# Turning the tide: a socio-critical model and framework for improving student success in open distance learning at the University of South Africa

George Subotzky and Paul Prinsloo\*

Department of Information and Strategic Analysis, University of South Africa, Pretoria, South Africa; Office of the Vice-Principal: Academic and Research, University of South Africa, Pretoria, South Africa

(Received 25 October 2010; final version received 9 February 2011)

The article presents a socio-critical model and framework for understanding, predicting, and enhancing student success developed at the University of South Africa. An extensive literature review indicated that predominant models from international contact institutions were of partial application in this context. Integrating socio-critical, anthropological, and cultural theoretical perspectives, the model applies the key constructs of *situated agency, capital, habitus, attribution, locus of control*, and *self-efficacy* to both students *and* institutions in understanding success at each step of the student's journey. The model and framework, to be implemented incrementally during 2011, provide useful pointers for open distance learning and other institutions in pursuing greater student success.

Keywords: student retention model; ODL; socio-critical; student success

#### Introduction

The challenges and imperatives to enhance student success<sup>1</sup> in higher education in South Africa are particularly formidable. Despite substantial government funding incentives, numerous policy initiatives and well-intentioned institutional efforts, retention and success rates are notoriously poor. For numerous reasons, tackling this challenge is therefore a high national and institutional priority and a key focus of the government's outcomes-based funding and enrolment planning framework (Ministry of Education, 2004). First, most students are under-prepared for higher learning as the consequence of the ongoing legacy of apartheid and predominantly substandard schooling system. After 16 years, the post-apartheid government has largely failed to rectify these stubbornly persistent inequalities and inefficiencies. Second, most students emanate from disadvantaged backgrounds and face deeply rooted socio-economic challenges, which, in combination, threaten success. Third, South Africa suffers from ongoing high-level skills shortages, which inhibit development and growth. Fourth, South Africa's notoriously high HIV/AIDS prevalence rates impact negatively on student retention and the workplace. Fifth, institutions have a moral obligation to avoid the 'revolving door' syndrome created by opening

<sup>\*</sup>Corresponding author. Email: prinsp@unisa.ac.za

access without ensuring maximum potential success. If they do not, they face reputational damage and reduced subsidy.

This article presents a model and framework<sup>2</sup> that were developed at the University of South Africa (Unisa) to understand, predict, and enhance student success in a developing-country open distance learning (ODL) context. Drawing from an extensive literature review, international and South African models and discourses on student success are critically reviewed. Key gaps and contrasts are identified between northern (developed country) contact models and developing-country ODL realities in order to achieve better understanding of the dynamics of, and preconditions for, student success in the Unisa environment. The key constructs of the model and the framework are elaborated and implications for implementation and institutional praxis highlighted. As the framework will be incrementally implemented from 2011, its effectiveness can only be evaluated in time. Nonetheless, the model and framework may provide useful pointers for other institutions pursuing the global challenge of improving student success, particularly in ODL.

#### The challenges of improving success at Unisa

It is impossible to overstate the destructive impact of the legislative, educational, and epistemological frameworks of colonialism and apartheid on South African society, and on higher education in particular. This is reflected in the severity of the student success problem, revealed by Scott, Yeld, and Hendry (2007), who found that only 30% of the 2000 first-time student cohort had graduated within five years. With a further 14% still registered, 56% of the cohort had therefore discontinued their studies. Graduation rates for ODL institutions were disturbingly poor.

Against this background, it is unsurprising that government has exerted strong pressure to improve student success, and that this is a high priority for all institutions. Given Unisa's institutional character as an ODL mega-university and its mandate to promote open access to higher learning, combined with the challenging socio-economic circumstances of most of its students, ensuring success is a daunting task. Unisa offers a comprehensive mix of academic and vocational programmes to approximately 260,000 students, the majority of whom are non-traditional, older, and part-time. Recent rapid increases in enrolments have severely strained Unisa's operational systems. This has resulted in service delivery problems, most notably the late distribution of study materials, which reduces learning and tuition time. These, alongside other academic and administrative challenges, create additional obstacles to student success. The extent of the problem was reflected in internal cohort case studies of three large commerce and law undergraduate programmes (Unisa, 2008). These indicated very low 10-year graduation rates of 14-30% and very high dropout rates of 50-70%, with numerous students still registered. Interestingly, the average *course* success rate increased to 59.4% in 2009, exceeding the 2010 ministerial target of 56% for Unisa. This occurred despite the absence of around 10% of students from examinations for which they were eligible – mainly due to work and domestic pressures. These trends suggest that enhancing retention is the priority in improving overall success. Success rates vary by race and gender (with white and female students outperforming their counterparts) and by field of study (with the natural and economic management sciences lower and human sciences, particularly education, higher).

The starting point to tackle these challenges systematically was to investigate international and national best practice through a comprehensive literature review with a view to developing an appropriate model for Unisa.

### Summary of the retention literature<sup>3</sup>

Compared to the substantial body of international research in this field, research into student success in the South African and other African contexts is in its infancy. Tinto (2006) laments that although research into retention has resulted in 'an ever more sophisticated understanding of the complex web of events that shape student leaving and persistence' (p. 1), 'most institutions have not yet been able to translate what we know about student retention into forms of action that have led to substantial gains in student persistence and graduation' (p. 5). This most certainly applies in South Africa.

