

Integrating the elements of open distance learning (ODL) to enhance service to students in a developing country

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ABSTRACT

The University of South Africa (Unisa) was the first university in the world to teach at a distance. It initially started as what Taylor (2001) has labeled first generation or correspondence education. Gradually it added elements of technology and contact. But essentially, these were add ons, not integrated well with the academic endeavours of the university, or used effectively. The merger between Unisa, the Technikon South Africa (TSA) and the distance education campus of Vista University (Vudec) in 2004 created a single, dedicated distance education institution for South Africa. The merger emphasized the fragmented nature of the various add ons at the three institutions. As a consequence, an initiative was started to investigate open distance learning best practice internationally as well as to analyse the existing situation in the university with a view to transforming towards a technology-enabled fourth generation ODL.

The vision of Unisa is 'Towards the African University in the Service of Humanity'. The social mandate of the university is to provide access to higher education in a developing country for people who would otherwise not have the opportunity to study: working adults, people in rural areas remote from facilities; students coming straight from school into the tertiary system without the school achievements or the means to attend contact universities. Access to the university and access to various support mechanisms once registered are hallmarks of ODL.

The Unisa student profile has shifted over the past two decades from the traditional, working adult towards more students choosing Unisa straight from school for reasons of access. About twenty percent of the students registered fall into this younger group. This is a group that demands more contact and has less access to technology than the working adult.

The paper addresses the basic aspects underlying effective ODL in a changing environment, where the focus is on development. The contribution of the paper is therefore in the focus on access to appropriate learning for development. The paper will uncover various initiatives aimed at integrating current good practice effectively to better support the student: managed open admission, which enables the university to identify students at risk prior to registration and put interventions in place; integrated development of courseware for 'power' courses; an extended tutor system more integrated with mainstream academic departments; a more technology-enabled system for registration, administration of assessment and student tracking as well as more access to technology for students.

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Distance education and open learning have combined into a new concept – open distance learning – that the University of South Africa (Unisa) wishes to pursue as its preferred business model in line with its stated vision – ‘Towards the African University in the Service of Humanity’ – and its social mandate to provide higher education opportunities for a diverse range of students in a developing country context who would not otherwise have access.

The Unisa definition of ODL (following, for instance, Holmberg 1995) that has been arrived at after more than a year of research and consultation is:

Open distance learning is a multi-dimensional system aimed at bridging the time, geographical and transactional distance between: student and institution, student and lecturers/ tutors, students and courseware, and student and peers.

The big idea that one has to understand about ODL is that all systems – strategy, what the university does, how it is done (processes), what it is done with (infrastructure: technological, human and financial) – have to integrate to support the academic enterprise and the student. Unisa’s systems are fragmented so the university is neither as effective nor as efficient as it would like to be in terms of its vision or mission to be an ODL institution in the service of humanity.

Unisa is generally recognised for its pioneering role in the ‘first-generation’ of distance education: the correspondence model (Taylor 2001). Economies of scale are a primary factor in this type of distance education. Characterized by Unisa’s massive infrastructure to produce and distribute learning material, it has been able to provide access to higher education to hundreds of thousands of students from South Africa and beyond for several decades. The university did add on other technologies – radio, videoconferencing, satellite delivery, an online learning management system – but they were not integrated well with the print delivery. Given the socio-economic realities of South Africa and the African continent, well-developed print material can be effective where access to more advanced technologies is a problem but we still need to push the idea of a more technology-enabled system because our students will be operating in such environments once they graduate.

Open universities became a trend that was followed at Unisa in pursuit of its social mandate. The open learning movement focuses on lowering entry requirements and then supporting students to reach the desired outcomes. This would seem to be an ideal scenario for a developing country. Open learning is an approach that embraces student-centredness in the following ways:

- life long learning;
- flexibility of learning provision;
- removal of barriers to access learning;
- recognition of prior learning;
- provision of student support;
- construction of learning programmes with expectation that students can succeed.

Senate discretionary access routes were opened; learning centres and tutors were introduced. Not enough was done systematically in terms of integrated course design and student support to enable this approach to be entirely effective. It was added on to the existing business model.

In terms of openness, the university has been criticized by internal and external stakeholders for its open policy. External stakeholders, including the Ministry of Education, are critical of the revolving door syndrome: access without success. Internal stakeholders are convinced that poor success and throughput rates can be attributed to the policy of open access that allows students into the system without requisite skills and thus affects their chances of passing; in effect, input has an adverse impact on output. However, as an open university operating in an outcomes-based education environment in a developing country context, the idea would be to design learning in such a way that the lower entry level did not affect the eventual outcomes for the student.

