CHE

DISTANCE HIGHER EDUCATION PROGRAMMES IN A DIGITAL ERA: GOOD PRACTICE GUIDE

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CONTENTS

ABBREVIATIONS AND ACRONYMS

ACE	Advanced Certificate in Education
CD	Compact Disc
CESM	Classification of Education Subject Matter
CHE	Council on Higher Education
DVD	Digital Video Disc
FET	Further Education and Training
HEQC	Higher Education Quality Committee
HEQSF	Higher Education Qualifications Sub-Framework
HET	Higher Education and Training
HR	Human Resource/s
ICT	Information and Communication Technology
LMS	Learning Management System
Max	Maximum
MEd	Master of Education
Min	Minimum
MOOC	Massive Open Online Course
MSc	Master of Science
Nadeosa	National Association of Distance Education and Open Learning in South Africa
NAMCOL	Namibian College for Open Learning
NQF	National Qualifications Framework
ODL	Open (and) Distance Learning
OER	Open Educational Resource/s
OU	Open University
PDF	Portable Document Format
PGDE	Postgraduate Diploma in Education
Q&A	Question and Answer
RPL	Recognition of Prior Learning
Saide	South African Institute for Distance Education
SAQA	South African Qualifications Authority
SMS	Short Message Service
TVET	Technical and Vocational Education and Training
UK	United Kingdom
UNISA	University of South Africa
UNISWA	University of Swaziland
US	United States
VLE	Virtual Learning Environment
WIL	Work-integrated Learning
WWW	World Wide Web

FOREWORD

Distance Higher Education Programmes in a Digital Era: Good Practice Guide provides good practice guidelines, examples and indicators for the development and evaluation of distance education programmes, including those that are supported by digital technologies. This *Guide* is intended primarily to assist those involved in programme design and review at an institutional level as well as CHE programme evaluators involved in the accreditation process of distance education programmes, whether technology supported or not. The *Guide* also aims to assist users to interpret existing HEQC criteria for a wide range of distance education programmes offered by higher education institutions in the country. Key components of the *Guide* are the following:

- A consideration of the impact of technology on higher education provision generally, and on higher education distance provision in particular.
- A conception of distance education in a digital era that guides programme developers and evaluators in distinguishing distance education from non-distance education programmes and suggests a way to map different modes of educational provision.
- Key considerations for the evaluation of distance education provision in a digital era.
- Lines of enquiry to guide programme developers and evaluators in the application of the CHE criteria to programmes using distance education methods generally, and digital technology-supported methods (also termed ICT-supported methods) in particular.
- Interpretation of existing quality elements related to general CHE programme accreditation criteria, taking into account considerations around distance education provision in a digital era.

This *Guide* has been developed through a consultative process:

- A reference group workshop was held at the CHE and involved open and distance learning (ODL) experts, distance education evaluators, CHE accreditation staff, representatives of the National Association of Distance Education and Open Learning in South Africa (Nadeosa), and student representatives.
- A national workshop took place, at which academic staff from universities discussed and provided feedback on the draft *Guide*.
- An internal think-tank meeting was held at the CHE with experienced programme evaluators.

The *Guide* has become necessary partly due to the misleading conflation of concepts such as e-learning, online learning, and open and distance learning. In addition, it is believed that institutions find themselves using supporting ICTs to a greater or lesser extent in providing distance education, both to meet the expectations of their students and to improve their teaching and learning efficiency and effectiveness.

The issues explored in this document are about the choice to adopt a technology-supported distance education approach (i.e. predominantly not campus-based), and the quality implications of this decision for students, staff and systems. The key principle is thus whether digital technology has been used to create an enabling environment for student success at a distance.

1. INTRODUCTION AND BACKGROUND

This *Guide* proceeds from an understanding that all programmes, regardless of mode of provision, should meet the same minimum criteria – but that some of the criteria need to be interpreted differently or additionally for distance provision.

Users of the *Guide* are recommended to begin by reviewing the companion document *Distance Higher Education Programmes in a Digital Era: Programme Accreditation Criteria*, and then to return to that document after reading through the relevant sections of the *Guide*.

The *Guide* and the accompanying *Programme Accreditation Criteria* proceed from the understanding that current policy distinguishes only two modes of provision for accreditation and funding purposes: a programme is either contact *or* distance mode.

This *Guide* recognises that in reality most institutions now offer a blend of lectures, tutorials, practical sessions, field work and/or work-integrated learning/work-based education, and ICT-supported learning experiences, as well as more independent self-learning and peer collaborative learning opportunities (which may be mediated in face-to-face sessions, or online, or a mix of both). However, this document proceeds from a belief that, from a programme quality assurance perspective, the geographic location of one's students should continue to inform the ways in which learning experiences are designed, mediated, assessed and reviewed. This then informs considerations about how to overcome the transactional and epistemic distance involved in all learning and teaching interactions, but which is exacerbated by physical distance, and the role that information and communication technologies (ICTs) might play in addressing this distance by providing appropriate structure, dialogue and support.[1]

1.1   Purpose and overview of the *Guide*

There is a need to expand the capacity and effectiveness of the post-schooling system. However, most traditional, contact-based institutions have already reached their capacity to support full-time students. In addition, there is increasing demand for more flexible provision of learning opportunities that allow lifelong learning to take place alongside other life commitments such as work, family and community engagements. There is evidence that, designed and implemented well, distance education provision can reach larger numbers and cater for more diverse student needs; and do so in ways that maintain or improve quality while achieving some cost savings for both institutions and students (e.g. the costs of travel to and from centres for direct, face-to-face contact). However, it should be noted that large online classes pose their own problems. These include, among others, implications for feasible levels of mediation by lecturers and tutors, and the possibility of simply passing on the cost of printing to students (where study materials are presented in digital format but students still prefer to read a printed text and so must themselves foot the bill for printing). Notwithstanding this reservation, national policy foresees and encourages expansion in the provision of high quality distance education, and such provision is increasingly likely to be mediated and supported through an increasing variety of technologies.

Although it is true that distance education may offer a way of breaking out of 'the iron triangle defined by the vectors of access, quality and cost[2]' by increasing access, potentially improving quality by opening up teaching resources to more public scrutiny, and cutting costs, it is also true that in many cases distance education is not properly planned, does not deliver what it promises, and is not cost effective. This is because distance education has an added layer of complexity in terms of planning and management, and because mistakes are less easy to overcome with a large, geographically dispersed student body. Systemic evaluations of distance education provision have provided evidence that much provision is far from ideal.[3]

In addition, there seems to be a widespread assumption that education mediated by means of ICT-supported methods can improve the quality of educational provision in developing countries, not least in institutions of higher learning. Governments and higher education institutions in such countries are spending enormous sums of money in this regard, with some implementation being supported by external funders. The integration of ICT-supported educational methods into schools, higher education institutions, and community learning centres, together with provision of online distance

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[1] Heydenrych n.d.; Moore & Kearsley 2012; Glennie & Mays 2013
[2] Daniel, Kanwar, & Uvalić-Trumbić 2009: 7
[3] Saide 1994; CHE 2004

education courses, is advocated as the means to increase access to education and improve the quality of its delivery through increased interaction and better retention and success rates. The suggestion seems to be that, particularly in countries that face serious educational shortcomings and whose educational institutions remain under-developed, ICTs – if appropriately implemented – have the potential to make the difference in addressing these issues.

However, even if we were to accept this proposition, the question of the quality of educational delivery and support using ICTs requires much deeper analysis. Simply 'throwing computers at higher education institutions' is in no way a responsible manner in which to begin to address quality improvement. While the provision of ICT hardware and related supporting network infrastructure, improvement in the provision and reliability of Internet access and connectivity, and implementation of relevant software applications are clearly important, it is only when the improvement of teaching and learning is addressed that claims made for the educational potential of supporting ICTs can be confirmed or refuted. In South Africa, this is what we should focus our attention on in order to place the advent and potential of supporting ICTs into perspective.

This *Guide* therefore sets out to clarify the key distinctions between distance and contact education provision, and to provide guidelines on how general programme accreditation requirements need to be interpreted for a distance education context and the wide variations thereof, including the effective integration of supporting ICTs.

The *Guide* is divided into eight sections as follows:

1. Introduction and background.
2. A conceptual framework for distance education in a digital era.
3. Curriculum design, development and delivery for distance education in a digital era.
4. Teaching and learning in distance education in a digital era.
5. Assessment in distance education in a digital era.
6. Partnerships and collaborations for distance education provision in a digital era.
7. Managing distance education provision in a digital era.
8. Concluding remarks.

These sections include examples of good practice in distance education. There is also a glossary of terms that are useful in the discussion of distance education provision, and a distance education bibliography.

Please refer also to the document *Distance Higher Education Programmes in a Digital Era: Programme Accreditation Criteria*, to which this *Guide* is a companion.

1.2 Who is the *Guide* for?

This Guide is aimed primarily at CHE programme evaluators as well as institutional staff tasked with the development and review of distance education programmes. However, it may also be of interest to other stakeholders such as researchers and students (e.g. in terms of what distance provision entails, what services should be offered and how, and the demands on students, staff and resources).

2. A CONCEPTUAL FRAMEWORK FOR DISTANCE EDUCATION IN A DIGITAL ERA

This Section of the *Guide* explores the concept of distance education in more detail, unpacking some of the misconceptions and offering an alternative model for constructing an understanding about distance education provision supported by advances in digital technology.

The discussion in this section has bearing on all the minimum criteria for programme accreditation but particularly Criterion 1: Programme Design elements (i) and (iii).[4]

2.1 Distance education as an evolving construct

Distance education can be thought of as both a collection of methods and a mode of provision.

As a collection of methods, distance education is concerned with finding ways to communicate and mediate the curriculum without necessarily requiring lecturers and students to be in the same place at the same time. Distance education methods, such as providing structured learning resources for independent study, may be integrated into what may otherwise be predominantly campus-based, contact teaching.

However, as a mode of provision, distance education is concerned with the design of programmes that presuppose the spatial and/or temporal separation of lecturers and students for the majority, and possibly the whole, of the learning experience. Distance education focuses on learning design for, and implementation of, teaching, learning, support and assessment – with or without supporting technology – that aim to provide educational opportunities to students who are not physically 'on site'. Institutions may opt for a *single mode* of provision in which all provision is through distance (e.g. the University of South Africa – UNISA); a *dual mode* of provision in which a traditional contact institution also offers some or all courses in distance mode as well (and here the University of Pretoria and North-West University provide somewhat different approaches to dual mode provision – dual mode provision opens up the possibility for students to start their studies in one mode but to complete them in another); or a *mixed mode* in which courses and programmes involve a mix of methods associated traditionally with distance- and contact-based provision, with the blend of methods varying from context to context. In other words, some course provision may tend more towards distance provision and some may tend more towards campus-based provision. Mixed mode provision is not common in South Africa, although UNISA often enrols students for non-degree purposes for single modules who are registered as contact students elsewhere and who want to include in their programme of study some content that is not offered at their own institution.

Over and above the traditional concerns about temporal and spatial separation in a distance education context, there is a 'transactional distance'[5] that exists in all teaching and learning interactions and that may well be exacerbated in a distance education context. This transactional distance is determined by the interrelated function of three sets of variables in learning and teaching processes:

- *Instructional dialogue* – this refers to the extent to which there is interaction between the student and educator. For example, there may well be less dialogue between students and educators in a large-scale lecture-based first-year programme in a contact university than between a distance student and an educator offering detailed written feedback on assignments and inviting responses from the student. Dialogue between distance students and their educators may often be slower but may also be more thoughtful than in an immediate, contact setting. Supporting ICTs can be used well in this regard but then their effective use must be an integral part of the programme design. The essential concern is whether opportunities for such dialogue are built into a learning programme and whether they are mediated in the best possible way in the circumstances.

- *Programme structure* – this refers to the extent to which a programme can accommodate or be responsive to each individual's needs, and suggests the need for multi-disciplinary teams to design learning experiences in such a way that diverse needs are catered for and opportunities for student–student and student–educator dialogue are maximised.

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[4] CHE 2014
[5] Moore 1993; Moore & Kearsley 1996

- *Student autonomy* – this refers to the extent to which in the teaching/learning relationship it is the student rather than the educator who determines the goals, the learning experiences, and the evaluation processes of the learning programme. It raises questions about the extent to which a programme is delivered in such a way that it helps students reach a point where they no longer need another person to guide and mediate their learning. At this stage, students can cope with a high degree of spatial and temporal distance between themselves, their educators and their peers. In this respect, there is really no significant difference in modes of provision at masters and doctoral levels.

It could be argued that all of the issues outlined above could be addressed with the support of ICTs, and to some extent that may be true if appropriate uses of suitable ICTs are integrated into programme design from the outset. However, there is a big difference in the way in which an ICT-supported programme needs to be designed in relation to the profile of the intended students.

Currently distance education students in South Africa rarely, if ever, have the opportunity to engage directly with their lecturers or peers, as contact sessions are often few and far between. ICT can be used to address this but, as noted previously, this calls for a conscious design decision with consequences for how such programmes are resourced. Designing a programme for a target audience that can be assumed to have access to the Internet from within computer laboratories or a Wi-Fi network on a central campus raises different challenges from the design of a programme for distributed students who may not have that access. Even if registration requirements stipulate that students must have specific ICT devices and skills and specific levels of connectivity, it is necessary to think about how distributed students can gain access to technical support (e.g. online support or call centres). And even where registration requirements are clear and a technical support structure is in place, the design of the learning programme itself usually makes certain assumptions about what students already know or can do (with respect both to disciplinary prior learning and ICT skills). Designing a programme for local students studying on a flexible study basis, or students distributed across a province, or students distributed across a whole country or region, or students anywhere in the world, raises important design questions about what examples to use, what resources to refer to, the type of language that might be appropriate, how a large and distributed student population might be divided into smaller groups for collaborative assignments (perhaps deliberately pairing students from different environments), and what learning styles and strategies might be appropriate (perhaps a greater range of options for a more diverse range of participants).

Clearly, whereas online learning opportunities may be offered both to campus-based and remote students, distance education is premised on a diverse and geographically distributed student body, a high level of independent learning, and decentralised support for students who may never attend the central campus or even a satellite centre. Therefore it is argued that online provision and distance provision cannot be conflated – though the former can be designed specifically to meet the needs of the latter. So when some educators[6] rightly question whether the notion of 'distance education' is still relevant, we would argue that it remains useful at the programme design stage to think about where prospective students are likely to be physically located, and also where they are in relation to one another and their learning facilitator. We believe that 'geographic distance' can still exacerbate 'transactional distance', even in an online environment, and activities and support strategies need to be designed accordingly.[7]

Distance education can thus be construed as a collection of methods (including but not limited to supporting ICTs) for the provision of structured learning, as well as a mode of delivery that avoids the need for students to discover the curriculum by attending face-to-face classes frequently and for long periods. Distance provision aims to create a quality learning environment using an appropriate combination of different learning resources, tutorial support, peer group discussion, and practical sessions (real or virtual or a combination of both). Studies[8] show that key to an effective learning environment, whether in face-to-face or distance education settings, is the provision of encouragement to students to engage with the discipline content, to collaborate and interact during learning, to reflect on what they learn, and to relate it to practice. In distance education, creating an effective learning environment entails designing activities that promote mastery of knowledge/concepts by students, mastery of skills through doing, interacting with peers and the environment to gain deeper insights, and reflecting on what is learned to gain wisdom, without assuming that lecturers and students will be in the same place at the same time. Students do not need to be 'online' to do many of these things.

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[6] Evans & Pauling 2010
[7] Glennie & Mays 2013
[8] CHE 2007; Strydom & Mentz 2010

As indicated in the opening discussion of the *Guide*, the concept of distance education is an evolving construct and there are multiple possibilities for the ways in which distance education provision may be effected in practice. For many years the dominant model of provision in South and Southern Africa has been print-based correspondence, with perhaps some limited contact support in the form of decentralised discussion classes. There have also been examples of attempts to integrate various media to supplement the print-based resources as well as the use of video-broadcasting and video-conferencing to try to encourage greater interaction. The increasing access to ICT and Internet connectivity have opened up more possibilities. The question now arises as to what constitutes good distance education practice *in a digital era?* The challenge ahead may usefully be articulated in the following terms:

> The core assumptions of distance education (i.e. access, independence, economies of scale) need to be re-examined in the context of online learning theory and practice (i.e. collaboration, community, quality assurance). A concerted effort is required if we are to achieve a comprehensive theory that encompasses distance and online learning. Much greater emphasis must be focused on transactional and collaborative theories of learning mediated by information and communication technology.

> It is time that distance educators think through the changes and possibilities of both flexible access and collaborative learning experiences.[9]

We could say then that the core challenge is clear: how might we use suitable ICTs in appropriate ways in distance education provision not only to continue to promote greater access to learning opportunities, but to do so in ways that enhance opportunities for success in programmes that develop meaningful graduate competences, promote lifelong learning, and are both affordable and sustainable?

2.2   Distance education and open learning

The common usage of the term 'open learning' together with distance education tends to create the false impression that the two are synonymous. Although there is some overlap between the two, they refer to different things. There is often confusion between the two terms, and thus conceptual clarity on them is important.

At the heart of open learning is enhancement of educational access and success through the removal of all unnecessary barriers to learning. It also entails an approach to learning that is student-centred, rather than lecturer- or content-centred, and geared to meet the idiosyncratic needs and preferences of individual students. South Africa's White Paper on Education and Training of 1995 contributed to a better understanding of the distinction between open learning and distance education. Open learning, it was stated, is a set of principles that should apply to any educational programme:

> Open learning is an approach which combines the principles of student-centeredness, lifelong learning, flexibility of learning provision, the removal of barriers to access learning, the recognition of prior learning (RPL), the recognition for credit of prior learning experience, the provision of student support, the construction of learning programmes in the expectation that students can succeed, and the maintenance of rigorous quality assurance over the design of learning materials and support systems.[10]

It is worth noting that in the application of these principles, many tensions will emerge: thus, for example, the provision of contact-based or synchronous support reduces flexibility about time and place; open curricula allow students to design their own individual learning pathways but they can also result in confusion and lack of a coherent learning experience. While distance education is characterised by flexible learning, it should always be ensured that learning takes place in some structured way. An example of this is the notion of 'semi-synchronous flow', meaning that at a micro-level a course is flexible while at a macro-level it is still structured, that is, deadlines are fixed.[11] It should be possible, for example, to see how different modules within a programme build on one another towards helping students achieve the intended exit-level outcomes, and it should also be possible to see a clear linkage between in-course activities for self-assessment, formative assessment and feedback as well as summative assessment requirements. However, within such a structured learning experience there should be space and encouragement for students to make informed choices about where to focus their attention, which lines of enquiry to pursue, how to relate course content to authentic, real-life experiences, which parts of the structured programme they may already have mastered through prior learning and experience and so do not need to repeat, and so on. Provision of 'open' distance learning thus also implies more open curricula, with more

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[9] Cleveland-Innes & Garrison 2010: 256, 257
[10] Department of Education 1995
[11] Google Course Builder 2013

choice about what, how, where and when to learn, and an emphasis on co-creation of new understandings rather than rote learning of a fixed body of content.

Distance education can thus give practical expression to many open learning principles. However, distance education programmes that have rigid curricula, enrolment and assessment schedules or that require compulsory attendance at certain times and at certain places with no back-up mechanism for those who cannot make it, can in fact be experienced as relatively closed learning experiences. So what we need to advocate is the use of a range of distance education methods that can give effect to open learning principles – open distance learning rather than open and distance learning.

2.3   The evolving role of technology

Distance education providers have traditionally been early adopters of new technology, and different generations of distance education provision have emphasised different technological and systems requirements to provide the necessary structure, dialogue and support. For example:

- First generation: correspondence – dependent on efficient mailing systems.
- Second generation: specially prepared self-study material – requires systems and processes for materials development, storage, dispatch.
- Third generation: print + multimedia and two-way communication – involves teams/student support.
- Fourth generation: ICTs and two-way interaction – requires social learning/multi-skilling.
- Fifth generation: communities of learning – raises systemic issues related to multi-skilling/decentralised decision making: Learning Management Systems or Virtual Learning Environments/Personal Learning Environments.[12]

While, in North America, distance education has become almost synonymous with online learning, in sub-Saharan Africa the traditional model has been print-based by correspondence only or print-based and contact supported. However, with growing access to ICT facilities by staff and students and increasingly available and affordable Internet connectivity, this is changing.

It should be noted that small-scale Virtual Learning Environments (VLEs) with high levels of inter-person interactivity are usually not affordable for scaled provision due to the limited availability and cost of suitable tutors/instructors and the added logistics of managing a high degree of such interactions.

Recently there has been recognition of the need to think and plan more holistically in terms of the 'student walk' through the institution[13] and the fit or lack thereof between student and institutional expectations, and preparedness and responsiveness at each key step of the walk.[14] Key steps in the student walk are: marketing and orientation; the process of initial application to the institution (and the need for guidance and counselling so that prospective students make informed choices); registration (including RPL); teaching and learning (including orientation to the process); formative assessment; consolidation and summative assessment; second assessment opportunity; and finally graduation and alumni management. Different combinations of supporting ICTs might be used in a variety of ways in each step of this process. This is in line with notions of learning journey management more generally and discussed in more detail in Section 4.4.

The rapid pace of technological change and increasing globalisation have resulted in an exponential increase in access to sources of information, which means that lecturers, whether contact or distance-based, can no longer be expected to be the sole content authority for the teaching-learning interaction. The roles and responsibilities of the lecturer, student, and support services may be significantly changed in the online environment, in particular, as described by many research studies.[15] The deployment of supporting ICTs opens up many possibilities for a more interactive engagement, but whether the affordances of ICT are used in this way must be a conscious design decision: at a basic level, ICT can be used simply to transmit content more efficiently. However, in institutions that consciously seek to use supporting ICTs to enhance their teaching and learning, the role of the lecturer is changing to that of facilitator, learning environment designer, and/or co-student, and may also include content curation.[16] The role of the student in such institutions and programmes is also

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[12] Extrapolated from Heydenrych & Prinsloo 2010
[13] Louw 2007
[14] Prinsloo 2009; Subotzky & Prinsloo 2011
[15] Including Yang & Cornelious 2005; Oliver 1999
[16] Plomp 1999: 26

changing, moving towards more self-directed independent study, and greater collaboration and engagement both with peers inside the institution and others outside the walls of the classroom or lecture hall.[17]

Migration to an ICT-supported approach to teaching and learning, whether for contact or distance or blended provision, should therefore be considered carefully and undertaken within the context of the institutional environment as a whole. Consideration needs to be given to the various layers, elements and influencing factors that provide the context for deploying ICTs in support of teaching and learning.[18] Layers to be considered start from policies and strategies and take cognisance of many interlinked factors – including programme, curriculum and learning design, academic staff professional development, the literacies of the target students and their access to the course, student support and the context and physical environment within which they are studying, and the available and appropriate ICT infrastructure – as well as taking into account the platforms and modus operandi already deployed at the institution.

The key point to be made here is that the way in which we use digital technology models particular values and uses for our students, and places particular kinds of demands on both them and their lecturers. Therefore, we need to make conscious choices to use suitable technologies in appropriate ways, taking cognisance both of our learning purposes and the technology profile of our target students and staff.[19] The integration of supporting ICTs cannot simply replicate traditional practice: it takes conscious decision making and action to use the affordances of ICT to change the practice of teaching.[20] Technology therefore needs to support the teaching and learning process and not drive it.

Example: How technology is supporting changed teaching practices in large classes

Introducing a Learning Management System in a Large First-year Class:
The Impact on Lecturers and Students
Jen Snowball and Markus Mostert

This case study explores how ICTs can be used to enhance the learning experience in a large first-year contact programme.

The challenges of teaching large classes are well documented in the literature on teaching in higher education. ICTs have the potential to address some of these challenges but, used inappropriately, technology can perpetuate entrenched practices and simply support performance models of teaching that encourage transmission approaches to learning. The authors report on the impact of implementing a Learning Management System (LMS) in a first-year introductory macroeconomics course with 600 students in a blended learning context. Experiences of the course coordinator, lecturers and an educational technologist are discussed. Data was also collected, via a course evaluation questionnaire, on student perceptions. Results show that the LMS was successful in a number of areas, particularly in improving the lecturers' accessibility to students and in encouraging interaction and participation in online discussion forums.

The findings of this study show that, even in a first-year class with relatively little experience of the use of ICTs in teaching and learning, the use of the LMS by students developed fairly quickly and increased as the course progressed. However, most students felt some anxiety about logging on to the LMS initially and there is a danger that those who experience significant problems at the start may give up altogether and feel left out of the developing online community. The process should thus be carefully managed, perhaps including an assessment of the information literacy skills of incoming students and the provision of programmes to address potential gaps.

While using an LMS to manage administrative and organisational matters and for making more course resources available is effective and useful in large classes, this case study found that the discussion forums brought the greatest improvements in teaching and learning. The increased communication, via the forums, helped lecturers to respond to problem areas quickly and to be more sensitive to student learning needs. Student-to-student responses can help to build confidence and interest in the course, but the value of peer tutoring (perhaps especially at first-year level) needs to be emphasised.

During study week (and before essay deadlines and tests), the forums proved to be an effective, and more efficient, substitute for face-to-face consultations. The number of postings was always manageable from a lecturer point of view,

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[17] Berge 2000; Khan 2012; Richardson n.d. c. 2013
[18] Marquard's (2013) Educational Technology Stack
[19] Mays 2011
[20] Bates & Sangrà 2011

and the time savings were significant. While both 'core' and 'peripheral' participation in the discussion forums can encourage more active, deeper learning activities, a possible danger is that students substitute the 'quick fix' answers obtained on forums for a more holistic understanding. Emphasis should be placed (in a blended learning environment) on the complementary use of the LMS, rather than seeing it as a substitute for lectures and prescribed texts.

Snowball, J. & Mostert, M. 2008. *Introducing a Learning Management System in a Large First Year Class: The Impact on Lecturers and Students* (October 2008). Available at *SSRN*.

Example: How technology is supporting changed distance teaching practices

Engaging Students Online:
A Module in an International MEd in Language and Literacy Education
Hilary Janks

This case study provides an interesting parallel to the previous one by exploring how ICTs can impact on teaching at a distance.

The author begins her case study by remarking:
'It still amazes me that I can sit in my study at home in Johannesburg, South Africa and teach my critical literacy course for the University of South Australia (UNISA) in Adelaide, South Australia, to students registered for a Master's degree at Mount Saint Vincent University (MSVU) in Halifax Nova Scotia, Canada, particularly as these Canadian students might live anywhere in Canada, or indeed in Saudi Arabia or Korea. The richness that is achieved by developing understanding across diverse contexts with students who are themselves diverse, enables exploration of local knowledge and practices in relation to global perspectives…'

In the first part of the case study, the author describes two forms of collaborative relationship: (i) between universities in three different countries and (ii) between a writer-lecturer and specialists in Web-based language enabled by the use of ICT.

The author then describes how interactive pedagogy, which has evolved through her many years of experience in face-to-face teaching, could be transferred productively to an online environment in which asynchronous discussion is central to learning for both students and their lecturer. The case study illustrates the need for integration of course materials, student support and assessment in course design for online learning.

The full case study can be found in the Nadeosa (2005) publication – *Designing and Delivering Distance Education: Quality Criteria and Case Studies from South Africa. Section Three Cases Studies 1–7* (Case Study 3 on page 87).

For the purpose of highlighting quality issues that are involved in technology-supported distance education, it is necessary to provide conceptual clarity on what constitutes distance education.

2.4 Recontextualising distance education in a digital era

Given the variety of ways in which the term 'distance education' is used, it is becoming a very elusive concept to define, both from a theoretical and a practical point of view. The US-based Council for Higher Education Accreditation (CHEA) argues that due to its considerable expansion, distance education now refers to any educational activity in which students are separated from faculty and their peers, and this may include, in addition to independent learning, synchronous or asynchronous environments with a variety of instructional modes.[21] The problem is, of course, to ascertain just how much of a programme has to involve this kind of 'separation' for it to be considered a 'distance' mode of provision. The University of Idaho's notion of distance education is that it is teaching and learning that takes place when a lecturer and students are separated by physical distance. They also argue that technology is used to bridge the 'instructional gap'.[22]

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[21] CHEA 2002
[22] University of Idaho 1985

According to Woodhouse,[23] there is very little 'pure distance' education (maybe in outback Australia or on ships at sea). Often there are supported study centres of various sorts, which act as the main service centres for students. Woodhouse therefore prefers to use the term 'flexible learning' for most distance education offerings, because the previous boundaries between the various learning modes are breaking down. This is problematic, however, in a context in which there are extremes of practice: currently many distance education students rarely, if ever, have the opportunity to engage directly with their lecturers or peers, as contact sessions are often few and far between. ICT can be used to address this but, as noted previously, this calls for a conscious design decision with consequences for how such programmes are resourced.

In distance education, students are separated from the instructional base or lecturer, either in space or time, for a significant portion or even all of their learning.[24] As an approach, distance education does not preclude face-to-face contact; on the contrary, it provides students with a range of support mechanisms that allow them to interact with content independently, in pairs or groups through a variety of technologies, and possibly even accommodating occasional face-to-face interactions. In distance education, learning does not necessarily take place at school or in the presence of a lecturer; neither does it have to be based on a 'group structured' programme. There is greater freedom of space and time, and there is also much student flexibility in the learning process.

2.4.1   Distance versus technology-mediated campus-based education: the narrowing gap

The fact that distance education and the use of ICTs for supporting teaching and learning are increasingly occupying or operating within a common space, points to a more general blurring of the distinction between distance and face-to-face education:

> As universities digitally enhance more courses, the difference between distance and local education is becoming blurred. Digitally enhanced courses provide students in traditional classrooms with more opportunities for independent study…Clearly distance students are not the only ones who benefit from 'distance' courses. In fact, most online students live in the local vicinity of the institutions offering their course.[25]

A stronger version of this view is articulated in the following argument from a paper titled *Information and Communication Technologies and South African Higher Education*, prepared for the Council on Higher Education in 2000:

> Technologies can be applied in a range of ways, to support an almost limitless combination of teaching and learning strategies, and it is essential to keep options as open as possible. This flexibility should form the cornerstone of all planning processes.[26]

The wealth of possibilities offered by 'mixed mode' or 'blended' learning is being explored by many educational institutions. Thus, due to the expanded use of supporting ICTs the distinction between distance education and face-to-face delivery is becoming blurred in the minds of practitioners. At the same time, the advent of ICT and its increasing ubiquity is making it more and more feasible to interact with a course facilitator and with peer students at a distance, both synchronously and asynchronously. Distance education providers are increasingly harnessing the affordances of this technology to enhance their teaching and learning processes. There is clearly a need to provide a model that will assist practitioners in interrogating their mode of provision and the implications thereof.