International studies show a growing understanding of the dynamic relationship between student learning, institutional context, and social, economic, and political contexts (Tinto, 1975). Factors impact on success at three related levels: *individual* (academic and attitudinal attributes, and other personal characteristics and circumstances), *institutional* (quality and relevance of academic, non-academic, and administrative services), and *supra-institutional* (macro-political and socio-economic factors). Numerous lists of variables impacting on success have been compiled, with various studies exploring combinations of variables (and models) to solve the student 'departure puzzle' (Braxton, 2000). However, the differences between contact and distance settings are generally insufficiently acknowledged. There is a danger of pathologizing dropout, specifically in distance education, which is 'under-conceptualised and under-theorised' (Woodley, 2004, p. 49). Accordingly, Woodley advocates a more critical understanding of the impact of the unique nature of distance education on attrition.

Internationally, the numerous attempts to develop coherent, integrated frameworks and models can be classified according to the *context* in which they were developed:

- the geopolitical *context* (developed vs. developing countries)
- the *theoretical/philosophical/ideological/disciplinary* basis, for example, theoretical (Pascarella & Terenzini, 1980); sociological (Berger, 2000; Spady, 1970); psychological (Bean & Eaton, 2000); comprehensive/ecological (Baird, 2000); cultural (Kuh & Love, 2000); socio-critical (Tierney, 2000); anthropological (Hurtado, 1997); and critical-cultural (Bernstein, 1977, 1996)
- the *type* of institution and delivery, for example, contact (face-to-face residential or commuter); distance education and ODL, traditional vs. non-traditional (e.g., Kember, 1989; Metzner & Bean, 1987)
- the specific *methodology* used, for example, a causal model (Bean, 1980); a path model (Bean, 1982); a structural model specifically regarding the role of finances (Cabrera, Nora, & Castaneda, 1992); a multinomial logit model of stopout and dropout behaviour (Stratton, O'Toole, & Wetzel, 2008); a stage model (Tinto, 1988); a bivariate probability model with sample selection (Montmarquette, Mahseredjian, & Houle, 2001); a logic regression analysis model (Cabrera, 1994); an explanatory model of undergraduate non-completion (Ozga & Sukhnandan, 1998); a structural equation modeling test of an

integrated model (Cabrera, Nora, & Castaneda, 1993); and an event history model of student departure (DesJardins, Ahlburg, & McCall, 1999).

No attempts to contest and/or adapt these northern models to developing-world contexts are evident in the literature. Most developing-world research tends to use northern models uncritically as if they have universal validity.

Three South African studies highlight the specificities of the context and were particularly useful in constructing the Unisa model. Koen (2007) explores success among *postgraduates* at the contact University of the Western Cape. He observes that most institutional strategies to enhance success are not based on research, but on anecdotal evidence. For Koen (2007, p. 14) the dominant explanations of dropout and failure focus on six predictable 'structural sociological' perspectives: rational-economic, resource scarcity, ineffective admissions policies, schooling deficits, inadequate adaptation, and inappropriate vocational choice.<sup>4</sup> Despite these various explanations, Koen (2007) points out that the following questions remain:

- Why do financially well-off students who performed well at school, whose school subjects and university courses are aligned, and who receive adequate financial support, leave the university before completing their courses?
- Why do students with good marks leave institutions before completing their courses?
- Why do students who were apparently attracted by an institution's reputation and articulated values leave as a result of their unmet expectations?
- What is the relationship, if any, between academic department, structural institutional characteristics (such as planning organization, rules, socialization, and academic culture) and student success?
- What is the relationship between student aspirations, expectations, intentions, study plans, and success? (pp. 17–18)

In defining an analytical framework for his research, Koen (2007, pp. 23–33) identifies seven collective variables, namely:

- *institutional context* (social climate, physical setting, social and academic spheres)
- *household spheres* (socio-economic group, educational past, domestic obligations, work responsibility, and financial circumstances)
- *personal factors* (academic ability, motivation, commitment, desire to finish, and other attributes)
- *organizational factors* (appointment policies, financial allocations, departmental structures, intellectual environment, and institutional resources)
- *socio-political influences* (allocation of state resources and scholarships, higher education legislation and regulation)
- *academic performance factors* (progress with a thesis, full-time vs. part-time study, faculty affiliation)
- *research factors* (teaching and supervision, problems inherent in research, language, and student attributes).

Another South African study (Jones, Coetzee, Bailey, & Wickham, 2008, pp. 5–6) interrogates various categories of *disadvantage* and their correlation with success. These include *geography* (specifically rural location); lack of *financial* resources (which often accompanies geographical disadvantage); *schooling* 

(specifically under-resourced, low-performing schools); *language* (specifically where the language of tuition may be the student's second or even third language); and other *socio-cultural factors* contributing towards students' under-preparedness. The study's key findings are that:

Students who receive sustained support on the REAP [Rural Education Access] programme are more likely to complete their studies in a shorter time, that a rural background may have a negative influence on student success, and that inadequate financial resources are one of the most important reasons cited for students dropping out of university. (Jones et al., 2008, p. 6)