Unisa has been a distance education institution for decades with a solid reputation in South Africa. Now it is modelling its 'as is' and 'ideal' ODL business practices to become a modern open distance learning institution. An important step towards achieving this goal was Council's approval in late 2006 of the appointment of an ODL Advisor in the office of the Vice Chancellor for two years. The stated purpose of the initiative was to transform Unisa's business model by establishing effectively contextualized ODL best practice at the institution through:

- Developing an appropriately contextualized ODL model for Unisa through:
 - interrogation of current ODL best practice internationally and
 - assessment of the current approach and practice at Unisa;
- Introducing change initiatives to establish a relevant ODL culture and practice throughout the institution;
- Impacting directly on the effective access, retention and success of students through establishing an appropriate service and learning environment.

Best practices were researched by a small team of dedicated people. An in-depth understanding of ODL within the University was created among all stakeholders through face-to-face interventions and consultation. One of the first steps was to form an ODL reference group within the University and an international reference group. An important Community Intelligence Lab was held from 20 to 22 February 2007 to engage university stakeholders and an international panel of ODL experts in thinking together about what Unisa is and what it could be. A strategy for modelling the business of the university was developed. This business modelling project will have to be managed and driven over the next three to five years to ensure that the goal of transforming the University into a service-oriented ODL institution that realizes its social mandate is achieved.

One of the biggest problems for distance education, particularly in the context of a developing country, is overcoming transactional distance. The transactional gap exists between students and the institution, between students and lecturers/ tutors, between students and courseware and between student and student. The following are the proposed ways of bridging the transactional distance building on existing good practices and introduces change plans where needed:

- combining a number of delivery options to facilitate flexibility;
- optimizing students' effective access to and participation in higher education (openness);
- enhancing the engagement and autonomy of the student (student-centredness).

The transactions between the university and the student were modelled in what has become known as the 'student walk', illustrated below:

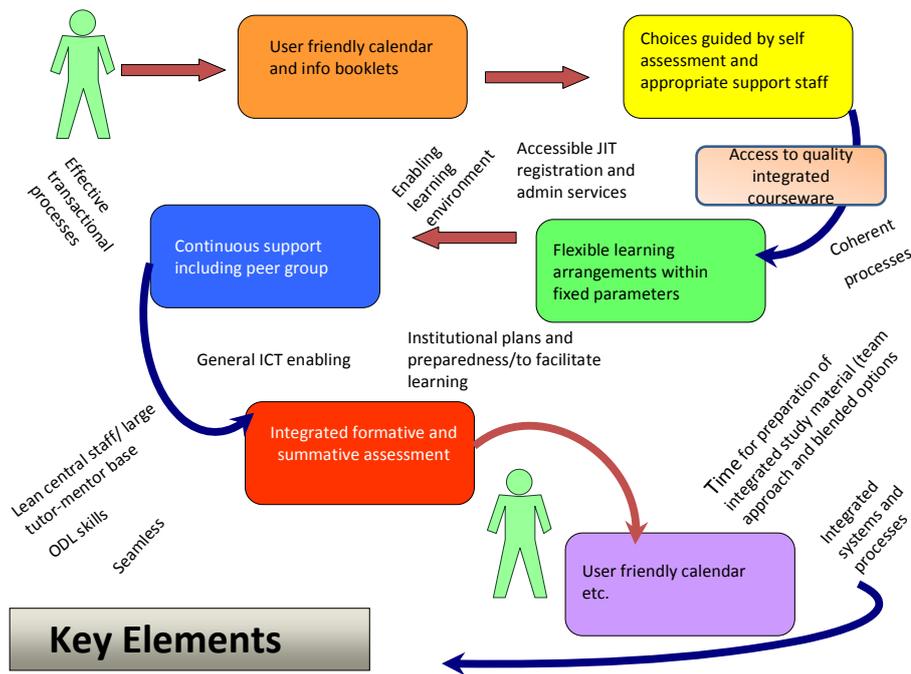


Figure 1: The student walk

The basis of this diagram is that the student's interactions with the university begin at the enquiry stage and that information must be available and accessible, as must counselling and orientation. Integrated courseware development takes place prior to registration but the courseware must be available at registration. Flexible learning arrangements can include courseware, online, satellite, videoconferencing, multimedia, access to tutors, access to library material, peer assistance, literacy centre assistance, etc.

At present, teaching is mediated through print study packages primarily, with the addition of second, third, fourth and fifth generation ODL technologies such as audio and video, videoconferencing, satellite delivery and online discussion forums. Print study packages can bridge the transactional distance if they are designed in a team approach to engage students actively in developing integrated foundational, practical and applied competence. Face-to-face tuition is also provided by lecturers in their offices or during group visits, by tutors around South Africa, at literacy centres, by qualified counsellors and trained peer collaborators. The changing profile of students is creating a greater demand for physical facilities and synchronous contact.

