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*A Framework and Strategy for
Enhancing Student Success at Unisa*

Final Report

Prepared by Task Team 6

Submitted to Senate

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Contents

Acknowledgements

1. Introduction & Background

1.1 Introduction

This submission to Senate comprises the final report of ODL Task Team 6 which was set up as part of the Unisa ODL Implementation Plan finalised in November 2009[1]. It updates previous drafts and provides final recommendations for a framework and strategy to enhance student success[2] at Unisa. The report was approved at the Senate Tuition and Learner Support Committee (STLSC) meeting of 30 May 2011 with minor amendments. The first draft report was submitted to the STLSC on 10 May 2010 and the main recommendations were subsequently submitted to Senate in June of that year. Several of these were approved and some referred back for further consideration. The second draft was submitted to the STLSC on 15 November 2010. Comments were invited from all members by 25 January 2011. Drawing from the comments received and from further deliberations of Task Team 6, the final report was completed.

The substance of this report was shaped by two important considerations: a) the reformulation of the original mandate of Task Team 6; and b) articulation with the Student Support Framework produced by Task Team 4. These are now briefly elaborated.

1.1.1 Reformulation of the Mandate of Task Team 6

At the inaugural meeting of Task Team 6 in March 2010, it was unanimously decided to reformulate the original mandate of the task team. In terms of Recommendation 19 of the ODL Implementation Plan, the mandate of Task Team 6 was formulated as follows: *To investigate the necessity of developing/allocating a system/unit to monitor drop out and completion.* According to the plan, recommendations were to be submitted to the STLSC meeting of 10 May 2010 with a view to seeking Senate approval in June. At its first meeting, however, Task Team 6 was of the view that this was too narrow a formulation as the task at hand involved for more than merely monitoring dropout and completion. Instead, it was felt that to address the challenge of enhancing student success at Unisa systematically and effectively, a well-researched comprehensive framework and strategy needed to be set out, in accordance with the approach adopted by the Throughput Forum (see below) and closely aligned to and informed by the emerging Student Support Framework produced by Task Team 4. Accordingly, Task Team 6 agreed that the mandate should be reformulated as follows: *To develop an institutional success and throughput framework and strategy for Senate approval by June 2010.*

It is important at the outset to define and clarify both elements at the heart of this proposal, namely the framework and the strategy.

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[1] See Appendix 1 for the members of the Task Team.
[2] In this framework, "student success" is conceived broadly to include success in: formative assessment (assignments), summative assessment (course exams), retention and persistence, throughput/time to completion, graduation, as well as student satisfaction and the fit between graduate attributes and labour market/societal needs. Accordingly, throughout this report the term *student success* denotes all these different dimensions of success.

- The ***framework*** refers to all the organisational elements (policies, processes, structures, methods and approach, practices and resources) required for the effective implementation and ongoing management of the process of enhancing student success, retention, graduation and positive experience.
- The ***strategy*** refers to the initiatives and actions involved in the implementation and institutionalisation of the framework, in particular the priorities identified for immediate action and impact.

In proposing this alternative mandate, members of Task Team 6 were very cognisant that the scope and scale of the original mandate had been significantly expanded. It was acknowledged at the outset that, as a result, it would not be possible to formulate a final and fully consultative framework and strategy document in time for submission to the STLSC and Senate in June 2010. Instead, it was agreed that a draft document, comprising work in progress to date, would be submitted. The finalisation of the framework and strategy document would then proceed in due course, informed by the responses of the STLSC and Senate and, more importantly, by the insights of the other task teams whose work was integral to the work of Task Team 6, notably Task Team 4's emerging Student Support Framework (see next point below).

With this in mind, Task Team 6 identified a Working Group to draft a framework and strategy document in line with the broadened mandate. The group initially comprised: Prof George Subotzky (Convenor), Hannerie Botha, Yuraisha Chetty, Dr Moeketsi Letseka, Dr Paul Prinsloo, Dr At Van Schoor and Hentie Wilson and was later expanded to include: Glen Barnes, Prof Ilsa Basson, Mahlapane Molatlhegi, Nelisa Tshaka, Suzette van Zyl and Herman Visser. After Senate at its June meeting approved some of the recommendations and referred others back to the Task Team, the Working Group convened numerous meetings to discuss the issues. Informed by these discussions, the second draft was produced.

1.1.2 Articulation with Task Team 4's Student Support Framework

It is important to note at the outset that the detailed formulation of the Student Success Framework and Strategy could not proceed until the details of the Student Support Framework produced by ODL Task Team 4 emerged clearly. For this reason, it was only possible to formulate and present the second draft of the Student Success Framework after the approval of the implementation plan for the Student Support Framework by the STLSC in October 2010 and subsequently by Senate in November. These two frameworks are inextricably linked and provide mutual points of reference.

As is elaborated below, the Student Success Framework comprises five component steps of which the fourth is the point of intersection between the Student Success and Support Frameworks. This is informed by the previous three steps, namely: a) the conceptual model of all factors impacting on student success in the Unisa context, based on an extensive literature review; b) the gathering and dissemination of relevant risk-related information and alerts through the tracking system; c) through the detailed analysis of this information, the profiling, assessing and prediction of risk. The final step comprises the monitoring and evaluation of the impact of the student success and support frameworks over time.

The following four propositions, particularly the second and fourth ones, at the heart of the Student Support Framework illustrate clearly the points of convergence between the two frameworks:

- Increasing the effectiveness & quality of current student support initiatives
- Profiling at-risk students and modules and providing an appropriate range of support including e-tutoring and/or e-mentoring using appropriate technologies
- Implementing interactive computer marked self-assessment
- Using a range of technologies more effectively to communicate with at-risk students at different points of the student walk.

With this in mind, the Task Team 6 Working Group held discussions in conjunction with members of Task Team 4 to ensure the alignment of the student success and student support frameworks. The final meeting of the Task Team 6 Working Group engaged extensively with the Task Team 4 Student Support Framework, with a view to completing the second draft for submission to the STLSC on 15 November.

Only after details of the student support implementation plan emerged, and in particular the envisaged procedures, roles, responsibilities within the academic cycle, was it possible to map out the broad information architecture required by the support framework. In other words, only once the procedures, roles, responsibilities within the academic cycle were specified, the flows of information required by each role player could be charted on the basis of who needs to know what, when and for what purpose. In this way, it became clearer how the above-mentioned steps of the success framework articulate and integrate with the support framework. Accordingly, the detailed design and development of the tracking system is now proceeding in alignment with the E-tutor pilot planned for the second semester in 2011 which forms the first step in the implementation of the Student Support Framework.

With this background in place, the rest of this report sets out the framework and strategy to enhance student success at Unisa. **Section 1**, after this introduction, sets out a brief background to the nature and extent of the problem internationally, nationally and at Unisa and the ensuing challenge of enhancing student success in the ODL context.

Section 2 elaborates the five component steps of the framework and the implementation strategy in relation to each. These components are:

1. ***Conceptual Model:*** *Establishing a Common Point of Reference*
2. ***Information Gathering & Dissemination:*** *The Tracking System*
3. ***Analysis of Information:*** *Profiling, Assessing & Predicting Risk*
4. ***Managing the Student Success & Support Frameworks:*** *Coordinating Procedures to Address Risk*
5. ***Monitoring & Evaluation:*** *Measuring Impact.*

For each step, the goal, desired outcomes, issues and next steps are presented. Where appropriate, recommendations are made. All five steps, with the exception of Step 4, were approved by Senate. Step 4 includes the issue of appropriate structures to manage and coordinate the implementation and operation of the Student Success and Support

Frameworks. This was a central concern which led to the original mandate of Task Team 6. Drawing from the comments by STLSC members on the second draft of this document as well as from subsequent deliberations of the task team, final recommendations in this regard are made. The **Final Section** consists of the summary, list of recommendations and conclusion.

The **Appendices** provide brief overviews of the literature review and the conceptual model as well as a list of Task Team 6 members.

1.2 Problem Statement: The Challenges of Enhancing Student Success at Unisa

Student retention and success has become a major focus of concern among higher education systems, institutions and institutional researchers, nationally and internationally. As a result of the 'massification' of higher education, student populations worldwide have become increasingly diversified and non-traditional in nature. They are generally less prepared for the rigours of higher learning and face more complex life circumstances with competing demands on their time, energy and well-being. As a result of these and other contributing factors, contemporary higher education students are generally more at risk in relation to drop out, stop out and time-to-completion.

In South Africa, given the persistent problems of socio-economic and educational disadvantage experienced by the majority of the population and given the mixed results of institutional remedial initiatives, higher education retention and success rates are notoriously poor. Accordingly, addressing this problem has been a policy priority and constitutes a key outcome of government's outcomes-based funding and enrolment planning framework. The extent of the problem was recently highlighted in a study commissioned by the CHE.

Table 1: National 5-Year Graduation, Retention & Attrition Rates, 2000 Cohort

Institutional Type	Graduated within 5 years	Still registered after 5 years	Left without graduating
Universities (excluding Unisa)	50%	12%	38%
Unisa	14%	27%	59%
All Universities	38%	17%	45%
Technikons (excluding TSA)	32%	10%	58%
Technikon SA	2%	12%	85%
All Technikons	23%	11%	66%
All Institutions	30%	14%	56%

Source: Scott et al, 2007

In summary, the findings were as follows:

- Among all institutions, 30% of students in the 2000 cohort had graduated within five years, 14% were still registered and 56% had dropped out. For all universities the figures were 38%, 17% and 45% respectively and for all technikons they were 23%, 11% and 66% respectively.