2.4.2   Towards an integrated model

To date, conceptions of how learning programmes are delivered have tended to be restricted to the continuum of face-to-face contact programmes to paper-based distance education.

The notion of different types of educational provision is illustrated on the continuum below, which can be used to describe a range of educational practices, on which educational provision can be located based on its mix of methods of provision. The greater the use of educational methods that assume temporal and/or spatial separation between students and

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[23] Woodhouse 2009
[24] ADEA Working Group on Distance Education and Open Learning
[25] Howell, Laws, Williams, & Lindsay 2006: 240
[26] Saide 2000: iv

educators, the more education will tend towards the distance education (remote) pole of the continuum. The more direct contact between educators and students, the more it will tend towards the contact or campus-based pole.[27]

<table>
<tr><td>Campus-based</td><td>Remote</td></tr>
</table>

As noted, the mode of education provision is typically viewed on a continuum from purely face-to-face tuition through to education purely at a distance, the latter traditionally conceptualised as correspondence tuition with no face-to-face interaction between lecturers and students. However, there is now more resource-based (independent) learning in face-to-face programmes, and more face-to-face interaction in distance education programmes. With the increasing use of supporting educational technologies there is likely to be rapid movement to the centre.

Spatial or geographic distribution of lecturers and students

Face to face (F2F)	Mixed mode	Distance education
On campus		Off campus
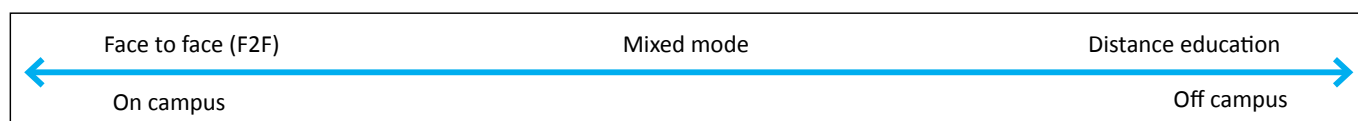
Sometimes, certain strategically placed points on this continuum are given labels, for example, 'mixed mode'. A mixed mode curriculum is communicated through a blend of distance education methods (such as self-instructional materials provided in print or online) and face-to-face methods (the face-to-face component may be offered on the central campus or at a centre away from the main institutional campus). Mixed mode may be implemented equally successfully for off-campus students (who cannot attend classes full-time) and on-campus students who do attend classes but who also receive part of their tuition/learning support through a range of more flexible means such as accessing Web-based materials or tutorials conducted online. The use of mixed mode approaches indicates that the previous rigid distinction between face-to-face and distance education provision is becoming increasing difficult to maintain at a curriculum level. Nonetheless, the physical location of students and their access to appropriate resources and technology remain important considerations in the design of programmes. Notwithstanding the growing mix of modes and methods, the realities of funding in the short to medium term, as well as a belief that distance provision raises some additional quality issues, has meant that the Department of Higher Education and Training (DHET) will continue to distinguish between 'contact' and 'distance' provision for the foreseeable future.

The above does not, however, explicitly include modes of provision that also employ 'e-learning' or digitally enhanced learning. As digital technology has become more accessible in South Africa, it is necessary to incorporate this dimension into our conceptualisation of different possible modes of provision. Therefore, a second continuum could represent another dimension by plotting the extent of supporting ICTs – ranging from fully offline to fully online.

Given the wide-ranging possibilities that are available for e-learning, it is useful to categorise what type of e-learning is being referred to. One useful categorisation is: Internet-supported, Internet-dependent and fully online:

- In *Internet-supported programmes,* participation online is optional and supplementary for students. Enrolled students can access additional information on units of study such as study guides, examination information, reading lists and other online learning resources.
- In *Internet-dependent programmes,* participation via the Internet is a requirement, and could include online interaction, communication and access to course materials via the Web. Thus, students must use the Internet to interact with content and to communicate with staff and/or other students. However, other methods are also used – for example, face-to-face instruction.
- In *fully online programmes,* there is no physical face-to-face component although there could be a virtual face-to-face component. All interactions with staff and students, educational content, learning activities, assessment and support services are integrated and take place online.

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[27] CHE 2004

Usually, a mix of some online and some offline modes is termed a 'blend'.

In our African context, it is pertinent to also consider digital forms of support that do not require Internet access: for example, learning supported offline via CD/DVD/flash drive. Of course, within a particular course, learning could be supported both online and digitally offline at various stages. The second continuum, in terms of supporting ICTs, can be depicted as follows:

Extent of ICT support
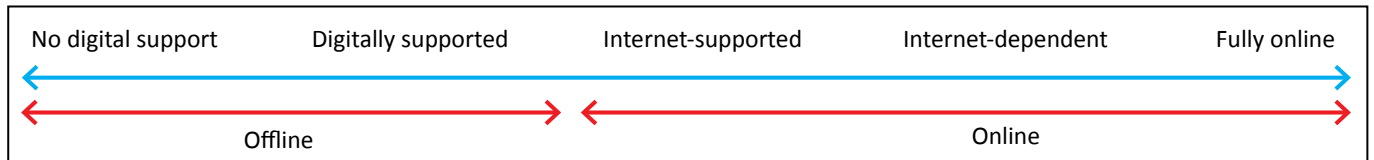
No digital support	Digitally supported	Internet-supported	Internet-dependent	Fully online
Offline		Online		

It is useful to conceptualise these two continua in relation to each other as horizontal and vertical axes (see Figure 1).

Situating various courses or programmes on the resulting grid allows one to describe both the extent of spatial or geographic distribution and the ICT-supported dimensions of a course or programme. The circles positioned on the grid represent examples based on courses or programmes at actual higher education institutions. This would enable an institution to position a particular course or programme (such as B) on the grid in terms of where they are situated right now, and then determine where the institution would like them to move to over a period of time. This could assist in identifying what changes would be required in order to move or reposition the course in terms of this grid, and the other influencing factors or aspects of the course that would need to be taken into account.
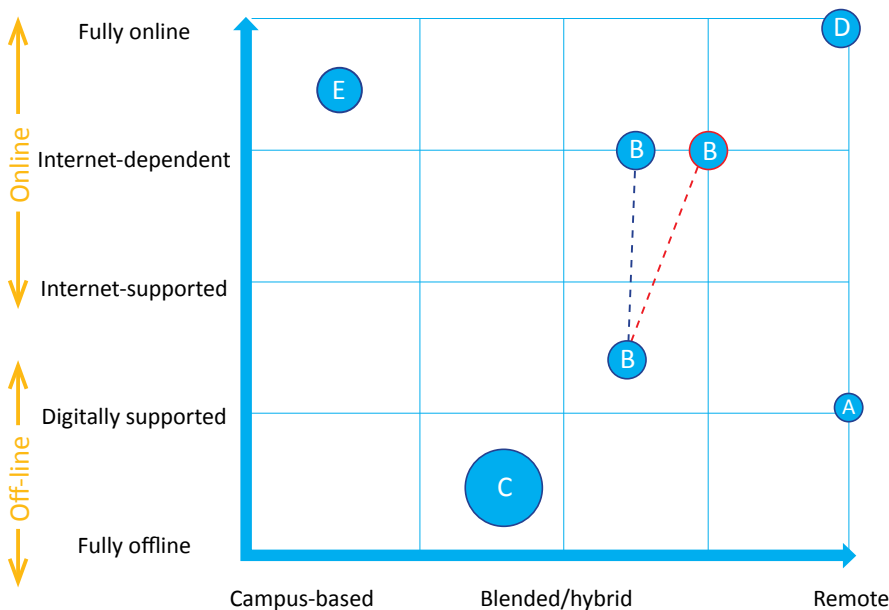
Figure 1: Grid illustrating different dimensions influencing mode of provision

One particular factor emerges as being particularly important in defining what the possibilities are in how a course is delivered. This is believed to be the group or class size: that is, the enrolment for a particular instance of delivering a particular course. The size of the cohort enrolled for a course or programme would appear to be a major determinant of the nature and extent of the lecturer–student and student–student interactions that are possible, of the need for the deployment of tutors, of the level of mediation employed by the lecturer and tutors, of the level of support for the students, and of the nature of the assessment, and could in fact be the determinant of the pedagogical approach.

It would therefore be opportune to depict class size when locating a course or programme on the grid in order to indicate the extent to which the underlying aspects identified and discussed would need to be considered. In addition, if the plan is to migrate a course to a different position on the grid over time, an indication of the class size would provide a cautionary flag to prompt examination of the practical aspects that would need to be considered to effect such a

migration. The class size could be depicted on the same grid by simply varying the relative size of the circles denoting a particular course. For example, it can be easily seen that the group for course C is larger than the group for course D, which is turn is larger than E.

These guidelines are concerned with programmes that fall to the right-hand side of the grid explored in Figure 1. As we move from the left to the right, so traditional distance education concerns come to the fore with respect to ensuring an equivalent learning experience for an increasingly distributed student cohort through provision of access to appropriate learning resources as well as decentralised support, assessment and, in some programmes, work-integrated learning.

In addition to their location in terms of the spatial (horizontal) and ICT (vertical) dimensions, other possibly interdependent characteristics or aspects of the course or programme would need to be taken into account. For example, various structural and pedagogical aspects of the course or programme would need to be examined to inform its appropriate positioning on the grid. Some aspects of this nature to be considered are shown in Table 1 (below).

The guidelines in this document therefore refer to practices towards the right-hand side of the grid in Figure 1 in which it is assumed that students will rarely, if ever, be in the same physical location at the same time as their lecturer. This has profoundly different implications, though, for student and staff roles and also for what facilities need to be put in place and maintained at the extremes of practice, notwithstanding that there may be a large number of programmes converging towards a blended mode of provision. Critical for the current discussion is a consideration of how ICTs are used to facilitate active student engagement with the curriculum, to provide a wide range of possible learning support strategies and to enable reliable assessment that is consistent with the overall purpose of the programme, without assuming that lecturers and students will be in the same place at the same time either physically or virtually. We are thus looking to uses of digital technology that involve far more than simply providing 'print behind glass'.

A growing body of literature provides insight into the possible advantages of and the minimum requirements for integrating supporting ICTs into learning provision more generally,[28] focusing on the unique opportunities provided by the online environment in particular.[29] These issues apply equally to contact and distance forms of provision. The literature suggests the need to recognise the increased diversity of the potential students and to design with different learning needs in mind from the outset,[30] including the need to address issues of cultural diversity[31] and to make the necessary investment in appropriate curriculum design ahead of marketing and registration.[32] It is then necessary to create awareness, in the prospective student population, prior to registration,[33] of the nature and demands of distance and technology-mediated learning, and to give attention to the ways in which tutors and students alike are prepared, monitored and supported in an online or technology-mediated learning environment[34] throughout the learning process. The design of the learning process may usefully be informed by an understanding of adult and possibly self-learning theory[35] and the changing expectations and preferred learning styles of students[36] and in particular the need for interaction, customisation and reciprocity in learning partnerships.[37] This complexity points to the need for multi-disciplined teams[38] to develop these kinds of programmes, which will obviously have implications for project management, time and cost, and in turn models a particular form of professional practice.

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[28] Simonson, Smaldino, Albright, & Zvacek 2003
[29] Anderson & Elloumi c. 2004
[30] Ehlers 2004; Davis 2007 as cited in Moore 2007
[31] Gunawardena & LaPointe 2007 as cited in Moore 2007
[32] Butcher c. 2001
[33] Simpson 2004; Davis 2007 as cited in Moore 2007
[34] McPherson & Nunes 2004
[35] Davis 2007 as cited in Moore 2007; Hase & Kenyon 2000
[36] Dede, Dieterle, Clarke, Ketelhut, & Nelson 2007 as cited in Moore 2007
[37] Beldarrain 2006
[38] Caplan, Thiessen, & Ambrock as cited in Anderson & Elloumi c. 2004

Structural	A	B	C	D	E
Mode of provision	Distance education/off campus/independent study	Mixed mode/off campus	Part time/on campus	Fully online/off campus	On campus/mixed mode
Pedagogical	**A**	**B**	**C**	**D**	**E**
Course materials (Interactivity)	Print-based materials. Tutorial letters (courier/email).	Self-instructional materials in electronic form – e.g. on CD ROM – as well as print materials. *The use of CD ROM, as well as the use of video clips, allows a level of interactivity.*	Paper-based, supplemented by CD. Not designed as self-learning materials, but ordinary journal publications and textbook extracts. *Peer and lecturer interaction only on attending face-to-face sessions – otherwise individualised.*	Independent study, online reflection. Access to VLE and digital library. *Group work: blogs, forums and asynchronous social media; also sync live chat, virtual worlds.*	Independent study, online digital resources and VLE. *Group work: Multimedia project, synchronous and asynchronous communication, and media.*
Learning support	• Some synchronous, interactive video conference sessions/lectures delivered at centres distributed nationally. • One-on-one support by lecturers per telephone and email.	• Some compulsory face-to-face workshops. • Weekly email discussions between workshops for peer as well as tutor support.	• Students attend face-to-face hour-long sessions twice a week over a semester. • For the rest of the time they study on their own at home, using reading resources supplied by the lecturer.	• One-on-one online support for foundation module. • Thereafter tutor and peer support online.	• Mostly online, team lecturers and peers. • Face-to-face and video conferences each week – everything else online.
Assessment	• Formative feedback on assignments. • One assignment and one examination per module to count towards final mark. • A research project (marks equivalent to a whole module).	Assignments as well as a supervised work-based project.	• Feedback on written assignments from the lecturer. • Assignments contribute towards final assessment. • In place of examination, a structured examination equivalent task is sent for external examination.	A variety of in-course online assessment activities.	Formative feedback on assigned research, online participation, group multimedia project, seen exam question.

Table 1: Description of mode of provision at illustrative points on the grid

The various considerations that have been referred to in the previous paragraph all need to be taken into account in the design of the learning environment for a specific programme or course. To illustrate this point it is useful to refer to Young and Chamberlin (2006), who describe a blended learning continuum in terms of two discrete tracks of using supporting or supplementing ICTs, differentiating the strategies that apply to the deployment of an Independent Learning Environment from that which focuses on an Interactive Learning Environment. The exposition of these strategies would need to be underpinned by a particular educational approach, which would need to be considered across all forms of provision. This is the extent to which the approach is fit for purpose in terms of the target audience, the purpose, and the level of the course being offered, as well as the extent to which an equivalent learning experience is offered across different contexts of learning and practice.

A diverse range of ICTs are now available to support the proposed learning and teaching strategy, including more informal social networking, but they need to be selected and used purposefully for this potential to be realised. In an insightful paper on emergent learning and the affordances of learning ecologies in Web 2.0, the writers caution:

> …although social networking media increase the potential range and scope for emergent learning exponentially, considerable effort is required to ensure an effective balance between openness and constraint. It is possible to manage the relationship between prescriptive and emergent learning, both of which need to be part of an integrated learning ecology.[39]

[39] Williams, Karousou, & Mackness 2011: 39–58

A report[40] on an engagement with an online learning process, exploring how to support online distance learning, noted the usefulness of Salmon's (2004) model for structuring the interaction and engagement within an online learning programme in a planned way, and of the WisCom model of Gunawardena et al. (2006) for designing particular learning activities. The report authors conclude that, designed appropriately, an online course can result in greater engagement and interaction; but they indicate that the approach needs to be thought about very carefully if large-scale provision is required. The recruitment, selection, training, monitoring and ongoing support of tutors working with sub-groups of the student population becomes a management task in its own right and has implications for the ways in which LMSs are constructed. Thus a meaningful migration towards ICT integration involves much more than simply making resources available online; it requires careful consideration of the supporting elements, as discussed, in order to plan for effective teaching and learning. It also requires a careful consideration of cost and resource requirements. Worryingly, another recent study concluded: 'open and constructivist distance education can achieve any two of the following: flexible access, a quality learning experience and cost effectiveness – but not all three at once'.[41]

Example: A UK Open University reflection on the importance of design when integrating ICT

Using ICT for Curriculum Design, Development and Delivery: Design for Active and Interactive Networked Learning
Mary Thorpe

This case study illustrates the kind of decisions that need to be made if we design courses consciously to exploit the affordances of ICTs for improved teaching and learning.

This keynote presentation to the Nadeosa conference in 2006 focuses on active and interactive learning as a key goal for the use of ICT for curriculum design, development and delivery. Researchers identify two key contributions for ICT: information-rich resources and interpersonal interaction. There is currently a view that greater attention should be paid to the latter to redress the tendency to emphasise delivery of resources. Networked learning offers a useful conceptualisation of the field because it focuses on connections – between people, and between communities and resources. A social constructivist approach to learning also highlights an important role for interaction in learning. Students need opportunities to reflect on and build their own understanding, working with others. Lecturers need to create learning environments that are 'constructively integrated' – that provide consistent support for students to develop critical understanding and skills.

Learning needs to be designed to achieve effective student action and interaction. Learning design is a form of knowledge that is relational, situational and probabilistic. We do not have rules for how to design learning, but we can identify principles derived from theory, and exemplars based on knowledge of what things work in particular contexts. We can learn from best practice, particularly through identifying the learning designs embedded within particular examples.

An example drawn from the presenter's own teaching and learning context is used to illustrate what can be learned about designing for active and interactive networked learning. The designs embedded within this example are highlighted, and evidence about how they work explored. Design does not guarantee outcome, however, and the student's situation will always impact on how the design works out in practice. Unintended effects are to be expected. Student workload was one such unintended effect in the best-practice example provided, and new efforts are being made at the UK Open University (OU) to address the important area of workload and study time. Learning designs – if made explicit and evaluated – can be re-used and improved on. Re-use of learning resources has been under way at the UK OU for many years and a new and large project – Open Content Initiative – will deliver free access to OER drawn from OU course materials in every faculty. Re-usable learning resources offer new opportunities but also require changes in some areas of practice in open and distance education. The presentation ends with a brief comment on projects focused on collaboration with our colleagues in various African countries.

The presentation is available from *Nadeosa*.

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[40] Welch, Drew, & Randell 2010
[41] Kanuka & Brooks 2010

Example: An ICT company makes pedagogical decisions on good practice

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Google Course Builder Software

Google provide a further perspective on the synchronous/asynchronous issue in describing their new *Course Builder Software.* It is useful that they are describing practice at the level of 'course flow' – up a level from the activity level that we are usually talking about when considering synchronous versus asynchronous choices.

Google observe:

Semi-synchronous flow
These online courses have a semi-synchronous flow. In conjunction with good material, this model can be effective at increasing student motivation, student retention, and student interactions. However, semi-synchronous flow is unfamiliar to many students. Students expect a course to be either completely asynchronous or completely synchronous.

- With a ***synchronous flow***, students do all of their work at the same time everybody else is doing that work.
  - ° If they ask questions, they reasonably expect other people to be working in the same area and so the likelihood of getting their questions answered by peers is good.
  - ° Students also expect that aspects of the course, such as availability of material and assessments, have inflexible deadlines.
  - ° Students must do the coursework at the pace set by the course designers, not at their own pace.
- With an ***asynchronous flow***, students do everything at their own pace and have no deadlines to consider.
  - ° Students can work at their own pace.
  - ° If students ask questions, there's an excellent chance that nobody else is working on the same area; there is less likelihood of someone answering the question in a timely manner.
  - ° The lack of deadlines means students can always finish the course 'later'. Procrastination seeming to be a universal human tendency when there are no deadlines, many people do not finish at all.
- With a ***semi-synchronous flow***, students do some parts of the course at their own pace and do other parts of the course on a fixed schedule.
  - ° Instructors release course materials on a fixed schedule: for example, a new unit on each Monday, Wednesday, and Friday of the course. Students can work on the units any time after their release. We've seen that students tend to work on units soon after receiving email about their release.
  - ° Live events, such as live Q&A sessions with the instructors, happen at a fixed date and time. After the event, the instructors may post the video for students to watch at their own pace. Live events focus students around particular topics.
  - ° Assessments are due by a fixed deadline. Submitting an assessment after the deadline affects a student's final score. This is the part that confounds students. Because much of the course is at their own pace, having fixed deadlines can be confusing unless you are crystal clear in what you tell students.

2.5 Technological considerations

2.5.1 Virtual Learning Environments

A VLE or LMS is a software application for the administration, documentation, tracking, reporting and delivery of programmes and courses. Any ICT tool to be used also needs to integrate with other institutional systems (e.g. student registration systems). There are thousands of VLEs and LMSs available for use, some proprietary (e.g. *Blackboard*) and some open source systems (OSS) (e.g. *Sakai* or *Moodle*).

2.5.2 Access to technology

Institutions should map the available ICT infrastructure and Internet access in the geographic areas in which target students live, and the opportunities and barriers to effective use of these. Where an institution envisages a course or programme to be open to students anywhere in the country, region or even world, the technology requirements and assumptions (hardware, software, connectivity and skills) need to be spelled out clearly prior to registration. Increasingly

institutions are reviewing whether to provide reduced-cost devices for students or make use of a Bring-Your-Own-Device (BYOD) scenario or a combination thereof. The type of approach selected in terms of ICT support and learning and teaching activities, the type of content, and the method in which it will be used have a major bearing on the device and network requirements. Some content may not be able to be accessed and used on all devices (e.g. Flash content is not supported for most tablets). Some content will also impact on bandwidth; for example, video and graphics requiring both high bandwidth and continuous access.

2.5.3 MOOCs

Massive open online courses (MOOCs) have attracted interest from educational institutions as a possible way to move into online learning as well as possibly provide learning at scale. Various MOOC platforms and partnerships have been developed worldwide, such as *Coursera* and *EdX*. Although an experimental and evolving area, MOOCs offer possibilities for promoting lifelong learning, greater variety of courses and the use of social learning pedagogies.

Example: So what are the key issues for distance education provision in a digital era?

> **Bates and Sangrà (2011) Study Finding: Technology to enhance traditional teaching rather than to transform**
>
> Bates and Sangrà (2011) report on a research study that found that 'most [of 11 institutions surveyed] seemed content to use technology to enhance traditional classroom teaching, rather than to use technology to transform the way teaching is designed and delivered'.[42]
>
> Given the above finding, Bates and Sangrà make the following recommendations regarding proposed long-term goals for ICT integration:
>
> - Increasing flexible access for a more diverse student body.
> - Increasing interaction between instructors and students, and allowing for more individualisation of learning.
> - Developing student skills in identifying, collecting, analysing, and applying knowledge.
> - Teaching students how information technology can be used within a particular professional or subject domain.
> - Using technology to support the development of 21st century skills of independent learning, initiative, communication, teamwork, adaptability, collaboration and networking, as well as thinking skills, within a particular profession or subject domain.
> - Greater cost-effectiveness: more students at a higher quality and less cost through use of technology.[43]

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[42] Bates & Sangrà 2011: xx
[43] Bates & Sangrà 2011: xxi

3. CURRICULUM DESIGN, DEVELOPMENT AND DELIVERY FOR DISTANCE EDUCATION IN A DIGITAL ERA

The discussion in this Section has bearing on all of the minimum criteria but particularly: 1: Programme design, 2: Student recruitment, admission and selection, 5: Teaching and learning strategy, 11: Academic development, 12: Teaching and learning interactions, 13: Student assessment practices and 15: Coordination of work-based learning (where applicable).[44]

This section focuses on curriculum issues that underpin programme design and implementation. It assumes that there is a natural sequence in which to work, working down in sequence:

- From curriculum design and development.
- To course design and development.
- To assessment and activity design.
- To resourcing of the curriculum.

The above does not, however, preclude the possibility of sometimes also working from the bottom up; for example, from a piece of content or an example activity that sparks a reconsideration of the larger course and curriculum design.

Our discussion in this Section is informed by the following macro design model (Figure 2).
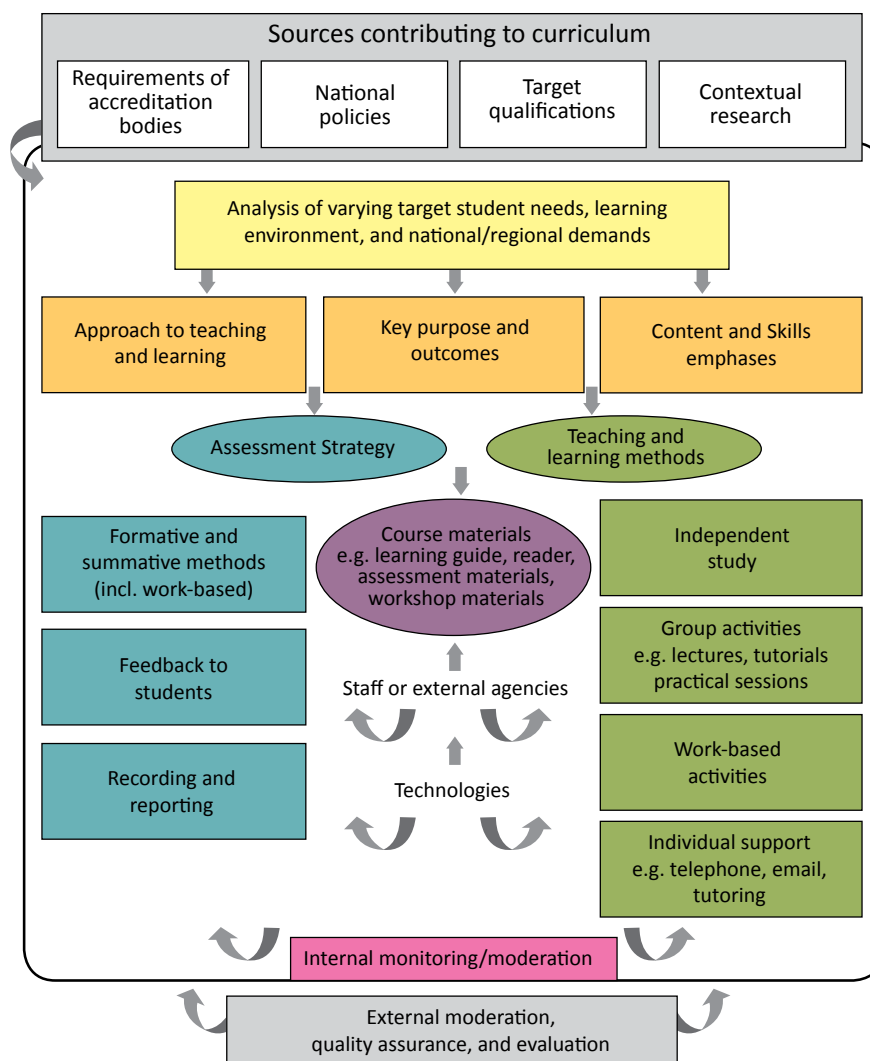
Developing a curriculum

Figure 2: Curriculum design for distance education programmes

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[44] CHE 2014

3.1 Curriculum design and development

When people think about curriculum, they often equate it with a syllabus that outlines the content to be covered and the way that it will be assessed.

However, we should really think more widely than this. We should consider not only *what* should be taught and why, but also *how* it should be taught and *how* the teaching-learning process itself will be implemented. This is illustrated in Figure 2.

Figure 2 suggests that we start by considering what international, national, state/provincial and institutional requirements tell us about what should be the expected graduate or exit-level competences of the programmes that we offer.

It then notes that we have to start where the students are. We need a clear idea of the profile of our entry-level students in terms of their subject or disciplinary competences, their fundamental learning competences and capability for independent learning, their practical and ICT skills, and their existing life and work commitments. The more distributed the potential target students, the more diverse the student profile and hence the more diverse content, activities and support options will need to be if we are interested in turning access into success.

The curriculum should then chart a *learning pathway* (i.e. the learning and action steps from application to registration through to learning and assessment) to help students get from where they are at the start of the programme to where they need to be as graduates of the programme.

Most students require *support* in this process; but they do not all need the same support and they do not all need support at the same time. The curriculum-as-plan therefore needs to consider how this support will be provided and what parts of the learning process are for independent study, what parts require group or work-based activities and how students might seek support individually.

Deciding on the *assessment strategy* is an essential part of the curriculum planning process. It must provide evidence that the programme purpose is being met. In addition, many students will equate the curriculum with what we ask them to do for assessment and will focus on those aspects of the curriculum most closely associated with the assessment requirements.

Programmes need to be flexible and, depending on the target students, designed with international and national needs as well as the needs of prospective employers in mind. Their form and structure should encourage access and be responsive to changing/diverse environments. Learning and assessment methods need to be demonstrably appropriate to the purpose and intended outcomes of the programme.[45]

Looked at from the perspective of the *student experience*, the learning programme comprises the learning resources provided for engagement with content, the interaction with other students, and the support students receive from the programme lecturers, administrators and tutors/mentors. Among other things this will include a programme timeline indicating when assignments are due, when contact sessions or online discussions will be held and when examinations or other summative assessment will be scheduled.

Looked at a programme from a *staffing and resourcing perspective*, there seems to be a clear need for careful programme management.[46]

Decisions about the *type of media* to be used will depend partly on costs and partly on instructional appropriateness. Decisions about assessment will have to be made concurrently with materials design and development. Doing the revisions that arise from the evaluation will involve reworking many or all of these tasks.

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[45] Welch & Reed 2005 (Nadeosa, Criterion 3, 23)
[46] The discussion in this section is based on ADB/COL 1999.

For this reason it can be useful to look at these phases as constituting a *management cycle*. The notion of a management cycle is based on the following principles:

• That distance provision depends equally on coordinated academic, administrative, technological, and student support activities and services.
• That these services must be jointly managed through management of the team.
• That the effectiveness of these services requires elaborate planning and pre-planning in order to ensure adequate early warning mechanisms.
• That it is possible to produce standardised guidelines and structures as tools to assist this process.
• That effective communication and data exchange networks are essential for such management.

The discussion that follows identifies four key phases in the management cycle.

3.1.1 Pre-planning

A new programme or course emerges from within an academic unit or collaboratively from an idea or need identified from an outside agency, such as a government department. This new course idea must then be subjected to scrutiny in comparison with the institution's overall mission, its assessment of its resources according to its strategic plan, and a needs assessment study, taking into account the outside environment into which the programme will be launched. Only if it still seems feasible in the light of these considerations should the programme or course go ahead.

3.1.2 Planning and development

Two steps must be taken at the planning and development stage. The first step is a detailed preparation of the curriculum and strategy for the programme, which involves a good deal of consultation, between the academic unit and the service departments such as media, printing and/or ICT, and student support, to explore the technical possibilities and the implications of the curriculum intentions. This step will result in the following:

• A detailed curriculum for the programme.
• A media, resource, and tutorial delivery plan.
• A detailed budget estimate of both expected costs and income from student fees or other sources.

All this information will be put together into a development blueprint, which will be circulated through the appropriate approval processes of the institution. Once approval has been gained, the second step is to design and develop the learning resources. This activity is probably the most complex and expensive in the whole cycle. The curriculum must be turned into reality, involving the following stages:

• Writers/developers must be identified, recruited, trained, and supported.
• Course teams, including discipline experts, editors, instructional and VLE designers, and media producers, must be created and sustained.
• Schedules must be drawn up and agreed upon.
• The learning resources must be pre-tested and revised.
• The whole package must be moderated by peer academics to ensure recognised standards are met.
• The promotional plan must be worked out and put into action.

