. These initiatives are addressing the broader issues - beyond those of literacy and numeracy - associated with disadvantaged students succeeding in higher education.

Report on REAP study

Dr Sharman Wickham, the lead researcher of the REAP study, addressed key aspects of the study and its findings.

The research questions for the study were:

- What are the factors that facilitate (and inhibit) access to and completion of higher education studies by disadvantaged undergraduate students?
- What recommendations can be made for improving access to and completion of such studies for these students?

REAP provides a package of financial and academic/lifeskills/mentoring support to selected higher education students from impoverished and mainly rural circumstances. Previous studies have suggested that REAP students have some advantage over other disadvantaged students, unrelated to school academic achievement, and that their success rate is higher than the average for HEIs. The purpose of the research study was to understand why this was so and to investigate ways of improving on this success. This was not an impact study: the focus of the research was on exploring the experiences of impoverished, rural students in HEIs who gain access to HE through NSFAS loans.

A review of the literature revealed certain key concepts that were used to make sense of the data. These were

- The notion of integration, which was used in the literature in different ways.
- Pre-entry characteristics of students, as opposed to only academic marks or symbols.
- The students' interactions, relationships and involvement, which played out in various ways in the data and the literature.
- Institutional preparedness for dealing with disadvantaged students, and a diverse student population.
- The importance of mediating the "clash of cultures" between HEIs and students from rural, impoverished backgrounds.

The study was found to have broader relevance than just to REAP's concerns, as, firstly, there appeared to be significant similarities between the experiences of the REAP students

and the majority of other students interviewed. Secondly, the conclusions speak to the need to expand the core business of HEIs, especially in teaching and support (because, for example, the marginalisation of student support services have a knock-on effect on student success). Thirdly, the conclusions suggest ways of thinking about institutional change and development, and that much of this is done from the bottom up. This was seen in the many individualised efforts in faculties, schools and departments where individual staff went beyond their formal responsibilities in providing students with the necessary support. One of the key arguments in the report is that such support needs to be institutionalised and that these efforts need to be redirected more holistically.

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When synthesising the findings, three umbrella themes with a number of sub-categories were identified. These were highly interdependent and broader and more complex than expected.

- **Financial** factors. These comprised application, registration and tuition fees PLUS accommodation, books, food, equipment, travel, clothes, etc. For example, many rural students do not have the money to go home for the holidays or even phone home, and the emotional pain this causes impacts on their studies and exacerbates feelings of isolation and alienation.
- **Academic** factors: Almost all the rural students in the sample needed to read and write in a second or third language PLUS they struggled with issues related to academic literacy, educational technology, independent study, conceptual issues, etc. For example, many students interviewed had never been exposed to academic writing and most struggled with independent learning. They may have found ways of studying that had enabled them to pass grade twelve at school, but they did not have the critical and reflective skills required of them by HE study.
- **Socio-cultural** factors: Most rural students lack role models and experience feelings of isolation and alienation far from home in a new environment, PLUS they frequently have to deal with loss and bereavement, etc.

The findings highlighted some false assumptions in HEIs, especially when applied to disadvantaged, rural students. The first is that if support services exist, students will find them and use them as required. In many cases, these students do not know about these services, may find them culturally irrelevant, and social stigmas may prevent students from using them. A second assumption is that orientation will serve to introduce the university to the students. It was found, however, that students often do not attend orientation, because they are trying to sort out registration, financial or accommodation matters, or because they simply do not know about it. Even when they do attend orientation, it may be too general to be meaningful and helpful.

In addition to these incorrect assumptions, the study found that student support services are marginal to the core business of universities, merely an 'add-on', which means that they are not given the serious consideration that they deserve. Finally, HEIs assume that it is the responsibility of students to "fit in" with the institution, its culture and norms, which is not a welcoming or a responsive approach: for many students these norms and cultures remain, at best, opaque and at worst, conflictual and alienating.

The data enabled the research team to develop clearer understandings of success and how it is facilitated by a multiplicity of factors; of the importance of integrated institutionalised support; and of the necessity for coordination and developing dynamic partnerships and relationships within and beyond institutions. The conclusions, recommendations and suggestions from the study were as follows:

- There is a gap between institutional intention and experienced reality for many students, but especially for disadvantaged, rural students.
- There is a gap between institutional missions and their implementation.
- There is a need for an institutional response – as opposed to isolated, individual responses within institutions - to meet the needs of these students.