- For the pre-merger Unisa, the figures were just 14%, 27% and 59% respectively and for the pre-merger TSA, they were a staggering 2%, 12% and 85% respectively.

Not surprisingly, these findings elicited a fresh wave of concern at the national level and, simultaneously, openly highlighted the particularly poor performance of the pre-merger Unisa and TSA in this regard. While we may quibble with the appropriateness of a 5-year benchmark in the ODL context, the imperative for the new Unisa to address the problem is unequivocal. Quantifying the problem more accurately at Unisa has been based on cohort studies – some conducted initially by the then Bureau for Management Information and, more recently, a report on three cohort case studies of large, representative Unisa qualifications (BCom, BCompt & LLB) which was prepared for the HEQC audit (DISA, 2008). The report included a comprehensive discussion of appropriate measurement and benchmarking of throughput, time-to-completion and graduation rates in the ODL context. The report made two recommendations in this regard to accommodate two key characteristics of the Unisa ODL context: its predominantly part-time character and the high incidence of underpreparedness for higher learning.

- First, it recommended benchmarking throughput and graduation rates against calculations of actual low rates by Prof Bunting in a document (Bunting, 2001) explaining the methods used to establish the normative benchmarks utilised in the 2001 National Plan on Higher Education.
- Second, it recommended benchmarking time-to-completion in relation to the average study load taken by students in their qualifications. This was motivated by the self-evident reflection that part-time students who take, for example, half a full-time study load can only be expected to complete in double the minimum time of their particular qualification. In the part-time context, this constitutes the *expected minimum time-to-completion*. However, this would only apply if they passed all courses. If their progress was impeded in any way by their past or current socio-economic circumstances, by the effects of educational disadvantage or by other non-academic factors, their time-to-to completion would inevitably be extended beyond the expected minimum time.

In summary, the findings of the cohort case studies report were as follows:

1. Regarding the 1998 cohort of students entering the BCom qualification, only 14,3% had qualified nine years later by 2007, a massive 75,6% had dropped out or transferred to another qualification or institution, and a further 10,2% were still registered.
2. The corresponding figures for the BCompt qualification were 29,4%, 59,5% and 11,1% respectively.
3. The figures for the LLB qualification were 25,1%, 65,6% and 9,3% respectively.
4. These figures indicate an unacceptably high dropout rate and poor graduation rate, which is well below even the lowest ODL-appropriate benchmarks and the low National Plan benchmarks.
5. However, in all three cases, the time-to-completion rates of those students who had graduated were within the expected minimum time – which was calculated, as indicated above, on the basis of the average study load taken by students registered for each qualification.

6. These findings indicate that the key problem at Unisa is dropout and not necessarily time-to-completion. Clearly, supportive initiatives must focus primarily on addressing dropout. In turn, these must be based on reliable information and intelligence regarding the reasons for dropout among the various segments of our student population.
7. Dropout and stop out occur predominantly in the first and second years of study. This indicates clearly the period in which students are most at risk in this regard. Again, proactive initiatives must be taken, on the basis of reliable information and intelligence, to reduce this risk wherever possible.

Subsequently, Unisa's recently developed pilot tracking system has provided more detailed indications of the extent of the problem. To take one example: the attrition rates of Unisa's first-time entering students are set out in the table below.

Table 2: Unisa 1st-time Entering Students Attrition Rates, 2001-7 Cohorts

Cohort	N	Y2	Y3	Y4	Y5	Y6	Y7	Y8
2001	44 551	37,7%	54,8%	60,9%	62,4%	63,5%	64,4%	65,0%
2002	46 216	47,5%	61,9%	65,1%	66,9%	68,4%	69,6%	
2003	41 190	51,6%	59,3%	63,6%	66,6%	69,0%		
2004	43 191	38,5%	49,8%	56,8%	61,4%			
2005	43 428	36,6%	51,5%	60,3%				
2006	51 478	44,2%	59,7%					
2007	60 456	44,4%						

Source: Unisa Institutional Information Portal

From Table 2 it can be seen that:

- By their 2nd year of study, between 36% and 51% of the 2001-7 first-time entering cohorts at Unisa had dropped out.
- By the 3rd year of study, the dropout rates had increased to between 49% and 61%.
- In subsequent years, the dropout rates reached up to 69%.

2. Components of the Framework and Implementation Strategy

In the light of the trends analysed in the previous section, there are a number of reasons why Unisa should address this goal resolutely:

- First, Unisa has a moral obligation to ensure that enhancing student access in the ODL environment is accompanied by effective measures to enhance success by providing high-quality tuition, appropriate student support and efficient administrative service.
- Second, persistent failure and dropout has significant financial implications for students and, increasingly, for Unisa. This is especially so in the light of government's outcomes-oriented funding framework and recent Ministerial Statements on Higher Education Funding. The statements signal the intention to distribute future teaching (and research) development grants only on the basis of approved plans to improve success and throughput and demonstrably effective institutional initiatives in this regard.
- Third, ongoing poor success, retention and graduation rates diminish institutional reputation as well as student and staff morale.

In this section, the components of the framework are set out and an update is provided of the strategy to implement the framework. The goals and desired outcomes of each element are briefly elaborated and progress to date and next steps are identified for implementation. Where appropriate, recommendations are made.

Needless to say, for the framework to impact positively on student success it must be effectively implemented, managed and co-ordinated across the institution. This entails developing appropriate policies, procedures, practices, roles, responsibilities and structures which are fully aligned with the emerging Student Support Framework. In addition, student success must be strongly championed as an all-embracing priority.

Since the merger, improving student success and satisfaction at Unisa has been a top priority. Accordingly, it has featured prominently in all planning documents and reviews, including the 2015 Strategic Plan, the subsequent Institutional Operational Plans and, notably, the HEQC Audit Report. Addressing this goal at Unisa is particularly challenging, due to its institutional character as an ODL mega-university in the developing country context of South Africa. As most students are part-time and many are underprepared, the academic and non-academic risks to success they face are complex and compounded.

Consequently, over the years many efforts were undertaken to address the challenge of enhancing success at Unisa. Most of these occurred at the college level. At the institution-wide level, previous initiatives were structurally and operationally siloed between the Academic & Research and Learner Support portfolios. A key aspect of the problem, therefore, is that for some time Unisa lacked a co-ordinated, effective institution-wide approach. While much good work was done, this remained largely localised. Where successful interventions did occur, they were generally not shared widely as best practice and, likewise, lessons from less successful initiatives were not adequately disseminated.

During the course of 2008, efforts were made to integrate the institution's approach to this challenge. A unified Throughput Forum, reporting to the newly integrated Senate Tuition & Learner Support Committee, became responsible for coordinating institution-wide efforts. In the course of its deliberations during 2008, the Throughput Forum adopted a comprehensive approach to addressing the problem. This involved mapping out a broad institution-wide framework for enhancing success, retention and graduation rates at Unisa. From the outset, the notion of a positive student experience was incorporated in the broad definition of success adopted in the framework.

Following the establishment of Task Team 6 as part of the ODL Implementation Plan in November 2009, Unisa's success and retention initiative shifted from the Throughput Forum to the task team. The components of the framework are now elaborated.

Figure 1: Components Steps of the Framework for Enhancing Student Success at Unisa
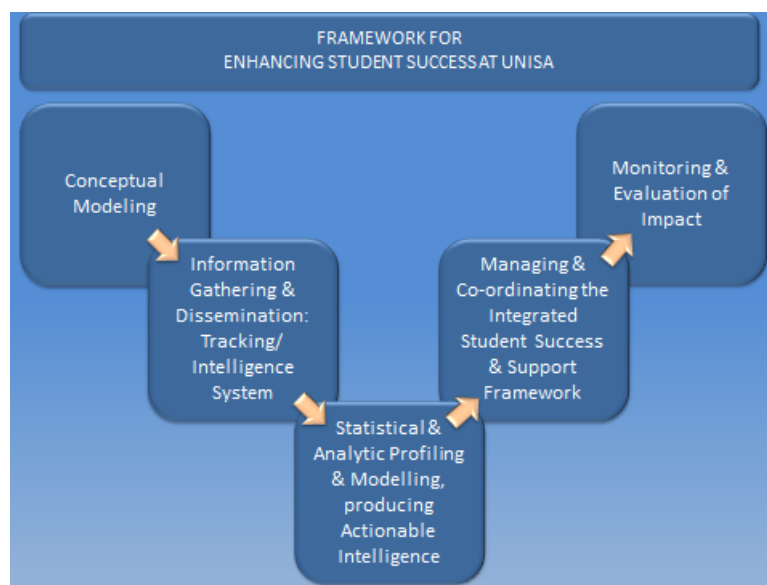
The five components of the framework are as follows:

1. Informed by a comprehensive literature review, construction of an appropriate **conceptual-hypothetical model** of all factors impacting on student success, retention and graduation in the ODL context of Unisa.
2. **Systematically gathering and disseminating** all relevant, available and actionable information and alerts relating to academic and non-academic risks faced by both students and the institution by means of the tracking system.
3. The detailed **conceptual and statistical analysis, predictive modelling and data mining** of this information, transforming it into actionable intelligence. This allows not only the retrospective analysis of trends, but importantly also the profiling and prediction of the nature and timing of both student and institutional risk, including the assessment and self-assessment of students' academic and non-academic risk.
4. The **integrated management and coordination of the Student Success & Support Frameworks**. Informed by the intelligence provided by the tracking system and the modelling, analysis and prediction of risk, roleplayers in the Student Support Framework provide appropriate support and interventions according to approved procedures.