Tools to assist in these processes include standard contract forms, and instructional design and house style manuals and online templates.

When all these tasks have been accomplished, senior management must undertake a final review to ensure that the original decision to go ahead is still justified several months later. Figure 3 illustrates the iterative nature of the process towards quality learning resource development.
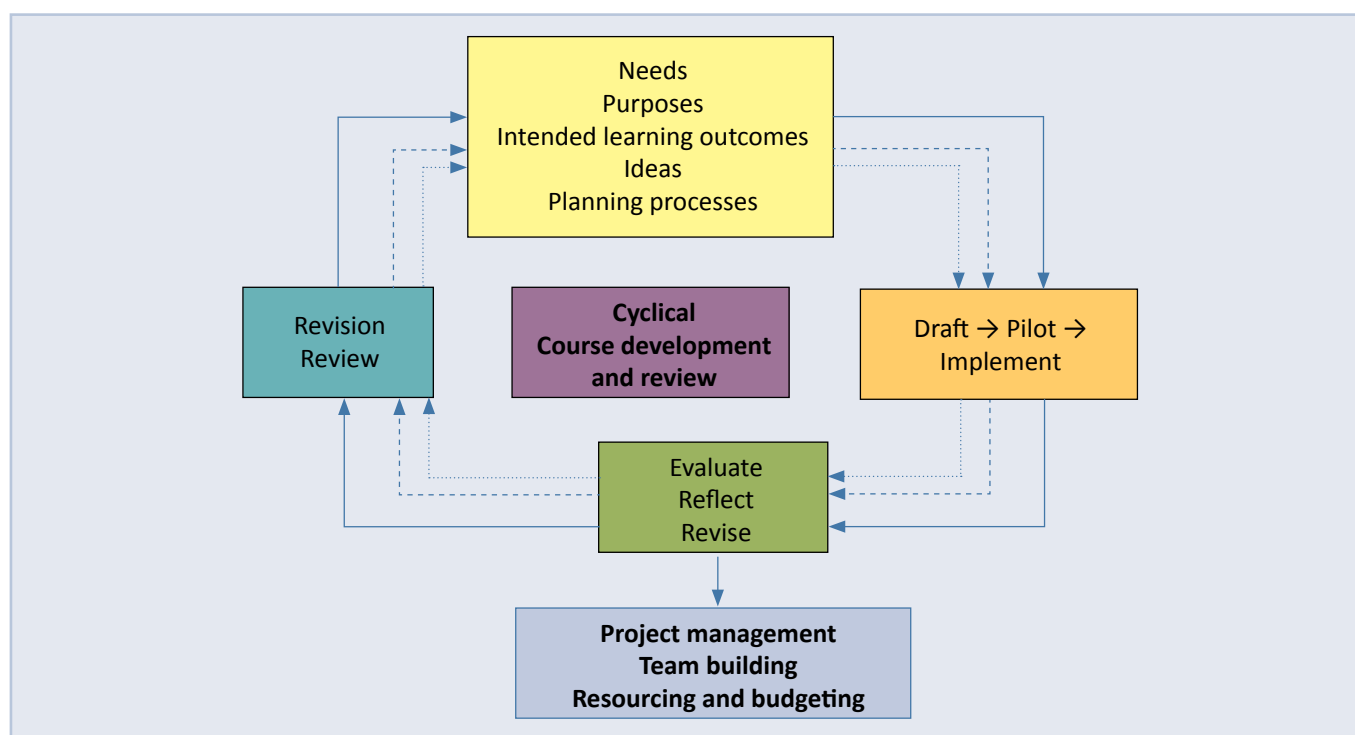
Figure 3: The iterative nature of learning resource development

3.1.3 Production and preparation

After the final go-ahead, the materials need to be reproduced to meet the latest estimate of enrolments – print and audio-visual and/or digital, as agreed at the outset. If audio-visuals are to be broadcast, they must be produced in their final form and broadcast schedules must be publicised.

If audio-visuals are to be loaded onto an LMS/VLE, due cognisance must be taken of file size and options for streaming video in low-bandwidth environments. Parallel with the reproduction process, the distribution logistics need to be finalised and full tutorial and student support services put in place. This will include the training of tutors and facilitators for face-to-face sessions and work-integrated learning (WIL) and e-tutors for online support.

3.1.4 Delivery and evaluation

It is only at the delivery and evaluation stage that the courses are ready to be presented to students. It is now that the tutorial and student support services become the main players in the process. The role of academic and media developers, however, is not over. The programme must be continually monitored, especially during its first presentation, to identify problems and possible improvements as well as to assess student progress and success. Initial monitoring may well lead to revision before future presentations. Fuller evaluation will be necessary at a later stage to guide decisions by senior management as to whether the programme should go to scale as a long-term programme or whether and when it should be withdrawn.

Example: Programme in household food security

> **Good Practice in Community Engagement:**
> **A Case Study of Household Food Security in the Eastern Cape**
> Alice Barlow-Zambodla and Fransa Ferreira
>
> *This case study provides an example of a programme that was developed through a process informed by the discussion in this Section.*
>
> The PHFS (Programme in Household Food Security) targets existing community development workers, home-based carers and volunteers working within communities. It was developed by the College of Agricultural and Environmental Sciences

(CAES) at UNISA working in collaboration with Saide. The programme was developed to address food security problems faced by poor rural communities in the Eastern Cape Province of South Africa.

On completion of the programme students are able to work closely with identified vulnerable households and together facilitate the behavioural change and learning strategies required to become more food-secure and in so doing, address issues of malnutrition and hunger that characterise poor rural communities in South Africa. Successful graduates can be referred to as 'household food security facilitators'. The programme is closely aligned to the country's Integrated Food Security Strategy and aims to improve delivery at the micro-level by building the capacity of households – a vital community development intervention.

During the iterative and participatory process of designing, developing, piloting and evaluating the programme, a number of factors were identified that required special consideration as the programme evolved. These included the nature of relationships between the university and various stakeholders, characteristics of students and promoters, and requirements of the practical, community-focused portfolio activities.

These factors were closely interrogated through ongoing formative evaluation processes, both in the classroom and in the community, as they were regarded as having the potential to impact negatively on both student access to, and success on, the programme. The programme materials and delivery strategies were subsequently changed to mitigate this potential negative impact. The outcome was a programme that is innovative in pedagogical approach and unique in South Africa in terms of the content covered. The programme integrates various aspects of nutrition, food and agriculture within a household food security context, resulting in a unique programme in the region at present.

The programme employed a participatory approach in its design, development and implementation, thereby distinguishing itself from the traditional distance education practices in which a lecturer (or often a contracted external materials developer) develops study material in isolation. The final set of learning materials will be available as OER under a Creative Commons Licence (Attribution-Share-Alike). Another exciting outcome of the programme is the finding that the existing programme and its materials can easily be adapted for training students at different levels of the National Qualifications Framework (NQF) (above and below NQF Level 5).

The full case study can be accessed at *Nadeosa*.

3.2   Implications for distance education provision at different NQF levels

In writing the specifications for new qualifications and designing the learning programmes leading to these, curriculum developers need to consider carefully the nature of distance education in relation to the entry requirements, the exit and cross-field outcomes and the graduate attributes associated with a particular curriculum for a particular kind of programme. Curriculum developers will need to interpret the descriptors for each qualification on the Higher Education Qualifications Sub-Framework (HEQSF) and design qualifications and programmes that are in alignment with these.

Figure 4 (below) provides a schematic overview of the main features of the HEQSF.

Level 10					Doctoral Degree (360 credits) Min 360 at Level 10
Level 9					Master's Degree (180 credits) Min 120 at Level 9
Level 8			Postgraduate Diploma (120 credits)	Bachelor Honours Degree (120 credits)	Professional Bachelor Degree (excluding teacher education) (480 credits) Min 120 at Level 7 Min 96 at Level 8 Max 96 at Level 5
	Postgraduate				
Level 7		Advanced Diploma (120 credits)		Bachelor Degree (360) Min 120 at Level 7 Max 96 at Level 5	
Level 6	Advanced Certificate (120 credits)	Diploma (360 credits) Min 60 at Level 7 Max 120 at Level 5			
Level 5	Higher Certificate (120 credits)				
Undergraduate					

Figure 4: Schematic overview of the HEQSF

3.2.1   Open schooling (NQF Levels 1–4)

An integrated post-schooling system needs to take greater cognisance of the articulation between different providers and modes of provision and the possibilities for recognition of prior learning gained through a wider range of experiences. Young people who are currently not in employment or in current education and training programmes will likely require more flexible modes of provision, with options to move between different modes at need. We are likely to see then the emergence of new kinds of institutional offerings and possibly new kinds of institutions – including those that might straddle the current FET/TVET–HET divide.

3.2.2   Certificate programmes at NQF Level 5

Certificate programmes offer a learning pathway into higher education and training for those students who did not meet the requirements for entry into diploma or degree programmes and for those whose learning needs to fulfil particular roles that do not need to extend beyond Level 5. It is likely that such students will be underprepared for independent study and that many may lack ICT access and skills. Distance education programmes for this level will need to take this into account, providing more careful scaffolding and support, incorporating the development of metacognitive skills, and providing options to develop the necessary language and ICT skills needed for success in the programme. Programmes at this level will likely make extensive use of media, including social media, to motivate engagement and to provide alternative ways of engaging with key concepts.

3.2.3   Diploma programmes at NQF Level 6

One of the challenges for longer programmes, such as the 360-credit Diploma, will be to ensure coherence across the programme. This is even more important when we consider that distance education students often take two to three times the minimum time to complete their programmes of study. As with the Certificate programmes, some of the 120 credits available at NQF Level 5 need to address the development of those specific competences needed for success in a distance education programme, including any ICT competences that may be required.

3.2.4   Undergraduate programmes exiting at NQF Level 7

The concerns here are similar to those at the diploma level. A further challenge, highlighted by the national review of education programmes,[47] will be to ensure that short programmes, such as the Advanced Diploma, have an exit level of demand that is commensurate with degree programmes also exiting at Level 7. The level descriptors provided by the South African Qualifications Authority (SAQA) need to be interrogated with respect to the design of exit-level assessment activities and then scaffolded back into formative assignments and in-course activities.

3.2.5   Initial postgraduate programmes at NQF Level 8

Postgraduate diplomas may need to address workplace-related issues like those identified in 3.7.2.3 and 3.7.2.4. Honours-level programmes will need to provide details of how the requirement of supervised research will be managed in a distance education context.

3.2.6   Masters programmes at NQF Level 9

Coursework Masters programmes as well as research-based Masters programmes will need to provide details on how access to information/literature as well as experimental resources/facilities will be afforded in a distance education context. The management of supervised research at a distance will also need to be considered carefully.

3.2.7   Doctoral programmes at NQF Level 10

The issues here are similar to those at the masters level. A doctoral candidate could be expected to be a much more independent worker but there is still need to make provision for ongoing communication and timely feedback on draft research proposals and chapters.

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[47] CHE 2010

Running across all levels will be considerations of how to ensure the authenticity of work submitted by students and how to advise and guard against plagiarism.

The more distributed the student population, the more diverse the topics and contexts likely to be explored. This may call for co-supervision and hence the building of collaborative relationships between institutions at both a national and international level.

3.3 Formative evaluation, reflective praxis and curriculum review

Given the time taken to source or develop learning resources to support distance education programmes – even if resources are adapted from OER – there is sometimes a tendency for curricula to become ossified and learning resources dated. It is important for distance education providers to commit to regular curriculum and learning resource renewal. The review of programmes and learning resources should be informed by an ongoing formative evaluation process in which feedback from students, student retention and performance, and feedback from other stakeholders (e.g. tutors, markers, employers and external examiners) demonstrably feed back into revised practice. This in turn calls for careful version control of learning resources. In an online era when most resources are accessed digitally, and ICTs can enable greater collaboration, students themselves may be involved in activities of sourcing, adapting and creating content in a continual process of curriculum renewal.

3.4 Accreditation

Programmes offered through distance education need to meet the same basic requirements for accreditation as programmes offered through contact mode but the interpretation of some criteria needs to be nuanced for the distance context. A key concept must be to ensure equivalence of learning experience and exit-level expectations across a much more diverse student body and range of contexts of learning.

State subsidies are linked to the credit value and CESM categories of subjects but are differentiated according to mode of provision at undergraduate level. During the recent funding review process, no empirical evidence was provided to support the need for a change of the current differentiated input funding model for distance education provision up to NQF Level 8 (there is already parity of input funding at Levels 9 and 10 and for graduate output at all levels). However, it seems clear that certain programmes – for example, those with WIL and practical components – will incur similar costs regardless of mode of provision. It also seems clear that tackling the problem of low retention and throughput in some distance education programmes will require additional investment in design and support processes. This investment and the efficacy thereof need to be captured in formal evaluation processes in order to inform not only appropriate funding models but also the minimum requirements for future accreditation.

3.5 Recognition of prior learning in distance education

As noted previously, one of the rationales for the introduction of distance education is to open access to more students and more diverse students. Recognition of Prior Learning (RPL) is an important component of addressing this need.

According to SAQA (2005), RPL is

> a process whereby people's prior learning can be formally recognised in terms of registered qualifications…regardless of where and how the learning was attained. RPL acknowledges that people never stop learning whether it takes place formally at an educational institution or whether it happens informally.[48]

Many institutions have policies on RPL for admission to, and advanced standing within, a qualification. The process of RPL for such purposes can be summarised as: 1) identifying what the person ('candidate') knows; 2) matching the candidate's knowledge, skills and experience to outcomes and associated assessment criteria; 3) assessing the candidate's knowledge against outcomes; and 4) crediting the candidate for skills, knowledge and experience acquired in the past. In most RPL cases, candidates need to be carefully assessed to ensure that they are appropriately placed within a programme.

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[48] SAQA 2005: 1

3.6   Course design and development in distance education

A programme that leads to a qualification comprises various smaller courses/modules/papers, which in turn may be subdivided into units or lessons.

For design of course/modules and units/lessons, we need to go through a similar process as for the curriculum design, but in a more focused way within a particular disciplinary area. With modularisation comes the risk of a loss of coherence, so we need to ensure that it is clear to students how the constituent elements contribute, separately and together, as a whole and in a coherent way, to the programme purpose and outcomes. A key finding from the national review of programmes offered in Education was that often this coherence is lacking.[49]

Use of a planning template like the following provides evidence of planning at a course level.

Title:	e.g. Students and Learning
Code:	e.g. LAL101A
Level:	e.g. 5 (first year)
Credits:	e.g. 12 (120 hours)
Purpose:	e.g. To enable students to reflect upon their planning and practice in ways that are grounded in four key learning approaches: behaviourism, cognitivism, (socio-)constructivism and connectivism and in ways that see these as not being mutually exclusive positions. This module, together with module xxx, speaks to programme outcome 1.
Exit-level outcomes:	e.g. By the end of the module, student-teachers should be able to: • Outline the key elements and theorists associated with behaviourist, cognitivist, constructivist and socio-constructivist, as well as connectivist approaches. • Identify potential strengths and weaknesses of these different approaches for classroom practice. • Analyse examples of planning (documents) and teaching (audio and video as well as direct observation). • Plan a lesson and justify their planning decisions in relation to appropriate theory. • Teach a lesson and then reflect critically on the experience in terms of what worked, what did not work, what might be done differently and any departures from the plan in practice.
Formative assessment 1	Post to online discussion forum. • This activity counts 5% towards the final module mark. • In not more than 100 words, students describe a classroom experience from when they were a school student that had a deep impact on their attitude to learning. They should speculate on what assumptions about students and learning informed the teacher's practice. • They should then comment on the postings of three other students.
Formative assessment 2	Written assignment to be submitted online. 1. This activity counts 25% towards the final module mark. 2. In Microsoft Word, students should plan a lesson for the subject and level in which they specialise. 3. They should provide a narrative explaining why they have planned the lesson in this way, making reference to appropriate learning theory. 4. They should ask a colleague to comment on their draft before submission using 'track changes'. 5. They should submit both the annotated draft and their final draft for submission. 6. They should receive feedback from their tutor within three weeks of submission.

Table 2: Module/course/paper planning matrix

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[49] CHE 2010

Summative assessment	Practical activity and written assignment.
	1. This activity counts 70% of their final module mark.
	2. Students should revise the lesson plan they developed previously in the light of feedback received.
	3. They should teach the lesson.
	4. In Microsoft Word, they should write a reflective account of the lesson. They should describe accurately what actually happened. They should evaluate what worked, what did not work, what could be done differently and any departures from the plan. They should support their description and evaluation with reference to appropriate learning theory.

Having developed an overall picture of what the module seeks to achieve and what evidence will be needed of student performance, we can then break the planning down further into units or lessons. In each case, it is useful to identify the key concepts that we want to cover in manageable chunks and the key activities that will encourage active student engagement as well as developing the competences that will enable students to work successfully on their tutor-marked formative assignments.

Unit	Core concept(s)	Key activity(ies)
1	Everyday and school learning	Blog
2	Behaviourism	Quiz Blog on pros and cons
3	Cognitivism	Quiz Forum discussion on pros and cons
4	(Socio-)Constructivism	Quiz Wiki on pros and cons
5	Connectivism	Quiz Chat on pros and cons
6	Theory and practice 1: Planning	Wiki (on example) Forum discussion
7	Theory and practice 2: Practice and reflection	Wiki (on example) Forum discussion

The example provided flows from an assumption that teaching is a purposeful activity and that we should have a clear idea of what we want to achieve and what we want students to know/be able to do/feel differently as a result of working through the learning resources. We need to think about what students will need to provide in the way of evidence of their achievement for summative assessment purposes, how we will prepare for that through formative assignments (and feedback thereon) and how the activities in the learning resources will in turn prepare the ground for the formative assessment.

We can then sequence the topics/themes we want to cover and begin thinking about what would be appropriate activities for the content that has been covered. In the template in Table 2, for example, a wiki seems like an appropriate kind of activity to reflect a socio-constructivist approach while a chat, in contrast, might better capture the dynamic nature of learning associated with a connectivist approach. (We consider guidelines for writing good activities a bit later in the *Guide*.)

Once we begin developing courses, it is important to provide a clear introduction to the course, what it entails and how it fits within the larger programme. A typical structure for the introduction to a course/module/paper might include answers to typical student questions as listed below:

• Introduction to the course.
• What is the purpose of the course?
• What is covered in the course?
• How does the course relate to the rest of the programme?
• How will the course be assessed?
• What are the objectives/outcomes of the course?
• How much time will be needed?
• How does the course teach?

It is helpful for independent distance students if learning resources follow a similar format and design. The template below provides an example of the kind of structure that should probably inform units of learning within a distance education programme, especially at undergraduate level and initial postgraduate level (NQF Levels 5–8) whether offered in print or digitally. Obviously the exact structure/terms would be adapted for different courses and purposes.

Design of a unit of learning

Course code:
Semester/year:
Module name:
Unit title:
Time allocation:

Introduction

1. What is the purpose of the unit? How does it link to what has gone before? How does it link to what is still to come? What assumptions are made about what students already know and can do?

2. Pose an open question, for which there is no quick and easy answer, to the students – the investigation of this question will provide a purpose for each of the activities and content sections below.

Objectives

By the end of the unit, you should be better able to:
1. Plan a lesson on a topic of your choice and explain your planning decisions.
2. Teach the lesson you have planned, departing from or adapting the plan as necessary in response to the needs of different pupils.
3. Critically reflect on your plan and practice based on your experience of teaching the lesson.
4. Change the plan for the next time you teach this topic so that you will teach it better.

Introductory activity for self-study

Create an activity that gets the students reflecting on what they already know but also challenges their knowledge and shows the need for more learning.

Feedback

Provide some feedback on the above activity that also introduces the next content/activity cycle.

Content 1

If required, provide content for the students to read. The content should work towards a solution to the open question posed in the introduction.

Development activity for self-study

Students need an activity where they engage with the content. Ask them to do something with the content such as, **recall** information – **comprehend** the meaning – **apply** content in new situations – **analyse** usefulness for their own contexts – **synthesise** the content with other information the student already has – **create** something new that uses the content as a building block.

Feedback

Provide some feedback on the above activity that also introduces the next content/activity cycle.

Content 2

Development activity for self-study

Feedback

<<Repeat, Content | Development Activity | Feedback, as needed>>

Consolidation activity for self-study

This activity allows the student to demonstrate that they have achieved the outcomes or objectives stated at the beginning of the unit. It could also be a consideration of the original open question to see if they now have the knowledge and skills to answer it.

Summary

The main points of the unit are briefly identified in a concise manner. A bulleted list could be used.

Self-assessment

It is useful to provide an opportunity for students to reflect on whether they have met the objectives of the unit.

Conclusion

Link what has taken place in the unit to what has come before and what is still to come so that the unit is seen as part of a process rather than a discrete unit.

Group discussion activity for the online forum etc.

This provides an opportunity for students to reflect on any challenges they encountered in working through the learning resources, to share and discuss the findings of any practical activities they completed, and to further consolidate the learning through additional activities designed specifically for a group discussion.

ICT integration activity (to build skills that will continue to be applied across the programme)

This provides an opportunity for students to practise their ICT skills by completing a course-related ICT-based task e.g. complete a self-assessment quiz, develop a PowerPoint presentation on what they have learned, write a short blog, contribute to a wiki-based review of the learning resources etc.

Example: A toolkit for effective course design

Saide has developed an *open Course Design and Materials Development Guide*, which is built around the core questions that course designers need to address and provides suggested processes, tools and templates that may be useful.

CHOOSE ONE OF THE SECTIONS BELOW TO EXPLORE

Section 1	Section 2	Section 3
Introduction	Course Design	Materials Development

Five important questions lie at the heart of Course Design and Materials Development:

Question 1	Question 2	Question 3
Where do we start?	What do learners need to learn?	How can we help learners learn?

Question 4	Question 5
How will we know learners have learned?	How can we be sure of good quality learning?

3.7   Materials development and OER in distance education

One of the two key distinguishing features of distance education provision is the development of resources designed for independent and collaborative learning. A logical place to start when considering the resources needed to support the curriculum is to consider what already exists. We are then faced with one of the three decisions:

• Adopt something that already exists; or
• Adapt something that already exists; or
• Create something because nothing that already exists is suitable.

Much of the time, distance educators find themselves working in the second of these three possibilities, and the advent of OER has made this increasingly possible.

3.7.1   What are OER?

OER comprise anything from single objects to complete programmes that are made available under an open licence that specifies upfront how they might be used or re-used for educational purposes. OER can facilitate the process of adaptation, being made available under a licence that explains the conditions under which the existing resource may be used or adapted. The most common licensing framework is that of the *Creative Commons (CC)* and the most commonly used licence conditions are attribution (acknowledge the original source), no commercial use (the resources can be re-used for non-commercial purposes only) and share-alike (if the resource is adapted for use in a different context, the adapted resource should be shared back so that it can in turn be adapted by other users if needed). The original owner of the resources retains the copyright but through the application of an open licence helps potential users know in advance the conditions under which the resource might be used and/or adapted without needing to seek further permissions or pay any licensing fees.

Where OER have been incorporated into distance education programmes, it is important that their selection and use has been guided by the same kind of quality design considerations as already discussed above, which we may in time be able to partly automate to improve the reliability of searches for good resources.[50] Often institutions will use OER to supplement existing text-based resources with other media such as audio and video resources or animations or educational games that they lack the capacity to develop in-house. With resources being drawn from multiple contexts and providers, there is a danger of a loss of coherence and this needs to be carefully considered at the programme and course design levels. The issue of coherence will likely be nuanced slightly differently for different kinds of programmes.

Example: OER in action

The design of programmes, the selection and presentation of appropriate resources and the integration of supportive ICTs are always undertaken in response to a perceived need for a particular context and group of students. In most instances it is difficult to find existing resources that are a perfect fit for our curriculum needs and sometimes we simply make do – prescribing readings and textbooks and models that may not speak that well to our particular contexts. The advent of open licences that enable the development and sharing of OER has created the possibility of using and remixing existing resources from different places, without the need to seek extra permissions or to pay licence fees, for a much better fitness for purpose.

In this Section, we provide an overview of some African OER initiatives, to illustrate what is possible. The *OER Africa* site provides access not only to the OER content developed in each project, but also to the documented process of developing the OER, and the tools used, as well as various toolkits to support collaboration in this area.

ACEMaths project

The aim of the *Saide ACEMaths project* was to pilot a collaborative process for the selection, adaptation and use of OER materials for teacher education programmes in South Africa. The *ACEMaths* module *Teaching and Learning Mathematics in Diverse Classrooms* is available for downloading for free in two formats: for printing (PDF), and for adaptation (Microsoft Word).

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[50] Rodríguez, Dodero, & Alonso 2011

AgShare Planning and Pilot project

The aim of the *AgShare Planning and Pilot project* is to create a scalable and sustainable collaboration of existing organisations for African publishing, localising, and sharing of teaching and learning materials that fill critical resource gaps in the African MSc Agriculture curriculum, and that can be modified for other downstream uses. The project's objectives are to create a strong foundation for growth and expansion by providing evidence of key metrics so that *AgShare* can achieve its vision of success.

Health OER Inter-institutional project

The *Health OER Inter-Institutional project* is a collaboration of institutions seeking to develop a sustainable and scalable model for the systematic rollout of OER to support health education on the continent. The OER materials produced in this initiative will be made freely available to students, faculty, and self-students around the world through a C*reative Commons* licence.

Health Informatics Building Blocks project

The *Health Informatics Building Blocks (HIBBs)* project seeks to strengthen global capacity to train the health workforce to use health information and health information and communication technologies (HICT) by providing a central, trusted source of freely available training content and catalysing linkages among health informatics trainers and users worldwide. The *HIBBs* project collaborates with partners to develop openly available HICT training modules for distance or face-to-face learning. *HIBBs* modules are designed to be adaptable to local needs and technological capabilities.

IADP-SADC Digital Resources project

The IADP-SADC Digital Resources project looks to extend the *International Association for Digital Publications (IADP) Affordable Access* project running in South African higher education institutions into universities in Malawi and Botswana. It has two main thrusts: firstly, to provide staff and students with discounted digital texts accessed from digital reading rooms as well as private laptops; and secondly, to promote the creation, adaptation and remixing of OER into texts, to support the student body by providing affordable, quality texts.

PHEA Educational Technology Initiative

The Partnership for Higher Education in Africa (PHEA) Educational Technology Initiative (ETI) was a five-year programme that aimed to support interventions in universities supported by the PHEA to make increasingly effective use of educational technology to address some of the underlying educational challenges facing the higher education sector in Africa. Among the strategic objectives of this initiative were to support teaching and learning initiatives that integrate educational technology; and to promote collaborative knowledge creation and dissemination. While the programme drew to a close at the end of 2013, its work is being taken forward by many of the projects initiated under the ETI.

Skills for a Changing World project

The *Skills for a Changing World* project seeks to provide educational opportunities for those who are currently excluded from post-schooling education, both at Further Education and Training (FET)/Technical and Vocational Education and Training (TVET) and higher education levels. In addition to preparing students for further study, the programme aims to prepare students for the world of work by focusing on the development of generic skills that are essential for successful functioning in today's economy.

3.7.2   Resources for distance education provision

This Section of the *Guide* provides some guidelines on the design of distance learning materials.

In terms of learning design, a key indicator for distance education is the way in which the materials tell a coherent story and unfold an argument that can be followed in a context of independent study and/or collaborative activity independent of the lecturer. Linkages between modules, between units, between sections of units and between activities, feedback and core content are central to this.

The following is a useful set of guidelines[51] for evaluating the appropriateness of learning resources for distance students. The guidelines may also be used as a checklist when developing such resources.

3.7.2.1 Key characteristics of distance learning resources

The criteria cover the following areas:

- Orientation to the programme, introductions, aims and learning outcomes.
- Selection and coherence of content.
- Presentation of content.
- View of knowledge and use of students' experience.
- Language and dialogue.
- Activities, feedback and assessment.
- Layout and accessibility.

Orientation

This category for review is about the way that clear and relevant information can motivate and direct students effectively in their study. Students need to understand from the outset the requirements of the various components of the course. As students, they need to be motivated by relevant introductions and overviews within each individual module/unit. They also need to be clear about what they have to achieve in each unit and these aims and learning outcomes should be consistent with the goals of the course.

Selection and coherence of content

What are at issue here are rigour, interest and relevance. The content should be well researched, up to date and relevant to the South African context. It should also be possible for students to be able to see how the content is related to the learning outcomes and goals of the course. Coherence is also important. If the components of a course are contradictory or unrelated to one another, the impact of the course will be considerably lessened.

The following table, adapted from a 1993 workshop run for Saide by Fred Lockwood of the Open University, summarises some of the main differences between traditional textbooks and self-instructional materials that might be a useful tool for self-assessment for subsequent materials development. It is interesting to note that as resource-based learning gains ground, so more and more textbooks reflect self-instructional principles.

Some differences between textbooks and distance education materials	
Textbooks	**Distance education courses**
Assume interest	Arouse interest
Written for lecturer use	Written for student use
No indication of study time	Give estimates of study time
Designed for a wide market	Designed for a particular audience
Rarely state aims and objectives	Always give aims and objectives
Usually one route through	May be many routes through
Structured for specialists	Structured according to needs of student
Little or no self-assessment	Major emphasis on self-assessment
Seldom anticipate difficulties	Alert to potential difficulties
Occasionally offer summaries	Always offer summaries
Impersonal style	Personal style

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[51] These guidelines were developed by Saide and have also been used for national courseware awards processes by Nadeosa: detailed elements inform the broad criteria outlined here.

Some differences between textbooks and distance education materials	
Textbooks	**Distance education courses**
Dense layout	More open layout
Readers' views seldom sought	Student evaluation always conducted
No study skills advice	Provide study skills advice
Can be read passively	Require active response
Aim at scholarly presentation	Aim at successful learning

Table 3: Characteristics of distance education materials

Presentation of content

This has got to do with how the content is taught. There is no one 'right' way to teach content – it will vary according to the subject and the audience. However, there are certain pointers for a reviewer. These include a clear explanation of concepts and a range of examples, as well as sufficient and appropriate ways for students to process new concepts rather than merely learn them off by heart.

View of knowledge and use of students' experiences

In many contexts, where rote learning and authoritarian views of knowledge have been the norm, particular attention needs to be paid to the way knowledge is presented. The perspective we would wish to promote is that knowledge should be presented as open and as constructed in contexts, rather than merely received in a fixed form from authorities. Students should be given opportunities to interrogate what they learn, and their prior knowledge and experience should be valued and used in the development of new ideas and practices. Frequent opportunities and motivation for application of knowledge and skills in the workplace, where relevant, should be provided, but this should be done in a reflective rather than mechanical way.