Jones et al. (2008) also warn that although students' unpreparedness is well documented, institutional unpreparedness to meet the needs of such students is less recognized. They also suggest that the impact of students' 'conceptual confidence' in the language of tuition is underestimated in several studies on language literacies: 'Students lack exposure to written and spoken English, which impacts on their language competence at university'. Jones et al. observe that this variable is seldom explored. Regarding tracking systems, they find that:

In order to be able to provide timeous and appropriate academic support, institutions need to be able to identify at-risk students at an early stage, to track and monitor their progress, and to evaluate the effectiveness of support systems and programmes offered. This study found, however, that tracking and monitoring systems were generally poorly developed at all levels of academic and support provision across the institutions in the sample. (p. 11)

In another South African study, Scott et al. (2007) acknowledge that poor success is:

a complex and multilayered one which is shaped by issues such as the lack of preparedness of students and staff; the nature and organisation of teaching and learning at higher education institutions; the conceptualisation of the educational process, particularly in terms of the appropriateness of content and assessment methods and its relationship with different institutional cultures; the extent or lack of professionalisation of academic staff; the nature and extent of funding; and the role that system differentiation might have in addressing under-preparedness. (p. iv)

These and other studies suggest that although factors affecting success in developing countries resemble those identified in international research, the relationship between, and combinations of, these variables probably vary significantly as does the impact of students' immediate habitus.

In summary, the following significant pointers from this ever-expanding literature were particularly relevant in building the Unisa model:

(1) International models are only partially applicable to the specific African, developing-country, post-apartheid, and ODL context of Unisa. Much of the literature focuses on traditional contact environments in developed countries. While there are undoubtedly common universal factors, and while increasing emphasis has for some time been placed on improving success among non-traditional students in the north (for example, Bean & Metzner, 1985), these models do not readily apply to the specificities of the Unisa context. Clearly,

an appropriate model for Unisa must accommodate the particularly complex and challenging developing-country socio-economic conditions shaping individual and institutional attributes and behaviours within the sharply stratified South African social order. For these reasons, building the Unisa model entailed incorporating common elements, as well as some rich, incontestably applicable insights from the international literature, and necessarily adapting and extending these. Although contexts obviously differ, knowing and engaging with students' lived experiences in every particular context is now widely acknowledged as a common universal precondition for enhancing success (Kuh & Love, 2000).

- (2) In ODL, where most students are part-time and non-traditional, non-academic factors – especially work-related and domestic responsibilities – are likely to create greater barriers to success than in contact settings, particularly so amidst challenging socio-economic circumstances. Kember's model (1989) attempts to demystify dropout in distance education, but the specificities of ODL in a developing country necessitate further interrogation.
- (3) Student success is shaped by a *complex, layered, and dynamic set of events* (Tinto, 1975). It is the outcome of interplay between personal, institutional, and broader contextual factors. This complexity presents a fundamental challenge in developing an explanatory/predictive model and creating a practical framework to tackle the problem. In the absence of what Merton (1957) calls a 'grand theory,' Tinto (1982) asserts that 'our theoretical models serve to explain only a portion of the wide range of behaviours that constitute the universe of social interactions' (p. 688). As Kember (1989) observes:

A theory that could fully explain every aspect of the attrition process would contain so many constructs that it would become unwieldy if not unmanageable. Such situations call for the use of theoretical models which are simplified versions of reality that strip away the minute details to concentrate on factors that are assumed or deduced to be important... Models can be judged by their usefulness. A model of the attrition process should contain sufficient constructs to explain what is undoubtedly a complex process and yet sufficiently simple to be understandable and useable. It should be able to explain collected descriptive data, and it should provide a framework against which predictions can be hazarded and judgements made about potential interventions. (pp. 279–280)

A further consequence of the complexities involved is that understanding attrition does not imply understanding persistence. As Tinto (2006) points out, 'leaving is not the mirror image of staying. Knowing why students leave does not tell us, at least not directly, why students persist' (pp. 5–6). The complexity of student success is also emphasized in the South African studies by Koen (2007) and Scott et al. (2007).

(4) Although identifying relevant variables explaining and projecting success is the point of departure, the real challenge, in light of the complexities involved, is determining the combined *effects of and relationships between different predictor variables*. These complex interrelationships vary by institutional type, across heterogeneous student profiles, at different points in the student journey, and by discipline and qualification types and levels. Only a relatively low proportion of student success variation can be explained by traditional statistical modelling techniques such as multiple linear regression analyses. These techniques simply establish valid and reliable relationships between relatively few variables relevant to a specific context. They therefore fail to capture the complexity and dynamic nature of the underlying multivariate process and thereby reduce their explanatory and predictive value, which, in turn, reduces the possibilities for action. Structural equation modelling (which helps to establish relationships between predictor variables) and data mining (in particular the emerging field of neural networks) may provide new opportunities for engaging with the complexities of student success.<sup>5</sup>