5. Finally, the **ongoing monitoring and evaluation** of the impact of these practices, services and initiatives over time as part of continuous improvement.

These components steps and implementation strategy in relation to each are now discussed.

Step 1: Conceptual Model: Establishing a Common Point of Reference

1. Goal:

To reach a common understanding of student and institutional factors impacting on student success in the Unisa context as a common reference point for all institution-wide initiatives to enhance student success.

2. Desired Outcome:

All institutional initiatives to enhance student success are informed and shaped by the model and aligned with other key policies & initiatives (admissions, curriculum development, assessment, quality assurance, academic planning, student support & enrolment management).

3. The Process Thus Far:

- As indicated, the first step in developing the framework was to construct a **conceptual-hypothetical model** of all factors impacting on success in retention in the Unisa context. A Modelling Task Team, comprising Prof George Subotzky (convenor), Prof Chris Swanepoel, Dr At van Schoor, Dr Paul Prinsloo and Ms Hanneri Botha was set up under the auspices of the Throughput Forum in 2008 for this purpose.

- To inform the construction of the model, a **comprehensive literature review** of international and national best practice was completed by Dr Paul Prinsloo in February, 2009 (Prinsloo, 2009). To gain a full understanding of the framework, it is essential to refer to the brief overview of the literature review which is provided in Appendix 1.

- Thereafter, the conceptual model was developed by February 2009, drawing extensively from the literature review and adapting existing models to the Unisa context. Between February and April 2009, the model was **presented internally** in a variety of forums. Subsequently, between May and October 2009, it was **presented at three international and three national conferences**. In addition, the framework and the model has been written up in a **peer-reviewed article** accepted for publication in the international journal *Distance Education* (Subotzky and Prinsloo, forthcoming). In all these, strong corroborative feedback was received that the framework and model was appropriate to the Unisa ODL context, and was innovative and at the cutting edge of contemporary developments in the field. This was particularly so regarding the richness of the constructs utilised and in the strong emphasis placed on the mutual responsibility of students and the institution in ensuring student success and on mutual engagement and knowledge as a prerequisite to this. A graphic representation and detailed overview of the conceptual model are provided in Appendix 3 and 4 below. As with the literature

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review, engaging with this is essential to understanding the framework and strategy presented in this document.

- In late 2009, the process of identifying **relevant variables** was begun related to relevant, available and actionable information.

- Two intensive open invitation **internal workshops** were convened on 7 October 2009 and 3 February 2010. The first provided an update on progress thus far and, in particular, the findings of literature review and the substance of the conceptual model. The second focused on the development of an institution-wide strategy, drawing from international conferences and workshops attended by Prof Subotzky in the US during 2009.

4. Implementation: Next Steps

- In June, Senate approved the recommendation that the conceptual model should be endorsed as the common reference point for all institution-wide initiatives to enhance student success.

- To ensure that this transpires, the model will need to be widely disseminated and discussed. The submission of this final report to the STLSC and Senate by June, 2011 will provide the opportunity for this.

- It would be highly advantageous to seek opportunities for the ODL coordinator and members of Task Team 6 to visit or roleplayers in the Student Support and Success Frameworks, including school and college tuition and learner support committees, to engage systematically with the Student Support and Student Success frameworks for this purpose.

- During recent discussions with the Unisa School for Graduate Studies, it has become apparent that particular elements of the conceptual framework pertaining to postgraduate students need to be identified and distinguished from the general model. Further deliberations in this regard will be held.

Step 2: Information Gathering & Disseminating: The Tracking System

1. Goal:

To systematically gather and regularly and timeously disseminate relevant student and institutional risk-related information and alerts to relevant roleplayers (academic and support departments, committees) within the student support framework and academic management more broadly.

2. Desired Outcome:

Required risk-related information and alerts are made available and accessible to all student support roleplayers according to a role-based information/intelligence architecture (who

needs to know what, when, why and how?) so that appropriate responses and interventions can be undertaken according to approved procedures.

3. *Main Features of the Tracking/Intelligence System*

- It incorporates relevant **student and institutional information, academic and non-academic information and qualitative and quantitative information**.

- It tracks students' **academic progress** at the institutional, college, school/department, qualification and course levels.

- It also tracks **key administrative and academic processes**, such as the delivery of study material and marking of assignments and examinations, linking these to the various levels outlined above.

- It provides **automated early warnings** of student-related and institutional risks to success.

  - **Student risk** is identified in terms of various parameters/indicators, including past and current academic performance and engagement (low achievement, failure to submit assignments, attend exams or tutorials or to utilise support services), non-academic (psychological, socio-economic and metacognitive) factors. The data for this will be gathered from a range of sources including: application and registration forms; academic readiness self-assessment (to be conducted by DCCAD – see Step 3 below); student profiling and non-academic readiness assessment (to be conducted by DISA by means of the Student Profile Survey – see Step 3 below); student satisfaction survey; student course evaluations; and planned exit and employer surveys.

  - **Institutional risk** is identified in terms of possible problems in academic and administrative activities and services (late delivery of study maternal or assessment feedback). Relevant information will be gathered from existing operational systems.

- Once the system detects one of these instances, a **customised automatic alert** is generated and circulated to the appropriate roleplayers (tutor, e-tutor, e-coach, counsellor, lecturer, supervisor, administrative & support departments) within the student support framework, according to approved procedures, roles and responsibilities. Where possible and appropriate, responses are automated to students via e-mail or SMS.

- By means of segmentation techniques and data mining, **risk profiles** of students can be created utilising the tracking system information in conjunction with other sources identified above (see Step 3 below). These identified at-risk groups of students can then be targeted for specific proactive support interventions.

4. Progress thus far

- A ***detailed progress report*** on the tracking system was tabled at the STLSC on 18 April 2011. A synopsis of this is now provided.

- The need for an effective student tracking system at Unisa has ***long been mooted***. Responsibility for this floated among various portfolios until the project was allocated to DISA in early 2009.

- By mid-2009, the ***first phase pilot student tracking system*** was operationalised in DISA. This utilised software created by the developers of the HEDA information portal, into which it is therefore fully integrated and compatible. Its functionality has been since evaluated and it has been decided to incorporate key future developments of the tracking system into the planned organisational intelligence system.

- The ***first phase***, already implemented, provides institution-wide cohort-based information on enrolments, retention, attrition and graduation rates at the qualification level. These reports are available through the HEDA portal to the broader Unisa community. They are, however, technically complex in terms of the options for defining cohorts and the interpretation of results. During the latter part of 2009, this was internally workshopped in DISA in order to understand the various methodologies built into the system.

- On 3 February 2010, an ***institution-wide workshop*** was convened to familiarise all interested stakeholders with the current system, and to map out the way forward for its future enhancements as part of the second phase.

- The developers were subsequently commissioned to ***extend the system to include course-level information*** and to make provision for the incorporation of quantitative and qualitative survey and other information sources related to student and institutional risks. Since then, DISA has engaged with the developers to develop prototypes of the customisable dashboards to which every user will have access.

- As Task Team 6's Student Success Framework and Task Team 4's Student Support Framework emerged with greater detail and clarity during the course of 2010, the tracking system was conceptualised as a comprehensive ***student & institutional tracking & intelligence*** system. This will eventually form part of the broader institutional-wide organisational intelligence framework currently being developed by DISA.

- On 28 July 2010, the system was demonstrated to the Unisa community at a DISA ***Strategic Discussion Forum***. The respondent, Dr Roger Mills, formerly of the OU UK, was very complimentary of the system, indicating that it was, in his opinion, world-class.

- At subsequent joint meetings of Task Teams 4 & 6, the precise role of the tracking system in the emerging Student Support Framework became clearer. Essentially, according to the emerging student support process, a ***role-based "intelligence architecture"*** became clearer: which roleplayer needs to know what, why and when in order to perform their role. This addresses one of the key concerns raised in comments

to the previous draft: what happens to the tracking system information and what structures responsible for managing this? The envisaged architecture and roles are set out in Figure 3 below.

- During these meetings, it was agreed that the tracking system would be further enhanced and tested as part of the **E-tutor pilot in CEMS** which represents the first phase of implementing the Student Support Framework planned for the 2nd semester, 2011. Considerable work towards this has been undertaken and the project is on track.

- The existing system has been utilised to provide **cohort analyses** in response to requests from CEMS and CSET.

5. *Implementation: Next Steps*

- The recommendation to establish a Student Tracking System Project Team was approved by Senate, but has been superseded by the subsequent integration of the work of Task Teams 4 & 6. The project is currently being led by the Director: Information & Analysis, DISA, Glen Barnes, who is a member of the E-tutor pilot working group.

- The target date for the first analysis and reflection of the pilot is July 2011, where the first round of e-Tutor results will be analyzed and the role of the tracking system evaluated. The pilot has already identified a number of technical systems-related issues which are being addressed. The recent upgrade of the HEDA system provides the required functionality to produce customisable, interactive dashboards and to allow users to access and view information specifically designed for their needs.