An underpinning epistemology, whether implicit or explicit, will affect the pedagogical choices made in programme and course design and materials development. In general, materials often do not build sufficiently from the assumed prior learning and experience of the students and tend to present content in an unproblematic way – as though there were only one interpretation of reality. Materials tend not to set up opposing viewpoints even though, at a higher education level, students should be able to cope with two or more viewpoints. Objectives and activities are often set at the lowest level of Bloom's or the SOLO taxonomy. A key characteristic of most progressive education systems is high expectations of students, but in many ODL course materials there are few demands in the materials on the more gifted students. It would seem useful to pause and reflect on what epistemological and pedagogical assumptions a programme of study wishes to espouse and promote (see the discussion in 2.2).

Language and dialogue

Aside from the obvious importance of clear, coherent language at an appropriate level for the students, the kind of style that is used is crucial. The style can alienate or patronise the reader, or it can help to create a constructive learning relationship with the reader. Style needs to be judged in terms of specific audience and purpose, and so a standard set of criteria is not useful. However, it is always helpful if new concepts and terms are explained and jargon is kept to a minimum.

It is important in ODL materials to engage in a dialogue with the students. For example, in order to fulfil the lecturer's role in the text, it is important that the writer of a distance education course establishes an ongoing and personal dialogue with the student. In the classroom, the lecturer talks to the students: s/he will explain the goals of a particular lesson, introduce topics, ask questions and answer them, guide students through difficult topics and ideas, give feedback, and motivate and encourage students. Distance education students are as much in need of this ongoing dialogue as students sitting in a classroom. Adapted from Lewis (1981) below are some examples of attempts to establish and maintain this sort of dialogue in printed distance education material. The setting of learning outcomes and the inclusion of summaries are an important part of this ongoing dialogue.

Dialogue in distance education materials		
Function	**Classroom talk**	**Distance education dialogue**
Indicating what the student should be able to do before tackling a particular project	'Go on to Chapter 6 of the book, but only if you've finished the work I set last week...'	Before starting this unit, you need to be able to... Complete the following activity, which revises the work you need to know before...
Stating what should be learned from a particular section	'This section deals with vertebrates. When you've finished it you should be able to list four main characteristics...'	By the end of this unit, you should be able to: discuss the use of dialogue in distance education course materials...
Practising so that students can see whether they have successfully achieved the outcomes	'OK. Now answer the questions on the sheet I've given you...'	This activity should help you to... Answer each of the questions in the spaces provided... Suggested answers can be found on page...
Feedback on the student's performance	'I'll hand back the essays you did last week...'	In answering the question you may have thought of the following points... This assignment was well done and I like...but you could have...
Motivation and stimulation	'It's tough going but it's worth struggling over, and it gets easier later on...'	If you disagree strongly with the commentaries, you can contact your tutor on... Do not worry if you still feel a bit uncomfortable with this idea, we will be exploring it again from a different point of view in Unit 5...
Unpacking the often difficult language of the textbook so that it makes sense to the student	'What it means is this...'	We must write in such a way that the material always makes sense to the student... Another way of thinking about this could be to...
Relating concepts to the student's experience	'You know when you cut your finger...'	In the space below, describe a lesson you taught recently that went particularly well. What preparations on your part do you think contributed to the success of the lesson?

Table 4: Examples of dialogue in distance education materials

The following guidelines neatly summarise and illustrate recommended language practice in the development of distance education materials for a diverse student group:

- Prefer short words (*use*) to long ones (*utilise*).
- Prefer familiar words (*give*) to more exotic ones (*render*).
- Prefer concrete words with metaphorical potential (*bloom, soup*) to abstract ones (*effloresce, substance*).
- Prefer verve-giving verbs (*try, simulate*) to needless nominalisations (*attempts have been made, provide a simulation of*).
- Prefer actives (*chemists have tried*) to passives (*attempts have been made by chemists*).
- Prefer shorter sentences to longer ones, avoiding in particular complex sentences with centre-embedding (*water, carbon dioxide, methane and ammonia, [which are all simple compounds, [known to be present on at least some of the other planets in our solar system,]] are among the plausible possibilities*).

- Prefer affirmative sentences (*...and is probably close to the truth*) to negative ones (*...cannot be too far from the truth*).
- Prefer a fairly personal style (*I shall give, we do not know*) to an impersonal one (*the account given here*).
- Avoid vague or ambiguous pronoun reference (B*ecause, by definition, it could not be observed, the account of the origin of life given here is necessarily speculative*).
- Provide adequate connecting links between clauses and sentences (*in particular, so*) especially where the meaning relation between the sentences is discontinuative (*but*).
- Abide by the given-new contract (*compare the positioning of a number of rival theories and after a few weeks of this*).[52]

Activities, feedback and assessment

A major strategy for effective teaching in course materials is the provision of a range of activities and strategies to encourage students to engage with the content. If the course designer provides feedback or commentary on these activities, then students will experience a form of the discussion that takes place in lively classrooms.

Furthermore, because students work through the materials largely on their own, they need some means of assessing their own progress. Comments on the activities in the materials can help to do this. The assessment criteria for the programme as a whole should be made clear to students and should be appropriate to the intended learning outcomes.

Layout and accessibility

Effective layout/presentation of printed or digital materials maintains a creative tension between consistency and variety. It is important that students are able to find their way through the various units and sections by the provision of contents pages, concept maps, headings, subheadings, statements of aims and learning outcomes, hyperlinks and other access devices. The text also needs to be broken up into reasonable chunks, and the layout should assist the logical flow of ideas. At the same time, a very predictable format can lead to boredom. A good way of introducing variety is through the use of visual material such as concept maps, pictures and diagrams, and so, where appropriate these elements should be included. This has the added advantage of catering for students who learn best through visual representations of ideas. Where the course is presented through another medium, or where other media are used to support printed course materials, similar issues of accessibility need to be applied to the other media employed. The medium chosen, and the way it is used, should be appropriate for the intended learning outcomes and target audience.

In most cases, and particularly with access to the Internet, we can find existing content that almost meets the needs of the courses and programmes we wish to offer but which, ideally, needs to be adapted slightly for a better fit for context.

3.7.2.2 Academic programmes

Academic programmes often set pre- and co-requisite requirements to guide the selection of learning modules in a coherent way: e.g. Economics 101 at NQF Level 5 is a pre-requisite for Economics 102 at NQF Level 6 and this, in turn, is a pre-requisite for Economics 103 at NQF Level 7. However, sometimes programmes cut across different sub-disciplines and coherence may be lost in the process. Consider, for example, a general BA degree comprising 30 modules of 12 credits in three different disciplinary areas. What guidance is provided to students about appropriate combinations, sequencing and workload to help them make informed choices, enjoy a coherent learning experience and pace themselves appropriately for success?

3.7.2.3 Professional programmes

Professional programmes also often cut across disciplinary areas and may also involve a workplace component. Consider, for example, a teacher education programme. A candidate teacher may well choose to specialise in languages (taught by a Faculty of Human Sciences) and technology (taught by a Faculty of Science, Engineering and Technology) while needing to study core educational content (taught by a Faculty of Education). To what extent do the approaches of these three different faculties cohere? Again we need to ascertain what guidance is provided to students about appropriate combinations, sequencing and workload to help them make informed choices, enjoy a coherent learning experience and pace themselves appropriately for success. In this particular example, there is the added dimension of needing to manage

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[52] Hilton Hubbard of the Linguistics Department of UNISA (in Mays 2004)

teaching practice placements. We need to consider how teaching practice placement requirements are communicated to prospective students prior to registration; when teaching practice should take place in relation to the progress with other parts of the curriculum; and how teaching practice placements are administered, supported and assessed for a distributed body of students in diverse contexts.

3.7.2.4 Vocational programmes

Vocational programmes offer similar challenges to the above with the added complication that they may involve several workplace placements as well as practical sessions that need to be supported, managed and assessed in an even wider range of contexts. Managing employer/workplace relations and placements as well as practical sessions for a distributed student body is complex and requires dedicated staff and systems.

3.7.2.5 Other issues

The CHE's (2011) *Work-Integrated Learning: Good Practice Guide* (pages 16–21) contains a discussion and examples related to different curricular modalities as follows:

- Work-directed theoretical learning.
- Problem-based learning.
- Project-based learning.
- Workplace learning.

The general issues and principles discussed there would apply also in a distance education context but with the added complexity of how institutions design, manage, support and assess these kinds of approaches in such a way as to ensure equivalence of experience across a distributed and diverse body of students.

Interestingly, and perhaps predictably, different distance education providers have adopted different dominant teaching and learning approaches to meet these perceived needs:

- For many years, print-based correspondence studies have been championed by UNISA (although this is now changing as UNISA has committed to migration to an ODL model).
- The United Kingdom Open University introduced notions of team approaches to materials development, the provision of extensive decentralised tutorial support and the integration of media, including public broadcasting, which became the model for many other institutions.
- FernUniversität emphasised research as a basis for learning.
- Broadcasting media were used to find a balance between distance and proximity by the Central Radio and Television University in China.
- Multimedia systems have been favoured by the University of the Air in Japan.
- Autonomous study has been championed by Empire State College in the USA.
- Interactive video has been favoured by the American National University Teleconference Network.
- Teleconferencing has been a key strategy for the 'Contact North' in Canada.[53]

Institutions need to be able to justify their choice to use distance education approaches, and their choice of approaches, in terms of their vision and mission, the capacity of their institution to deliver and the needs of their target population(s) of students.

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[53] Peters 1998

Example: NAMCOL – finding a model that is fit for purpose

Namibian College for Open Learning (NAMCOL)

NAMCOL provides an example of an approach that seems to be informed by the 'fitness for purpose' principle.

NAMCOL has been set up as a public institution that provides an opportunity for secondary school students to achieve a school-level qualification (Junior and Senior Certificate) and other professional certificate or diploma programmes in areas such as child development, local government studies and business management.

The institution has a flexible implementation model, which includes resource-rich individual study packs, and digital media and, most recently, some courses have been mounted on Moodle, an online learning platform. Programmes are coordinated from one main centre located in Windhoek, with smaller regional centres across the country (significantly, many centres equipped with ICT facilities are open for use by students from multiple institutions who have collaborated to form an open learning network – NOLnet). This model overcomes some of the challenges of distance and location given the vastness of the country and the low population density. The institution has adopted a blended mode of delivery with more frequent face-to-face sessions for junior programmes. Implicit in this practice is the assumption that more senior students are able to take increasing responsibility for their own learning. The learning centres are also open during weekends and holidays, and during the day and evenings. These opening hours enable students who are committed during conventional teaching hours and timetables to engage in learning programmes and activities.

Since 2013, NAMCOL has also introduced a small basket of technical and vocational education and training (TVET) programmes. Contact time typically takes place within existing schools to minimise capital costs, and educators who are currently employed in the ordinary schooling system are typically employed on a part-time basis to teach NAMCOL students. The institution uses exams that are nationally set so that students within NAMCOL can be compared to those in the ordinary schooling system. Emphasis is placed on tutor training and development to increase the quality of the learning experience for students. It is also reported that the nature of this model has reduced delivery costs compared to the costs incurred when students are completing such programmes in the ordinary schooling system (which is premised upon a face-to-face model of teaching and learning). NAMCOL has around 30 000 students and at the secondary level achieves results comparable to the schooling system.

4. TEACHING AND LEARNING IN DISTANCE EDUCATION IN A DIGITAL ERA

This Section explores the ways in which the changing context – both of the wider society and of higher education – is influencing how we understand teaching and learning and the changing roles of students and staff alike in this process. The discussion in this Section bears particularly on the following minimum criteria: 5: Teaching and learning strategy, 7: Library services, 11: Academic development, 12: Teaching and learning interactions and 17: Student retention and throughput.[54]

4.1 The changing profile of distance education students

The student experience in the 21st century will likely be characterised by more years of engagement with education over the course of a lifetime, as well as greater options in terms of what, when, and how to study. In most parts of the world, students will increasingly need to finance their studies from personal resources...Students and their families will require more detailed and comprehensive information on the relative merits of different study options as the higher education sector expands and evolves in many countries and the incidence of cross-border delivery grows. Finding ways to protect students' rights and enhance their roles in governance and decision making will be especially important if higher education is to respond effectively to changing student profiles and needs the world over.[55]

However, it has been suggested that many of the students entering higher education and training are underprepared for study at this level. A commitment to 'engaged learning' in the ways in which programmes and resources are designed and mediated may help 'to scaffold the underprepared to learn more effectively'.[56] Such an approach places emphasis on building on and creating opportunities for students' experiences, requires the active participation of students in making informed choices about their own learning, and provides structured opportunities for students to reflect upon their learning both inside and outside of the classroom in order to construct and justify their own conceptual understandings through interaction with others.

A 2009 UNISA Corporate Profile[57] observes the following:

- UNISA provides access to a growing number of younger students with students in their twenties currently making up 47% of the student enrolment figure.
- UNISA's student profile increasingly reflects South African demographics. Female students account for about 57% of the total registrations, while black students (Africans, coloureds and Indians) make up 76%.
- 90.5% of students are enrolled at the undergraduate level.
- 18% of students are effectively full-time students while 46% are employed.

In addition to the above, some 70% of students now register for their courses 'online' – either remotely via the UNISA website or by using one of the 'self-service' terminals at the various regional centres.

Similar changes are noted by the UK Open University, which is increasingly attracting younger students, who combine study with work and other needs.[58]

At the 17th Conference of Commonwealth Education Ministers, held in Kuala Lumpur in June 2009, the Youth Forum made the following recommendations to education ministers, which indicate some of the expectations of a new generation of distance education students:

- Student representation: Students should be involved in decision-making bodies within the education system.
- Mode of delivery: Arguing that traditional methods of teaching are not adequate in this age, the Youth Forum advised Ministers to facilitate the use of information and communication technologies (ICTs) and establish a special Commonwealth fund for ICTs in education.

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[54] CHE 2014
[55] Altbach, Reisberg, & Rumbley 2009: 107
[56] Brüssow & Wilkinson 2010: 374
[57] UNISA n.d. c. 2009: 15–16
[58] Murray, J. Young Students Flock to the OU. The Guardian, Tuesday 29 June 2010.

- School to life transition: Vocational and technical disciplines should be incorporated into the main stream system, and work experience and community involvement should be a mandatory part of the education process.[59]

This leads us to deduce that the age, needs and expectations of students entering distance education institutions are changing. We should ask ourselves if there has been a concomitant change in the kinds of programmes needed and offered.

4.2 Pedagogy and distance education

It is suggested that both the selection and the manner in which resources and ICTs are used to support learning are influenced by explicit or implicit assumptions about the nature and purpose of teaching and learning. This is illustrated in Table 5.

Decisions made regarding:	*Three scenarios are presented reflecting three dominant ways of making decisions about what to teach and how – the dotted lines reflect that the boundaries between them are often quite blurred and in practice there is often movement between them.*		
Communicating the curriculum	• Outcomes and content finalised before programme. Apply to all students. • All students start and end at the same time and follow the same study sequence. • Emphasis on providing 'finished' content through lectures/printed materials/multimedia/ICTs. • Use of generic tutorial letters offering assignment model answers/ provision of model answers to tasks.	• Outcomes and content finalised before start but programme offers core and elective options. • Ongoing enrolment, but same study sequence for all students. • Emphasis on providing resources and scaffolding to enable students to construct their own understandings, through tutorial-in-print; 1-1 contact tutorials; emails; tele- or e-tutoring.	• Outcomes and content negotiated with students before start of programme. • Ongoing enrolment and modularisation allow multiple pathways. • Emphasis on providing resources, not always complete, that reflect multiple perspectives, and inviting discussion via email, website forums, in small group contact tutorials.
Communicating the curriculum	• In-course activities few or used to consolidate memorisation of content. • Tutor/materials developer seen as expert transmitting knowledge.	• Emphasis on individual feedback on assignments. • In-course activities require students to construct and demonstrate their own understanding. • Tutor/materials developer seen as scaffolding learning opportunities.	• Emphasis on formative feedback on both individual and group tasks; feedback as continuation of discussion. • In-course activities favour discussion/collaboration with others and examination of multiple viewpoints and multiple resources. • Tutor/materials developer seen as co-collaborator and co-student.
Engaging with the curriculum	• Assume that students have appropriate study skills. • Students expected to master content. • Emphasis on recall in activities, assignments and examinations.	• Enable reflection on and development of metacognitive skills. • Students expected to construct own understanding; therefore concern with both product and process. • Emphasis on problem identification and problem solving in activities, assignments and examinations.	• Enable reflection on and development of metacognitive and social skills. • Students expected to co-construct knowledge with others; emphasis on process. • Emphasis on critical analysis and open-ended discussion.
Applying what has been learned	• Assessment by tutors only. • Assessment tasks require recall. • Assessment tasks include assignment content tests; examinations.	• Assessment by self and others. • Assessment tasks require application of knowledge in authentic situations. • Variety of individual assessment tasks, including portfolios.	• Assessment by self, peers and tutors. • Assessment tasks require reflection and application in congruent real-life contexts. • Variety of assessment tasks, including group tasks.

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[59] CoL 2009: 2
[60] Adapted from Mays 2004: 52

Typical resources	• Single prescribed textbook.	• Prescribed and recommended mixed resources; with intent to set up debates.	• No limits on resources consulted including idiosyncratic resources and resources co-constructed as part of the learning process.
Uses of technology	• Focus on efficient ways to transmit content	• Technology used to create access to a wider range of resources and to facilitate two-way communication.	• Technology used to shift the teaching-learning transaction from content provision and testing to open-ended exploration, co-creation of new knowledge and interactions that move beyond traditional boundaries of the institution.

Table 5: The impact of different conceptions of learning on practice (continued)

Table 5 suggests that assumptions about the nature and purpose of teaching and learning, whether or not made explicit, will influence the choices lecturers make about the selection and use of both resources and ICT. Dotted lines are used inside the table to indicate that boundaries are by no means clear. Although different approaches might be needed by different students at different stages in their learning journey, the overall trend is towards favouring practices towards the right of the table. However, this has profound implications for the ways in which learning programmes are designed, supported and assessed, and consequently also for the expectations of students and teaching staff.

Probably the most important and perhaps the most difficult transition to the online/blended learning mode for lecturer and student alike is that of adjusting to the online communication medium, be it used synchronously or asynchronously. This includes concepts and practice surrounding teaching and learning interaction, engagement and facilitation.

Programme design should be guided by an upfront decision concerning the level of mediation that is to be employed in the online component of the course by the lecturer directly and/or by decentralised tutors or facilitators. Large student numbers would indicate the employment of tutors to manage and facilitate small virtual group online interaction. In the first instance, interactions would typically be: tutor/instructor-student, and student-student. However, the online environment offers greater potential for an expanded environment,[61] including linking with expertise residing outside the institution, as shown in Figure 5 (below).
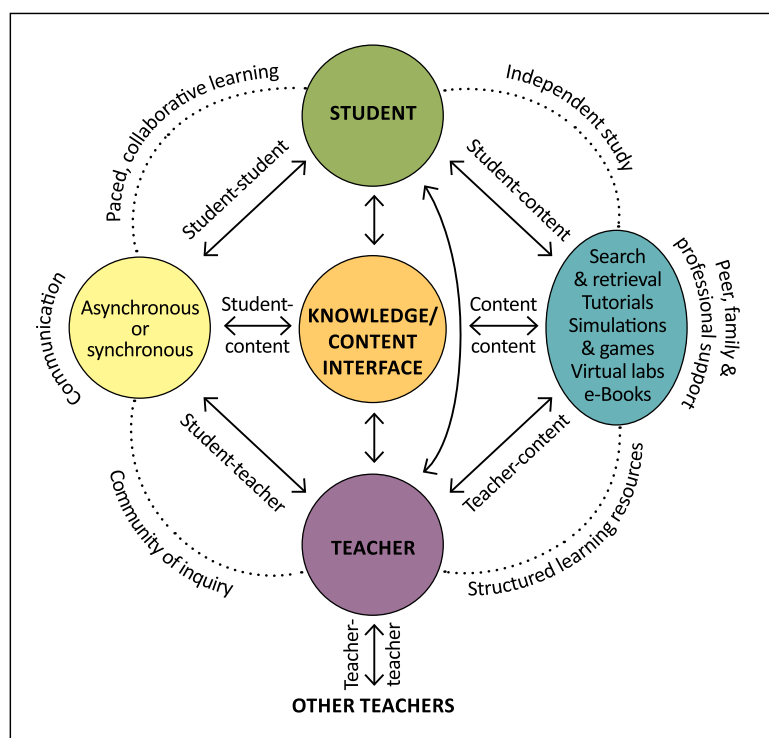

Figure 5: A model for online learning[62]

[61] Anderson 2008
[62] Anderson 2008: 61

Not all aspects of Anderson's 2008 model (Figure 5) will necessarily feature in all programme designs – for example, the development of simulations and games or virtual labs is time consuming and may not be appropriate to all contexts. However, it does seem to make sense for all programmes to at least create some opportunities for greater student–content interaction (e.g. through the design of meaningful activities with feedback, automated or otherwise), opportunities for student–lecturer interaction inside or outside of normal office hours by email and through online forums, as well as student–student interaction (as students can often support one another in the learning process and an online community of learning can help overcome the sense of isolation that often characterises distance education provision).

Although perhaps more extreme in sub-Saharan Africa for a host of historical and current reasons, similar challenges regarding effective teaching and learning are also evident elsewhere as society adapts to the increasing availability of and demand for information enabled by the ubiquitous availability of ICT. Laurillard (2002, 2006) suggests that there is consequently a need to rethink the way we teach in the new knowledge society, including adopting a more professional, research-based teaching approach that parallels the professional approach the sector has always adopted towards research; placing greater emphasis on the development of the long-term high-level cognitive skills of scholarship; and using technology to promote meaningful interaction and engagement.

Expansion of distance education provision in higher education is increasingly being associated with greater use of educational technology, for precisely these kinds of reasons. In South Africa, although there is currently only one dedicated public distance education institution, there has been a considerable increase in the number of students studying on distance education programmes at predominantly contact institutions, a process that is supported by evolving policy guidelines for post-schooling provision generally. The increasing use of ICTs in support of teaching and learning has made it possible for more providers to engage students that are not in the same place at the same time, that is, reach students 'at a distance'. This has meant that many institutions/programmes that would characterise themselves as contact/face-to-face may be moving into distance education provision without necessarily making a conscious decision to do so. It is clear that providers of face-to-face education cannot ignore the wealth of possibilities offered by mixed mode or blended e-learning. This is seen as essential in terms of opening access and increasing graduate output.

4.3   Role of ICT in supporting teaching and learning

Consideration needs to be given not only to the extent of temporal or spatial separation of lecturer and student, but also the extent to which digital technology is used to support the teaching and learning in a programme. The flexibility of the temporal dimension in technology-supported teaching and learning provides a great pedagogical strength. Interaction can either be synchronous (at the same time) or asynchronous (with delays). The asynchronous nature of many of the communication and collaboration technologies currently available allows students to reflect and contribute more meaningfully in an online dialogue, thus hopefully developing and improving their critical thinking skills.

In fully online programmes all interactions with staff and students, educational content, learning activities, assessment and support services are integrated and delivered online. Blended programmes with some elements of online participation could also be digitally supported offline e.g. by use of CD/DVDs/flash drives/mobile devices with course content pre-installed. In the South African context, this could alleviate excessive and expensive downloading of multimedia materials.

When designing or transforming a course for online delivery, the presence of the learning pathway becomes more important than ever and needs to be carefully designed and implemented, so that the navigation framework for the course is entirely clear. It should not be assumed that the activities, assignments and assessment would necessarily be scheduled to take place online. The potential of the new environment should be exploited only if and when it is deemed to be relevant and appropriate. The instructions and guidance for each activity should be entirely explicit, as this environment will form students' primary source of reference for their engagement with the course.

Thus, the potential of the digital medium should be exploited to the full within the constraints of the target teaching and learning environment, ICT infrastructure and available budget. Multimedia elements could be incorporated where appropriate. However, careful consideration should be paid to the pedagogical purpose (the primary driver) of any multimedia learning object – this should always be supported by the appropriate use of ICTs.

With regard to online assessment, there are a variety of assignment and question types that are typically supported by VLEs/LMSs. However, it is important to note that the usual considerations around the validity and security of assessment apply. The deployment of automated online assessment can be used more easily for formative than summative assessment,

unless a proctored examination venue is used, and a variety of appropriately structured and valid assessment forms are designed.

When engaging in a mediated online course, the 'teacher's presence' is of paramount importance. Students should also be given the opportunity at the beginning of a course to establish their own online presence and acknowledge other students as part of their group embarking on this learning experience together. Again, the opportunity to establish online presence should be explicitly built in at the design stage.

Taking into account the flexible nature of materials presentation in an online environment, the layout and layering of the various pedagogical elements requires particular attention. The 'layering' refers to the information that the student first sees on the online course 'landing' page (Figure 6), what course elements are then available via a hyperlink, and how they are presented; what activities and assessment are designed to support learning, and how these are supported by ICTs; and how students are to engage with the materials, their instructor and one another – all to be accomplished through making the most of opportunities afforded by the online environment. The elements of each section of a landing page would typically include: the title of the sub-topic; some textual narrative explaining what the section is about; and a clear indication of what the student is expected to undertake in this section, and how they should go about undertaking it. In order to keep the landing page uncluttered, the detail of any resources and activities is available via a link.

Recapping OER Concepts (1)

Open Educational Resources (OERs) are teaching and learning materials that are offered freely and are openly available online for educators and learners, without an accompanying need to pay royalties or license fees. OERs are free for your use under a variety of Creative Commons Licences.

This is particularly important for developing countries where access to academic resources mae be difficult and costly. Our aim as Africans is to become not only **consumers** of OERs, but also to become in practice, we need to know ho to **find** releveant OERs, **review** them for suitability, **adapt** them (if licenced for this) for our own context, and what the process is for **producing** and making available (**publishing**) our own OERs.

It is highly important to consider the **impact for acedemics and institutions** of publishing of publishing content as OERs. We are going to start by reviewing what are OERs, why use OERs and what are the licensing considerations of OERs.

Action 1: Together we will Recap OER concepts to contextualise our understanding of the major issues in utilising OER.

Action 2: The **OER activity** below will direct you to some OER repositories for further exploration. Please record the reresults of your search in the **Subject Specific OER forum** below.

OER Activities (1):

　Subject Specific OERs

OER Resources (1):
　Recapping OER
　Video Introduction to OER by David Wiley
　Openness and Repositories: Finding OER

Figure 6: An indication of layering within an online course

The introduction of a new technology for delivering the teaching component of the programme, even if it is confined to one course in the programme, will have consequences for all aspects of the programme, from recruiting and marketing to staffing and training to developing, producing, and disseminating materials and, perhaps most importantly, to monitoring and supporting learning more effectively.

Example: Predictive analytics

In order to improve retention, success and throughput we need to be able to track student progress continually, identify patterns in performance and behaviour and intervene proactively to support students who are at risk. US for-profit online higher education institution, the American Public University System, has had some success in identifying key indicators for risk and success and in 2011 used these indicators to support proactive interventions across multiple institutions in the USA. Its comparative research suggests that some indicators are institution specific:

• Gender and ethnicity are significant predictors at some institutions.
• A mean age of 25–31 is the most successful category.
• Collaborative strategies negatively impact part-time undergraduates.
• Hierarchical effects are present – certain institutions do a better job with different student profiles.
• An end-of-course survey is a very powerful tool for programmatic development but it must account for and collect feedback on unique pedagogies employed.

In 2012, an additional 24 institutions came on board in the USA, and in 2013 the initiative was internationalising.

Source: Ice, P. VP Research and Development: American Public University System. Predictive Analytics and the Future of Distance Education. Keynote presentation at *Nadeosa conference*, 30 August.

Example: Enhancing student success in ODL

Enhancing student success is a worldwide challenge. This challenge is particularly formidable at UNISA, which has large numbers of mainly non-traditional, older, part-time, underprepared students. They face challenging socio-economic circumstances, including particular work-related and domestic responsibilities, which impede student success. Internal analysis has shown that the main challenge in improving student success is improving retention within a programme of study over a period of time.

To address this, UNISA developed and introduced in 2011 an Integrated Student Support and Success Framework, which is a central component of the implementation of its ODL plan. The Framework requires an approach to quality assurance that is underpinned by the development of a holistic understanding of the factors that shape the 'fit' between student needs and institutional provision at different stages of the learning journey from application to alumnus.

For more information see: Subotzky, G. & Prinsloo, P. 2011. Enhancing Student Success in ODL: UNISA's Integrated Student Success and Support Frameworks and Strategies. Presentation at *Nadeosa conference*, 30 August.

We also need to give thought to the use of assistive technology to support students who encounter various barriers to learning, as illustrated below.

Activity	Issue	Assistive Technology Examples
Computer Access	When a student cannot access a computer with a standard keyboard and a mouse, he may need special input devices. These devices are commonly used by students with physical, visual or cognitive disabilities.	Software: OS accessibility features, word prediction, keystroke reduction, voice recognition, on-screen keyboard Hardware: Keyguard, arm support, trackball, trackpad, joystick, alternative keyboard, switch with Morse code, switch with scanning
Communication	For many autistic people and some with learning disabilities, augmentative and alternative communication devices may be helpful. They use symbols, pictures and printed words.	Software: Symbol browser, art activities, games on the computer Hardware: Voice output devices or devices with speech synthesis for typing
Reading	The low resolution of monitors can cause fatigue and eye strain for all users. For those with vision or learning issues, reading onscreen can be an added deterrent. Keeping track, following a line of text, understanding and remembering can be problematic.	Software: Talking electronic device/software to "pronounce" challenging words, electronic books, mindmapping, talking calculator, voice recognition Hardware: Single word scanners, scanner with OCR and talking word processor, hand-held scanners, hand-held computers

Activity	Issue	Assistive Technology Examples
Writing	There are two different accessibility issues when using computers for writing: 1) physical problems with typing; and 2) cognitive problems with composing and organising ideas and converting them into written expression.	Software: Templates, word processors, voice recognition, talking dictionary, spelling and grammar checker, multimedia software for expression of ideas Hardware: Alternative keyboards and input devices used as for Computer Access (above)
Learning	Students with learning difficulties may have problems with attention and with organising ideas.	Software: Multimedia software for expression of ideas, mind-mapping, electronic organisers Hardware: Hand-held Computers
Hearing and Vision	Assistive technologies for visually and hearing impaired students may either increase the signal or replace it with something else.	Software: Screen Magnifier, screen colour contrast, screen reader, captioning, computer-aided note taking Hardware: Braille/tactile labels, alternative keyboard with enlarged keys, Braille keyboard and note taker, signalling device, phone amplifier, personal amplification system/ hearing aid, FM or loop system

Figure 7: Assistive technologies to open learning[63]

4.4 Supporting the learning journey

For some practitioners, perhaps inclined towards a more post-modern perspective, 'open' approaches to distance education may require that 'student choice' entails a completely open choice: students might choose from a 'shopping basket' of offerings, and mix and match a learning experience according to their needs and interests at any particular time. For others, perhaps located in a more transactional paradigm, openness of choice should be balanced by the provision of guidance. Building a curriculum around fundamental, core and elective components would seem to offer a middle ground. Furthermore, identifying student needs at different stages of their learning journey and providing guidance for them to make informed choices at these different stages – in order to gradually shape a better 'fit' between student expectations, needs and aspirations and those of the institution – would seem to offer a useful way for institutions to think about the kinds of decisions that need to be made at different stages, and therefore what resources (including supporting ICTs) might be needed to enable this. Table 6 outlines some possibilities in this regard.