An institutional response requires an effective tracking and monitoring system that provides for:

- Identification of at-risk students prior to entry. Identification of these students at the end of the first term is usually too late.
- The prioritisation of first-year students for residential accommodation.
- The appointment of mentors for first-year students in the first week of the academic year.
- Proactive, immediate and ongoing communication with at-risk students and between these students and support services.
- A coherent set of timeous, integrated and well-coordinated support services that talk to and complement each other, thus preventing gaps and duplication.
- Increased staff and student knowledge of support services.
- Normalisation of support services - so that they become a part of students' everyday lives.
- Regular communication between academic and support staff.
- Evaluation of support offered and taken up.
- Ongoing monitoring of students' progress.
- Rigorous comparisons of institutional mission and achievements.
- Institutional decision-making needs to be based on data collected in monitoring and evaluation activities – so that policies, strategies and budgeting are based on this data.

In addition, it was recommended that HEIs develop coordinated strategies and partnerships to address:

- A once-off, nationally administered application fee, that would increase financial access significantly for poor students
- Comprehensive financial packages that do not cover only tuition fees, so as not to seem to be offering students something that, in reality, they cannot have.
- Accessible locations of Financial Aid Offices, as the first port of call and a central coordinating point for student support.
- Resourcing schools – infrastructure (technology/ICTs), information (e.g. careers information, NSFAS loans) and teaching skills (independent learning).
- An ongoing and staged process of orientation ending with an introduction to the world of work:
 - Preferably faculty-based, with peer facilitators
 - Inclusion of the logic and culture of HEIs
 - The integration of academic literacy programmes into curricula.
 - The integration of student experiences, languages and socio-cultural discourses in programmes, so that universities become welcoming places, oriented to South Africa.
 - Credit-bearing tutorials.
 - Diverse ways in which to increase participation in student life (cultural civic and sporting activities).

Finally, it was emphasised that student success requires student engagement **AND** institutional responsiveness, and that student success is a **shared** responsibility.

Discussion

The discussion that followed highlighted the following key points:

- The similarities between rural disadvantaged students and many others who struggle financially, academically and socio-culturally when first entering HEIs
- REAP's current definition of rurality - those from impoverished backgrounds living outside a central metropole who would not be able to access higher education without REAP's intervention.



- The need to take a variety of factors into account when selecting students (see other factors associated with success below)
- The value of affirming students' own identities – those they bring with them to the HEIs
- The importance of developing and using an at-risk profile to identify at-risk students
- The importance of ensuring that ongoing monitoring and evaluation takes place
- While there are sometimes stigmas associated with intervention, many students prefer an intervention programme to failure
- “Intrusive support” may be better than none at all
- Changes at both national policy level and at institutional level require further research to provide direction and to ensure the development of useful strategies

Explanations offered by delegates for student success included the following:

- a student's inherent abilities
- mentoring at a critical stage of her/his life
- family motivation and expectations (especially the mother's)
- involvement in community life
- engaging in reading as a leisure activity
- early interventions when needed.

Institutional presentations

Three cases of interventions in HEIs that aim to improve student success were then presented. Points of discussion are woven into the case reports. In each case, key principles on which the interventions were premised had been raised in the research study described earlier. For example, Tinto's (2008) assumptions about student success were listed as:

- Student success is not coincidental
- Access without support is not opportunity
- Student success is a shared responsibility
- Conditions of support and development need to be infused into the academic experience – i.e. integrated into curricula.
- Academic integration – shared learning – is vital.
- Social integration – shared experiences provide a sense of cohesion and belonging
- Adjustment to a HEI environment – changes in behaviour, beliefs and self-perception
- Attachment to the new higher education environment is important.