- During a recent progress report presented in March to Professors Mare, Mosoma, Havenga, Ryan and Mashile and Dr Prinsloo, it was decided to simplify and make the current qualification level cohort analysis functionality more user-friendly to increase the visibility and availability of the current system. This is now under way.

- To this end, DISA is currently using the system to write up a briefing document on cohort analyses of Unisa's attrition/retention, throughput and graduation rates by qualification type. These are disaggregated by college, race, gender and other key variables.

Step 3: Analysis of Information: Profiling, Assessing & Predicting Risk

1. Goal:

To provide systematic high-level aggregated analysis, modelling, profiling and prediction of student-related and institutional risks to student success.

2. Desired Outcome:

The availability of analyses and predictive models of risks to student success in order to inform evidence-based student support interventions.

3. Key Issues:

Drawing upon the conceptual model, risks to student success can be clustered into three types. Accordingly, three different kinds of student support are identified in the Student Support Framework: a) *academic* (cognitive); b) *non-academic* (affective – psychological and meta-cognitive attributes); and c) *institutional* (operational/systemic). Central to the Student Support Framework is the identification of risk related to all three types of support. Students' academic and non-academic risks can be assessed and institutional risk is addressed through a number of recommendations in the Student Support Framework. These are now briefly elaborated.

a) Assessment of Students' Academic Readiness/Risk

Background and Progress Thus Far:

- The first draft of the framework included a recommendation to implement the pre-registration assessment of academic readiness/risk at Unisa and to this end, to investigate the appropriateness and reliability of the NBTs and other academic skills assessments in the Unisa ODL context. This was referred back by Senate for further consideration. Since then, considerable discussion on these points has occurred.

- It is self-evident that the **lack of academic readiness constitutes a major risk to student success**. We have known this for a long time – both at Unisa and among other higher education institutions in South Africa and internationally. Despite this, we have not reached consensus about the appropriate method and procedure by which to assess academic readiness/risk in the ODL context. It is important to note that this kind of assessment is not intended as an admissions criterion. Instead its purpose is to enhance students' prospects of success by guiding them, in an informed way, towards suitable qualifications, towards an extended curriculum where required, towards realistic study loads and appropriate forms of academic and non-academic support.

- Assessment of academic readiness/risk can be done in two ways: utilising matric scores and some form of testing. Regarding the first, the reliability of **Matric scores as a predictor of student success** has been long debated since the academic development movement emerged in the mid-1980s. There is overall consensus that Matric scores are

poor predictors for under-performing school-leavers as under-performance more often reflects the negative impacts of educational disadvantage rather than potential to succeed in higher education. Conversely, Matric scores are relatively reliable predictors for high-achieving school-leavers. The introduction of the NSC in 2008 raised concerns about its value as an indicator of readiness for higher learning, following the generally poor performance of NSC-holders in higher education in 2009. As a result, many contact institutions raised their admission requirements for 2010 and 2011. The reliability of the NSC is a politically sensitive issue as questioning it is often interpreted as doubting the credibility of the Department of Basic Education and Umalasi. As only two years' data is available, it is too late early to provide systematic evidence either way. Nonetheless, previous Matric and the current NSC scores remain important elements of the assessment of academic readiness.

- The ***test-based assessment of students' academic readiness at Unisa*** has been mooted for many years. Initially, this took the form of MOAP and, subsequently, ROAP. The idea has been vigourously debated. On the one hand, concern has been expressed that this constitutes an exclusionary academic test (based on criteria inappropriate to the Unisa context) which creates a barrier to access that contradicts our social mandate. On the other hand, it has been constantly emphasised that its intention is inclusionary, as it aims to identify how best to channel students academically, to provide support appropriate to their non-academic circumstances and, in this way, to contribute meaningfully to their ultimate success.

- Since then, ***National Benchmark Tests*** (NBT) were developed under the auspices of HESA to assess the academic readiness of all new higher education students by means of a single test opportunity. These are now applied at all contact institutions. According to recent work at the University of Cape Town and NBT national task teams, NBT results have been used to complement the 2010 NSC results to produce a more reliable predictive model which builds on the strengths of both forms of assessment. Some institutions, and faculties within them, are using the results as part of their admission requirements. Others use the tests to place students on the basis of the three readiness/risk categories. The relevance, validity, reliability and practicality of applying the NBT tests at Unisa has been hotly debated. The main practical obstacle is that, at this point, the online administration of the test is precluded because a sufficiently large item bank is not yet available. However, plans are now in place to address this. Once this is achieved, Unisa could consider utilising the tests. However, the most important consideration is whether the NBT would add sufficient value to the NSC in the Unisa context as a predictor of success in order to justify undertaking it.

- To this end, DISA has undertaken to examine the ***relationship between the 2008 and 2009 NSC results of its first-time entering undergraduates and their course-level success*** at Unisa. Initial analysis indicates that home language correlates particularly highly with course success. In parallel, DISA will obtain as much information from other institutions where similar studies have been undertaken. On the basis of this investigation, more light will be thrown on whether conducting the NBTs at Unisa would add sufficient predictive value.

- Besides the NBTs, there are numerous **other appropriate and reliable academic skills analysis tests**. These include the specially developed Unisa Science Foundation Provision test, which focuses on academic skills, quantitative literacy and logic.

Implementation: Next Steps

- The second draft of this framework document recommended joint discussions between DISA, DCCAD and the ODL Coordinator to integrate their several initiatives regarding the assessment and self-assessment of academic readiness and risk. These initiatives include: a) the Task Team 4 framework document proposal to undertake interactive computer marked self-assessment of academic readiness/risk; b) a self-assessment instrument currently being developed by DCCAD to assess academic readiness/risk; and c) the academic and non-academic self-assessment component of the Student Profile Survey outlined above. The outcome was that:

  a) DCCAD is developing an instrument for academic assessment, building on the MOAP/ROAP models. A special post has been approved for this purpose by Mancom. This will be administered during the second half of 2011.
  b) As indicated, DISA is investigating the predictive value of the NSC in the Unisa context as well as that of the NBT in other institutional contexts. The report will be presented to the STLSC when completed. The findings will be useful in determining definitively whether the NBT could add predictive value in the Unisa context, assuming that online administration becomes practical. The findings of the DCCAD academic assessment initiative will provide another point of reference.
  c) A proposal to invite expressions of interest from vendors of suitable self-assessment instruments, including interactive computer marked ones, was approved by the STLSC in April. This is proceeding.
  d) The assessment on non-academic risk will be addressed through the planned Student Profile Survey (see next point).

b) Assessment of students' non-academic readiness/risk

Background and Process Thus Far

- There is considerable evidence internationally, nationally and at Unisa (most notably in the recently conducted Exam Absence Survey) that **non-academic factors impact strongly on student success**. The pressures of combining part-time study with the ongoing demands of work and domestic responsibilities create additional barriers and stress for students in the ODL context. For these reasons, non-academic factors feature prominently in the conceptual model.

- The **profiling and prediction of students' non-academic readiness/risk is therefore essential** to the integrated student success and support frameworks. This is done through building predictive models, based on the analysis of survey and other available information. On the basis of this, risk categories and groups are identified and students are guided – through counselling and mentoring – towards realistic study loads and appropriate forms of learner support.

- A key process towards this end was to examine the original conceptual model in order to distil out of this ***a predictive model of student success in the Unisa context*** based on available, reliable and relevant variables. This work is being undertaken in DISA by a small team comprising Prof Subotzky, Dion van Zyl (Manager: Information Services) and Hanlie Liebenberg (Deputy Director: Institutional Research). As is evident from Figure 2 below, the model incorporates students' pastime current socio-economic status and life circumstances, their academic ability, metacognitive skills and knowledge and relevant psychological attributes. It also includes the quality and relevance of institutional services. All these constructs are based on measurable variables in order to profile and prediction risk.

- Alongside this, the same team has undertaken the first steps towards the ***segmented profiling*** of Unisa's highly heterogeneous student population. This involves the definition of various student risk categories, based on the permutations of three key student-related factors impacting on success, namely: academic ability, metacognitive/psychological attributes and skills, and life circumstances.

- A large portion of the information for the predictive model and segmented profiling will be sourced from the ***Student Profile Survey***. The instrument is currently being finalised by DISA, based on comments received by members of the STLSC and others. This is designed to gather comprehensive information about students' socio-economic and educational background, current socio-economic status and life circumstances, metacognitive skills and knowledge as well as psychometrics focusing on relevant attributes and aptitudes. The information thus gathered will provide a very rich and appropriately segmented profile of our diverse student population and the foundation for predicting non-academic risk reliably. Other sources include application and registration forms, HEMIS, the student satisfaction survey and other surveys.