- (5) Although financial security plays a major role, the tangible and intangible impacts of *economic factors* in the African ODL context remain underresearched. Several studies suggest that the psychological stress of economic challenges may play an even more important role in developing countries (Jones et al., 2008; St John, Cabrera, Nora, & Asker, 2000). Particularly in this context, widening access is likely to result in increasing dropout (Hall, 2001).
- (6) Predominant models do not adequately recognize the *mutual responsibility* in the process. Students must acquire and develop the required attributes, skills, and knowledge for successful higher learning, while institutions must constantly review, adapt, and improve their practices to eradicate hidden administrative, socio-economic, and cultural barriers to equitable access and ensure success, particularly in relation to non-traditional and diverse student populations. This is the defining feature of a *transformative* approach. In the early models on student success (e.g., Spady, 1970; Tinto, 1975), students' lack of success was in part attributed to their unsuccessful integration (read assimilation) into the academy. Later critiques of these models (e.g., Braxton, 2000) questioned this one-sided emphasis on students' responsibility to 'fit in' to a fixed notion of the academic institutional status quo and emphasized a reciprocal transformative process (Tierney, 2000). With internationalization of the curriculum in developed countries (Knight, 2004; Morey, 2000), student and contextual diversity necessitates re-evaluating the validity and normativeness of claims to universal truths. Likewise, radical institutional transformation has long been at the foreground in post-apartheid South African higher educational policy (Kraak & Young, 2001).
- (7) Mutual responsibility depends upon mutual engagement, which, in turn, depends on *actionable mutual knowledge*. Relevant quantitative and qualitative, institutional, and student-related intelligence should therefore be used to identify, predict, and address risks effectively. This involves not only detailed student profiling, but also the tracking of relevant trends in student activity and behaviour *and* institutional practices and services. An effective tracking system must therefore go beyond the conventional provision of quantitative student cohort academic data. It also needs to incorporate qualitative sources and a broad range of organizational intelligence to track and profile relevant processes and, on the basis of this, predict and address risks. Students' participation in planned self-assessment of risk makes this a mutual process.

Considering the partial relevance of international models for understanding and predicting student success in a developing-country ODL context, Unisa committed itself to developing an appropriate socio-critical model using several key constructs, as outlined below.

## Key constructs in the model

Drawing extensively but critically from the literature review, Unisa's conceptualhypothetical model captures the dynamic and complex nature of success and the particularities of the South African ODL context. In so doing, it uses the following key constructs (see Figure 1).

## Situated agents: student and institution

Success is seen as the outcome of the mutually influential activities, behaviours, attitudes, and responsibilities of students and the institution, which are viewed in the sociological perspective of *situated agents*. This construct captures the structure/ agency issue at the heart of social theory: the extent to which we are individually free of, or determined by, our collective socio-economic structures and conditions (Giddens, 1986). Student and institutional *situatedness* implies that their attributes and behaviours are strongly shaped by the structural conditions of their historical, geographical, socio-economic, and cultural backgrounds and circumstances. None-theless, as *agents*, they enjoy relative freedom within these constraints to develop, grow, and transform their attributes in pursuit of success. In acknowledging that both students and the institution are (situated) agents with joint responsibility for assimilation into the academic status quo, this construct deviates from most interna-



Figure 1. Unisa's socio-critical model for explaining, predicting, and enhancing student success.

tional models, which tend to focus on students' responsibility in this regard (Spady, 1970; Tinto, 1975, 1988).

# The student walk

At the heart of the model (and flowing from the construct of situated agents) lies the construct of the *student walk* (University of South Africa , 2010, p. 2) – the numerous ongoing interactions between student and institution throughout each step of the student's journey. This begins with pre-registration and proceeds through every phase of mutual engagement: application; registration; teaching, learning, and assessment; student support; graduation; and subsequent participation in the community and labour market. Further features are:

- Interactions between student and institution are (at least potentially) *mutually constitutive*: engagement with one will shape the way the other engages in the interaction. Self-evidently, the more effectively one engages with the other, the more constructive the interaction will be. In ODL, students' knowledge of the institution (which is often isolated and partial) depends on the timing and appropriateness of printed and online communications and marketing strategies. Conversely, the institution's knowledge of the students' life circumstances is often limited to registration information and surveys. It is therefore crucial to achieve greater mutual understanding through a set of *planned and spontaneous* events.
- These interactions are influenced by the socio-economic and cultural contexts and networks in which each of the agents is situated, in other words, their *connectivity*. For students, this refers to the multiple ways in which they are effectively engaged in their social, economic, cultural, and technological networks. For the institution, in addition to these, connectivity refers to its engagement in national and international networks relating to academic disciplines and research, institutional policies and practices, government and policy circles, sectoral organizations, civil society, and the private sector. Again self-evidently, the more effectively students and institution engage in their relevant networks, the more informed and productive their interaction will be.
- Effective mutual engagement entails going beyond the academic domain. Particularly in ODL, *non-academic factors* in students' life circumstances strongly influence success. Likewise, the effectiveness of non-academic institutional support, administrative services, and organizational cultural dynamics directly impact on success in ODL.
- Significantly, the model explains success in terms of *mutual responsibility for the transformation* of student and institutional attributes. Transformation is the outcome of effective interaction. This, in turn, rests on the depth, accuracy, and effective application of mutual knowledge of relevant academic, non-academic, and administrative processes. For the student, *knowledge of the institution* involves progressively understanding and mastering all the requirements of higher learning at each step of the student walk. This includes making an informed choice of qualifications, courses, and course loads; understanding and meeting learning and assessment expectations; and mastering in due course the range of requisite competencies such as time management, self-study skills, determination, and self-discipline. It also

involves such matters as knowing where, when, and how to access and gain guidance from lecturers, tutors, counsellors, administrators, and library staff. For the institution, *knowledge of the student* involves understanding and addressing students' individual and collective needs, attitudes, behaviours, academic and non-academic profiles, backgrounds, readiness and risk factors, life circumstances, socio-economic conditions, and other relevant details. Thus informed, the chances of effectively assessing, predicting, and addressing academic and non-academic risks to success are likely to be greatly enhanced.