The scope of the ODL business modelling project encompasses the best use of learning opportunities to enhance access, retention and throughput including:

- Teaching and learning approach;
- The product range and the assessment approach;
- Student support functions including administrative, psycho-social and academic aspects;
- Access approach and facilitation of admission into Unisa and to the services of the institution;
- Business processes enabling the teaching, learning and support functions;
- Role and position of ICT to create a technology-enabled organization and learning environment;

- Basis for resource allocation to facilitate ODL implementation including finances, human resources and infrastructure;
- Input into the establishment of an appropriate organizational culture;
- Human resource ODL competency.

The value chain and critical success factors arrived at after research and strategic analysis are reflected in the following diagram which, in fact, represents the proposed ODL model:

Envisaged ODL Model

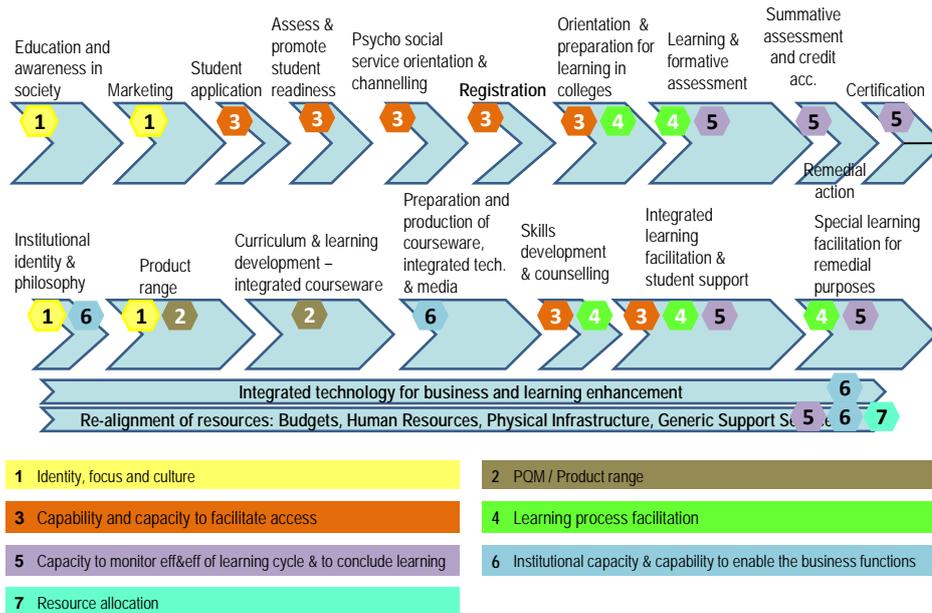


Figure 2: The new ODL business model

The top row of the value chain reflects the student experience. It starts with the university creating awareness in society about what distance education is so that students do not arrive at Unisa with unrealistic expectations. The second row of the value chain relates to the academic enterprise starting with an alignment to the vision and mission, including the comprehensive programme and qualification mix, courseware design and development, and so on, as indicated in the diagram. This value chain supports the student experience. Underlying the value chain are two core aspects of infrastructural architecture: the ICT platform and human resources. The seven critical success factors are listed at the bottom of the diagram and plotted on to the value chain numerically.

The business model will require a paradigm shift from being a product-centric business to being a stakeholder-centric business: How do we attract students? How do we get them into the university? How do we keep them? How do we graduate them successfully? What has been accomplished so far? Basically, in terms of the business model, the following will have been accomplished by mid 2008:

- Research into international best practice in ODL to give a baseline for the ideal from second half of 2006;
- An analysis of the 'student walk' 'as is' in relation to the ideal;
- The development of a value chain for the organization;
- The determination of four goals or functions for the University:
 - The life of a student

- The academic cycle
- Student enablement
- Support goals;
- The extrapolation of seven critical success factors:
 - Identity, focus and culture
 - PQM
 - Capacity to facilitate access/ admission
 - Quality of courseware and learning process facilitation
 - Effectiveness and efficiency of learning cycle monitored
 - Capacity to enable business functions
 - Resource allocation, use and management;
- The goal decomposition for each function (Function/ Goal structure diagram);
- The plotting of functions/ goals against success factors;
- The integration of goals and value chains (data flow or systems operation model);
- The mapping needed to integrate the functions;
- The presentation of the model to Council in January 2008 and Senate in March 2008;
- The drawing up of business rules related to goals;
- The establishment of architectural priorities and their integration with the business priorities already identified;
- The analysis of the 'as is' and 'to be' processes;
- A gap analysis (by mid-March – what could go forward and what has to change);
- Change plans per process (to plan integration and fix the system where it will make the biggest difference).