Figure 2: Predictive Model of Student-Related and Institutional Risks to Success
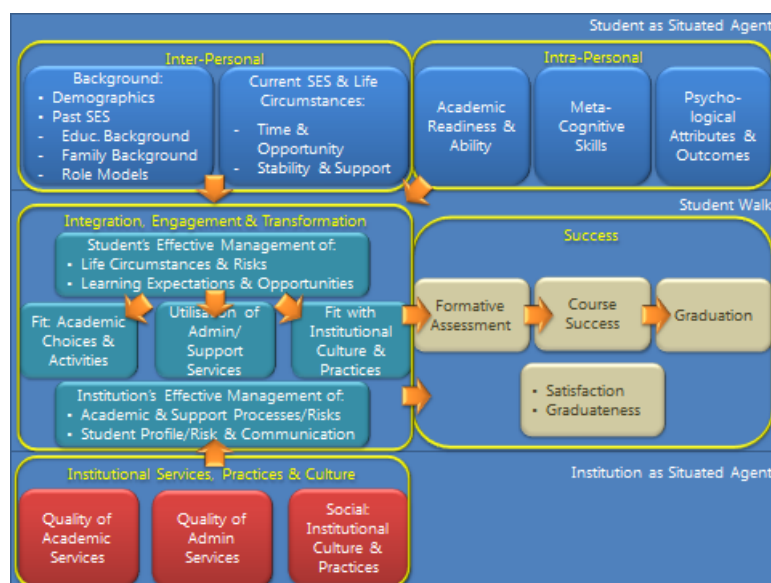
Implementation: Next Steps

- The Student Profile Survey instrument will shortly be piloted with a view to administering the survey during the second half of 2011.

- Papers on the predictive model and segmented profiling have been accepted for presentation at two international institutional research conferences in London in June and in Warsaw in August 2011. These opportunities will provide valuable feedback.

- More work will be done on the predictive model and segmented profiling, based on responses to the presentation of the papers at the international conferences and other venues.

- The findings of the survey will be analysed and run through predictive the model and the proposed segmented profiling to assess their validity and reliability.

- These steps take forward the recommendation, approved at the June Senate meeting, for DISA to develop and implement an appropriate Student Profile Survey instrument and, as part of this, to investigate the reliability and validity of a self-assessment instrument to measure and score student readiness and risk.

- In June, Senate approved the recommendation that DISA should develop the required capacity to undertake advanced statistical analysis, data mining, profiling and predictive modelling of student and institutional risks. This is under way.

c) Addressing Institutional Readiness/Risk

- The previous draft of this framework document identified four key priority areas of institutional activities in order to have an immediate impact on improving success. These were: a) the on-time delivery of study materials; b) availability of lecturers; c) feedback on assessment; and d) exam scheduling.

- The June Senate meeting referred these back. Since then, the issue of on-time delivery of study materials is receiving attention in STLSC. Regarding the availability of lecturers: while the Student Satisfaction Survey indicates on-going dissatisfaction, the VP: Academic & Research indicated that the matter had received attention and required no further action at this point. In time, the impact of efforts to improve lecturers' availability should be evident in future satisfaction surveys. Feedback on assignments is identified as a fifth key area for attention in the Task Team 4 framework document. Finally, the issue of flexible exam scheduling is being attended to in the Directorate: Student Assessment Administration.

- In addition to these issues, the Task Team 4 framework document outlines several issues which need to receive attention as part of Proposal 1 which focuses on addressing the effectiveness and quality of current student support initiatives. In this regard, detailed recommendations are made to review and improve practices in the following areas:

- Tutorials & group discussions
- Videoconferencing and satellite broadcasting
- Unisa call centre
- ODL training for all Unisa staff
- Virtual learning environment training
- Assessment
- Integrated & co-ordinated functions, systems & procedures
- ODL research
- The following structures/departments: DCCAD, the Library, CCM, ICT, DISA, Student Affairs, DSAA, DSAR, academic departments
- *myUnisa*
- Supervision & mentoring of postgrad students
- Experiential learning.

Implementation: Progress/Next Steps

- In the light of the above, the issue of addressing institutional risk to student success is being addressed systematically in the recommendations of the Task Team 4 report and will therefore receive no further attention in this document.

Step 4: Managing the Integrated Student Success & Frameworks

1. Goal:

To ensure the effective incremental implementation and ongoing institution-wide management and coordination of the integrated student support and success frameworks by means of appropriate structures, procedures, systems and compliance mechanisms.

2. Desired Outcome:

Demonstrably improved student success and satisfaction as the result of an effectively implemented managed and co-ordinated integrated student support and success framework.

3. Key issues, process thus far and recommendations

- The June meeting of Senate referred back the recommendation to establish a Student Success Subcommittee as the structure responsible for coordinating student success initiatives.

- Considerable discussion of this matter ensued. The second draft of this framework document retained the recommendation. Further strong concerns were raised by respondents to this draft. These involved the observation that the proposed composition and function of the subcommittee duplicated that of the STLSC and further there was still lack of clarity about precisely where the information and alerts generated by the tracking system would be directed. These concerns were discussed in the final meetings of Task Team 6 and are addressed in the recommendations that follow.

- One suggestion made in response to the second draft to this document was to emulate the **Student Success Centres** which have recently emerged in many US institutions. However, following an investigation by DISA researchers, it is evident that these are in the main one-stop face-to-face centres providing a range of counselling services, academic support and career guidance. They are therefore enhanced versions of our own DCCAD geared clearly towards the face-to-face context of these institutions. They therefore do not constitute appropriate models for the coordination of student success and support at Unisa.

- Nonetheless, **central coordination remains a prerequisite** for the effective implementation of the student support and success frameworks. As Unisa's ODL implementation plan – in particular its student support and success frameworks – has matured, increasing integration has been achieved conceptually and operationally. This is also reflected at the college level, where tuition and learner support and quality assurance activities have been unified in the college tuition and learner support committees. However, some duplication in addressing success and support issues remains at a higher committee level in the work of the STLSC, the Professional Administrative and Academic Quality Assurance Committee and the Senate Higher Degrees Committee. Overall coordination is therefore still required.

- The tracking system **sources three kinds of information**: student information, operational processes and a range of communications and engagements between the student and the institution at different levels. As indicated above, the tracking system **provides information and alerts** related to three kinds of risk: academic, affective and administrative. These are directed, as required, by the role-based student support procedures, to relevant roleplayers.

- While student support must address all three kinds of risks and is therefore cross-functional in nature, it is proposed that **coordination and primary responsibility lies within the academic sphere**. This means that, while academic departments do not address affective and administrative risks, they should at least be aware of all risks and interventions in the best interests of the students. Academic departments must therefore refer non-academic issues to relevant roleplayers and liaise with them to ensure a holistic and integrated approach to student success. Academic departments should therefore be capacitated to provide the lowest level point of coordination and convergence of student support at the course level.

- Within academic departments, it is therefore recommended that the current temporary role of the Academic Department Tutor Coordinator (ADTC) be formalised in a permanent administrative function in the form of **Academic Support Coordinators (ASCs)** appointed according to the size of departments. In the case of small departments, one ASC could suffice. In the case of larger ones, more than one would be necessary. ASCs report directly to the Chairs of Departments and sit on all School Tuition and Learner Support Committees. The primary responsibilities of the ASCs would be: a) to provide administrative coordination of all student support initiatives within the department, including administering the appointment and claims of all contract employees (eg tutors, E-tutors, external markers, experiential learning); b) to refer any

affective or administrative issues that come to their attention to the appropriate departments.

- To this end, it is further recommended that the STLSC mandates an ***urgent investigation by Organisational Development (OD)*** to formalise the ASC posts and investigate the best option for the provision of the required resources. OD to report back to the STLSC of September 2011.

- Through the tracking system, ASCs and other student support roleplayers (tutors, E-tutors, lecturers, supervisors, online mentors) would receive ***information and automated alerts*** relevant to their function and responsibilities (see Figure 3 below).

- ***At the next level***, responsibility for oversight and coordination of student support lies with the School Tuition and Learner Support Committees. In turn, responsibility at the college level lies with the College Tuition and Learner Support Committees (CTLSCs).

- To provide institution-wide coordination, it is recommended that the current Throughput Forum is replaced by a ***Student Success Forum***.

  - The overall purpose of the forum is to provide a cross-functional, institution-wide operational oversight structure for the integration and coordination of all initiatives to enhance student success through the integrated student success and support frameworks.

  - It is responsible for the development of detailed procedures for student support and to ensure compliance with these.

  - It ensures that the dissemination of the student and institutional intelligence meets the needs of all relevant student support roleplayers to allow them to fulfil their assigned responsibilities within the student support framework.

  - It also provides a working forum for in-depth engagement with reports, analyses and tracking system information and alerts and for the sharing of information and best practices across the institution. Where appropriate, follow-up actions aimed at addressing identified institutional risks will be logged and directed towards relevant support and administrative departments and monitored.

  - It reports to the STLSC and Senate.

  - The proposed composition is as follows:

    - *o* ED: Tuition and Facilitation of Learning (Chair)
    - *o* Dean of Students
    - *o* Executive Dean: Unisa School for Graduate Studies
    - *o* Chairpersons of School and College Tuition & Learner Support Committees
    - *o* Director: DCCAD
    - *o* Director: TSDL
    - *o* Director: Information & Analysis
    - *o* Director: Institutional Research.

- The envisaged sources and destinations of the information and alerts provided by the tracking system are set out in Figure 3 below.
  - As is apparent, information from three principal sources (student information, operational processes and engagements/ communication between student and information on various levels) is centralised in the student tracking system.
  - Information and alerts from the tracking system are then routed to the various student support roleplayers, according to their responsibilities and needs.
  - Trends and processes are monitored at the higher levels in the school and college tuition and learner support committees, and in-depth engagement occurs in the proposed Student Success Forum, reporting to the STLSC.
- Together with the two recommendations above, this information architecture addresses the main concerns raised in response to previous drafts of this document, namely:
  - What appropriate structure/unit will monitor and address student success issues?
  - What happens to the information produced by the tracking system?