- If sufficient mutual knowledge is acquired and translated into effective action at each point in the student walk, a closer alignment between relevant student and institutional attributes and activities is likely to be achieved. Sufficient *fit* at each stage of the walk is a precondition for sustained success.
- For the student and institution, the student walk involves *managing and negotiating risks and seizing opportunities* in the students' life circumstances and institutional processes and the dynamics between these that can impact on planned activities and, in turn, success. Managing uncertainty effectively is another key element of success.

# Capital

The model also assumes that mutual engagement and success are enhanced when each of the agents possesses certain kinds of *capital* (Berger, 2000; Bourdieu, 1971; Tierney, 2000). In addition to financial capital, these include cultural, intellectual, organizational, and attitudinal forms of capital. As situated agents, they acquire (or fail to acquire) these various forms of capital partly through the reproductive mechanisms embedded in their socio-economic and cultural contexts and partly through their own individual or institutional/organizational initiatives. Academic literacy may be construed as one form of cultural and intellectual capital required for students' success. Likewise, the capacity for organizational learning may be seen as a form of institutional capital required to use actionable intelligence in constantly improving practices and services and thereby enhancing success. This construct is an essential element of the socio-critical model, which emphasizes transformative reflexive praxis to identify and address the cultural specificities and hegemonic power relations that are embedded in these forms of capital.

# Habitus

Mutual engagement and success are also shaped by the closely related construct of *habitus* (Bourdieu, 1971; Braxton, 2000), the complex combination of perceptions, experiences, values, practices, discourses, and assumptions that underlies the construction of our worldviews. As these are often unconscious and covertly embedded in our practices, it is crucial to understand their role in shaping behaviour. As with *capital*, this construct is useful in critically reflecting on the hidden assumptions (and power relations) in individual or institutional cultural behaviour, that create opportunities or barriers for success (Tierney, 2000). Institutions that effectively and self-critically reflect on their practices in this way constitute *transformative learning organizations* and are more likely to embrace diversity and meet the particular needs of non-hegemonic identities. They will be less likely to run the risk of reproducing social elites by uncritically perpetuating the status quo and its purported

universalist standards and values and by viewing success in terms of students' assimilation into the academy. Success, then, in the Unisa model is dependent on subverting obstructive elements of student and institutional habitus.

### The domains and modalities of transformation

Two key constructs derived from the literature review are *domains* and *modalities* of transformation. Regarding the domains:

- For students, change must occur both in the *intra-personal and inter-personal domains*. The first refers to the range of individual psychological attributes required for successful study. These include positive attitude and beliefs, self-discipline, motivation, and confidence. The inter-personal domain refers to the range of social, psychological, and sociological aspects of social interaction that need to be negotiated and mastered in self-development. These include communication and inter-personal skills, cultural and diversity issues, power relations, assertiveness, critical reflection, and self-knowledge derived from interaction.
- For the institution, change must occur in the *academic, administrative, and non-academic social domains* of institutional life. The first two refer to the core activities of teaching, research, and community engagement. The social domain refers to the institutional culture, power relations, micro-politics, inter-group dynamics, and dominant ideology. The entire institution is infused by the social domain, which colours the other two domains. Recognizing and addressing this is an essential feature of the socio-critical model.

A common thread in the literature is that success is shaped by three key modalities: *attribution, locus of control, and self-efficacy.* The Unisa model is unique in applying all of these both to the students *and* the institution:

- Attribution is the process whereby *causality is attributed* (rightly or wrongly) to various external or internal/individual factors (Bean & Eaton, 2000). It tends to be based largely on perception, not evidence. The potential risk here is to identify only one or a few of many possible factors. In this instance, although the identified factors might not be wrongly attributed as causes, the attribution remains partial. For example, the students may legitimately attribute lack of success to apartheid-generated disadvantages, but neglect to acknowledge other factors such as inadequate individual determination, motivation, and self-discipline. Institutions, too, may partially attribute cause blaming students' poor school background or attitudes while neglecting to identify or admit to institutional shortcomings. The Unisa socio-critical model aims at conceptual comprehensiveness in identifying all possible factors impacting on success, with the specific purpose of avoiding the pitfalls of partial attribution either way.
- Closely linked to this, *locus of control* refers to where agents locate control internally or externally. This concerns *factors over which we either have or do not have control* (Bandura, 1997). This is a vital distinction for students and institution alike. We may rightly attribute cause to external factors such as socio-economic disadvantage, but have no direct control over this. This does not, however, imply that these kinds of structural factors are not actionable. Disadvantage, for example, can be offset by the agency of both institution and student through appropriate remedial support and determined

individual initiative, respectively. This is a key feature of the mediated structure-agency nature of the model.

• Self-efficacy – *belief in one's own capacity to succeed* – is widely regarded as an essential intra-personal attribute for success (Bean & Eaton, 2000; Pizzolato, 2003, 2004). In common psychological terms, this refers to self-confidence and self-regard. The model applies this construct to both student and institution. In institutional terms, self-efficacy may be construed as the institution's confidence and trust in its capacity to achieve its vision, mission, mandate, and desired outcomes. This derives from the cumulative success of initiatives, conducive organizational preconditions, and effective organizational learning.