Step in the student walk	Appropriate technology for purpose and audience
1. Marketing and orientation	Provision of information in user-friendly styles and multiple modes (e.g. online, mobile, CD, DVD, multimedia, and print) and access to OER examples of learning resources enable potential students to make more informed choices. Supported by online advisors, call centre, or staff at decentralised regional centres.
2. Application: Responsible open access programme	Provision of diagnostic self-test quizzes available online, DVD, flash drives or in person at regional centres can help potential students to make appropriate choices about what, how much and in what mode to study. The emphasis should be on the most appropriate route to access learning rather than on testing for exclusion. Supported by online advisors, call centre, or staff at decentralised regional centres.
3. Registration	Students can register online remotely, at a self-service terminal at a regional centre, or seek personal assistance at a regional centre. Currently, about 70% of distance students register online. An ICT-supported registration process allows for automatic pop-up alerts regarding pre-and co-requisites, possible exam clashes, workload challenges and WIL components, such as teaching practice. It also allows for the possibility of immediate access to digital versions of resources, on successful registration, through the use of a toaster (i.e. CD writer/burner).

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[63] Boskic, Starcher, Kelly, & Hapke 2008: 158

Step in the student walk	Appropriate technology for purpose and audience
4. Teaching and learning	
Orientation	Traditionally, distance providers relied on printed tutorial letters at programme and module levels for orientation purposes and these are usually also available as PDFs online and can be downloaded should students lose their copy. Other orientation possibilities include YouTube, video-conferencing, satellite TV or radio broadcast, video or podcast on DVD, an e-tutor-led small group online or tele-conference, and – where the need exists and numbers justify it – even a face-to-face contact session in a regional centre, other institution, school, church hall, teacher centre, etc. All contact with student-lecturers should consciously model appropriate lecturer–student behaviours.
Maintenance/formative assessment	In many institutions, formative assessment in the form of assignments is a pre-requisite for entry to summative assessment (most often in the form of a formal examination). However, 10% of students either do not complete or do not pass their formative assessment. Suggested mitigation strategies: Provide Short Message Service (SMS) and email reminders of deadlines. Set up online discussion related to assignment preparation. Provide for an e-tutor or student-led (peer collaborative learning – PCL) small group online or tele-conference, and – where the need exists and numbers justify it – even a face-to-face contact session. Provide for online, postal and in-person submissions. Provide for online marking and marks submission. Automate routing of non-submissions or weak submissions for proactive follow-up by an e-tutor – by phone, email or Skype. Provide feedback on problem areas in a tutorial letter, email, SMS, in the online forum, via e-tutor or via face-to-face tutor. For the joint exploration of practice, consider having students engage with digital copies of lesson planning documents and videos of classroom practice and encourage critical engagement online, by mobile, in an e-tutorial or in a face-to-face tutorial; maintain a programme and teaching practice website throughout the programme, including updates on policy, news articles, and research publications etc. as well as informal chat room facilities.
Consolidation/summative assessment registration	Ten percent of students successfully complete the formative assessment but although registered to attempt summative assessment do not present themselves. Suggested mitigation strategies: Provide SMS and email reminders of timetables. Provide SMS or online booking of exam candidacy and automated reminders for deferrals. Automate routing of non-registrations for proactive follow-up by an e-tutor – by phone, email or Skype. Provide feedback on key areas/assessment foci in a tutorial letter email, SMS, in the online forum, via e-tutor or face-to-face tutor, or use YouTube, video-conferencing, satellite TV or radio broadcast, video on DVD or podcast.
Summative assessment	Of the 80% of students who present themselves, 70% of Humanities students may pass first time (pass rates tend to be lower in other fields), yielding an initial cohort throughput of 80% x 70% = 56%. Suggested mitigation strategies: Track trends automatically to prioritise interventions. Where possible provide both online and more traditional opportunities to complete summative assessment. Automate routing of no-shows or poor performance for proactive follow-up by an e-tutor – by phone, email or Skype.
2nd examination opportunity	Students who fail a module with a stipulated subminimum can usually register for a second examination opportunity in the following semester or exam period. Provide SMS and email reminders of timetables. Provide SMS or online booking of exam candidacy and automated reminders for deferrals. Automate routing of non-registrations for proactive follow-up by an e-tutor – by phone, email or Skype. Provide feedback on key areas/assessment foci in a tutorial letter email, SMS, in the online forum, via e-tutor or face-to-face tutor, or use YouTube, video-conferencing, satellite TV or radio broadcast, video on DVD or podcast.
5. Graduation and alumni	Build and maintain a database of graduates; keep regular contact with alumni through a quarterly e-newsletter; conduct e-impact studies; recruit graduates as e-tutors.

Table 6: The student walk, technology and choice[64]

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[64] Table from Mays 2011; concept of student walk and fit from Louw 2007; Prinsloo 2009

The management of distance education programmes more broadly is addressed in Section 7.

4.5   Decentralised student and learning support

Students should be provided with a range of opportunities for collaborative engagement with peers, with faculty, with tutors, and/or with external stakeholders (e.g. employers) through the use of various forms of technology: for tutoring at a distance, contact or online; assignment tutoring; workplace mentoring and supervision where appropriate; and the stimulation of peer support structures and forums. The decentralised student and learning support strategy should, among other things, consider student needs with respect to the following:

•   Academic support.
•   Counselling support.
•   Administrative support.
•   Learning centres/computer laboratories/practical work spaces.
•   Monitoring and quality assurance to ensure that student needs are being met consistently across a diverse and distributed student body.[65]

The student and learning support strategy should be informed by the following principles: (i) students are placed at the centre of the learning experience and are afforded a fair chance of success; (ii) there is support for lifelong learning; and (iii) progression is facilitated through prioritising articulation possibilities. Each of these principles is expanded below.

4.5.1   Students are placed at the centre of the learning experience

Facilitating students' active engagement in learning recognises the value and knowledge that students bring to the learning process and that education is not simply a one-way process from lecturer to student.

Constructivist notions of learning suggest that students learn something by becoming actively engaged, and through engaging in activities are able to reflect on and internalise what they have learned. With appropriate guidance and reflection, students will keep on learning. Activity-based learning places students at the centre of the learning experience because they are involved in the ongoing construction of knowledge. For this to take place effectively, a lecturer or tutor needs to mediate the learning process. The reflective process with appropriate mediation is defined as a learning pathway.[66] As knowledge is actively constructed, it cannot merely be transferred to another student – what people know is heavily influenced by their own cultural and learning context.

The process of mediating learning requires a shift from the lecturer-led and content-driven approaches, towards resource- and collaboration-based approaches. In turn, this shift necessitates developing the learning pathway in a very deliberate and conscious manner, in order to facilitate the provision of adequate support to students, through both high quality learning resources and online media and face-to-face interactions. Figure 8 (below) represents the evolution of this learning pathway. The notion of guided reflection also provides a source of student support, which enables further learning.
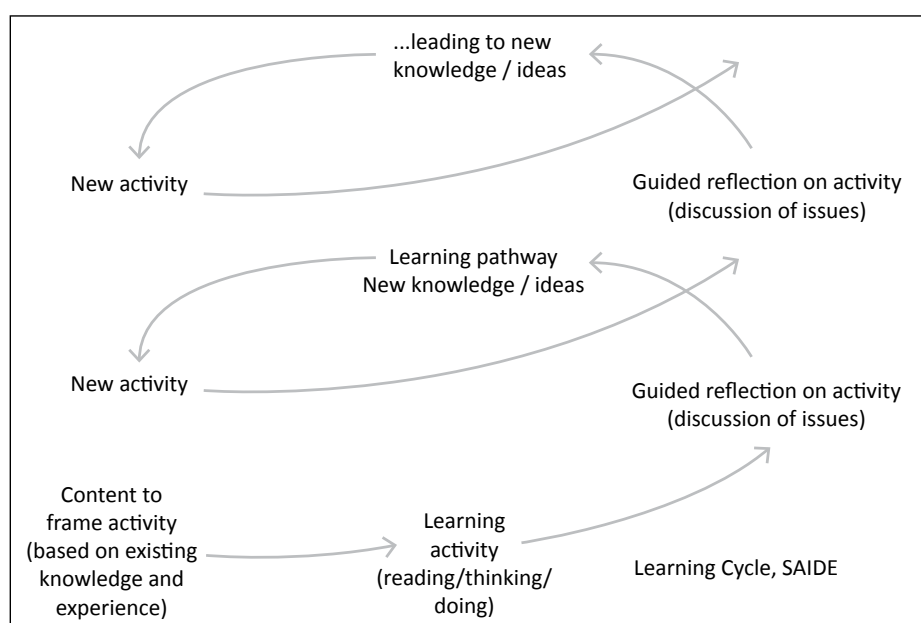

Figure 8: The learning pathway[67]

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[65] Welch & Reed 2005: 32–34.
[66] Saide 2012a
[67] Saide 2004 in Saide 2012a

All learning also takes place within a context, and the nature of learning is heavily influenced by a student's own circumstances and ability to participate. In South Africa specifically, consideration needs to be given to the poor quality of the basic education system and the ill-preparedness of many school leavers to enter and succeed in post-school education and training. For this reason, particular attention needs to be given, when designing the curriculum and structuring learning opportunities, to the quality of the educational opportunity that the learning environment seeks to provide, including ensuring that appropriate levels of support are available to students.

This support can take the form of adequate guidance and advice to enure that students are pursuing education and training that is relevant to their own reality in line with their interest and learning choices. Support can take the form of one-on-one contact, peer-to-peer engagement, tutorials, and access to high quality resources in the form of computer facilities and high quality learning materials.

Central to the above is recognising that student support is not a discrete teaching and learning strategy to be applied, but rather a combination of methods and options that can either support or constrain a student. Consideration needs to be given to the extent to which any strategy supports a student, and the likely effect on student success.

Debates exist as to whether educational opportunities should focus on students, or whether it is more appropriate to focus on learning. Such debates have been driven by the concern that if education becomes too student-centred, it can undervalue the role of the educator in the learning process, as compared to creating a learning-centred system, which facilitates the active engagement of students and educators alike. Concerns have also been raised that focusing too much on the individual student can have implications for the quality of learning, and that a student-centred approach is best implemented where it focuses on students as a larger group, and on responding to the societal context. This imperative needs to be balanced with the risk of applying a one-size-fits-all approach that is educator driven and does not respond to the broader needs of society.

An additional important dimension is the quality and relevance of the course or programme. While a student may complete a course or programme successfully, there is no guarantee that the qualification will make that student employable or be of any benefit to the student. Ensuring a fair chance of success is not only related to mechanisms or processes within education and training, but also to whether available education and training opportunities can equip people for a viable future.

4.5.2   There is support for lifelong learning

The notion of lifelong learning is central to open learning. It underscores that learning is a process, and not a series of discrete events. Open learning should provide students the opportunity to learn throughout their lives, and recognises that learning is not always reliant on structured, organised education systems. No student enters the learning process without any prior knowledge or experience: in fact, each student brings valid knowledge or experience to the learning process, whether this is generated through formal study and training, informal life experience or on-the-job learning (or a combination of these). This means seeing every opportunity or interaction as a possible learning opportunity, and accepting that learning will take place throughout one's life. Similarly, the active engagement and participation of students in the learning process will assist in their being able to think critically, a vital life skill that will equip students to function in the broader society.

4.5.3   Progression is facilitated through prioritising articulation possibilities

Facilitating progression is crucial to removing barriers to further learning. It requires facilitating RPL and credit transfer. This open learning principle is aligned to the notion of making the student the central focus of the learning. Attention needs to be given to enabling articulation between qualifications offered at various institutional types – including but not limited to between schools and FET/TVET colleges, between FET/TVET colleges and universities, and between adult learning centres/community colleges and other types of providers. This is particularly important where students are seeking admission to an institution based on their prior qualifications. Where the course-to-course comparison does not meet another institution's requirements, it can happen that a student is required to repeat content before being eligible to participate in a desired course. Facilitating progression also entails developing a process for credit transfer where a student may wish to continue studies at an alternative institution. In particular, a student enrolled in a face-to-face programme may wish to move to a distance education programme as personal circumstances may have changed. This needs particular attention.

4.6 Changing roles for content, lecturers and students in an online environment

4.6.1 Content

Access to the Internet provides students and lecturers with access to the world's knowledge. This knowledge is available in multiple formats including text, video, audio, mixed media, and digital animations. It is also increasingly possible to engage in learning from practice through simulations and engagement with video resources. An increasing number of these resources are available under open licences that allow their re-use and re-mixing without the need to request permission or pay royalties. With this overabundance of resources, the focus shifts from faculty developing and delivering all content to how to select and adapt existing appropriate content to suit different learning needs and contexts informed by enquiry- and problem-based learning approaches.

4.6.2 People considerations: students and educators

When embarking on a new mode of delivery for a particular course, there are a number of additional elements to be considered in order to promote the success of an online/blended programme.

Students: computer literacy skill levels should be ascertained and any remediation deemed necessary should be undertaken prior to students' engagement with the online course. Of primary importance is the verification that each student has reasonable access to the online environment. This would include provision for the device that is to be used to access the student's course, as well as regular Internet access at a reasonable cost. Students should also be provided with a brief orientation to their online environment that would include a training session in order for them to explore the features and functions of the software they are expected to engage with and, importantly, an orientation to the pedagogical purpose of their course.

Lecturers/tutors: should be equipped with the skills required to facilitate the course online in a manner that supports and engages the student in the changed environment.

Extended support team: the following should be clearly and purposely brought to the attention of lecturers/tutors and students: who is available to support them, when those people are available, what kind of support can be expected from them, and how they should be contacted. This information should be embedded in the start-up information for each programme. In order to achieve this, good inclusive relationships should be developed within the institution between academic and support staff in their quest to provide an effective online teaching and learning environment.

Example: Using appropriate technology to support students

The Potential of Mobile Phones in Supporting Open and Distance Learning (ODL) Students:
The Case of the University of Pretoria
Johan Hendrikz and Ruth Aluko

This case study provides an example of one institution's conscious approach towards the selection and use of technology in response to context and student profile.

This case study illustrates attempts made by an ODL provider to harness appropriate and relevant technology to enhance student support. It shows how the Unit for Distance Education in the Faculty of Education at the University of Pretoria has used, and is still using, mobile phones in an innovative way to enhance the quality of support for distance education students. The evolutionary use of SMS technology (explained later in the case study) is linked to some of the quality criteria of Nadeosa.

The University of Pretoria was capable of delivering online distance education programmes, but that would have excluded thousands of students from continuing their studies. The technology profile of distance education students showed that almost all students had access to or owned a mobile phone, but very few had access to an email address, computer or the Internet.

Tracking students' demographics in terms of their accessibility to technology is in itself an example of good practice by a provider as it enhances proper planning. Because the profile of the students served is known, the University of Pretoria decided to explore possibilities of augmenting the traditional paper-based delivery mode with SMS in order to support the university's dispersed student clientele. The Unit for Distance Education largely serves educators who are over 40 years of age. The common challenge faced by students with this profile is that they get overwhelmed by the myriad of commitments and responsibilities they have as full-time employees and as the head of a family, to a point where they normally overlook some of their academic responsibilities. Thus, the University of Pretoria initially used the SMS largely for administrative support, reminding students of important events such as tutorial dates, assignment due dates and examination dates. From 2004, the system was upgraded so that whenever a parcel was sent to students, they would by default receive an SMS with the tracking number of the parcel.

The upgrading initially focused on communication to students using the 'push approach'. With this approach, the University of Pretoria had control over the content, time and recipient of the SMS. The Institution later introduced a 'short code', whereby students could also communicate with the university and an SMS could be received as an email on the student's desktop. This 'pull approach' invited students to engage with the University via SMS. For example, it was now possible for students to register for contact sessions via SMS. In using this technology, it was very important for the University to ensure that its available infrastructure could deal with and manage the messages that came through.

To make the intervention more sustainable, the University negotiated a deal with a service provider for bulk SMSs. Through this arrangement, the cost of these SMSs is almost 50% lower than that of normal SMSs. The postage cost of a letter is almost 400% higher than that of an SMS.

Furthermore, the human resource requirements of making this innovation work are minimal. Once a message has been constructed, one person can, from a desktop computer, extract all the numbers of the SMS recipients from the mainframe within a minute or so, and send the message either directly to the students' mobile phones or to the service provider who will send it to the students. The software used to perform this function was made available free of charge by the service provider.

The full case study can be accessed at *Nadeosa*.

5. ASSESSMENT IN DISTANCE EDUCATION IN A DIGITAL ERA

The discussion in this Section relates primarily to Criteria: 6: Student assessment, 13: Student assessment practices and 14: Assessment system.[68]

Perhaps, the most important characteristic of distance learning resources, whether in print or digital, that distinguishes them from traditional textbook type resources is the integration of activities to guide students towards a deeper engagement with the content and support the overall assessment strategy of the programme as a whole.

Activities within distance education courses, and the feedback provided thereon for self-assessment purposes, should help prepare students for formative assessment activities for which they will receive formal constructive feedback from a peer and/or a tutor and/or an educator.

The formative assessment activities and feedback thereon should in turn adequately prepare students for appropriate summative assessment activities that provide evidence that the exit-level outcomes have been met.

The remainder of Section 5 thus discusses, in depth, learning activities and feedback and some of the ways in which ICT can facilitate activity-based learning.

5.1 Learning activities and feedback

In this *Section* of the *Guide* we provide further detailed guidelines regarding the design and inclusion of learning activities and feedback thereon. Discussion is under four main headings:

- Purpose (looking towards e-learning/online learning in particular).
- Variety and type of activities.
- General structure and effective design of activities.
- Feedback to students.

5.1.1 Purpose

General purpose

Each learning activity included in a distance learning resource must have a purpose – and sometimes more than one purpose. For example, an activity might require students to engage with content but to do so in ways that also require practice of their emerging ICT skills.

A major strategy for effective teaching and learning in course materials and in an online learning environment is the provision of a range of activities and strategies to encourage students to engage with the content and acquire the knowledge, skills and values linked to the course outcomes.

Purposeful learning activities

Good learning activities motivate and engage the student to attain an acceptable level of success in achieving the learning outcomes specified in the course. The following criteria and guidelines are drawn from different sources.[69] They are integrated to provide an overview of the main elements constituting good learning activities.

Purpose of specific activities

The purpose and nature of a course determines the level, type and spread of learning activities. By analysing the course outcomes it is possible to determine the right mix of activities.

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[68] CHE 2014
[69] Saide 2012a; Welch & Reed 2005

- The activity is related to course-level outcomes and content (e.g. Bloom's Taxonomy).
- The activity is relate to the type of knowledge, skills and values that need to be acquired.
- Students are provided with clear expectations and criteria.

Promote learning

The aim of any learning activity is to motivate students to become actively involved in interrogating concepts and content to develop their own understanding and acquire or strengthen identified skills. Activities are not haphazardly thrown into the content but are carefully designed and integrated to create a focused and engaging learning pathway.

- Activities are informed by and reflect appropriate learning processes and strategies e.g. Kolb's Learning Cycle, Constructivist Learning Theory.
- The number of activities adequately covers the course outcomes and content.
- Activities are sufficient to give students the practice they require.
- Activities are distributed at fairly frequent intervals throughout a section.
- Activities are sufficiently varied in terms of task and purpose.
- Activities are life/work related.
- Activities show a range of difficulty; initial activities should be less complex, with more complex tasks assigned as the course progresses.
- Activities are realistic in terms of time indications.
- Activities motivate and engage the students.

Support students

Research has shown that students do not attempt activities if they are unclear about what to do and have insufficient background knowledge. Students need adequate support in the form of clear and unambiguous explanations and guidelines, including illustrative examples where necessary.

- Detailed step-by-step instructions are provided for each activity and evaluative exercise; clear instructions help students to know exactly what they are expected to do.
- Guidelines for submitting outputs of activities are provided.
- The number of activities/assignments and their due dates are reasonable and do not overload the student.
- Students are encouraged to interact with others and engage in collaborative information sharing.

Provide feedback

Feedback is an integral part of the learning process. Appropriate feedback and commentary on activities enables students to experience a form of interaction and discussion that normally takes place in lively classrooms. In addition, because students work through the materials largely on their own, they need some means of assessing their own progress. Comments on the activities in the materials can help to do this.

- Feedback to students is clearly indicated.
- Feedback is offered in the form of suggestions and is only prescriptive where necessary.
- Students are able to identify the errors they have made, and to assess their progress from tutors' responses.
- Where calculations are required, the stages in the working are displayed and explained.

5.1.2 Variety and type of activities

Variety

There is a tendency to include, in distance learning materials, activities that are written and summative only. However, to support distance students more effectively, we need to make provision for a wider range of activities.

It is often useful to begin by thinking about how we would teach a particular concept in a classroom setting, as illustrated in Table 7 below.

Types of activities

We can cluster learning activities into three broad categories: activities building comprehension, activities building critical thinking, and activities building skill. The three groups of activities as shown in Table 7 must be viewed as interrelated as they serve to develop competence. We understand competence to mean: the knowledge, skills, values and attitudes required to perform at an acceptable standard.

Activities building comprehension	Activities building critical thinking	Activities building skill
Computer-marked quizzes: • Short answers • True/False or Yes/No • Multiple choice	Online research	Simulations, role plays (online)
Video reflections	Case studies	Demonstration and practice
Webquests	Problem based learning	Games
Matching and sequencing	Decision making trees	Projects
Drag and drop		
Cloze	Webquests	Peer-to-peer collaboration and communication: • Chat sessions • Blogs • Forum discussions • Emails
Label and identify diagrams		e-Portfolios
Scavenger hunts		Student presentations
Activities are interrelated and serve to build competence comprising knowledge, skill, values and attitudes that enable students to perform at a specified standard.		

Table 7: Activity types and offline and online possibilities

Examples of online activities

Examples of all the kinds of activities in the above table can be found in the *Saide Design Guide* (Saide 2012a).

The design of an activity links directly to its purpose in the learning journey and we often need to think about what might be appropriate for any contact-based components of a distance education programme and what kinds of activities might nurture similar kinds of learning in the more independent/online/distance components of the programme, as illustrated in Table 8 (below).

Lecture	Discussion	Group work	Self-activity
• Class lecture • Speech • Paper • Story • Demonstration • Symposium • Panel	• Free group discussion • Controlled class discussion • Forum	• Horseshoe groups • Round-table groups • Syndicates • Buzz groups • Brainstorming • Nominal group method • Fishbowl	• Play • Project work • Activity cards • Learning contracts • Self-study models • Programmed learning • Teaching machines
In distance education, we might design activities that guide students towards engaging with print, audio, video or multimedia resources.	*In distance education, we might use contact sessions, audio or video-conferencing or online forums to facilitate this kind of interaction.*	*In distance education, we might build group work into contact sessions or by using various kinds of online tools such as wikis to enable more collaborative learning.*	*In distance education, we need to think carefully about how we scaffold activities and feedback to support different kinds of independent study.*

Experiential learning
• Simulation • Dramatisation • Role play • Socio-drama • Case studies • Advanced learning programme • Laboratory learning • Sensitivity training
In distance education, we need to think about how we might use ICTs to support these kinds of learning experiences: for example, simulations, virtual reality gaming etc.

Source: Adapted from Carl (2009: 96)

Table 8: Contact-based components of a distance education programme

As indicated in Table 8, there are a number of different strategies that we can use and model in contact sessions and workshops.

Just as we use different activity approaches to suit different learning purposes in the classroom, and to keep students engaged and interested, so we need to vary the ways in which we present activities in distance learning resources.

It is useful to begin by thinking about activities for the introductory phase such as building an activity around a case study, a cartoon or a video.

Then activities in the development phase might involve more complex, multi-step processes, such as trialling an activity in the workplace, capturing evidence in the form of photographs, audio or video files on a cell phone; discussing this with colleagues in the workplace; and then preparing a presentation for study centre or online discussion.

In the concluding/consolidation phase of a unit of study, we might consider activities such as summarising in the form of a table or mind map or creating a diagram or poster or audio/video presentation.

5.1.3   General structure and design of effective activities

General structure

In this section we provide some guidelines towards planning and structuring learning activities generally.

Example: A guide for activity development

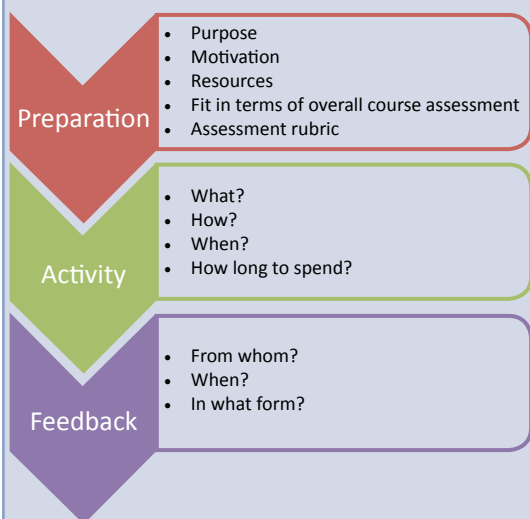| Suggested structure for activity/assignment design (engaging the student) |
|---|
| The following examples provide a useful checklist for activity design and development.

*All of the following issues need to be considered by the lecturer at the **design** stage in order to construct/develop an activity or assignment that is relevant and appropriate for the course (i.e. aligned with the course objectives) and clear to the student.*

Academic preparation for the activity:

1.   What is the purpose of this activity/interaction? (aim/objective)
2.   What is the motivation for the student? (reason for doing it)
3.   What resources are necessary to undertake the activity? (information/preparation)
4.   How does this activity fit into the overall assessment of the course?
5.   What is the assessment rubric for this particular activity/assignment? |

Student information to guide them through the activity:

1. WHAT precisely do you want the students to do? (directions/guidance)
2. HOW do you want them to do it? (Using which resources?/On an individual or group basis?/Where and how to submit the activity outputs?/Working in online or offline mode?/How long?/How many words? etc.)
3. WHEN? (time frame within which the activity or assignment should be completed)
4. HOW LONG do you expect the student to spend on this activity or assignment?

Post-activity issues:

1. Feedback (From whom? When? In what form?)
2. Any further action required from students regarding peer feedback or comments.

Having used this structure in order to design the activity or assignment, you then need to convey all this information explicitly to the students, in order for them to be able to undertake the activity or assignment in an informed manner. This information should be available at the point that the student needs it; that is, embedded in the actual online activity description.

Preparation
- Purpose
- Motivation
- Resources
- Fit in terms of overall course assessment
- Assessment rubric

Activity
- What?
- How?
- When?
- How long to spend?

Feedback
- From whom?
- When?
- In what form?

Example: Evaluation of online courses using quality criteria – Forum activity

Objective (AIM): Test run our chosen Quality Criteria by reviewing some international open courses.
Motivation (WHY): To build up expertise in recognising quality.
WHO: You may undertake this exercise individually or in pairs.
Preparation: You should refer to a document containing the Quality Criteria agreed upon by the group.
Activity:
- **WHAT:** (to do)
  - Choose an international online course to review from the given selection.
  - Review, discuss and record your opinions/findings regarding both the strengths and weaknesses of at least one course (but possibly more); i.e. how did the course(s) perform against your set of Quality Criteria? (20 minutes)
  - Collate these responses into a logical response to the task. (5 minutes)
- **HOW:** (to respond to the assigned task)
  - Please start a new discussion thread for each course that is being reviewed.
  - Please write the course title (or other unique identifying information) in the subject of your post.
  - You could also provide a direct link through to the course to make life easy for all!
  - You should include notes on particular aspects to which you would like to draw the group's attention.

- **FEEDBACK:** (from the group/facilitators)
  - Take a look at the other forum contributions describing the other participants' experiences in using the Quality Criteria for review.
  - Reply and comment on at least one other participant's review comments/findings.

Activity design in an online learning environment

The online learning environment offers a variety of features, which when integrated provide students with flexible, diverse and supported learning experiences. The main features are the following:

- Access to a range of resources both embedded and through hyperlinks to resources on other relevant websites.
- Ease of updating resources and keeping them current.
- Inclusion of online resources that cater for different learning preferences. It is possible to include text, video, sound, interactive games and activities, real-time/synchronous and offline/asynchronous learning activities.
- Reliable and valid online assessment that is easy to use, is responsive and provides speedy feedback. Students can upload their assignments and key assessment tasks.
- Communication processes such as discussion forums, blogs and emails make it possible for two-way communication – whether synchronous or asynchronous – between students and tutors, and between peers.
  - Appropriate use is made of online technology tools to create an interactive learning environment that is suitable for the level of the course and the target group.
  - Clear navigation structures are in place, with clear directions to students.
  - Students have convenient access to up-to-date Internet-connected computers that have the hardware and software necessary for ease of operation in the online environment.
  - Technical support is accessible to students.
  - The online LMS allows opportunities for students to interact with the facilitator/tutor and fellow students.
  - Adequate orientation and support are provided to enable students to become skilled at operating in the online learning space.
  - Effective tracking and feedback mechanisms to and from students are provided, to enable students to check their own progress.

Structure and layout of activities

A well-designed structure and layout consistently threaded through the unit or module of the course signals to students when they are expected to become actively involved. A predictable but not inflexible structure is like a learning thread or pathway through the learning materials, whether in print or online.

- ✓ Activities are clearly structured:
  - Short motivational introduction (WHY is this activity important and worth doing?);
  - Clear description of task and instructions (WHAT do you have to do?);
  - Guidelines (HOW can you approach this task?);
  - Time allocated; and
  - Feedback (comments to enable students to track their progress, and additional information to strengthen learning).
- ✓ Activities are clearly stated and *all* deadlines for completion of activities are clearly stated upfront.
- ✓ Activities are clearly signposted and students know where each begins and ends.
- ✓ The signposting of activities is consistently followed through in each unit and module of the course.

5.1.4 Feedback to students

Traditionally, distance education provision has been characterised by print-based materials and possibly some contact support. Increasingly, however, distance and contact providers alike are making growing use of e-learning and online learning approaches. Connected students have access to information on almost anything, 24/7, and so the role of the lecturer shifts from that of being a primary provider of content to being a guide in pointing students to useful sources of credible information and suggesting activities that will help them to make meaning and create new understandings.