Figure 3: Sources & Destinations of Tracking System Information & Alerts
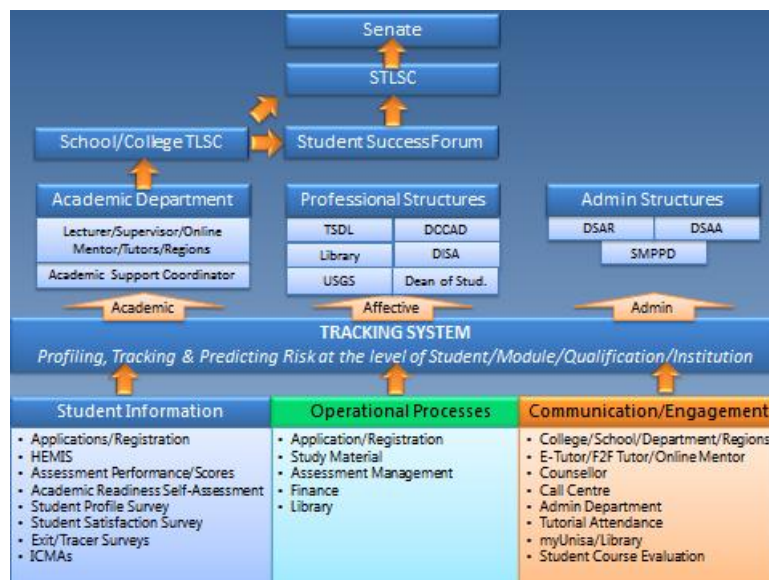
Step 5: Monitoring & Evaluation: Assessing Impact

1. Goal:

To monitor trends and evaluate the impact of interventions and in the light of this, to continuously review practices & identification of new proactive interventions.

2. Desired Outcome:

Clear evidence of progress and the impact of particular initiatives on success, retention, graduation & satisfaction rates.

3. Implementation/Next Steps:

- In June, Senate approved the recommendation that DISA develops an appropriate framework for the monitoring and evaluation of Unisa's student success initiative.

- As part of its overall information and analysis function, DISA will develop the framework for monitoring and evaluating success and monitor trends and evaluate the impact of interventions. The findings will be reported through the proposed Student Success Forum to the STLSC. This will facilitate the continuous review of practices & identification of new proactive interventions.

3. Summary & Conclusion

This document comprises the final report of ODL Task Team 6 on a *Framework and Strategy to Enhance Student Success*, broadly conceived, at Unisa. This report draws from two previous drafts and numerous comments and deliberations by the Task Team and its Working Group.

The report was shaped by two key considerations: a) the reformulation of the original mandate of Task Team 6; and b) articulation with the Student Support Framework produced by Task Team 4. The Student Success Framework intersects directly with the Student Support Framework and should be read in conjunction with it.

There are numerous compelling reasons why improving success is an institutional priority for Unisa. Central among these are the University's moral obligation to match success with access and the need to avoid the detrimental financial, psychological and reputational impacts of lack of success. Drawing from an extensive literature review and building on previous institutional initiatives, the framework and strategy proposed in this report aims at a comprehensive approach to effectively addressing this challenge, which is particularly formidable in the Unisa ODL context. Through numerous national and international presentations and engagements, the framework – and in particular the conceptual framework – has been acknowledged as innovative, cutting-edge and appropriate to its context.

The framework comprises five component steps:

1. *Conceptual Model: Establishing a Common Point of Reference*
2. *Information Gathering & Dissemination: The Tracking System*
3. *Analysis of Information: Profiling, Assessing & Predicting Risk*
4. *Managing the Student Success & Support Frameworks: Coordinating Procedures to Address Risk*
5. *Monitoring & Evaluation: Measuring Impact.*

Shaped by the conceptual model, information is gathered, disseminated and analysed in order to identify, predict and address student-related and institutional risks to success. The flow of this information – its architecture – is designed to support and inform the activities of all the various role players in the Student Support Framework, according to its principles and procedures. Step 4 constitutes the point of intersection between the Student Success and Support Frameworks.

This report elaborates each of the five component steps of the framework, setting out goals, desired outcomes, key issues, implementation next steps and, where appropriate, and recommendations. The two main recommendations are now listed.

Recommendation 1: Academic Support Coordinators

a) *Within academic departments, it is recommended that the current temporary role of the Academic Department Tutor Coordinator (ADTC) be formalised in a permanent administrative function in the form of Academic Support Coordinators (ASCs) appointed according to the size of departments.*

- *In the case of small departments, one ASC could suffice. In the case of larger ones, more than one would be necessary. ASCs report directly to the Chairs of Departments and sit on all School Tuition and Learner Support Committees.*

- *The primary responsibilities of the ASCs would be: a) to provide administrative coordination of all student support initiatives within the department, including administering the appointment and claims of all contract employees (eg tutors, E-tutors, external markers, experiential learning); b) to refer any affective or administrative issues that come to their attention to the appropriate departments.*

b) *To this end, it is recommended that the STLSC mandates an urgent investigation by Organisational Development (OD) to formalise the ASC posts and investigate the best option for the provision of the required resources. OD to report back to the STLSC of September 2011.*

Recommendation 2: Student Success Forum

To provide institution-wide coordination, it is recommended that the current Throughput Forum is replaced by a Student Success Forum.

- *The overall purpose of the forum is to provide a cross-functional, institution-wide operational oversight structure for the integration and coordination of all initiatives to enhance student success through the integrated student success and support frameworks.*

- *It is responsible for the development of detailed procedures for student support and to ensure compliance with these.*

- *It ensures that the dissemination of the student and institutional intelligence meets the needs of all relevant student support roleplayers to allow them to fulfil their assigned responsibilities within the student support framework.*

- *It also provides a working forum for in-depth engagement with reports, analyses and tracking system information and alerts and for the sharing of information and best practices across the institution. Where appropriate, follow-up actions aimed at addressing identified institutional risks will be logged and directed towards relevant support and administrative departments and monitored.*

- *It reports to the STLSC and Senate.*

- *The proposed composition is as follows:*

- *ED: Tuition and Facilitation of Learning (Chair)*
- *Dean of Students*
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- *Chairpersons of School and College Tuition & Learner Support Committees*
- *Director: DCCAD*
- *Director: TSDL*
- *Director: Information & Analysis*
- *Director: Institutional Research.*

As indicated, all the implementation next steps are set out in the previous section. During the course of the implementation, it would be advantageous to seek opportunities for the ODL coordinator and members of Task Team 6 to visit relevant structures and roleplayers in the Student Success and Support Frameworks, including school and college tuition and learner support committees, to engage systematically with the Student Support and Student Success frameworks to ensure that common understandings and points of departure are established.

The ODL Implementation Plan called for the integration of the two framework documents by June, 2011. However, it is proposed that, as the implementation of each is proceeding with clear points of intersection, this unnecessary step is avoided.

Members of Task Team 6 are confident that this comprehensive framework and strategy to enhance student success at Unisa provides a firm foundation for making decisive progress towards the achievement of this important institutional priority.

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Appendix 1 Overview of the Findings of the Literature Review

With the purpose of informing the construction of a relevant conceptual model of all factors impacting on student success (broadly defined) in the Unisa context, a comprehensive literature review was conducted by Dr Paul Prinsloo (Prinsloo, 2009). The strength of this excellent review lies in its comprehensiveness and theoretical richness. As this literature review is available as a separate document, only a high-level overview is provided here for the purposes of this report.

- The extensive review covered the literature from the earliest retention model proposed by Spady in 1970 to current theoretical developments. It examined relevant models in international contact higher education (e.g. Spady, Bean, Tinto, Swail & Dietsche), in international distance education (e.g. Kember, Simpson) and in South Africa (e.g. REAP, Koen, Scott et al).
- Theoretically, the models examined included a variety of perspectives including sociological (Baird, Berger), anthropological (Hurtado), social-critical (Tierney) and psychological (Bean and Eaton).
- In the emerging field of retention studies, Tinto has had enormous influence. His notion of academic and social integration as key predictors of persistence in the contact environment laid the foundation for most subsequent models. Despite some insightful critiques of the limitations of his model, it remains the primary point of departure in the field. A key challenge in developing a model appropriate to the Unisa context is to interpret the notion of social integration meaningfully in the ODL environment.

The key findings of the literature review can be summarised as follows:

1. Student success is a ***complex, layered and dynamic set of events*** (Tinto 2006). It is the outcome of a dynamic 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 address the problem. In the absence of what Merton (1957) calls a "grand theory", Tinto (1982:688) asserts that "our theoretical models serve to explain only a portion of the wide range of behaviours that constitute the universe of social interactions". As Kember (1989:279-280) states:

   > 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.