The First Year Academy at Stellenbosch University (SUN)

Dr Susan van Schalkwyk introduced the First Year Academy (FYA) as a systemic-holistic, institution-wide process where all parties (staff and students) participate in re-thinking, re-crafting and re-aligning those activities at the University that impact on first-year students' wellness and academic success. She explained that the model was informed by **systems theory**, so that interrelationships within SUN are elevated over individual elements. The FYA is therefore pioneering an integrated, transdisciplinary approach in the institution. The Academy is not a building, but a virtual system comprising areas of good practice that are coordinated systemically and holistically throughout the institution. The task team was drawn from all levels of staff across the university, which has ensured widespread buy-in and involvement. Very importantly, leadership supports the initiative and provides institutional funding.

The Academy has several components. Firstly, early assessment of all first-year students - within the first six weeks - allows those at-risk students to be identified and specific interventions put in place. The process for this is to release these assessment results to the students, their families and the faculty. The results are then used to discuss, critique and transform teaching, learning and assessment practices, as well as to inform the interventions needed, supported by the FYA. So, for example, the FYA has assisted the Psychology Department in training tutors for running small tutorial groups one day per week, in lieu of a formal lecture, and these tutorials seem to be having very positive results.

A creative tracking and monitoring system indicates the students' results and their progress across all subjects. This also contributes to research, for example by enabling the progress of bursary and loan students to be assessed. There have been initial problems with implementing the system, such as getting some of the lecturers to understand formative assessment and what they need to assess in the first six weeks. Existing initiatives, e.g. tutoring and mentoring systems, have had to be integrated with new initiatives of the FYA, and this has required academics to change their practices and use more technology. In addition, there have been complaints that the system is too complicated and that it is increasing lecturers' administrative load. It has been a challenge to obtain buy-in and involvement across the entire institution, and to market and sell a 'virtual' idea, but it has been absolutely necessary and 80% of the faculties are now committed to the idea.

A second component, and part of the holistic approach, is opening up learning spaces – taking into account that a great deal of learning takes place outside of the classroom. This includes the 'ResEd' programmes, which are learning spaces within student residences to cater for commuting students.

A third component is the dedicated Teaching and Learning Coordination points (TLCs) within faculties for first-year students, which deal with lectures, student housing, student finance etc. These have been a major success factor in implementing the FYA system. Although these TLCs work better in some faculties than in others, they open up spaces for ongoing conversations around student success and academic practice.

The FYA programme rewards excellence in teaching and learning by inviting the thirty top first-year students to a prestige dinner. They, in turn, invite the lecturer whom they believe has contributed the most to their achievement. It is an inspiring event and provides a forum for deans, lecturers, students, the rector, support staff etc. to sit around the same table and converse with each other.

The systemic-holistic approach of the FYA programme for enhancing first-year student success thus comprises technological support; early assessment; faculty-based Teaching and Learning Centres; mentoring and tutoring; residential education; a research-based approach; rewarding excellence in teaching and learning; and the system is integrated into institutional structures.

Tangible results so far, aside from positive feedback from staff and students, are reduced



numbers of first-years going to Student Counselling for problems with adapting to the higher education environment; greater awareness of teaching and learning issues in faculties (especially with regards to first years); significantly more teaching and learning research initiatives aimed at first-years than ever before; and enthusiastic and excellent conference participation during both the in-house SOTL conference as well as at the first Southern African Conference on the First Year Experience, which SUN hosted. Although a causal connection cannot be claimed at this point, retention and pass rates are increasing since the implementation of the system. Some of the faculties continue to achieve better throughput rates than others, but all are experiencing a **relative** improvement in first-year student results.

In retrospect, it is recognised that the top-down approach adopted was not ideal and the notion of a virtual structure was problematic for some – the analogy of the FYA as an umbrella structure has been helpful here. But having the resources and using a systemic approach has enabled it to be successful. It has also worked because it was the right time for change for SUN – they were prepared for change. The “magic” of the initiative lies in its overarching institutional (support and shared responsibility) focus on first-year success. This has had a ripple effect into other years. Its strength is that it is a **network** (web) of people, actions and mechanisms that are focused mainly on improving teaching and learning.

An unexpected finding was that bringing academic faculties on board has been easier than with some support and administrative divisions. But the most significant lesson was the extent to which they had under-estimated the power of the systemic-holistic approach to implementing change and aligning teaching and learning initiatives.