In many countries, experiences at the school level will have been largely characterised by lecturer-led and content-driven approaches. Therefore, learning pathways need to be deliberately designed to gradually move the locus of power from lecturer to student through communities of learning, in a bid to help students 'to move to mediated learning, without losing their ability to achieve situated learning',[70] and from an emphasis on rote learning to one that foregrounds the process of reasoning, taking into account the student's local context. So we need to be concerned not only with what supporting technologies are being used in teaching and learning and where, but also with how such supporting technologies are being used and whether there is a progression towards increasing student autonomy in making decisions about what, how, where and when to learn. Despite the opportunities that we provide for more open-ended engagement, the reality is that in the case of some students – those who lurk on the periphery of our discussion forums, for example – meaningful engagement on an individual basis with the lecturer/tutor may only occur when they have to complete a compulsory assignment and we have an opportunity to provide feedback. Online lecturers, even if working within a contact-mode institution, could therefore usefully learn from the experience of seasoned distance education practitioners; and such experience and engagement should ideally be included in the orientation of new staff and in the selection and appointment of assessors.

5.2 Assessment in distance education

The design of the assessment strategy is an essential component of the overall programme design and we need to think about the new affordances of ICT without losing sight of the basic requirements for an effective assessment strategy.

5.2.1 New affordances

As institutions move to fifth-generation distance education provision, with increased e-learning and online learning, it seems necessary to consider how the role of assessment and feedback is being re-imagined in a digital era. The integration of ICT opens up increased functional possibilities for interaction with dispersed students. Students can submit assignments, including multiple media, online; provided there are some kind of guidelines or a rubric, they can receive constructive feedback from peers and from a tutor or educator; and the submission and feedback process can be monitored to ensure quick turnaround times.

However, before considering the implications that a changing approach to open distance learning has for assessment, it is important to recognise that there are certain characteristics of an effective assessment strategy, regardless of the mode of provision.

5.2.2 Characteristics of an effective assessment strategy

The overall assessment strategy should ideally provide the following:

- Sufficient formative feedback to help students to check their progress against the intended learning outcomes and assessment criteria.
- Sufficient evidence to allow students and lecturers to diagnose potential problems and areas of strength.
- Sufficient guidance and feedback to maximise student chances of success.
- Reliable summative evidence of student achievement, so there can be no doubt that students have met the exit-level outcomes and earned a qualification they can be proud of.
- Support to students in time management by staggering assignments and workloads so that they can be sure that they cover the complete programme adequately in the time they have available.
- Motivation to students to succeed by encouraging them to relate their studies to their own working/potential working and/or learning environments and problems and through the provision of encouraging and realistic feedback.
- A clear sense of progression and development by linking assignments and modules, so that each one builds on what has gone before.[71]

Of course, distance education has some different characteristics from more traditional contact-based tuition, so it is important to consider some implications of the distance mode of provision for formative and summative assessment – especially in the management thereof.

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[70] Kinross & McKenzie 2009
[71] Adapted from Raggatt 1994 in Lockwood 1994: 138; Morgan & O'Reilly 1999: 80

5.3   Formative assessment and feedback in teaching and learning

In the literature relating to student learning in higher education, there is general agreement that feedback given to students on continuous assessment plays a key role in learning.[72] Feedback should provide advice on how to close the gap between the actual and the desired levels of performance.[73] This is a critical aspect of formative assessment, which contributes to improved student performance. Feedback includes any information that is provided from lecturers to students about the course activities that students are engaged in, including written assignments, conference postings and course interactions.[74] Feedback on formative assessment in the form of assignments may often be the only time in which we engage with the work of individual students.

Feedback includes both objectivist, product-oriented information (e.g. comments provided following evaluation of written assignments) and constructivist, process-oriented information (e.g. suggestions on how to improve the form and content of online conference postings).[75]

Feedback is probably the most crucial way in which we can support our students through their learning process. The way in which we provide feedback can have a dramatic influence on our students' confidence in the subject, and their motivation to persevere, especially if they are struggling.

By following a few simple guidelines, we can give our students the kind of feedback that boosts their confidence and helps them to overcome even the toughest of challenges. Constructive feedback is:

•   Prompt – research shows that if students receive feedback within 14 days of submitting an assignment, they are more likely to act on it than if they are made to wait longer.
•   Specific, giving the student a clear indication of where the strengths and weaknesses lie.
•   Thoughtful, indicating that the tutor has put time and effort into trying to understand what the student is saying.
•   Related to the learning outcomes, and includes an explanation of how the grade/mark was arrived at.
•   Also related to the student's assignment-writing skills, and gives advice on study skills, where appropriate.
•   Related to the course material, so that students know where to look for further information if required.
•   Focused on the most important improvements needed, rather than overwhelming students with details about minor improvements that could be made.
•   Written in plain, jargon-free language that students will understand with ease.
•   Fair.
•   Honest – in terms of both its praise and criticism.
•   Supportive and encouraging – focusing on the work, not the student.
•   Personal, referring to the student by name.[76]

We would hope that if students are struggling with completing (or even starting) an assessment task, they would feel able to make contact with a tutor or lecturer (and/or a fellow student) and find a solution. We should seek to avoid anybody dropping out of the programme because of a problem that could have been resolved through discussion. The kind of feedback we provide on students' assignments, which as noted may be the only substantive interaction we have with the individual student, will be central to building this sense of openness and trust. We therefore recommend the following guidelines to evaluate how peers, tutors or e-tutors assess and provide feedback on student assignments.

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[72] Nicol 2008; Race 2009; Yorke & Longden 2008
[73] Furnborough & Truman 2009: 400 citing Hunt 2001: 73
[74] Getzlaf, Perry, Toffner, Lamarche, & Edwards 2009
[75] Getzlaf et al., 2009 citing Hummel 2006
[76] Saide 2012b

Example: Providing guidance for use of feedback on assignments as a key teaching strategy in distance education provision

Look for **evidence** of the following in assignments and assignment feedback:

Do the assignments and feedback help to:
1.   Consolidate the learning?
2.   Provide a progress check (for students and tutors)?
3.   Provide academic support (i.e. guidance on writing, editing, pacing themselves, accessing/using/acknowledging information)?
4.   Motivate the student (even if s/he has not done very well)?

Look at the comments made and try to find evidence of the following:
5.   A system for giving feedback that is consistent across all the assignments and easy to understand.
6.   Comments that demonstrate that the tutor has read the assignment and has established and maintains an empathetic/supportive dialogue.
7.   Comments that flag errors or simple misunderstandings with reference to course material, so that students can check and make their own corrections.
8.   Comments about the relevance or appropriateness of the content and approach used by students in answering the assignment.
9.   Comments that offer support and encouragement.
10. Comments on assignment-writing skills, and advice on study skills techniques and strategies.
11. Comments that explain the grade/mark that students have been given.
12. A general summative comment on the assignment, at the beginning or end, which indicates whether the intended outcomes were achieved, as well as specific comments next to relevant sections of the assignment itself.
13. A consistent system for providing useful formative feedback on language issues relating to meaning, coherence, cohesion, language of discourse/discipline, general accuracy, and on referencing skills.
14. Comments that extend outstanding students.
15. A system for flagging at-risk students.
16. Efficient record keeping.
17. Provision of model answers.
18. Benchmarking (assessment criteria/norm referencing).
19. Respect for adult students.

20. Look for a structure in the feedback such as the following:
20.1 Start with positive comments on the assignment, and build on the strengths of the assignment.
20.2 Follow this with constructive criticism, giving examples of weaknesses and possible ways to overcome them.
20.3 End off with encouragement to motivate the students.
20.4 Comment on accuracy in calculation of marks.[77]

This might be a useful checklist for programme managers and course/module/paper coordinators or evaluators to use in moderating the marking of assignments. The development of detailed rubrics and memoranda at the time of compiling the assessment task can help us to provide online feedback that is comprehensive, consistent and time-efficient but that can also be modified to the individual. In summary, feedback on assignment tasks is seen to be a critical teaching strategy for both traditional print-based distance and online learning provision.

5.4   Summative assessment in distance education

Partly because distance education programmes often involve large numbers, especially at the undergraduate level, and partly due to the complexity of managing the submission, return and moderation of scripts involving external assessors and a distributed student body, there is sometimes a tendency in distance education provision to oversimplify summative assessment activities. The move towards online provision has often tended to exacerbate this, encouraging a growing use of multiple choice questions at the expense of other, more appropriate, forms of assessment.

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[77] Saide 1998

It is vitally important, for the integrity and validity of distance education provision, that summative assessment tasks provide evidence of student achievement that is commensurate with the purpose, exit-level outcomes and NQF level of the course or programme being assessed. How this will be managed needs to be agreed at the programme design stage.

Examples of Course Assessment Strategies

Example 1: A course in liaison and consecutive interpreting

Successful students in this distance education course are able to demonstrate practical interpreting skills and to apply these skills professionally to liaison interpreting settings in the legal, health and business contexts. With limited guidance, students are expected to be able to interpret competently in the short consecutive mode both with and without notes from the second language into the first language.

There is a structured programme of self-assessment (Assignment 1), consisting of activities in the workbook (both oral and written) which students can work through at their own pace.

In addition, written assessment (which counts 50% of the final mark for the module) consists of a written examination plus a written assignment (Assignment 2), which tests students' ability to critically reflect on the liaison interpreting process and to express themselves in an academically appropriate way. They are required to read the material critically, synthesise information and express their answers in the form of paragraph-type questions.

Assessment of oral skills (which counts 50% of the final mark for the module) consists of an oral, taped assignment (Assignment 3) and an oral, taped take-home examination (Assignment 4), which tests students' ability to interpret consecutively with and without note-taking. Assignments 2 and 3 together count 20% towards the final examination mark for the module.

Example 2: A course in leadership and management for change

This course consisted of course materials and activities on CD ROM, a workshop, and structured email communication between students and tutors. It was directed at staff in human rights organisations in Southern Africa and sought to improve their management and organisational development skills.

Assessment took the form of two formative assignments while students were working through the materials and a summative project that they completed after the workshop. The workshop itself served the purpose of assessing whether students had come to terms with the course and its application to their contexts.

The first assignment required that students analyse the contexts of their organisations using analytical tools, such as PEST, SWOT, stakeholder analysis and force-field analysis, which they encountered in the course materials. In the second assignment they had to analyse their organisations themselves, focusing on aspects such as vision and mission, objectives, structures and programmes. The project activity, which they completed after the workshop, gave them two options. Either they could develop a strategic planning process for their organisations or they could plan a strategic review.

The assessment process was an important part of course learning since it entailed formative feedback on drafts and the opportunity for students to revise and resubmit either their assignment as a whole or specified parts thereof. Students and their facilitators thus engaged in a dialogue around their assignments and, through their assignments, their organisational contexts and programmes.

As a form of assessment, the quality of the students' participation at the workshop indicated that they had a thorough grasp of the course materials and were able to relate them to their organisational contexts.

Example 3. An introductory undergraduate course in counselling

The purpose of the course is stated as: To enable you to develop broad-based counselling skills such as the ability to listen and communicate and to apply these counselling skills in an ethically responsible manner in order to unlock the client's personal capacity and facilitate change in diverse contexts.

The course uses distance education methods. Students use a textbook and a student guide with numerous carefully constructed practical activities. In addition, there is a video that illustrates successful and less successful attempts at counselling and discusses them within the paradigm of the person-centred approach.

The assessment strategy consists of:

- One non-compulsory assignment consisting of two sections: a set of multiple-choice questions; and a section requiring a reflective record of a practical interview with a volunteer 'client'; and
- An examination consisting of a 60-mark multiple-choice section, a 20-mark essay on the theory of counselling, and short questions on the practical interview that students have to do but not submit.

Example 4: A methodology course ina professional Education programme

The goals of the course are that in-service teachers should:

- Improve their classroom practice;
- Extend their subject knowledge and subject teaching knowledge and skills;
- Become competent reflective professionals;
- Learn how to do classroom and school-based research;
- Learn how to work cooperatively; and
- Learn how to critically evaluate and adapt teaching strategies for their own classrooms.

In addition to self-assessment through activities in the course materials, the assessment consists of four tutor-marked assignments, and a final examination. Each of these components counts 50% of the final mark.

Each of the four assignments in the coursework component demands that students work directly in the classroom – either teaching or doing research on their students. There are no assignments that require students to read and reformulate theory without applying it to classroom research or classroom practice.
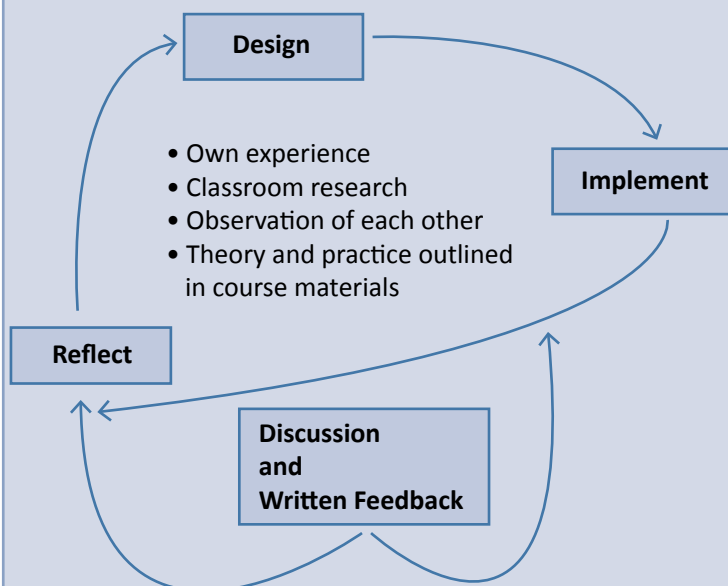
Whereas the detailed content of the assignments and examination questions differs from unit to unit, the basic processes through which students are required to work are broadly similar. These processes of design (or adaptation of lessons or approaches provided), implementation and reflection are shown diagrammatically above.

It is suggested that quality assurance and moderation of summative assessment activities should take place at three stages:

1. Summative assessment instruments should be reviewed *prior to use*.
2. The quality of marking should be moderated *during* and at the *end* of the marking process.
3. The *results* of the summative assessment should be subjected to comparative review, and recommendations should be made for improved practice.

At NQF Levels 7, 8, 9 and 10, the quality assurance and moderation process should involve suitably qualified and experienced external academics.

At NQF Levels 5 and 6, the quality assurance and moderation process may involve suitably qualified and experienced internal academics.

6. PARTNERSHIPS AND COLLABORATIONS FOR DISTANCE EDUCATION PROVISION IN A DIGITAL ERA[78]

The discussion in this Section relates to aspects of Criteria: 3: Staffing, 7: Library services, 10: Programme coordination and 15: Coordination of work-based learning (where applicable).[79]

The emerging policy framework, as well as the realities of the context of practice, mean that it is increasingly desirable to work in a collaborative rather than a competitive mode. This Section explores some of the issues related to this.

6.1 Introduction to partnerships and collaborations for distance provision

In the interests of cost-effective provision, distance education providers have often entered into collaborative relationships (involving public and private institutions, governmental and non-governmental educational providers, stakeholders and/ or community structures, and agencies or providers outside of the country) for activities such as the following:

- Sharing developed courses.
- Jointly developing new courses.
- Sharing facilities such as libraries, learning centres, laboratories or workshops.
- Sharing regional centres for student registration, distribution of study material, and examinations.
- Jointly delivering programmes.
- Collaborating in research.
- Building and sustaining communities of practice.

6.2 Partnerships for different modalities of provision

Partnerships are particularly important for programmes that involve practical work in laboratories or workshops (such facilities can often be used by distance providers during vacations) or for WIL placements. To facilitate workplace learning, partnerships are built with employers that enable productive experiential learning opportunities for students. One of the consequences of the most recent national review of programmes offered in Education, for example, has been an increased focus on institutions' active engagement in building relationships with host schools, placing student-teachers in a diversity of learning contexts, and supporting and evaluating their progress in the school setting.

6.3 Managing partnerships and collaborations

Where partnerships and collaborations are envisaged, we should expect to find as part of the programme plan the criteria for selecting partners and contractors and the means to monitor and evaluate their work. In the case of public–private partnerships, it is important for the public partner to take full responsibility for academic integrity and quality management and to ensure that student rights are protected. Among other things, the contractual agreement between the parties would probably need to address the following:

- Responsibilities regarding the design of the assessment strategy and assessment instruments (which should rest with the public provider).
- Responsibilities regarding safe-keeping of examination instruments, production and dissemination of assessment instruments, communication of timetables, security of venues, authentication of candidate attendance, invigilation, management of scripts for marking, and so on, which might well be shared responsibilities.

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[78] Adapted from Welch & Reed (2005: 40).
[79] CHE 2014

6.4   Consortia and disaggregated provision in a digital era

In the organisation of consortia for programme development or delivery, there should be structured contractual relationships formed to protect the interests of all parties, including students. Performance expectations should be defined in these contracts and agreements.

In cases in which providers offer programmes developed externally (either by another institution or other, external sponsoring agency), there need to be clear procedures for programme approval, in which the quality assurance requirements of both the provider and the external body are dovetailed, and issues related to certification, protocols and procedures for marketing, admission and registration criteria and processes, and the administration of assessment, are all appropriately addressed.

In programmes delivered collaboratively, responsibility for performance remains with the provider that certificates students.

Example: A national collaboration

ACE: School Leadership

The demands on school management have changed, with the emphasis growing on managing safe, diverse and integrated school environments. Principals have to interpret the demands of their job and determine how they will perform this within the context of national development – and therefore tap into the full potential of themselves and the rest of the school community. The core of the principals' job is to improve teaching and learning in the school. This includes the need to be aware of and understand environmental demands and the ability to respond to the defined values in education. The Department of Basic Education worked in collaboration with teacher unions, 16 public higher education institutions, as well as NGOs and individual consultants, to develop a national curriculum for an Advanced Certificate in Education (ACE) in school leadership and management and to develop, field test and review the supporting learning materials. All the reviewed course materials are available on the Thutong website published under an open licence (available as both PDF and Word files) and can be re-used and remixed to suit different needs and contexts.

See full details on *Thutong*.

Example: A regional collaboration

A Case Study of Regional Strategic Alliances toward Offering a Professional Psychosocial Support Programme
S Chakanyuka, N Vilakati and K Ferreira-Meyers

This case study outlines the benefits and challenges of collaborative relationships forged between the Institute of Distance Education (IDE) in the University of Swaziland (UNISWA) and regional stakeholders in the interest of cost-effective provision of a professional psychosocial support (PSS) programme. It illustrates how the IDE and collaborating partners assure quality provision of the professional programme. This case study focuses on collaborative relationships as a quality assurance criterion derived from a set of quality criteria adapted from Nadeosa. The collaborative relationships involve UNISWA, the National Children's Coordinating Committee (NCCU) located in the Swaziland government Deputy Prime Minister's office, the University of KwaZulu-Natal (UKZN), the Centre for African Childhood (ACC), the Regional Psychosocial Support Initiative (REPSSI) and the United Nations Children's Fund (UNICEF).

The psychosocial programme has contributed towards human resources development in Swaziland in an area where there is demand for scarce skills that caregivers need in order to cope with their work with children and youth. The programme has widened access to higher education, not only by admitting students who are traditionally disadvantaged but also by providing conditions that ensure their successful progression. The programme is more likely to uphold high quality standards, given the support offered by collaborating partners with many quality assurance mechanisms. Such mechanisms ensure that the students have good, supportive systems to achieve ongoing work-based learning success. For example, partners see to it that students have all the necessary self-study materials, along with module guides and mentors, for additional learning support. Since good learning resources are a necessary but insufficient learning requirement for most students, group and individual support is also provided. Therefore, the success of the programme

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has been a result of the collaborative relationship between UNISWA and its partners. Despite challenges that are typical of collaborative relationships, such as differences in approaches and work ethics, the benefits far outweigh the challenges.

The full case study can be accessed at *Nadeosa*.

Example: Emerging forms of international collaboration and disaggregated provision

Claims made in this Section are taken from institutional websites. Readers need to visit the websites and engage with their content directly in order to ascertain whether the approaches outlined would be fit for purpose in a different context.

The Open Educational Resource University (OER University)

The OER University is a virtual collaboration of like-minded institutions committed to creating flexible pathways for OER students to gain formal academic credit. The OER University aims to provide free learning to all students worldwide using OER learning materials with pathways to gain credible qualifications from recognised educational institutions. It is based on the community service and outreach mission to develop a parallel learning universe to augment and add value to traditional delivery systems in post-secondary education. Through the community service mission of participating institutions, OER University opens pathways for OER students to earn formal academic credit and pay reduced fees for assessment and credit.

Directed by the core principles of engagement, the OER university collaboration will:

* Design and implement a parallel learning universe to provide free learning opportunities for all students worldwide with pathways to earn credible post-secondary credentials.
* Offer courses and programmes based solely on OER and open textbooks.
* Design and implement scalable pedagogies appropriate for the OER University concept.
* Implement scalable systems of volunteer student support through community service learning approaches.
* Coordinate assessment and credentialising services on a cost recovery basis for participating education institutions to ensure credible qualifications and corresponding course articulation among anchor partners.

For more information visit *OER University.*

Coursera

Coursera is an education company that partners with universities from across the world to offer courses online for anyone to take, for free. The technology enables its partners to teach millions of students rather than hundreds. Students watch lectures taught by world-class professors, learn at their own pace, test their knowledge and reinforce concepts through interactive exercises. Key underpinning approaches include mastery learning, interactivity and frequent feedback.

For more information visit *Coursera*.

University of the People

University of the People (UoPeople) is the world's first non-profit, degree-granting, tuition-free online university dedicated to opening the gates to higher education for all individuals otherwise constrained. The university embraces the worldwide presence of the Internet and dropping technology costs to bring tuition-free undergraduate degree programmes to qualified high school graduates around the world. UoPeople offers Associate and Bachelor degree programmes in Business Administration and in Computer Science. With the support of academic leadership from top universities and having admitted more than 1 500 students from 136 countries to date, UoPeople is well on its way to becoming a global higher education leader. Peer collaboration and assessment is a key strategy in the design of UoPeople courses.

For more information visit *UoPeople*.

OERtest

The OERtest project was a two-year project funded by the Lifelong Learning Programme of the European Commission. Its aim was to support the mainstreaming of OERs within higher education and to test the feasibility of assessing learning achieved exclusively through the use of OER. The project foresaw the possibility of disaggregating the teaching and assessment processes.

Source: Camilleri, A., Haywod, J., & Nouira, C. 2012. Giving Credit for OER-based Learning, Presentation at the World Open Seminar and Exhibition, UNESCO, Paris, June.

For more information visit *OER Europe*.

See also the *Virtual University of Small States of the Commonwealth (VUSSC)*.

7. MANAGING DISTANCE EDUCATION PROVISION IN A DIGITAL ERA[80]

The discussion in this Section has relevance to all the minimum criteria and lines of enquiry but particularly to: 2: Student recruitment, admission and selection, 3 and 4: Staffing, 8: Programme administrative services, 9: Postgraduate policies, procedures and regulations, 14: Assessment system, 17: Student retention and throughput, 18: Employability and recognition and 19: Programme evaluation.[81]

7.1 Overview

These materials support discussion on the topic of the operational issues that confront distance education providers.

The Section opens with a list of the similarities between distance education programmes and their more conventional counterparts. This list is only a beginning, and could be expanded to include features that are common to all education programmes, regardless of mode of development or delivery.

The remainder of the materials focus on operational issues that are of particular concern to managers of distance education programmes.

7.2 Strategic and leadership issues in distance education provision

At the very start of the process, education providers need to be clear about why they are opting for distance provision, and they need to decide how they think they might best organise such provision, for example:

- Single mode in which all programmes are offered through distance.
- Dual mode in which all or some programmes are offered in both a contact-based and a distance mode and students make a decision about which mode to choose.
- Mixed/blended mode in which all programme offerings have distance, online and/or contact elements and the precise mix or blend varies from programme to programme.

Managers and leaders of distance education programmes face the same challenges as the managers of learning programmes delivered in more conventional, face-to-face settings:

- Both aim to provide an education that is relevant and of high quality.
- Both aim to offer and achieve certain minimum standards of education and training.
- Both have administrative systems that enrol students and register them on their chosen courses.
- In the case of conventional programmes, both usually require students to sit examinations before receiving certification.

However, distance education programmes and conventional programmes have several differences. Specifically, distance education programmes:

- Often tend to be more 'open' programmes, concerned with improving access and with democratising education, as contrasted with maintaining education as a privilege of the elite.
- If they are also open programmes: drop or lower the academic entry requirements that typically characterise conventional programmes.
- Have the same exit or graduation requirements as conventional programmes even though, because of their openness, they may accept students with fewer formal qualifications, which creates a situation that places even greater demands on those providing tuition and student support.

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[80] Content in this section is based on ADB/CoL 1999; Moore & Kearsley 2012; and Lussier 2000.
[81] CHE 2014

- Tend to deliver their courses using a mix of technologies and media; they almost always include some print materials, but these are supported by a variety of electronic media, including radio, television, audio and video cassettes, computers, and telecommunications.
- Are typically supported by part-time tutors and counsellors who may be employed by conventional institutions.
- Usually have a more distributed and heterogeneous student body including, possibly, students from across the host country's borders, which raises questions about both equivalence of provision and recognition of qualifications in receiving countries.
- Frequently require collaboration with other programmes and agencies to provide learning materials, course development and delivery personnel, facilities, or all of these.
- Often work with large-scale programmes and large student numbers per module.
- Tend to need larger administrative bodies that accommodate a greater diversity of functions.
- Must remain open, flexible, and innovative in response to student needs – a challenge that is best met by open, flexible, and innovative approaches to management.

These differences between distance education and more conventional programmes raise a number of issues for managers of such programmes:

- Staffing roles, mix and size.
- Integrating media.
- Managing project teams.
- Analysing systems (systems thinking).
- Collaborating with other agencies and organisations.
- Centralising versus decentralising.
- Planning and scheduling.
- Costing and budgeting.
- Monitoring and supervising staff at a distance.
- Evaluating programme performance.

All of these issues impact on the curriculum and course design decisions that need to be made, as discussed in Sections 3 and 4.

7.3   Systems thinking

Systems thinking can be traced back to Aristotle's famous dictum that 'the whole is greater than the sum of its parts'.

A systems approach sets the conditions for proceeding with problem solving in an orderly way, recognising that every component and task is related to every other, and that a change in one component will bring about changes in the others. These components may be described as a series of phases:

analysis → design → development → implementation → evaluation → revision.

As Moore and Kearsley (1996) explain:

> A distance education system consists of all the component processes that make up distance education, including learning, teaching, communication, design, and management, and even such less obvious components as history and institutional philosophy. Within each of these broadly named components are subsystems…While we may choose to study each of these systems separately, we must also try to understand their inter-relationships.[82]

Managing these tasks is clearly not linear, for the following reasons:

- Programme staff will be involved in several of these tasks at the same time.
- The tasks are interdependent.

It therefore remains useful to think about the provision of distance education from a systems perspective, which provides a holistic picture of the various elements and how they interrelate.

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[82] Moore & Kearsley 1996: 5

The following elements have been identified as key:

- A source of content knowledge and teaching (i.e. an educational institution with faculty and other resources for providing content).
- A course design subsystem to structure this into materials and activities for students.
- A subsystem that delivers the courses to students through media and technology.
- Instruction and support personnel who interact with students as they use these materials.
- Students in their different (diverse) environments.
- A management subsystem to organise policy, needs assessment, and resource allocation; to evaluate outcomes; and to coordinate other subsystems.[83]

These key elements can then be visualised in relation to one another as depicted in Table 9. This Table illustrates the range of issues about which distance providers need to make informed decisions.

Management				
• Needs assessment • Prioritising	Resources • Allocation • Administration	Personnel • Recruitment • Training	Control • Monitoring • Evaluation	Policy
Content sources • Organisation • Individual • Dual mode • Single mode • Consortia Manages content experts Does needs assessment Decides what to teach	Programme/ course design Course team • Content specialists • Instructional designer • Graphic designer • Audio/video producers • Editor • Evaluator • Course team manager	Delivery Media • Text • Images • Sound • Artifacts Technology Recorded Print/online Audio: CD/tape/online Video: CD/tape/online Interactive Audio conference Video conference Satellite/cable Desktop Computer/Internet/WWW	Interaction • Instructors • Counsellors • Administrative staff • Librarians • Help desk • Learning content/site coordinators • Other students	Learning environment • Workplace • Home • Classroom • Learning centre • Travelling

Table 9: A systems model[84]

7.4   Staff roles and functions

7.4.1   The staffing mix

The intent here is to emphasise the similarities and differences in the configuration of 'teaching staff' between conventional and distance programmes. The staffing mix required to implement a distance education programme depends on the educational job to be done and the organisational model that has been chosen.

Nonetheless, personnel will likely fall into the following categories.

Educational staff

Educational staff include the following:

- Subject/discipline specialists (responsible for the overall curriculum design and supported by the other educational staff listed here).
- Specialists in materials/media production.
- Specialists in tutoring and counselling.

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[83] Moore & Kearsley 2012: 12
[84] Moore & Kearsley 2012: 14 (presentation adapted slightly)

- Tutors, especially part-time e-tutors.
- Broadcasting producers.
- ICT and VLE specialists.
- Research workers and evaluators.

Learning resource development staff

Learning resource development staff include the following:

- Subject/discipline specialists (responsible for the overall selection and quality assurance of the learning resources, supported by the other learning resource development staff listed here).
- Copy/language editors.
- Graphic designers.
- Broadcasting/media technicians.
- Desktop publishing specialists/VLE design and maintenance specialists.
- Third-party copyright clearance/alternative OER sourcing specialists (could be students).

Administrative staff

Administrative staff include the following:

- Subject/discipline specialists (responsible for the overall integrity and coherence of the curriculum, supported by the administrative staff listed here).
- Administrators and managers.
- ICT support staff, including VLE managers.
- Personnel staff/module coordinators/WIL coordinators.
- Financial staff.
- Records clerks.
- Warehousing and dispatch staff for print and ICT systems and VLE support for online/digital provision.
- Messengers, drivers, and janitors for decentralised sites of contact provision e.g. tutorial groups, WIL placements, and field or practical work.

7.4.2 Training staff

Arrangements will also be necessary for the training of staff, which may be done by means of the following:

- On the job.
- Through short courses at the institution.
- By sending staff on full-time or part-time courses e.g. VLE training.
- By enrolling staff in an appropriate course taught at a distance or online e.g. PGDE in Higher Education teaching/MEd in ODL.

The choice of organisational model will influence the training strategy.

Example: Within a bi-modal institution, where a course developer is combining that role with teaching courses face-to-face, sensitivity is needed in arranging courses for experienced university course developers on how to create/adapt learning resources for use at a distance.