What still remains to be done in the second half of 2008 is to

- look at processes and organizational structures;
- set up a programme and project management system;
- drive human engineering processes in the University; that is, change management processes that include top Management support as well as involvement of all staff in co-creation;
- incorporate change plans into operational budgets for 2009 to ensure the integration of the business model and the IT infrastructure;
- plan roll out of additional projects throughout the University to reach the ideal business model and
- put in place metrics to measure implementation, output and impact.

The last bullet is particularly important. Unisa needs an appropriate evaluation mechanism to monitor and determine relevance, effectiveness, efficiency and impact of the new approach and its development.

Various initiatives already support the emerging ODL business model.

- To promote access with success, a managed open admissions process was introduced in 2008, using first time registering students in the College of Law. The process entails first-time registering students applying four months in advance of registration and undergoing a diagnostic test. Material is provided to those who have problems in literacy, numeracy and study skills as part of a university preparation programme (UNIPREP). The material was developed by the Bureau for Counselling, Career and Academic Development (BCCAD) in a team approach to ensure that it is interactive and student-oriented. The process was short-cut for the 2008 pilot owing to pressure of time so the material will be revised in the course of 2008 based on lessons learnt during the pilot. Orientation to ODL will form a crucial part of UNIPREP. Before the registration date, the student will have to present her/ himself to rewrite the diagnostic test. Students with potential to achieve in higher education should be able to improve sufficiently between

the two tests to gain admission. Students who do not cope the second time around will be given counselling on alternatives, such as doing a Senate Discretionary Access programme or attending an FET College to upgrade certain competencies. Use will also be made of the planned National Benchmarking Test in this managed open admissions process. Another plan in the pipeline is to make the test completely online allowing for student to receive results immediately. The results of the pilot in 2008 were as follows:

- 2064 potential LLB students were tested in two sessions.
 - 39% were prepared.
 - 46% were partially prepared.
 - 15% were under-prepared.
- Of the initial number tested, 1239 registered.

The underprepared students were directed to the UNIPREP programme.

- The University has been addressing support to the students post-registration through foundation courses in the science Colleges (piloted in 2006, refined in 2007 and continuing in 2008). Other Colleges have been asked to investigate similar initiatives.
- A 'power course' prototype is being rolled out that entails developing courseware for modules or programmes from scratch to integrate student profile, stakeholder needs, orientation and counselling needs, tutoring, multimedia, formative assessment, etc. A 'power' course is normally one with large enrolments or a course used in many different programmes; either would have a significant impact. When size combines with low student success rates, the module is doubly significant in terms of priority. The first fifteen modules will be piloted in 2009, a further 30 in 2010 and then 200 a year thereafter. The power courses' success is fundamentally tied to an extended tutor system and an integrated IT, HR and Finance infrastructure. Students need to be linked to a tutor at registration; a new relationship has to develop between lecturers and tutors; tutors have to mark students' assignments (and there have to be at least two formative assessment opportunities as part of the learning mediation); and tutors have to keep contact with students through tutorials (or other media if students do not attend tutorials). In this way the transactional distance between the student, the institution and teachers will be bridged. A method of digitizing all assignments and routing them electronically to tutor/ markers is underway, which should make the turn-around time significantly shorter and the record management much more effective.

ODL has become the internationally preferred label for innovative non-traditional modes of delivery whose defining purpose is to overcome barriers to access. International good practice in ODL includes excellent (well-designed and produced) learning materials, face-to-face contact, and the appropriate use of education technology and various student support and communication systems – all brought together in a properly-integrated course design in which the various learning resources complement one another in such a way that they foster effective learning in a competitively cost-effective way. Students should benefit as follows:

- They will be more aware of what ODL is, what they can expect from the university and what the university will expect from them.
- Under-prepared students will be identified prior to registration and assisted to be more successful as students through the UNIPREP programme. Further assistance will be available post-registration for weaker students through foundation programmes.
- Students will be linked to tutors at registration and enjoy more personal attention and a quicker turn-around time on their assignments. At-risk students can be more easily identified and interventions planned. The tutoring can be done face-to-face or online.

- Students will be given training in the use of computers, receive free e-mail addresses and assisted to purchase computers.
- Other forms of assistance will be available at learning centres across the country such as peer collaborative learning groups, literacy centres, etc.
- Students who fail summative assessment will be provided with additional interventions in the form of additional tutorials before the supplementary examination.

The coherent integration of various learning resources into a flexible pattern that enables effective learning is the hallmark of best ODL practice, and it underwrites a concept of teaching that transcends the categories of 'contact' and 'distance'. This is the ODL ideal towards which the university is working.

References

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