It was acknowledged that Stellenbosch University currently has one of the lowest intakes of black disadvantaged students, and that, at present, the FYA is not substantially benefiting the type of students profiled in the REAP report. The Rector, Russell Botman, has expressed a transformation vision for SUN of “the farm labourer’s daughter having the same education as the farmer’s son” by 2015 (Financial Aid Practitioners of South Africa conference dinner, 25 June 2009). Therefore, expectations are that this situation will change and that the FYA will be supporting more and more disadvantaged students in the near future.

Two programmes that aim to actively develop strong identities for first-year students through communities of learning are “Skills for Commerce” at UCT and “Living and Learning in Science” at UWC. It was pointed out that a general indication of being at risk, for all students, is when they do not identify with their studies or the institution.

Skills for Commerce: UCT

Dr June Pym reported that this is specifically an equity programme for B Com and B Business Science students that has been developed by the Education Development Unit in the Commerce Faculty at UCT. There are approximately 200 first-year students on the programme and 750 altogether across the degrees. The majority of those on the programme do not have enough access points to enter the mainstream first-year group. In addition, all bursary students are on the programme and some others have chosen to come on the programme, despite having enough access points to enter the mainstream degree.

The purpose of the programme is to pro-actively address the problem of students not coping and “falling apart”, rather than merely to be reactive and try to pick up the pieces once it is too late. Student difficulties are therefore detected early and appropriate interventions implemented. The first year of the programme is a registered, formal course but during the remainder of the degree the programme is more informal in nature, although there is a range of different activities and interventions at different times. There is a focus on articulation and competencies throughout the degree.

The first-year class is divided into groups of about 20. A formal induction week gives the students a sense of themselves and a connection with each other - a coherence and a location. This is sustained through monthly class meetings, so that a “learning community” develops. A good, consistent group of lecturers is used for the first year, to provide a sense of continuity and connectedness and for role modelling – this is very

important in assisting students develop a strong centredness. Multiple methods (induction, mentorship) develop leadership in the students and help them develop a group identity. Rather than being an archetypal “black programme” (a deficit approach) that tends to stereotype the students, it adopts a multi-focused, value-added approach.

The first-year course includes:

Introduction and adjustment Know your campus and services Note taking Planning and goal setting Planning and time management Information literacy Stress management and coping	Citizenship Career management Communication and co-operative learning Communication and diversity Communication and transformation Exam competence and evaluation
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Additional elements of the programme, beyond the formal curriculum, comprise:

Mentoring Induction for first years ‘Yellow Pages’ guide Sense of belonging Awards ceremony Sensitivity to language & culture Library of prescribed textbooks Corporate links Language development embedded in courses Writing consultant Website	Newsletter Formative evaluation Academic workshops Class meetings Individual files Interview skills Crisis interventions Leadership opportunities Skills workshops Pedagogies oriented to diversity Multilingualism Multiple personal engagements
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Students report that they have developed self-confidence, a sense of coping, and a sense of self: as Dr Pym pointed out, “when we are not feeling whole, we are not going to perform well.” It has facilitated their healthy development and assisted them in making adaptive choices. They develop a sense of groundedness, assertiveness and leadership, and these abilities are arguably as important academic success.

Throughput rate has increased dramatically - which has provided ‘visible’ evidence for the ‘invisible’ – and this, together with being a formal, credit-bearing course, gives the programme credibility. It also provides an understanding of ‘graduate attributes’ to consider for teaching and learning. Very significantly, it is beginning to be piloted into the mainstream programmes of the faculty and may provide models for service learning: this means that the programme is no longer seen as ‘just’ an academic development programme.



Living and Learning in Science: UWC

Birgit Schreiber from Student Support Services and Prof Vivienne Bozalek from the Centre for Teaching and Learning presented the Living and Learning in Science programme at UWC, which their departments continue to support. The theory underpinning the programme is that developing communities of learning, that are adapted to the needs of the students, can be a valuable way of building student identity, making learning more meaningful and enabling students to develop generic learning skills within a discipline-specific context.

The programme is integrated into the curriculum of the extended learning programme for first-year students – it is not simply bolted on. The aims of the programme are:

- to facilitate personal, social and academic adjustment to university
- to utilise the group contact to mediate adjustment
- to provide generic skills training and assistance on task-specific issues
- to provide a space to practice these skills in a trusted environment
- to provide a safe platform for students to discuss difficulties and collectively find solutions to shared problems
- to promote early integration into social group(s) connected to academic experience.