Within a single mode institution, which contracts course developers from other, conventional institutions, the same kinds of sensitivity is required in training, as well as even greater flexibility in timing the training sessions so that they fit in with the developers' other commitments.

See the guidelines in Sections 3.6, 3.7, 4 and 5 for examples of the kind of ground that needs to be covered in training activities.

7.4.3   Monitoring and supporting staff at a distance

The management of distance education programmes will almost always involve monitoring and supporting staff who are at a distance from the central campus. These staff may include regional centre staff, tutors, and learning materials producers such as writers of text-based materials and scripts for media production.

It has become something of a truism in distance education that students need continuing contact with the programme and support from programme personnel as they undertake and work through their studies, whether this is mediated in person through occasional contact sessions, through synchronous discussion forums such as Skype or tele-conferences, or asynchronously, through email, online discussion forums or a host of social media such as Facebook, Mxit etc.

Staff at a distance need the same kind of support and contact, especially since they are frequently working under conditions such as the following:

• They tend to be part-time, with major affiliation and commitment to some other institution.
• They tend to be on short-term or annual contracts.
• They likely have no regular face-to-face contact with supervisors and colleagues.
• Their roles are frequently diffuse and ill-defined.

Too often the adage 'out of sight, out of mind' means not just isolation but invisibility for distant staff when it comes to decisions on policies and procedures, which tend to be made without due attention to their particular circumstances and needs.

Because of the distance factor, it is even more important with distant staff to practise effective staff relations, by means of the following:

• Clear role descriptions, expectations, and reporting lines.
• A thorough induction into the programme, its history, goals, policies, and procedures.
• Continual updating on changes in policies and procedures.
• Frequent and effective two-way communication (email is an excellent medium for this where available).
• Opportunities for face-to-face or online meetings.
• Regular performance monitoring and review.
• Accurate and efficient record-keeping systems.
• Opportunities for input into decisions that affect their work.

It would be ideal to ensure that all staff on a programme are linked through the system to a project site where there can be continual interaction between programme and module coordinators at the centre and e-tutors and other support staff at decentralised sites. A move towards digital submission of assignments and on-screen marking supported by detailed memoranda is also recommended.

7.4.4   Managing project teams

Much of the work of distance education provision is carried out in teams.

Example: The development of a course requires the collaboration of subject matter experts, instructional designers, editors, visual designers, and a variety of support people, including liaison librarians, printers, VLE support staff and so on.

Likewise, the delivery of a course requires the collaboration of tutors, counsellors, librarians, registry personnel, and course materials warehousing and dispatch clerks and/or LMS technicians, among others.

Managing a team places different kinds of demands on managers than does line management:

• Time, because you have specified start and finish dates.
• Resources, because you need a high degree of financial accountability as projects are more difficult to cost and control than routine line management functions are.

- Personnel, because you tend to work with a cross-functional team of temporary members, some of whom will be in a reporting line to someone other than you.

7.5   Networking

Creating, expanding, and maintaining relationships with other agencies — popularly known as *networking* — is an important part of the manager's job in a distance education context. Collaboration among educational institutions, agencies and programmes is becoming increasingly the order of the day, in industrialised and less affluent countries alike, for a number of reasons, among them being that:
- Public funding for education at all levels is decreasing, and governments are requiring institutions to work with one another and in many cases with industry in order to qualify for funding.
- Institutions and agencies are responding to decreasing levels of funding by seeking collaborative arrangements that can make scarce resources go further.

This is considered at an institutional level in Section 6 above.

7.6   Quality assurance

While distance education is gaining prominence in higher education, many challenges are faced in terms of enhancing the quality of delivery. Key challenges of distance students to be addressed by a provider include overcoming the difficulty of students sharing their experiences with other students; providing opportunities to interact with lecturers outside of normal hours; providing timely and appropriate interactive learning materials and feedback on assessment; and making available expert guidance and support in order to derive maximum benefit from the learning materials. Many of these traditional challenges can be addressed through appropriate use of suitable supporting digital technologies but only if the integration of technology is designed for purpose, and the impact on students, staff and systems is taken into account and provided for.

The prominent quality assurer in higher education, David Woodhouse (2009),[85] identifies the following key characteristics of distance education that often pose quality challenges for providers:

- More stakeholders or sites involved in the creation and delivery of a course or programme.
- Longer chains of communication.
- Often larger scale.
- Greater number of separate activities and roles to be coordinated.
- Greater administrative needs (such as record keeping).
- More delegation of assessment in competency testing.
- Achieving consistency of practice over a distributed organisation or a collaboratively delivered programme or course.
- A different interpretation of what constitutes 'teaching' (e.g. in the separation of roles in providing learning content and support).
- A more careful and deliberate process of planning and development of courses and systems than is common for conventional delivery.
- Greater issues of credibility.
- Complications raised by a transition from a largely correspondence-based ODL programme to an increasingly online system.

QA processes that are accepted as integral to the ODL programme can provide models for the assessment of quality in campus-based programmes. The Section below offers a bird's eye view of international experience in quality assuring distance education.

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[85] Woodhouse 2009

Example: The New Zealand experience

The New Zealand Qualifications Authority, which is responsible for the accreditation of programmes and institutions in that country, uses a set of generic quality criteria with some specific reference to distance education.[86] Thus, there are no separate quality criteria for distance education programmes. Apart from accrediting institutions and programmes, the Qualifications Authority also has the responsibility of building quality assurance capacity in the system. Over and above the broad quality criteria used in the accreditation process,[87] special attention is paid to distance education issues to ensure that processes for managing distance students' needs are in place. Some of the distance education issues that are particularly paid attention to are the need for engaging qualified and experienced staff, appropriate and sufficient resources, student support, programme development and review, systems for monitoring student satisfaction, valid and reliable student assessment systems, and systems for maintaining records of student progress.[88] Kilfoil notes that in the New Zealand system, the Qualifications Authority also insists on approving changes in distance education-oriented delivery modes to ensure that there is capacity to effect the change. 'As systems are core to distance education, the approval criteria are also guidelines for institutions planning to move to a blended tuition mode.'[89]

Example: The Nigerian experience

In Nigeria, university programmes are re-accredited every five years through the National Universities Commission (NUC). According to Kilfoil,[90] the general process of preparing for programme accreditation involves the following stages:

- Consensus is arrived at on the accreditation criteria to be used through a series of meetings with academics from universities.
- *The accrediting agency interacts with the institution in preparation for the accreditation.*
  The NUC's quality assurance staff visit universities to inform them of the requirements and to receive feedback.
- *A self-study is conducted.*
  The universities complete a self-study for each programme and submit reports to the Commission, where they are analysed by a peer review panel comprising representatives from academic specialisations and statutory professional bodies across the country.
- *Site visits are conducted by trained panels.*
  The panel conducts on-site verification of the self-study report. The panel engages with university management and gives them an opportunity to respond to comments.
- *The results are published.*
  The panel reports are then sent to the Commission for publication of results.
  There are three possible outcomes of an accreditation process: full re-accreditation for five years, interim re-accreditation for two years, or re-accreditation is denied. If a programme is denied re-accreditation, the university may not register new students for the programme until it meets the requirements. It is, however, allowed to graduate existing students on the programme.

  The process outlined above seems fairly typical, regardless of mode of provision. In general, we can expect to find evidence that certain general criteria have been met regardless of mode of provision as well as evidence related to proper planning and management of distance provision.

Example: The US experience

In the USA, assuring quality in distance learning presents three major challenges, particularly for accreditation purposes.[91] The Council for Higher Education Accreditation (CHEA) poses key questions with relevance for accreditation around these challenges:

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[86] Kilfoil 2007

[87] Goals and objectives, governance, personnel, resources, student support, programme delivery, assessment and research

[88] Kilfoil 2007

[89] Kilfoil 2007: 3

[90] Kilfoil 2007

[91] CHEA 2002

- *Alternative design of instruction:* Distance learning offerings frequently call for a design of instruction that is different from the traditional face-to-face learning.

What must accreditors do to assure that these alternative designs sustain a level of quality commensurate with the standards of their respective organisations?

- *Alternative providers of higher education:* Distance learning is offered not only by traditional institutions, but also by new online degree-granting and non-degree-granting online institutions, sometimes working in collaboration with several providers. These institutions seek accreditation.

What must accreditors do to assure that these providers sustain a level of quality commensurate with the standards of their respective organisations?

- *Expanded focus on training:* Distance learning is a favoured instructional mode, especially for ongoing training in professional fields, whether offered by higher education institutions, corporations, or other organisations. The emphasis is on a discrete set of learning activities usually designed to provide immediate acquisition of skills and knowledge over a relatively short period of time. These activities are often independent of longer-term, more structured offerings such as degree programmes.

Should accreditors who are focused mainly on institutions and programmes of considerably longer duration further expand their attention to include assuring the quality of these discrete learning activities? In short, what programmes should be accredited by accreditation agencies?[92]

In the USA, there is a separate agency that accredits distance education programmes – the Distance Education and Training Council (DETC).

Some accreditation bodies also outline standards and criteria for distance education courseware development.[93] The DETC in the US and the Quality Assurance Agency for Higher Education in the UK have specific online delivery standards that can be used by distance education providers.

The increasing integration of ICT, Internet use, and growth in openly licensed resources mean that existing guidelines probably need to be reviewed and updated, as in the following examples.

Example: A European perspective

The use of ICT in higher education is growing in Europe despite concerns surrounding the quality of first generation e-learning approaches and applications. It is felt that existing quality guidelines do not sufficiently address e-learning. Therefore, it was felt that there was a need to promote greater communication between universities and communities of interest to enhance quality assurance of e-learning provision and to develop tools to support this. The Hextlearn peer review approach that has been developed allows for scalable exchange of information for learning between institutions regarding the use of ICT for using Web 2.0 capabilities effectively. It places emphasis on networking, exchange of ideas and interaction to exchange best practices and to employ virtual peer review methodologies. For more information visit *Hextlearn*.

Example: An international perspective on OER and OEP: OPAL

OPAL, the Open Educational Quality Initiative, is an international network to promote innovation and better quality in education and training through the use of OER. It is partly funded by the European Commission. OPAL was initiated by international organisations including UNESCO, ICDE and EFQUEL, and a number of universities including the Open University UK, the Aalto University in Finland, University Duisburg-Essen and the Catholic University of Portugal, in Lisbon. OPAL is aiming to establish a forum that works to build greater trust in using and promoting OER. It will focus on provision of innovative open educational practices (OEP) and promote quality, innovation and transparency in higher and adult education. The OPAL initiative focuses beyond access to OER – on innovation and quality through OEP. For more information visit *OPAL*.

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[92] CHEA 2002
[93] Kilfoil 2007

Quality assurance is an approach to organising work that ensures the following:

- That the institution's mission and aims are clear and known to all.
- That the systems through which work will be done are well thought out, foolproof and communicated to everyone.
- That it is clear to everyone who is responsible for what.
- That what the institution regards as 'quality' is well-defined and documented.
- That systems are in place to check that everything is working to plan.
- That when things go wrong — and they will — there are agreed ways of putting them right.

Because the standards of conventional programmes may often not be appropriate to distance education programmes, the proper response to a gap between the measure and the standard may be to revise the standard rather than to initiate corrective action.

If corrective action is required, however, the highly integrated and complex nature of a distance education programme may make implementation somewhat problematic.

In addition, although distance learning programmes tend — and need — to be flexible so that they can respond effectively to students' needs and circumstances, this flexibility should not be abused. Staff and students do not appreciate being part of a continuing experiment in which all the variables are undergoing constant modification.

Finally, the cost implications of corrective action may be more far-reaching in an integrated system of the kind that tends to characterise distance education programmes.

Having provided a general overview, the next few sections include some more specific suggestions and possibilities for consideration.

7.7   Planning programme design, development and renewal

In this Section, we briefly explore five practical issues: curriculum review, academic planning, managing time, managing tutors/e-tutors, and coordinating programme design, development and renewal.

7.7.1   Curriculum review cycle

Institutions should set a curriculum cycle for major reviews of the curriculum, and programme manager should keep tabs on where the programme is with regard to this cycle. However, as students and staff migrate to digital and online provision, it is inevitable that the updating of resources will be ongoing: increasingly students will themselves identify, or co-develop, resources that they find useful. The programme manager will need to keep track of how the curriculum and its supporting resources are evolving.

7.7.2   Academic planning

Each year institutions develop an academic plan with activities, dates and deadlines for the following year. It is important that programme managers support departmental secretaries in providing advance reminders of impending deadlines with respect to issues such as uploading of learning resources, assessment plans and assessment instruments.

7.7.3   Managing time

All academic staff find themselves under pressure to manage the three-fold demands of teaching, research and community engagement. The programme manager, as an experienced practitioner, should be prepared to offer advice and mentoring to help staff, especially staff new to distance education provision, to manage their time.

This link to a *time management tool* could be useful for some programme team members.

7.7.4 Managing tutors/e-tutors

A distance provider will likely commit itself to the progressive employment of tutors/e-tutors to support students. Curriculum planning must therefore include guidelines on how these tutors/e-tutors can best be used. It is likely that they will need to work across several modules/courses within a programme and therefore the management of tutoring/e-tutoring needs also to be led at a programme level.

7.7.5 Coordinating programme design, development and renewal

It is suggested that the programme manager might usefully ensure the following:

- That programme updates are included in the meetings agendas of departments in which programmes or majors are housed so that issues can be identified and addressed proactively with the support of departmental chairs who have line management functions.
- That a regular programme review meeting is instituted, probably at least twice per semester, to proactively address challenges but also to celebrate achievements.
- That participation in the programme review meetings is widened to include other stakeholders such as registration, student assessment, finance, HR etc. to address challenges and achievements with regard to alignment of academic and administrative components of programme implementation.

7.8 Monitoring programme implementation and evaluation

Institutions should have a process of ongoing programme and module review and it is important for the programme manager to lead and support such a process.

However, it is also suggested that programmes collaboratively develop a monitoring and evaluation strategy for the programme, which would include, among other things, the following:

- Feedback from students.
- Feedback from tutors/e-tutors.
- Feedback from external examiners/moderators.
- Feedback from critical readers.
- Review of retention, pass rates and throughput at both module and programme level to ascertain whether the trends are positive or negative and to take any remedial action that may be necessary.

8. CONCLUDING REMARKS

There is a hierarchy in evaluation implied by the discussion in this *Guide*:

*   First, we need to look for a curriculum design that models good teaching and helps students develop the necessary competences for success, regardless of the mode of provision.
*   Second, we need to look for learning pathways and learning activities that model the desired approaches to knowledge, students and technology usage within a distance context of diverse and geographically distributed students and a commitment to equivalence of experience.
*   Third, we then need to establish whether suitable technologies are used in the ways most appropriate to the learning intention, taking cognisance of the technology profile of the students and their educators, and their contexts of practice.

This *Guide* seeks to provide support for programme development, implementation, review and evaluation. In many ways it has to be seen as a work in progress as the field of education generally and distance education in particular is constantly evolving. The digital era provides us with access to a wealth of content and a constantly expanding suite of tools that can help us better to manage information, to communicate and to create interactive, collaborative and enquiry-based learning programmes at a distance. However, the selection and presentation of good content and the selection and use of good tools requires careful needs analysis and planning upfront, and careful and ongoing monitoring and review in process. The following thoughts by Sir John Daniel in the Commonwealth of Learning *(CoL) Blog* of 14 March 2010 seem pertinent in concluding this *Guide* to good practice in distance education provision:

LMSs and e-learning

The other day a colleague made the remark 'the glory days of Learning Management Systems are over'. I think he was making the point that with today's social software it is possible to organise eLearning in more informal ways, without having recourse to highly structured systems. Is this true and, if it is, is it a good thing? The nub of my own anxiety is the issue of scale. I have devoted my career to the proposition that the more students you can educate, the better. Although the world is strongly influenced by the insidious assumption that quality and exclusiveness are two sides of the same coin, we have been making great progress, thanks mainly to the multimedia systems of distance learning that have made possible the emergence of mega-universities and mega-schools. I have a growing worry that the shift to eLearning may erode these gains because of its tendency to take us back to the cottage-industry style of course development that preceded the organisation of learning at scale. I was reassured, however, that the use of Learning Management Systems did encourage the ambition of operating at scale and made it possible to manage scale operations, not least by linking pedagogical activities to student records. Are the newer generations of web technologies reinforcing the return to cottage-industry methods or am I missing something? In my view the genius of technology, in education as in other areas of life, is to allow us to achieve scale, quality and low cost simultaneously. We must not turn our backs on that revolution.

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GLOSSARY OF TERMS

Asynchronous interaction is the learning or sharing of information within a group outside the constraints of time and place: e.g. the access to and use of email, discussion forums etc.

Blended learning refers to the provision of structured learning opportunities using a combination of contact, distance, and/or ICT-supported opportunities to suit different purposes, audiences and contexts. It can also refer to the use of a variety of teaching models and styles of learning.

Bring Your Own Device (BYOD) refers to the policy of permitting students to bring personally owned mobile devices (laptops, tablets, and smart phones) to their educational setting, and use those devices to access institutional information and applications.

Distance education is concerned with a set of teaching and learning strategies (or educational methods) that can be used to overcome spatial and/or temporal separation between educators and students. It is a collection of methods for the provision of structured learning. It avoids the need for students to discover the curriculum by attending classes frequently and for long periods. Rather, it aims to create a quality learning environment using an appropriate combination of different media, tutorial support, peer group discussion, and practical sessions.

Since distance education methods are employed in a variety of contact, mixed and blended learning approaches, and may be used in more or less open ways, distance education may also be used to refer to a mode of delivery based primarily on the use of distance education methods. Institutions opting for distance education as a mode of delivery need to establish systems and processes for decentralised distribution of learning resources, communications, student and learning support, and formative and summative assessment.

Learning management system (LMS) – see **Virtual Learning Environment (VLE)** or Learning Management System (LMS).

Mode of provision refers to the dominant mix of methods by which institutions mediate their curricula. In a single mode institution, all courses and programmes are mediated either by distance-or contact-based methodologies; in a dual mode institution, courses and programmes may be mediated by either distance- or contact-based methods, and often equivalent forms of the same course or programme may be offered in either mode; in a mixed mode institution, all courses and programmes involve a mix of methods associated traditionally with distance- and contact-based provision – with the blend of methods varying from context to context. Some course provision may tend more towards distance provision and some may tend more towards campus-based provision.

Massive open online course (MOOC) is an online course aimed at unlimited participation and open access via the Web.

Open (and) distance learning (ODL) refers to the use of distance education methods to support the realisation of open learning purposes and principles. An ODL approach typically involves making provision to support a wider range of student choices regarding access, curriculum, pacing, sequencing, learning modes and methods, assessment and articulation. Students studying through ODL approaches typically take longer to complete their studies as they need to balance study and other commitments. Guiding students towards making informed choices based on workload, and on the assumption that completion of a course or programme of study will typically take twice as long to complete, is an important feature of responsible ODL practice – as is trying to assist students not to take longer than three times the minimum time to complete for the sake of coherence and the complications arising from curriculum renewal processes.

Open content is content that is licensed in a manner that provides users with the right to use the content in more ways than those normally permitted under the law – at no cost to the user. This is of particular importance at the postgraduate level, where the 'learning' materials are mostly primary sources and journal articles. This term, which is more encompassing than OER, allows for other resources such as open data and open access journals to be considered as open content, to which students and lecturers will ideally have access.

Open educational resources (OER) are educational resources (including curriculum maps, course materials, textbooks, streaming videos, multimedia applications, podcasts, and any other materials that have been designed for use in teaching and learning) that are freely available for use by educators and students without an accompanying need to pay royalties

or licence fees. OER is not synonymous with online learning or technology-supported learning. Openly licensed content can be produced in any medium: text, video, audio, or computer-based multimedia.

Provider means a registered institution that offers learning programmes culminating in NQF standards and/or qualifications, and that manages the assessment thereof.

Post-schooling, in the South African context, refers to provision of educational opportunities to all people who have left school as well as those who have never been to school. It includes education and training for out-of-school youth, and also includes institutions offering second chance learning, FET/TVET colleges, and education and training offered by the Sector Education and Training Authorities (SETAs), universities of technology and universities, as well as other training colleges and institutes.

Qualification means a planned combination of learning outcomes, which has a defined purpose or purposes, and which is intended to provide qualifying students with specified applied competence and a basis for further learning; it also means the formal recognition of the achievement of the required number and type of credits and such other requirements as may be determined by the South African Qualifications Authority (SAQA).

Quality, in the context of the South African education system, refers to the interrelated demonstration of fitness of and for purpose, value for money, and contribution to social transformation in line with the intent and values of the Constitution of the Republic of South Africa (1996).

Quality management entails a number of elements of institutional planning and action to address issues of quality. These include institutional arrangements for quality assurance, support, development and monitoring.

Recognition of prior learning (RPL) involves formal identification, assessment and acknowledgement of the full range of a person's knowledge, skills and capabilities acquired through formal, informal or non-formal training, on-the-job or life experience.

Standard means registered statements of desired education and training outcomes and their associated assessment criteria.

Synchronous interaction is the learning or sharing of information within a group that necessitates taking part at the same time, although it could be outside the constraint of place (if supported online): e.g. a lecture in a classroom with facilitator and all students present, or a lecture via Web-conferencing with some or all students online.

Technology-supported learning refers to structured learning opportunities mediated through software applications using digital resources (usually combinations of text, audio and visual/video files) and communication, and accessed through a range of fixed or mobile hardware devices. Such learning provision may be online and synchronous (e.g. real-time conferencing), online and asynchronous (e.g. text-based discussion forum) or off-line (e.g. interactive or resource-based CD/DVD/flash drive). ICT can support learning in contact, blended and distance education programmes.

Work-based education/work-integrated learning (WBE/WIL) is a component of a learning programme that focuses on the application of theory in an authentic, work-based context. It addresses specific competences identified for the acquisition of a qualification that relate to the development of skills that will make the student employable and will assist in developing his/her personal skills. Employer and professional bodies, together with academic staff, are involved in the assessment of experiential learning. Distance education methods may usefully be used in providing a structured WBE/WIL experience within a larger learning programme; the provision of WBE/WIL, and the need for placement, mentoring, support, supervision and assessment present particular challenges for large-scale, distributed distance education provision and require special attention in the planning, resourcing and monitoring of programmes offered in distance mode.

Virtual Learning Environment (VLE) or Learning Management System (LMS) is a software application for the administration, documentation, tracking, reporting and delivery of programmes and courses.

DISTANCE HIGHER EDUCATION PROGRAMMES IN A DIGITAL ERA: PROGRAMME ACCREDITATION CRITERIA

A Companion to Distance Higher Education Programmes in a Digital Era: Good Practice Guide
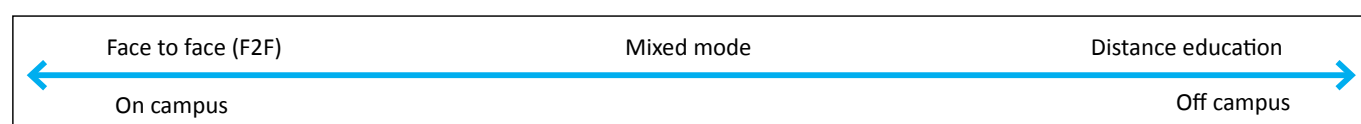
CONTENTS

Lines of inquiry in interpreting distance provision
This document should be read together with the related *Good Practice Guide*.

Although it is clear that an increasing number of institutions are using a blend of face-to-face, e- and on-line learning as well as distance methods, the revised funding policy for higher education provision maintains a distinction between contact- and distance provision and it seems sensible also to maintain the distinction from a quality assurance perspective. When the intended target students for a programme are located remotely from the institution and may never attend a meeting on a central or even decentralised campus, it is then necessary to make informed decisions about how such students will be able to access the curriculum and its resources, how they will be supported through the learning process and how they will be assessed in a valid and reliable way. In addition, the management of Work-Integrated Learning/Work-Based Learning as well as practical work needs more careful planning and support if students are more widely distributed. There are accordingly many variations on what might be construed as distance provision as outlined in the following discussion.
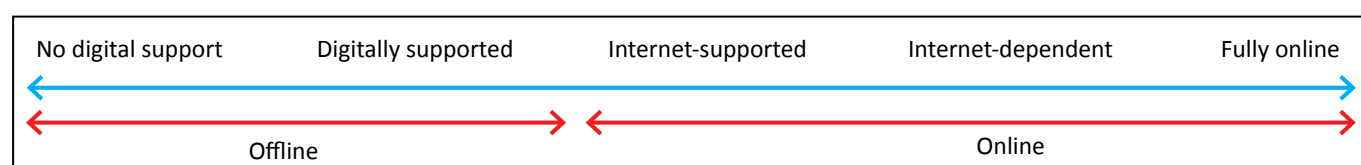
The mode of education provision is typically viewed on a continuum from purely face-to-face tuition through to education purely at a distance, the latter traditionally conceptualised as correspondence tuition with no face-to-face interaction between lecturers and students. However, there is now more resource-based (independent) learning in face-to-face programmes, and more face-to-face interaction in distance. With the increasing use of supporting educational technologies there is likely to be rapid movement to the centre.

Spatial or geographic distribution of lecturers and students

Face to face (F2F)	Mixed mode	Distance education
On campus		Off campus

A second continuum could represent another dimension by plotting the extent of supporting ICTs – ranging from fully offline to fully online. In internet-supported programmes, participation online is an option or alternative for students. In internet-dependent programmes, participation via the Internet is a requirement, and could include online interaction, communication and access to course materials via the web. In fully online programmes, there is no physical face-to-face component, although there could be a virtual face-to-face component.

Extent of ICT support

No digital support	Digitally supported	Internet-supported	Internet-dependent	Fully online
Offline			Online	

In our African context, it is pertinent to also consider digital forms of support that do not require internet access, for example learning supported offline via CD/DVD/flashdrive. Of course, within a particular course, learning could be supported both online and digitally offline at various stages. The previous rigid distinction between face-to-face and distance education provision is becoming increasingly difficult to maintain. Nonetheless, the physical location of students and their access to appropriate resources and technology remain important considerations in the design of programmes.

It is useful to conceptualise these two continua in relation to each other as horizontal and vertical axes.

Situating various courses or programmes on the resulting grid allows one to describe both the extent of spatial or geographic distribution and the ICT supported dimensions of a course or programme. The circles positioned on the grid represent examples based on courses or programmes at actual higher education institutions (HEI). This would enable a HEI to position a particular course or programme (such as B) on the grid in terms of where they are situated right now, and then determine where the institution would like them to move to over a period of time. This could assist in identifying what changes would be required in order to move or reposition the course in terms of this grid, and the other influencing factors or aspects of the course would need to be taken into account.
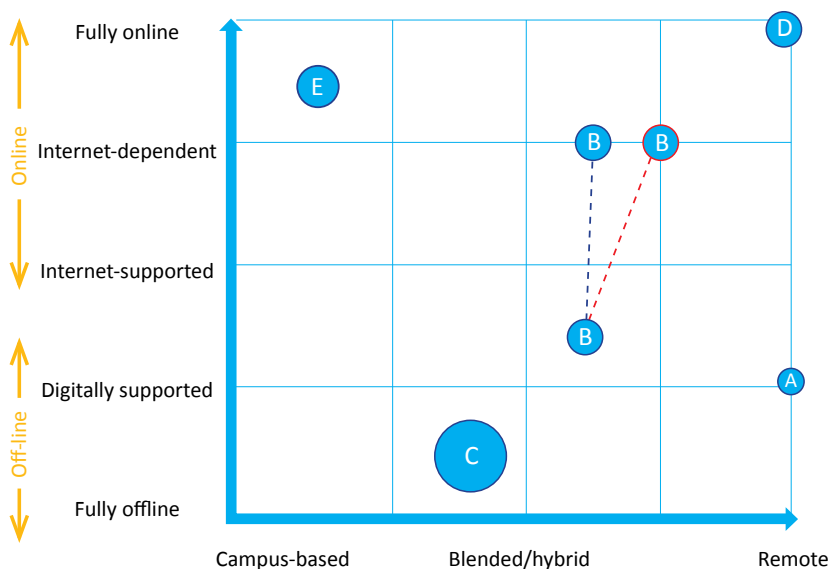
One particular factor emerges as being particularly important in defining what the possibilities are in how a course is delivered. This is believed to be the group or class size i.e. the enrolment for a particular instance of delivering a particular course. The size of the cohort enrolled for a course or programme would appear to be a major determinant of the nature and extent of the interactions possible between lecturer-student and student-student, the need for the deployment of tutors, the level of mediation employed by the lecturer and tutors, the level of support for the students, the nature of the assessment, and could in fact be the determinant for the pedagogical approach.

It would therefore be opportune to depict class size when locating a course or programme on the grid in order to indicate the extent to which the underlying aspects identified and discussed would need to be considered. In addition, if the plan is to migrate a course to a different position on the grid over time, an indication of this aspect would provide a cautionary flag to prompt examination of the practical aspects that would need to be considered to effect such a migration. The class size could be depicted on the same grid by simply varying the relative size of the circles denoting a particular course. For example, it can be easily seen that the group for Course C, is larger than the group for Course D, which in turn is larger than E.

These guidelines are concerned with programmes that fall to the right-hand side of the grid explored above. As we move from the left to the right, so traditional distance education concerns come to the fore with respect to ensuring an equivalent learning experience for an increasingly distributed student cohort through provision of access to appropriate learning resources as well as decentralised support, assessment and, in some programmes, work-integrated learning.
In most instances, the review process will begin with a consideration of an institution's online accreditation application. Experience suggests that it is often difficult to get a clear sense of how providers have designed their programme with the needs of remote distance students in mind. This means that how curriculum resources are designed and shared; the ways in which the programme will be assessed and how students will be supported through the process; as well as how staff are prepared and supported for teaching in new ways, become critical lenses for interrogation. Where technology is used to enable some of these functions, it is necessary to assess whether appropriate use is made of relevant technology for the intended purposes and whether the implications for students and staff have been sufficiently thought through: the learning purpose should drive the use of ICTs and not the other way round. The following tables therefore seek to provide indicators for good practice of distance provision related to the general criteria that apply to all programmes.

Criteria 1: Programme Design

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
The programme is consonant with the institution's mission, forms part of institutional planning and resource allocation, meets national requirements, the needs of students and other stakeholders, and is intellectually credible. It is designed coherently and articulates well with other relevant programmes, where possible.	
(i) The programme is consonant with the institution's mission and goals and was approved by the appropriate institutional structures, including Senate /equivalent structure. Provision is made for the programme and its technology requirements in the institution's planning and resource allocation processes.	Considerations include: • The vision and mission reflects commitment to pursue greater student access and success by means of (open and/or) distance learning and executive management have demonstrably committed to appropriate planning, resource allocation and review processes. • The planning process for meeting technology requirements includes statements related to the needs of students.
(ii) The programme meets the requirements of the HEQSF.	Applies equally to all modes of provision.