## A broad definition of success

All the previous five constructs culminate in the final construct, *broadly defined success*. The model defines success as follows:

- Course success leading to graduation and time-to-completion within the expected minimum time appropriate to qualification types in the ODL context.
- A positive student experience and high levels of satisfaction throughout all phases of the student walk.
- Successful fit between students' graduate attributes and the requirements of the workplace, civil society, and democratic, participative citizenship.
- Course success without graduating. This occurs for various legitimate reasons, including the case of occasional students pursuing the intrinsic reward of formative studies or completing qualifications at other institutions. Occasional students and even dropouts undoubtedly derive some benefit and enrichment from their exposure, albeit brief, to higher learning. In ODL, they cannot therefore narrowly be regarded as failures and the costs incurred as wastage. Consequently, Unisa has advocated government subsidization of course success, as is done in the UK, in addition to the current subsidization of graduate outputs.

# A socio-critical model for understanding, predicting, and enhancing success at Unisa

The six constructs discussed above are key elements of Unisa's integrated comprehensive model (see Figure 1). Central to the model is the *student walk* (the second construct), comprising the various interactions between the student and institution as *situated agents* (the first construct). The situated agency of both is shaped and informed by *capital* and *habitus* (the third and fourth constructs). As the student walk progresses, the dynamic interrelationships between agency, capital, and habitus unfold in the transformation process, in the various *domains and modalities* (the fifth construct). The result of these multiple, mutually constitutive interactions is the extent of fit between student and institutional attributes, which, when sufficient, culminates in *broadly defined success* (the sixth construct).

The whole process is influenced by predictable and uncertain *shaping conditions* surrounding both situated agents. Although these lie largely beyond the control of both, responses to them lie within their respective control. The student walk

construct emphasizes the need for mutual engagement in the search for reciprocal knowledge and understanding. It is crucial for both student and institution that preknowledge of any *predictable shaping conditions* is shared and taken *into account in planning*. Likewise, both agents must accept the occurrence of unpredictable events and uncertainties affecting either party. This engenders reciprocal trust and commitment to mutual engagement, thus ameliorating any negative consequences for success.

# Towards implementation: Unisa's framework for managing and enhancing success

All five Unisa colleges (faculties) have been committed to enhancing student success despite the absence of a shared understanding and common framework. Previous institution-wide initiatives were structurally siloed between the Academic/Research and Learner Support portfolios. These included face-to-face tutorials at regional centres, decentralized counselling and student advice services, satellite broadcasts, and video conferencing. The successes and shortcomings of these various initiatives were not widely shared. To overcome the absence of a coordinated, effective institution-wide approach, Unisa adopted a comprehensive framework for enhancing success in 2008 (see Figure 2).

The six main elements of the framework are:

- Construction of an appropriate *conceptual-hypothetical model* of all factors impacting on success in the ODL context of Unisa, informed by a comprehensive literature review.
- Based on this, the *identification of appropriate variables* relating to relevant, measurable, available, and actionable information.
- Systematic gathering of required information by means of a comprehensive tracking/intelligence system which acquires student academic information and in-depth quantitative and qualitative information (detailed surveys, focus group interviews, personal online journals) on all relevant academic, non-aca-



Figure 2. Main elements of the framework for managing student success at Unisa.

demic, and administrative student and institutional processes. This system also provides automated early warnings of institutional and student-related risk.

- Detailed conceptual and statistical analysis, predictive modelling, and data mining of acquired information which is transformed into actionable intelligence. This allows not only tracking and retrospective analysis of trends, but also predicting the nature and timing of student and institutional risk, the indicators of which are built into the tracking system.
- Based on this intelligence, a *student support framework* is being operationalized, existing academic and support practices, services, and initiatives are being reviewed, and new ones are being identified to minimize risk by providing appropriate, proactive support.
- The long-term and short-term impact of these practices, services, and initiatives will be monitored and evaluated to achieve continuous improvement.

## Conclusion

This account of the development of a context-appropriate socio-critical model and framework for understanding, predicting, and enhancing student success at Unisa provides, in our opinion, critical pointers for institutions, in particular ODL providers, in both developing and developed countries in pursuing this global objective. Many, if not most, international models interpret success narrowly as the outcome of students assimilating into prevailing institutional cultures and epistemologies. Given the increasing diversity of non-traditional student cohorts worldwide and the socio-economic challenges inherent in developing countries, student success is necessarily much more complex than students simply fitting in. Mutual responsibility is a precondition. The framework adopted in 2010 by Unisa's Senate reflects a comprehensive, contextually appropriate approach to tackle this challenge systematically. It interprets success as the outcome of transformed student and institutional attributes to achieve optimal fit through mutual engagement, knowledge, understanding, and action. To this end, relevant, available, measurable, and actionable information need to be identified to identify, predict, and address risks to success. This intelligence architecture (addressing who needs to know what, why, and when?) informs and improves the institution's academic and student support practices to ensure maximum student satisfaction and success, broadly conceived.