In 2009, 49 students have been enrolled on the programme, forming two groups of 24 and 25 respectively. It starts in the first week of the academic year and weekly sessions of one hour each are held. It was acknowledged that this is not enough time, but it is at least a start.

The programme content covers:

- Mapping learning context
- Adjustment to Higher Education and UWC
- Navigating via e-learning
- Goal setting, time management and prioritising
- Communication, diversity and cooperative learning
- Stress management and coping
- Exam preparation

Small group interactions provide cohesion, a sense of belonging, trust and universality. The focus is on dealing with the critical changes in identity that students experience when they enter a HEI. It helps them to adjust and learn new behaviours – new ways of communicating and interacting with people – and so to build up a strong self-identity, from which other identities, like a professional identity, can develop later.

The formation of a learning community is facilitated by the use of Participatory Action Learning (PAL) techniques, which enable the emotional aspects of learning – something that is usually neglected in academic practice. These are group-based, open-ended, flexible, visual methods used in the learning process, such as mapping, matrix ranking, problem-solving and objective trees. PAL provides a stimulus for discussion on various issues like gender, stereotyping and diversity and individual, personal stories are encouraged. This allows students to open up and start to feel safe, especially within the small group context. Much of what is learned is life skills, which students can apply outside the HE context.

These learning techniques are particularly useful for:

- Promoting social learning – opportunities to learn about each other, which is important in forming learning communities.
- Dealing with difference and modelling democratic and respectful interpersonal interactions.
- Enabling participatory parity – being inclusive of all participants.
- Enabling reflection – they are good reflective tools.
- Allowing students to speak in their own language and to learn to feel comfortable expressing themselves in English.

- Providing a stimulus for discussion.
- Promoting collaboration between students and the institution/department.
- As non-threatening, “playful” ways of approaching learning.
- Students’ adaptability to different contexts and disciplines.

The facilitator needs to be skilled in the use of these techniques and in dealing with sensitive issues as they arise. Participatory Action Learning does not work in a large group, classroom situation.

In addition to Participatory Action Learning, e-learning and m-learning (using mobile technology such as cellular phones) are also employed to promote communities of learning. M-learning is particularly useful as an accessible, affordable, flexible medium with which students are familiar. It allows students to own the process of their learning and take responsibility for it. Where necessary, students are trained in the use of specific tools such as podcasting using MP3 players, Audacity and Wiki by more knowledgeable peers.

The challenge is how to use techniques like these in other disciplines, such as engineering.

Discussion

Some of the issues raised for discussion are as follows:

- Student success should be considered as broader than just throughput, such as their ability to make a contribution to the development of the country. So student success could be also about them discovering what they really want to do, even if this entails them dropping out of university. A response to this was that many of these drop outs can be prevented if good careers advice and course information is provided before a prospective student registers.
- Mentoring can assist in building on students’ strengths and developing a strong identity - something that the REAP programme does.
- Institutional capacity and willingness to change can present obstacles to implementing effective tracking and monitoring systems. At-risk students are an international phenomenon in higher education and there are therefore international examples of sophisticated tracking and monitoring systems. A pilot tracking and monitoring project, commissioned by the CHE, is being tested in certain South African HEIs.
- Much more research in certain areas is required; a critical mass of research is needed for the sorts of broad changes that are needed to take place. Data from tracking and monitoring systems in HEIs would assist greatly in this regard, as well as in addressing institutions’ strategic development needs.
- Universities need to redefine and expand their core business for broad change to happen.

Conclusion

The colloquium highlighted the importance of implementing holistic strategies to substantially increase the numbers of graduates in higher education. A clear picture of students’ identities and views of self, as well as their skills and competencies, need to be developed in order to shape institutional responsiveness and so improve throughput. Tracking and monitoring systems, that profile and identify at-risk students on entry, can make a significant contribution in this regard. Student attributes need to be affirmed and built on in academic programmes, from the first day, to enhance their academic and socio-cultural integration and success. Without the integration of all students and the diverse services that might support them, student success will not be achieved.

This colloquium is to be followed by others of a similar nature at HEIs in different provinces.