A further consequence of the complexities involved is that understanding attrition does not imply understanding persistence. As Tinto (2005:5-6) states: "Leaving is not the mirror image of staying. Knowing why students leave does not tell us, at least not directly, why students persist".
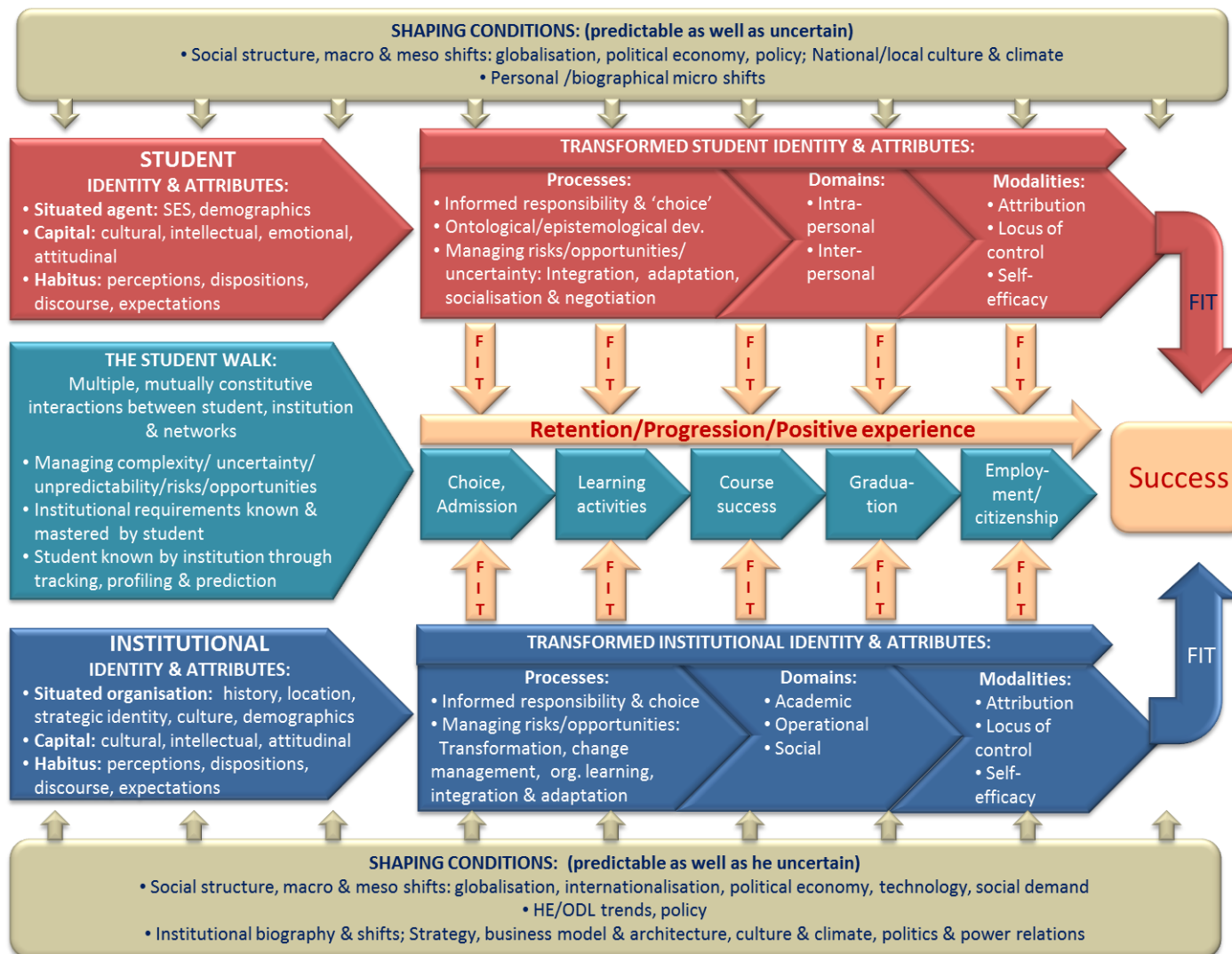
2. Consequently, while identifying relevant variables explaining and impacting on success is the point of departure, the real challenge in the light of the complexities involved is determining the combined effects of, and **relationships between different predictor variables**. These complex interrelationships will vary across different contexts: across different institutional types, across heterogeneous student profiles, at different points in the student journey and across different disciplines and qualification types and levels. Only a relatively low proportion of student success variation can be explained by traditional statistical modeling techniques such as multiple linear regression analyses. These techniques only establish valid and reliable relationships between 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 and, in turn, possibilities for action. Structural equation modeling (which helps to establish relationships between predictor variables), data mining (in particular the emerging field of neural networks) may provide new opportunities for engaging with the complexities of student success[3].

3. **International models are generally inappropriate** to the specific African, developing country and ODL context of Unisa. Most of the literature focuses on traditional contact higher educational environments in developed countries. While there may be some common universal factors, these models do not readily apply to the particularities of the Unisa context. Clearly, an appropriate model for Unisa must accommodate the complex, specific macro-, meso- and micro-level socio-economic conditions shaping individual and institutional attributes and behaviours within the sharply stratified South African social order. This reflects the increasing emphasis on non-academic, non-cognitive factors in the international literature. In the ODL context, where the majority of students are part-time and non-traditional, these factors – especially work-related and domestic responsibilities – are likely to create greater barriers to success than in residential settings. In particular, the literature suggests that while financial security plays a major role, the tangible and intangible impacts of economic influences on persistence in the African ODL context remain under-researched.

4. Predominant models do not adequately recognise the **mutual responsibility** involved in the process. Not only must students develop and acquire all the required attributes, skills and knowledge for successful higher learning, but institutions must also constantly review, adapt and improve their practices and services to ensure success, in particular of non-traditional and diverse student populations. The institution's obligation in this regard is to reflect continually and critically on its implicit assumptions and practices not only to improve service delivery but also to eradicate hidden socio-economic and cultural barriers to equitable access and success for non-traditional and disadvantaged students. This is the defining feature of a *transformative* approach. In the absence of this, the

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[3] The author is indebted to Dion van Zyl, Manager: Information Services, Department of Information and Strategic Analysis, Unisa, for clarification of these points.

institution merely perpetuates the social reproduction of elites. In developed countries, the academy is commonly regarded as a static entity with fixed, universal standards. In this view, students are expected to assimilate into the academic status quo. By contrast, the need for institutional transformation has long been foregrounded in post-apartheid South African high educational policy. Taking mutual responsibility depends on mutual engagement which, in turn, depends on mutual knowledge.

5. Closely linked to this, institutional and student-related intelligence on retention and success should draw from both in-depth ***quantitative and qualitative sources*** in order to effectively identify, predict and address risks. This relates not only to detailed student profiling, but also to explaining relevant trends in student activity and behaviour *and* institutional practices and services. Accordingly, an effective tracking system must go beyond conventional systems which provide quantitative student academic data exclusively. It must include qualitative sources and a broad range of organisational intelligence to track and profile relevant processes and, on the basis of this, to predict success.

Appendix 2: Graphic Representation of Conceptual Model

SHAPING CONDITIONS: (predictable as well as uncertain)
• Social structure, macro & meso shifts: globalisation, political economy, policy; National/local culture & climate
• Personal /biographical micro shifts

STUDENT
IDENTITY & ATTRIBUTES:
• **Situated agent:** SES, demographics
• **Capital:** cultural, intellectual, emotional, attitudinal
• **Habitus:** perceptions, dispositions, discourse, expectations

TRANSFORMED STUDENT IDENTITY & ATTRIBUTES:

Processes:
• Informed responsibility & 'choice'
• Ontological/epistemological dev.
• Managing risks/opportunities/ uncertainty: Integration, adaptation, socialisation & negotiation

Domains:
• Intra-personal
• Inter-personal

Modalities:
• Attribution
• Locus of control
• Self-efficacy

FIT

THE STUDENT WALK:
Multiple, mutually constitutive interactions between student, institution & networks

• Managing complexity/ uncertainty/ unpredictability/risks/opportunities
• Institutional requirements known & mastered by student
• Student known by institution through tracking, profiling & prediction

Retention/Progression/Positive experience

Choice, Admission | Learning activities | Course success | Graduation | Employment/ citizenship

FIT | FIT | FIT | FIT | FIT

Success

INSTITUTIONAL
IDENTITY & ATTRIBUTES:
• **Situated organisation:** history, location, strategic identity, culture, demographics
• **Capital:** cultural, intellectual, attitudinal
• **Habitus:** perceptions, dispositions, discourse, expectations

TRANSFORMED INSTITUTIONAL IDENTITY & ATTRIBUTES:

Processes:
• Informed responsibility & choice
• Managing risks/opportunities: Transformation, change management, org. learning, integration & adaptation

Domains:
• Academic
• Operational
• Social

Modalities:
• Attribution
• Locus of control
• Self-efficacy

FIT

SHAPING CONDITIONS: (predictable as well as he uncertain)
• Social structure, macro & meso shifts: globalisation, internationalisation, political economy, technology, social demand
• HE/ODL trends, policy
• Institutional biography & shifts; Strategy, business model & architecture, culture & climate, politics & power relations

Appendix 3: An Overview of the Conceptual Model

Drawing extensively from the literature review, the conceptual-hypothetical model developed by the Modelling Task Team of the Throughput Forum attempted to capture the dynamic and complex nature of success and retention and the particularities of the South African ODL context. In so doing, the model utilises several key constructs and emphasises the mutually influential roles and responsibilities of both students and the institution in the process. A schematic diagram of the conceptual model is included as an appendix at the end of this document.