Unisa's ODL implementation plan involves various initiatives, including re-conceptualizing the student support services (revitalizing the current face-to-face tutorial support and developing appropriate e-tutoring and mentoring), rethinking formative assessment, and redefining the admission requirements appropriate to Unisa's socioeconomic and educational environment. By late 2010, the conceptual foundations and planning for implementing these initiatives had largely been completed. Based on carefully selected pilot courses and formative evaluation, full implementation will begin in 2011.

The model described critically challenges many of Unisa's time-honoured assumptions and practices, such as the sole emphasis on the under-preparedness of *students* and not also taking into account the operational efficiency and dominant beliefs regarding student success of the institution. It requires cultural and mindset changes in managers, staff, and students alike. Time, experience, and further research will tell whether the development and application of Unisa's integrated

student support and success frameworks have managed to turn the tide and improve students' success and whether they prove appropriate and informative for other institutions.

#### Acknowledgements

The authors would like to thank the blind reviewers for their helpful comments and especially John Cowan who, as critical friend, substantially contributed to enhancing the quality of this article.

#### Notes

- 1. Throughout this article, unless otherwise indicated, the notion of success is broadly defined to include retention, persistence, course success, and graduation, as well as student satisfaction and effective graduate attributes.
- 2. In this article, model refers to the conceptual model developed to explain and predict success in the Unisa context, and framework refers to the integrated, coordinated institutional approach and plan adopted to enhance success.
- 3. Within the scope of this article, it is impossible to report adequately on the wealth of international and South African research on student success. The extensive literature review undertaken to inform the development of the socio-critical model at Unisa is available from the corresponding author. The notion of international research here refers to research published primarily in North Atlantic and Australasian contexts.
- 4. For a full description of these perspectives, see Koen (2007)
- 5. The authors are indebted to Dion van Zyl, Manager: Information Services, Department of Information and Strategic Analysis, Unisa, for clarification of these points.

#### Notes on contributors

George Subotzky is Executive Director: Information & Strategic Analysis at Unisa, a post he has held for the past six years. He has published widely in the field of higher education policy research and contributed to a number of advisory groups and editorial boards.

Paul Prinsloo is the Open Distance Learning Coordinator at Unisa. His academic background is diverse and includes studies in theology, religious studies, art history, management development, law, and online learning. He has published on topics such as student success, curriculum development, corporate citizenship, online learning, and management education.

#### References

- Baird, L.L. (2000). College climate and the Tinto model. In J.M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 62–80). Nashville, TN: Vanderbilt University Press.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY: Freeman.
- Bean, J.P. (1980). Dropouts and turnover: The synthesis and test of a causal model of student attrition. *Research in Higher Education*, 12, 155–187. Retrieved from http://www.springer. com/education+%26+language/higher+education/journal/11162
- Bean, J.P. (1982). Student attrition, intentions and confidence: Interaction effects in a path model. *Research in Higher Education*, 17, 291–320. Retrieved from http://www.springer.com/education+%26+language/higher+education/journal/11162
- Bean, J.P., & Eaton, S.B. (2000). A psychological model of college student retention. In J.M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 48–61). Nashville, TN: Vanderbilt University Press.
- Bean, J.P., & Metzner, B.S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55, 485–540. Retrieved from http://rer.sagepub.com/
- Berger, J.B. (2000). Optimising capital, social reproduction, and undergraduate persistence: A sociological perspective. In J.M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 95–124). Nashville, TN: Vanderbilt University Press.

- Bernstein, B. (1977). Class, codes and control: Towards a theory of educational transmission (2nd ed., Vol. 3). London: Routledge & Kegan Paul.
- Bernstein, B. (1996). *Pedagogy, symbolic control and identity: Theory, research, critique*. London: Taylor & Francis.
- Bourdieu, P. (1971). Systems of education and systems of thought. In M.K.D. Young (Ed.), *Knowledge and control: New directions for the sociology of education* (pp. 189–207). London: Collier-Macmillan.
- Braxton, J.M. (Ed.). (2000). *Reworking the student departure puzzle*. Nashville, TN: Vanderbilt University Press.
- Cabrera, A.F. (1994). Logistic regression analysis in higher education: An applied perspective. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 10, pp. 225–256). New York, NY: Agathon Press.
- Cabrera, A.F., Nora, A., & Castaneda, M.B. (1992). The role of finances in the persistence process: A structural model. *Research in Higher Education*, 33, 571–593. Retrieved from http://www.springer.com/education+%26+language/higher+education/journal/11162
- Cabrera, A.F., Nora, A., & Castaneda, M.B. (1993). College persistence: Structural equations test of an integrated model of student retention. *The Journal of Higher Education, 64*, 123–139. Retrieved from http://www.jstor.org/stable/2960026
- DesJardins, S.L., Ahlburg, D.A., & McCall, B.P. (1999). An event history model of student departure. *Economics of Education Review*, 18, 375–390. doi: 10.1016/S0272-7757(98)00049-1
- Giddens, A. (1986). *The constitution of society: Outline of the theory of structuration*. Berkeley: University of California Press.
- Hall, J.C. (2001). *Retention and wastage in FE and HE*. Edinburgh: Scottish Council for Research in Education. Retrieved from http://www.ulster.ac.uk/star/resources/retention%20and %20wastage hall.pdf
- Hurtado, A. (1997). Understanding multiple group identities: Inserting women into cultural transformations. *Journal of Social Issues*, *53*, 299–328. doi: 10.1111/j.1540-4560.1997. tb02445.x
- Jones, B., Coetzee, G., Bailey, T., & Wickham, S. (2008). Factors that facilitate success for disadvantaged higher education students: An investigation into approaches used by REAP, NSFAS and selected higher education institutions. Athlone: Rural Education Access Programme. Retrieved from http://www.reap.org.za/REPORTS/RESEARCH/Factors%20that% 20facilitate%20success\_Final%20report%202008.pdf
- Kember, D. (1989). A longitudinal-process model of drop-out from distance education. *The Jour-nal of Higher Education*, 60, 278–301. Retrieved from http://www.jstor.org/stable/1982251
- Knight, J. (2004). Internationalisation remodelled: Definition, approaches, and rationales. *Journal of Studies in International Education*, 8, 5–31. doi: 10.1177/1028315303260832.
- Koen, C. (2007). Postgraduate student retention and success: A South African case study. Cape Town: HSRC Press.
- Kraak, A., & Young, M. (Eds.). (2001). Education in retrospect: Policy and implementation since 1990. Pretoria: HSRC Press.
- Kuh, G.D., & Love, P.G. (2000). A cultural perspective on student departure. In J.M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 196–212). Nashville, TN: Vanderbilt University Press.
- Merton, R.K. (1957). Social theory and social structure. London: Collier-Macmillan.
- Metzner, B.S., & Bean, J.P. (1987). The estimation of a conceptual model of non-traditional undergraduate student attrition. *Research in Higher Education*, 27, 15–38. Retrieved from http://www.springer.com/education+%26+language/higher+education/journal/11162
- Ministry of Education. (2004). A new funding framework: How government grants are allocated to public higher education institutions. Retrieved from http://www.info.gov.za/view/Download FileAction?id=70360
- Montmarquette, C., Mahseredjian, S., & Houle, R. (2001). The determinants of university dropouts: A bivariate probability model with sample selection. *Economics of Education Review*, 20, 475–484. doi: 10.1016/S0272-7757(00)00029-7
- Morey, A.T. (2000). Changing higher education curricula for a global and multicultural world. *Higher Education in Europe, 25*, 25–29. doi: 10.1080/03797720050002170
- Ozga, J., & Sukhnandan, L. (1998). Undergraduate non-completion: Developing an explanatory model. *Higher Education Quarterly*, *52*, 316–333. doi: 10.1111/1468-2273.00100

- Pascarella, E.T., & Terenzini, P.T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *The Journal of Higher Education*, 51, 60–75. doi: 10.1007/BF00979592
- Pizzolato, J.E. (2003). Developing self-authorship: Exploring the experiences of high-risk college students. *Journal of College Student Development*, 44, 797–812. Retrieved from http://muse. jhu.edu/journals/journal of college student development/
- Pizzolato, J.E. (2004). Coping with conflict: Self-authorship, coping, and adaptation to college in first-year, high-risk students. *Journal of College Student Development*, 45, 425–442. Retrieved from http://muse.jhu.edu/journals/journal of college student development/
- Scott, I., Yeld, I., & Hendry, J. (2007). A case for improving teaching and learning in South African higher education. Pretoria: The Council on Higher Education.
- Spady, W.G. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. Interchange, 1, 64–85. doi: 10.1007/BF02214313
- St John, E.P., Cabrera, A.F., Nora, A., & Asker, E.H. (2000). Economic influences on persistence reconsidered. In J.M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 29–47). Nashville, TN: Vanderbilt University Press.
- Stratton, L.S., O'Toole, D.M., & Wetzel, J.N. (2008). A multinomial logit model of college stopout and dropout behaviour. *Economics of Education Review*, 27, 319–331. Retrieved from http://econpapers.repec.org/article/eeeecoedu/
- Tierney, W.G. (2000). Power, identity, and the dilemma of college student departure. In J.M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 213–34). Nashville, TN: Vanderbilt University Press.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review* of Educational Research, 45, 89–125. Retrieved from http://www.jstor.org/stable/1170024
- Tinto, V. (1982). Limits of theory and practice in student attrition. The Journal of Higher Education, 53, 687–700. Retrieved from http://www.jstor.org/stable/1981525
- Tinto, V. (1988). Stages of departure: Reflections on the longitudinal character of student leaving. *The Journal of Higher Education*, 59, 438–455. Retrieved from http://www.jstor.org/stable/ 1981920
- Tinto, V. (2006). Research and practice of student retention: What next? Journal of College Student Retention, 8, 1–19. Retrieved from http://faculty.soe.syr.edu/vtinto/Files/Student%20Retention-What%20Next .pdf
- University of South, Africa (Unisa). (2008). *Improving throughput at Unisa: A report on three cohort case studies* (Addendum to the Self-evaluation Portfolio prepared for the Institutional Audit of the Higher Education Quality Committee). Pretoria: Author.
- University of South Africa (Unisa). (2010). *Electronic, media and marketing monthly report to* Mancom, 1 September-1 October (Unpublished report). Pretoria: Author.
- Woodley, A. (2004). Conceptualising student dropout in part-time distance education: Pathologising the normal? *Open Learning*, *19*, 48–63. doi: 10.1080/0268051042000177845

Copyright of Distance Education is the property of Routledge and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.