The key constructs are as follows:

a) *Situated agents: student and institution*

The model sees success as the outcome of the mutually influential activities, behaviours, attitudes and responsibilities of both students and the institution. It regards each 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 activities, etc are necessarily shaped, and to greater or lesser extents constrained by the structural conditions of their historical, geographical and socio-cultural backgrounds and current circumstances.
- Nonetheless, as **agents**, they enjoy freedom (to a greater or lesser extents) within these constraining contexts and hold corresponding responsibility to develop, grow and transform their attributes in pursuit of success.

b) *Capital*

The model also assumes that success is enhanced when each of the agents possesses certain kinds of *capital* (Berger 2000). In addition to financial capital, these include cultural, intellectual, organisational and attitudinal forms of capital. As situated agents, they acquire (or fail to acquire) these various forms of capital party through the reproductive mechanisms embedded in their socio-economic and cultural contexts, and partly through their own individual or institutional/organisational initiatives. So-called 'academic literacy' may be construed as one form of cultural and intellectual capital required by students for successful higher learning. Likewise, the capacity for organisational learning may be construed as a form of organisational capital required by the institution in order to utilise actionable intelligence in constantly improving its practices and thereby enhancing success.

c) *Habitus*

In the model, success is also seen as shaped by student and institutional *habitus* (Bourdieu 1971). This refers to the complex combination of perceptions, experiences, values, practices, discourses and assumptions which underlies the construction of our worldviews. As these are often unconscious and covertly embedded in our practices, it is very important to understand their role in shaping behaviour. This construct is very useful in critically reflecting

on the hidden assumptions in individual or organisational cultural behaviour which create barriers for success. As indicated, institutions which effectively reflect critically on their practices in this way can be regarded as *transformative learning organisations* which are predisposed towards embracing diversity and meeting the particular needs of non-hegemonic identities and groups. Those who do not, run the risk of reproducing social elites by uncritically perpetuating the status quo and the universalist standards and values which are assumed to underpin this.

d) The Student Walk: Mutual transformation on the basis of engagement and knowledge

At the heart of the model lies the central construct of the *Student Walk*. This denotes the numerous ongoing interactions between the student and the institution throughout each step of the student's journey through higher education. It begins with the first pre-registration encounters either way: for the student, the initial knowledge and perceptions of the institution and its reputation, and for the institution, marketing and school outreach initiatives. It proceeds through every phase of the student walk: application, registration, engagement in teaching and learning, (study material and assessment), student support (academics, tutors, counsellors, peers and online), graduation and subsequent engagement in society (civil society and the labour market). Further features of the student walk are:

- The interactions between student and institution are ***mutually constitutive***: that is, the way one engages with the other will shape the way the other engages in the interaction. Furthermore, it is self-evident that the more effectively one engages with the other, the more effective the interaction will be.

- These interactions are also influenced by the socio-economic and cultural contexts and networks in which each of the agents are situated, in other words, their '***connectivity***'. For the student, 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 the way in which the institution effectively engages in its various national and international networks relating to academic disciplines and research, government and policy circles, sectoral organisations, civil society and the private sector. Again, it is self-evident that the more effective students and the institution are engaged in their relevant networks, the more informed the interaction between them will be.

- Significantly, effective engagement between student and institution entails going beyond the academic domain. As indicated, particularly in the part-time, distance education context, the ***non-academic factors*** and students' life circumstances undoubtedly loom large in influencing success. Likewise, the efficiency of non-academic institutional support and administrative services as well as organisational cultural dynamics directly impact on success in the ODL environment.

- Most importantly, the model explains success in terms of the required ***mutual transformation*** of student and institutional attributes. Transformation is the outcome of effective interactive engagement. This, in turn, rests on the depth and accuracy of relevant mutual knowledge. As just mentioned, this includes both academic and non-academic dimensions.

- For the student, **_knowledge of the institution_** involves understanding and mastering all the requirements of higher learning at each step of the student walk. This ranges from informed choice of qualification, courses and course load; understanding the expectations of all aspects of learning and assessment; mastering the range of required skills and attributes: such as time management, study skills, determination and self-discipline. It also involves practical issues such as how to negotiate contact, access and communication with the institution – with lecturers, tutors, counsellors, administrative departments and the library.

- For the institution, **_knowledge of the student_** involves understanding students' academic profile, background, readiness and risk factors as well as their non-academic profiles, life circumstances, socio-economic status, attitudes and other relevant details. The purpose is to gather relevant information by which to assess and predict academic and non-academic risk to success so that effective interventions can be identified and implemented.

- If sufficient mutual knowledge is required by both student and institution, and if this is translated into effective action on both sides at each point in the student walk, then a much greater alignment between student and institutional attributes and activities will result. Put differently, there will be much greater **_fit_** between all the required aspects of student attributes and institutional expectations, activities and services.

- For both student and institution, undertaking the student walk involves **_managing and negotiating risks and seizing opportunities_**. This entails not only dealing with the risks and challenges inherent in student' life circumstances and institutional life, but also managing and negotiating the inevitable unpredictable shifts in individual and organisational life which impact unexpectedly on planned activities and, in turn, on success. Managing uncertainty effectively is a key element of success.

e)   The domains & modalities of transformation

The literature review provided rich insights into the nature of the transformation and change process required by both students and institutions in order to achieve success. Two key constructs in this regard are *domains* and *modalities*. Regarding the domains:

- For the student, change must occur both in the **_intra-personal and inter-personal domains_**. The first refers to the range of individual, psychological attributes that must be fostered for successful study. These include positive attitude and beliefs, self-discipline, motivation, confidence and so on. Second, the inter-personal domain refers to the range of social psychological and sociological aspects of social interaction which need to be negotiated and mastered. These include communication and inter-personal skills, cultural and diversity issues, power relations, assertiveness, critical reflection and so on.

- For the institution, change must occur in the **_academic, administrative and social domains_** of institutional life. The first two refer to the core activities of the institution (teaching, research and community engagement) and support services respectively. The

social domain refers to the organisational culture, power relations, micro-politics, inter-group dynamics, dominant ideology and so on. Importantly, the entire organisation is infused by the social domain and, in this way, 'colours' the other two domains.

A common thread running through the literature on retention is that student success is shaped by three key modalities: ***attribution, locus of control and self-efficacy***.

- Attribution is the process whereby ***causality is attributed*** – rightly or wrongly – to various external or individual factors. Attribution is largely based on perception and not necessarily on evidence. The potential risk in the process of attribution is to identify only one, among many other contributing factors. While the identified factor is not in itself wrong, this explanation remains partial. For example, students may legitimately explain their lack of success in relation to apartheid schooling, but neglect to include other factors such as lack of individual determination, motivation and self-discipline. Institutions, too, may attribute cause in this way – blaming the poor school background of their students, lazy academics or students' low academic standards.
- Closely linked to this, locus of control refers to those ***factors over which we have, or do not have control***. In seeking to enhance success practically, this is a very important distinction. While we may rightly attribute cause to certain external factors, such as low socio-economic background, we have no control over this. This does not, however, imply that this kind of factor is not in any way actionable. Poor socio-economic background can be offset by various remedial initiatives.
- Finally, self-efficacy – ***belief in one's own capacity to succeed*** – is widely regarded as an essential inter-personal attribute for success. In common psychological terms, this refers to self-confidence, which grows as a result of cumulative positive feedback and success. While this construct generally applies to individuals, the model uniquely applies it also to the institution. In organisational terms, self-efficacy may be construed as the institution's confidence and trust that it can reach its stated goals and desired outcomes. This is based on the cumulative success of initiatives, or lack thereof.

f) Broad definition of success

As indicated, the model defines success broadly to include:

- Course success, graduation and time-to-completion within the *expected* minimum time.
- A positive student experience and high levels of satisfaction throughout all steps 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 necessarily 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. Such students and dropouts undoubtedly derive some benefit and enrichment from this albeit brief exposure to higher learning. In the ODL context, they cannot, therefore, be regarded as failures and the costs incurred as wastage. Consequently, Unisa has informally engaged with the Ministry on the possibility of future subsidisation of course success, as is the case in the UK, in addition to the current subsidisation of graduate outputs.

Appendix 4: Composition of Task Team 6

During February 2010, the Constitution of Task Team 6 was finalised as follows:

1. **<u>Convenor:</u>** Prof G Subotzky
2. **<u>ODL Coordinator:</u>** Dr P Prinsloo
3. **CAES:** Prof T Awofolu
4. **CEMS:** Prof E Odendaal; Dr B Shuttleworth
5. **CHS:** Prof RMH Moeketsi; Prof EO Mashile; Dr M Letseka
6. **CLAW:** Prof R Songca (alternative: Prof Masiloane)
7. **CSET:** Dr F Ilunga
8. **DCCAD:** Dr WA van Schoor
9. **DCLD:** Ms Wilson
10. **Decision Sciences:** Prof CJ Swanepoel (co-opted)
11. **DISA:** Ms Y Chetty; Ms S van Zyl
12. **DSAR:** Mr K Beckworth
13. **DSPQA:** Dr E Johannes
14. **ICT:** Ms H Botha
15. **IODL:** Prof A Minnaar
16. **Library:** Dr B Mbambo-Thata
17. **Planning & Coordination of Study Materials:** Mr E Blignaut
18. **SRC:** Mr N Mokgotho
19. **SRC:** N Siwela
20. **Student Affairs:** Mr B Tshabangu.