(iii) Learning outcomes, degree of curriculum choice, teaching and learning methods, modes of delivery, learning materials and expected completion time cater for the learning needs of its target student intake. Competences expected of students who successfully complete the programme are made explicit.	Considerations include:
	• There are processes in place to guide students towards registering for a reasonable workload according to their individual circumstances.
	• Minimum and maximum study periods are consistent with the stated target audiences and contexts of learning.
	• The programme design indicates how equivalence of learning provision across all sites/contexts will be ensured including management of any contact sessions, online group discussions, work-integrated learning components, practicals etc.
	• The programme and assessment requirements are consistent with the exit level of the programme regardless of mode of provision.
	• The ICT selected is appropriate to the circumstances and needs of students, purpose of the programme, the teaching methods to be used and the manner in which interaction and mediation will be planned, implemented and managed.
	• When programmes are exported (that is either the programme as a whole is made available elsewhere with or without the possibility of adaptation and/or foreign students are allowed to register for the programme as taught by the SA institution):
	  o The programme is substantially the same as that offered to students inside South Africa with regard to content, student support, and assessment standards and practices.
	  o The detailed content of the programme has been adapted to take account of local contexts.
	  o Where required, the programme adheres to minimum standards determined by the regulatory frameworks for higher education of the country of residence of the students enrolled for it and makes explicit the requirements to be met for recognition of the qualification in either SA or the students' home country.

	• Appropriate student support is catered for in the programme design and planned delivery in order to achieve the overall purpose of the programme as articulated for the mode of provision and for the varied contexts in which the programme may be accessed.
(i) The design maintains an appropriate balance of theoretical, practical and experiential knowledge and skills. It has sufficient disciplinary content and theoretical depth at the appropriate level, to serve its educational purposes.	Considerations include: • Although the learning resources provided include appropriate scaffolding for more independent learning, the kinds of exit level activities expected of students are commensurate with the NQF level of the programme/course. • Appropriate arrangements are made for necessary practical and experiential learning for a diverse and distributed student audience to ensure an equivalent learning experience
(ii) The design offers learning and career pathways to students with opportunities for articulation with other programmes within and across institutions, where possible.	Considerations include: • To the extent that it is possible and within the control of the institution, the programme design supports access, RPL and credit transfer.
(iii) Modules and/or courses in the programme are coherently planned with regard to content, level, credits, purpose, outcomes, rules of combination, relative weight and delivery. Outsourcing of delivery is not permitted.	Considerations include: • Resources, including digital resources, are incorporated into a coherent learning experience rather than offered as discrete bits of information. • There is adequate budget and resourcing to mediate the educational resources, to offer support to the students and to provide sufficient formative assessment. • The core academic component of programme design and provision cannot be outsourced, but outsourcing of certain functions (e.g. exam management at learning centres, or creation of digital multimedia objects, or preparation of learning material/ management of learning platforms according to the specifications decided by the institutional programme staff) is quite acceptable and should be declared in the application.
(iv) There is a policy and/or procedures for developing and evaluating learning materials and ensuring their alignment with programme goals and underpinning philosophy. Where necessary, members of the academic staff are trained to develop learning materials.	Considerations include: • There is evidence from the submission that the institution understands the role, function and quality issues associated with learning materials in distance education provision. • The policy framework includes appropriate workload models and procedures to support staff in the development and evaluation of learning resources appropriate for high levels of independent study. • There is a plan with realistic timelines and budgets, for sourcing, developing, and updating/revising learning resources. • If digital on-line or off-line access is needed this is taken into consideration in planning and indicated to students prior to registration; where possible there is provision of alternatives, for low bandwidth/ challenged access.

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
(v) Programme outcomes meet national and/or regional labour market, knowledge or other socio-cultural needs. The requirements of professional bodies are taken into consideration, where applicable. Relevant stakeholders, including academic peers from outside the institution, and employers and professional bodies where applicable, are involved in the development of the programme.	Applies equally across all modes of provision.
(vi) The characteristics and needs of professional and vocational education are catered for in the design of the programme, where applicable. This includes the following, in addition to (i) – (vii) above: • The programme promotes the students' understanding of the specific occupation for which they are being trained. • Students master techniques and skills required for a specific profession or occupation. • Work-Integrated Learning (WIL) including workplace-based learning and placement in a work-based environment form an integral part of the curriculum according to the HEQSF qualification type selected.	Considerations include: • There are appropriate 'enabling mechanisms' (e.g. placements in appropriate and proximate locations) for distance education students, and for the contexts in which they find places for Work-Integrated Learning, where this is appropriate to the programme purpose, to ensure that 'students master the techniques and skills required'. • There are documented procedures for the identification, training and monitoring/ support of workplace-based mentors as well as making provision for visits/interaction with supervisors appointed, trained and monitored by the institution. • Institutions make clear how the above will be managed for a distributed student body and a diversity of contexts.
(vii) In the case of institutions with service learning as part of their mission: • Service learning programmes are integrated into institutional and academic planning, as part of the institution's mission and strategic goals. • Enabling mechanisms (which may include incentives) are in place to support the implementation of service learning, including staff and student capacity development.	Considerations include: • In DE programmes with a service learning component, arrangements similar to those indicated above in (i) need to be planned and resourced.

Criteria 2: Student Recruitment, Admission and Selection

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
Recruitment documentation informs potential students of the programme accurately and sufficiently, and admission adheres to current legislation. Admission and selection of students are commensurate with the programme's academic requirements, within a framework of widened access and equity. The number of students selected takes into account the programme's intended learning outcomes, its capacity to offer good quality education and the needs of the particular profession (in the case of professional and vocational programmes).	Considerations include: • Minimum and maximum timeframes for completing the curriculum are provided. • If a continuous registration process is envisaged it is explained how this will help widen access and how it will be managed. • Consequences for teaching and learning of the practice of continuous registration are made explicit if this is indicated.

(i) Advertising and promotional materials contain accurate and sufficient information on the programme with regard to admission policies, completion requirements and academic standards. Marketing and advertising are done according to DHET and SAQA regulations and accurate information is provided about the NQF level and the accreditation status of the programme.	Considerations include: • Any practical/WIL/technology requirements of the programme are communicated and verified prior to completion of registration. • Advertising and marketing do not imply that the use of technology is free of cost or guarantees success. • The technology requirements/ assumptions made by the programme are communicated clearly prior to student registration. (This may include inter alia informing students of the competence and equipment required to be successful in the programme, providing students with the necessary equipment or software to do the course as an integral part of the learning package, providing students with tests to assess their level of competence in order to design appropriate capacity building, building IT training into the programme, and/or ensuring that a range of learning and teaching methods are used to support different learning styles.)
(ii) Admission, matriculation exemption, age exemption, etc., adhere to current legislation.	Applies equally across all modes of provision.
(iii) The programme's admission criteria are in line with national legislation. Equity targets are clearly stated as are the plans to attain them. Provision is made, where possible, for flexible entry routes, which includes RPL with regard to general admission requirements, as well as additional requirements for the programme, where applicable. Admission of students through an RPL route should not constitute more than 10 percent of the student intake for the programme.	Applies equally across all modes of provision. (In contact programmes it is only in exceptional circumstances and only in undergraduate programmes that admission of students through an RPL route will be allowed to exceed 10% of the total number of students in the programme. However, in ODL programmes which are designed to promote improved access, the ratio may be higher than 10%, although the RPL process outlined by the institution should be sufficiently rigorous to inspire confidence in the integrity of the programme as a whole.)
(iv) Admission requirements are in line with the degree of complexity of learning required in the programme, within the context of widening access and promoting equity.	Applies equally across all modes of provision.
(v) Selection criteria are explicit and indicate how they contribute to institutional plans for diversity. The number of students selected for the programme does not exceed the capacity available for offering good quality education. The number of students is balanced against the intended learning outcomes of the programme and takes into account the mode(s) of delivery and the programme's components (modules/courses).	Considerations include: • The implications for teaching and learning of offering a programme which has a wide range of electives and a large geographic footprint (e.g. national, cross-border provision) has been identified and addressed. • There is evidence to demonstrate that institutions have thought through the implications of their admissions policies for provision of student support including whether the institution can provide an equivalent learning experience and a reasonable chance of success for all students. • There is a sufficiently rigorous process to ensure that student registration numbers are commensurate with the capacity of the programme to deliver an equivalent high quality learning experience to all students in all contexts e.g. in terms of digital system capacity and integrity, packaging of learning resources to enable download in low bandwidth contexts and proposed synchronous and asynchronous support or equivalent print-based versions.

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
(vi) In the case of professional and vocational programmes, the quality and number of students admitted takes into account the needs of the particular profession, consonant with the appropriate equity considerations and institutional infrastructural capacity.	Applies equally across all modes of provision.

Criteria 3 and 4: Staffing

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
Criteria 3 *Academic staff responsible for the programme is suitably qualified, has sufficient relevant experience and teaching competence, and their assessment competence and research profile are adequate for the nature and level of the programme. The institution and/or other recognised agencies contracted by the institution provide opportunities for academic staff members to enhance their competences and to support their professional growth and development.*	
(i) Academic staff members for undergraduate programmes have relevant academic qualifications higher than the exit level of the programme, but at minimum a degree. Academic staff members for postgraduate programmes have relevant academic qualifications at least on the same level as the exit level of the programme. At least 50 percent of the academic staff members for postgraduate programmes have relevant academic qualifications higher than the exit level of the programme.[1] The qualifications of academic staff members were awarded by recognised higher education institutions.	Applies equally across all modes of provision.
(ii) The majority of full-time academic staff members has two or more years of teaching experience in a recognised higher education institution, and in areas pertinent to the programme. In the case of professional programmes, a sufficient number of academic staff members also have relevant professional experience. Qualified and experienced academic staff members design the learning programme, although junior or part-time tutors may act as facilitators of learning.	Considerations include: • There is evidence of sufficient planning and resource provision (in terms of time as well as money) to build the capacity of the staff to deal with the demands of distance education as a mode of delivery and the increased use of technology. (Technology-supported distance teaching and learning makes greater demands of staff including for example, developing and delivering electronic learning materials demands the integration of three crucial sets of skills: academic expertise, instructional expertise, technological expertise.) • Where current staff do not have the required expertise, there is evidence that the institution can contract in specialist expertise flexibly and efficiently as necessary for distance delivery.

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[1] This does not apply to doctoral programmes, or to master's programmes in certain fields of study, for example medicine, where M Med degrees are regarded as adequate.

(iii) Academic staff members are competent to apply the assessment policies of the institution. Some of the academic staff members responsible for the programme have at least two years of experience of student assessment at the exit level of the programme. There is ongoing professional development and training of staff in assessment.	Considerations include: • There are procedures in place to asssure the quality of feedback on formative assessment tasks. • There are plans in place to train staff in both continuous and summative assessment in DE.
(iv) Academic staff members have research experience through their own research and/or studies toward higher education qualifications. The research area(s) of some of the academic staff members are relevant to the subject areas of the programme. In the case of postgraduate programmes, the research profile of the staff includes recognised research outputs.	Considerations include: • Institutional research policy encourages academic staff to engage in collaborative research on DE with academics from the same institution and from other institutions.
(v) The institution and/or other recognised agencies contracted by the institution provide orientation and induction opportunities in which new academic staff members participate. Provision is made for regular staff development opportunities in which relevant academic staff members participate.	Considerations include: • Orientation and ongoing professional development includes distance education teaching and learning and the appropriate use of appropriate ICT.
Criteria 4 *The academic and support staff complement is of sufficient size and seniority for the nature and field of the programme and the size of the student body to ensure that all activities related to the programme can be carried out effectively. There is an appropriate ratio between full-time and part-time staff. The recruitment and employment of staff follow relevant legislation and appropriate administrative procedures, including redress and equity considerations. Support staff members are adequately qualified and their knowledge and skills are regularly updated.*	
(i) The staff:student ratio expressed as full-time equivalents is suitable for the nature and field of the programme and number of enrolled students. Sufficient support staff members dedicated to the programme are available, where appropriate.	Considerations include: • The institutions makes a case for why the FTE staff:student ratio is appropriate for the mode of provision. • The roles and responsibilities of part-time, decentralised staff used to provide support for decentralised learning and assessment are documented. • The institution has appropriate procedures to assure the quality of all functions including those performed by part-time or external staff. • The institution has correctly assessed the amount of time needed for the performance of various distance education related tasks.
(ii) The programme has an appropriate ratio of full-time to part-time staff to ensure working conditions conducive to teaching and learning and research. Part-time and junior staff and tutors are trained, where necessary, and monitored by full-time staff.	Considerations include: • The institution has motivated the numbers and ratio of full-time to part-time staff in terms of its appropriateness for the mode of provision. • Staff are appropriately recruited, trained (in both distance teaching and technology use), monitored and supported.

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
(iii) Recruitment and employment of staff adhere to the stipulations of the Labour Relations Act and to conditions of service, and there are appropriate administrative procedures for the selection, appointment, induction and payment of staff members and tutors. Redress and equity considerations receive due attention in the appointment of staff.	Applies equally across all modes of provision
(iv) The academic staff complement is such that it ensures that students are exposed to a diversity of ideas, styles and approaches, and that there is experience in the particular requirements of the mode of delivery used	Applies equally across all modes of provision
(v) There is provision for the academic coordination of the programme as in Criterion 10.	Applies equally across all modes of provision
(vi) Contractual arrangements relating to the hours and workload of staff ensure that all programme quality assurance, teaching, research, learning support, materials development, assessment, monitoring of part-time staff members (where applicable), counselling and administrative activities take place.	Applies equally across all modes of provision • It is possible to ascertain who has the responsibility for programme administration and the incumbent is trained and resourced appropriately for the task. • It is possible to ascertain who has the responsibility for IT support for both students and staff and the incumbent is trained and resourced appropriately for the task (possibly at institutional rather than programme level).
(vii) Administrative, technical and academic development support staff members are adequately qualified for their duties, and opportunities exist for staff development.	Considerations include: • The institution has motivated the mix and level of qualifications and skill sets of its staff in terms of its appropriateness for the mode of provision.
(viii) For distance learning programmes, sufficient administrative and technical staff is employed to manage the specialised tasks of registry, dispatch, management of assignments, record-keeping, and other issues in relation to student needs.	Considerations include: • Storage and dispatch are less of an issue in a digital environment but the focus shifts to issues of access to ICT resources, bandwidth, back-up, versioning and updating of digital resources and this should be reflected in the programme description.

Criteria 5: Teaching and Learning Strategy

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
The institution gives recognition to the importance of the promotion of student learning. The teaching and learning strategy is appropriate for the institutional type (as reflected in its mission), mode(s) of delivery and student composition, contains mechanisms to ensure the appropriateness of teaching and learning methods, and makes provision for staff to upgrade their teaching methods. The strategy sets targets, plans for implementation, as well as mechanisms to monitor progress, evaluate impact and effect improvement.	

(i) Recognition of the importance of the promotion of student learning is reflected in the institution's central operating policies and procedures, including resource allocation, provision of support services, marketing, appointments and promotions.	Considerations include: • The overall teaching and learning strategy is consistent with the stated programme purpose, the level of demand, the planned outcomes and the realities of a dispersed staff and student body. • The institution has systems in place to monitor the active participation of all registered students and to identify and pro-actively support students at-risk of dropping out.
(ii) A teaching and learning strategy is in place which – • Is appropriate for the institutional type as reflected in its mission (programme types, research: teaching), mode(s) of delivery (contact / distance / e-learning), and its student composition (age, full-time / part-time, advantaged / disadvantaged), etc. • Employs mechanisms to ensure that teaching and learning methods are appropriate for the design and use of learning materials and instructional and learning technology. • Provides for staff development opportunities where staff can upgrade their teaching methods. • Contains targets, plans for implementation, ways of monitoring progress and evaluating impact, and mechanisms for feedback and improvement.	Considerations include: • It is made clear what technology is used and how is it used to support teaching and learning. • There is evidence that staff and students are oriented and supported for the use of technology in ways that support the teaching and learning strategy of the programme. • Staff and student access to appropriate educational technologies for the purpose of teaching and learning activities is clearly indicated. • Where distance education programmes make extensive use of educational technologies, staff members are assisted to design programmes to facilitate synchronous or asynchronous electronic communication, to build different forms of mediated learning into designed learning materials, and to provide opportunities for peer support and peer teaching in the electronic environment. • Research outputs as well as ongoing research include research related to improving provision of distance education.

Criteria 6: Student Assessment

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
The different modes of delivery of the programme have appropriate policies and procedures for internal assessment; internal and external moderation; monitoring of student progress; explicitness, validity and reliability of assessment practices; recording of assessment results; settling of disputes; the rigour and security of the assessment system; RPL; and for the development of staff competence in assessment.	
(i) The programme has appropriate policies and procedures in all modes of delivery for: • Internal assessment of student learning achievements by academic staff responsible for teaching a course/module of the programme in a system that includes internal moderation. • External moderation of students' learning achievements by appropriately qualified personnel. Moderators are appointed in terms of clear criteria and procedures and conduct their responsibilities in terms of clear guidelines. • Monitoring student progress in the course of the programme.	Considerations include: • In distance education delivery between countries, whether technology is used or not, care is taken that the assessment activities are designed and administered in ways that do not disadvantage students and make provision for equivalence across a range of contexts. • The implications for security and integrity for decentralised assessment are identified and addressed. • There are procedures in place to ensure the minimum turn-around time and quality of feedback on formative assessment tasks.

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
• Ensuring the validity and reliability of assessment practices. • Secure and reliable recording of assessment results. • Settling of student disputes regarding assessment results. • Ensuring the security of the assessment system, especially with regard to plagiarism and other misdemeanours. • Development of staff competence in assessment.	
(ii) There are appropriate policies and procedures for RPL, including the identification, documentation, assessment, evaluation and transcription of prior learning against specified learning outcomes, so that it can articulate with current programmes and qualifications. Assessment instruments are designed for RPL in accordance with the institution's policies on fair and transparent assessment.	Applies equally across all modes of provision.

Criteria 7: Library Services

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
Suitable and sufficient venues, IT infrastructure and library resources are available for students and staff in the programme. Policies ensure the proper management and maintenance of library resources, including support and access for students and staff. Staff development of library staff takes place on a regular basis.	Note: Seminal issues are covered under Criterion 1 as well as in Criterion 8 below.
(i) Suitable and sufficient venues are available at all official sites of learning where the programme is offered, including teaching and learning venues, laboratories and clinical facilities, where appropriate. Codes for clinical conduct, laboratory practice and safety exist, where appropriate. Venue allocation and timetabling are carefully planned to accommodate the needs of students.	Considerations include: • Arrangements for access to and use of physical sites of learning as part of a distance programme are appropriate for the geographic footprint of the programme and ensure an equivalent learning experience for all students.
(ii) Suitable and sufficient IT infrastructure, as determined by the nature of the programme, is available at all sites of learning. This includes functionally appropriate hardware (computers and printers), software (programmes) and databases. The infrastructure is properly maintained and continuously upgraded and adequate funds are available for this purpose. Students and staff are trained in the use of technology required for the programme.	Considerations include • Arrangements for access to and use of ICT infrastructure as part of a distance programme are appropriate for the geographic footprint of the programme and ensure an equivalent learning experience for all students. [This may involve, inter alia, availing access to decentralised computer labs outside of normal working hours to accommodate the needs of working distance students.]

(iii) Suitable and sufficient library and other academic resources exist which: • Complement the curriculum. • Provide incentives for students to learn according to their own needs, capacity and pace. • Support appropriate professional and scholarly activities of students and staff involved in the programme.	Considerations include: • Library support includes access to wider electronic knowledge resources, as well as the information literacy skills to handle these resources appropriately. Particular attention is given to provide access to students working from workplaces or homes or across borders. • There is evidence of how the institution plans to make library access to information equivalent to that provided for campus-based students through inter alia online library access; preloading required reading resources in digital format on CDs/DVDs/flashdrives/mobile devices etc.
(iv) Policies exist for the proper management and maintenance of library and other academic resources, as well as for their continuous renewal and expansion. These policies are integrated into the institution's financial plan.	Applies equally across all modes of provision.
(v) On- and off-campus students have adequate library support and adequate access to library research and computing facilities.	Considerations include: • Attention is paid to access issues and costs of library and course materials for students.
(vi) Staff development takes place on a regular basis to update the knowledge and skills of library staff.	Considerations include: • Not only library staff receive training, support and professional development, but also staff involved in providing technological support to academics or directly to students.

Criteria 8: Programme Administrative Services

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision

The programme has effective administrative services in order to provide information, manage the programme information system, deal with a diverse student population, and ensure the integrity of processes leading to certification of the qualification obtained through the programme.	Criteria 8 and 10 need to be considered together.
	Considerations include:
	• There should be evidence of the following systems necessary for distance education:
	  o Production and delivery of course materials and/or devices on which learning resources are pre-loaded.
	  o Organization of decentralized support for remote students (grouping of students, allocation of tutors whether contact- or online, location of suitable sites of learning and/or establishment and management of online fora).
	  o Procedures to receive, record, process, and turnaround assignments including procedures for online submission, on-screen-marking, capturing of data and timeous return.
	  o Communication with remote students who may not have access to standard means of communication.
	  o Enrolment of students at remote sites.
	  o An effective communication system that gives students as individuals a sense of belonging to the institution throughout their period of study.
	  o Administrative procedures are outlined to ensure that the requirements of criterion 6(i) are met for a distributed student body.

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
(i) The programme information system is managed effectively in order to provide reliable information on the following: • Venues, timetables, access to library and IT facilities, availability of academic and support staff for student consultations, and student support services. Information and communication needs of students in remote (rural) areas receive due attention. • Records of the students in the programme, including admission, progression, grades/marks, fees and graduation. • Records of students in the programme for the National Student Records Database (NLRD) of SAQA.	Considerations include: • The management information system captures enough information about students to form a student profile to inform appropriate course design. • Data management systems are robust and secure and used to track student progress, to identify and pro-actively support students at-risk and to provide data to inform programme review. • Institutions provide adequately for the reliability, privacy, safety and security of lecturer and student information and student financial transactions.
(ii) Effective administrative systems are in place for: • Identifying academically non-active students, particularly in distance education programmes. • Monitoring student performance in order to ensure timely identification of at-risk students. There are strategies for advising students on improving their chances of success and for referral to appropriate academic development programmes. Rules for re-admission to programmes are clear and are sensitively applied. • Dealing with the needs of a diverse student population.	Considerations include: • There are systems in place to identify and support, in a pro-active way, at-risk and/or inactive students in order to enhance retention and throughput.
(iii) Clear and efficient arrangements are in place for ensuring that the integrity of certification processes for the qualification obtained through the programme is not compromised. These include: • Effective mechanisms to quality assure the processing and issuing of certificates. • Effective security measures to prevent fraud or the illegal issuing of certificates.	Applies equally across all modes of provision.

Criteria 9: Postgraduate Policies, Procedures and Regulations

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
Postgraduate programmes have appropriate policies, procedures and regulations for the admission and selection of students, the selection and appointment of supervisors, and the definition of the roles and responsibilities of supervisors and students, etc.	

(i) Appropriate policies, procedures and regulations are in place for student admission, selection and assessment. These are communicated to all postgraduate students, and academic and administrative staff, and implemented consistently across the institution and programme.
 	
(ii) The selection and appointment criteria in place for postgraduate supervisors are acceptable to the research community in the area of study. These include the following:
• The supervisor has a qualification in a relevant field of study higher than, or at least at the same level as, the exit level of the postgraduate programme he/she is supervising.
• The supervisor has an appropriate research track record, as well as experience, expertise and peer recognition in the field of study.
• In the case of inexperienced or new supervisors, there is ongoing staff development and support, and joint supervision is explored as an option.
 	
(iii) Explicit guidelines exist on the roles and responsibilities of supervisors and students and other matters relevant to the performance of research. These include the following:
• The nature, format and expected turnaround time for work submitted to the supervisor.
• Forms of assessment, and the communication of feedback to the student, which includes:
   o The periodicity of contact between student and supervisor, the schedule for the submission of progress reports and written work.
   o Research ethics, code of conduct, regulations on plagiarism and intellectual property rights.
   o Examination and qualification requirements.
	Considerations include:
	• There are clear guidelines for how the general requirements will be met for a distributed student body.
	• There are mechanisms for providing distributed students with support in the various aspects of research in order to help them cope with the research requirements of DE programmes in which they are enrolled.
	• Where possible, the research policy encourages co-publishing by DE students and supervisors through an incentive system.

Criteria 10: Programme Coordination

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
The programme is effectively coordinated in order to facilitate the attainment of its intended purposes and outcomes.	

(i) An academic is identified as programme coordinator and operates within the framework of an agreed-upon mandate and defined procedures and responsibilities. This includes responsibility for:
• Ensuring the academic coherence and integrity of the programme and that all conditions for the delivery of the programme are met.
• Coordination of logistical and other issues regarding:
  o The day-to-day delivery of the programme.
  o All aspects of the programme quality management system, including the provision of resources.
  o The review of the programme and feedback with a view to improvement.
• Monitoring of expenditure.
	Considerations include:
	• The use of educational technology for teaching and learning requires a budget for maintaining and continually upgrading the appropriate technology. This must include provision for the appropriate number of academic staff, and maintaining a high level of technical and other support staff, and maintaining current operating learning management systems.

(ii) Opportunities exist for student input and participation in relevant aspects of programme coordination.	Applies equally across all modes of provision.
(iii) Policies for ensuring the integrity of certification processes for the qualification obtained through the programme are effectively implemented.[2] This includes: • Mechanisms for monitoring the eligibility of candidates for the award of certificates. • Mechanisms for quality assuring the processing and issuing of certificates. • Security measures for preventing fraud or the illegal issuing of certificates.	Applies equally across all modes of provision.

Criteria 11: Academic Development

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
Academic development initiatives promote student, staff and curriculum development and offer academic support for students, where necessary.	Criteria 11/12: Academic development/Teaching and learning interactions need to be considered together. • The seminal distance education issues are dealt with under Criterion 1. • Provision should be made for self-evaluation, the identification of support services for a variety of student needs including distance study skills and the tracking of student performance to allow proactive identification and support of students at-risk.

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[2] See also 3.1.7 above.

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
(i) Staff responsible for academic development is adequately qualified and experienced for their task, and their knowledge and skills are regularly updated.	Applies equally across all modes of provision.
(ii) Student and staff development initiatives are responsive to the needs of the students and staff. This includes foundational and skills-oriented provision for students.	Considerations include: • Assumptions about student and staff readiness, have been taken into account in the design of all learning activities including technology-enhanced activities; and courses are available to support development of the necessary ICT competences needed for success where these are lacking.
(iii) Curriculum development at programme and course/module levels includes strategies for language skills development, numeracy and cognitive skills which enhance the use of disciplinary discourse and skills by students.	Applies equally across all modes of provision.
(iv) Additional student academic support is offered where necessary.	Considerations include: • Recognition of and provision for supporting the development of knowledge, skills and attitudes likely to promote greater success within the chosen mode of provision.
(v) The effectiveness of academic development initiatives is regularly monitored and feedback is used for improvement.	Applies equally across all modes of provision.

Criteria 12: Teaching and Learning Interactions

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
Effective teaching and learning methods and suitable learning materials and learning opportunities facilitate the achievement of the purposes and outcomes of the programme.	Criteria 11/12: Academic development/Teaching and learning interactions • The seminal distance education issues are dealt with under Criterion 1. • With regard to student support, programmes using educational technologies for teaching and learning need to provide the same three distinct but interrelated kinds of support as all other programmes: o Academic support, organised and carried out by the staff of the relevant academic departments o General information support, organised and carried out by the appropriate administrative, financial and counselling sections of the university o Technical support, which offers resources to students in timely manner when technical difficulties arise in the electronic learning environment, and is carried out by an appropriate IT or related university department.
(i) Students are provided with guidance on how the different components of the programme (for example, subjects, courses and/or modules) contribute to the learning outcomes of the programme.	Applies equally to all modes of provision.

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
(ii) There is an appropriate balance and mix between different teaching and learning methods. Teaching and learning methods are appropriate to the design and use of the learning materials and instructional and learning technology.	Considerations include: • A programme which makes intensive use of educational technology for teaching and learning should be presented in a coherent manner that takes proper account of the constraints and possibilities of the electronic information environment. Institutions may have interpreted a technology-supported approach in the form of simply digitising content without planning sufficiently carefully for access, programme coherence and appropriate levels of interaction. If the course material itself is designed specifically for the electronic learning environment, then appropriate learning pathways for students should be built into the structure and presentation of each course.
(iii) Suitable learning opportunities are provided to facilitate the acquisition of the knowledge and skills specified in the programme outcomes, and within the stipulated time.	Applies equally to all modes of provision.
(iv) Students actively participate in the teaching and learning process.	Applies equally to all modes of provision.
(v) The staff members have opportunities to upgrade their teaching methods and there is facilitation of suitable learning opportunities.	Applies equally to all modes of provision.
(vi) The effectiveness of teaching and learning interactions is regularly monitored and the results used for improvement.	Applies equally to all modes of provision.

Criteria 13: Student Assessment Practices

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision

The programme has effective assessment practices which include internal (or external) assessment, as well as internal and external moderation.	• Validity of assessment
	  o The institution can demonstrate that students who pass the programme demonstrate the graduate competences indicated in the purpose and exit level outcomes of the programme.
	  o The challenges for distance education programmes in assessment of practical competence where this is required to achieve the planned outcomes, have been addressed.
	  o Assessment activities, including online assessment activities, are sufficiently rigorous and varied for the programme purpose and level and the diversity of its student body.
	  o Assessment activities are appropriately structured to support more independent learning and there is a clear progression from in-course self-assessment activities and feedback, formative assessment tasks and feedback to the exit level summative assessment requirements.

		• Assessment management
		   o There is evidence that the institution understands the importance of feedback on formative assessment in distance education.
		   o There is evidence of an assessment management system to ensure that feedback on assessment reaches the students timeously.
		   o Where external part-time assessors are used, there are adequate systems to guarantee the integrity and security of the system and the authenticity of student submissions (including means to discourage plagiarism from online sources).

(i)	Assessment is an integral part of the teaching and learning process and is systematically and purposefully used to generate data for grading, ranking, selecting and predicting, as well as for providing timely feedback to inform teaching and learning and to improve the curriculum.	Considerations include: • The central role of formative assessment and feedback in a distance setting is formally recognised and there is evidence of an appropriate number and variety of formative assessment tasks, and mechanisms for the monitoring and quality assurance of feedback and minimum turn-around time. • The potential of the electronic environment for the use of ongoing formative assessment of different kinds (self-, peer- and tutor assessment) is exploited appropriately.
(ii)	The learning achievements of students are internally assessed by the academic staff responsible for teaching a course/module in terms of a system that includes internal moderation. This includes: • Academic staff who teach a course/module are responsible for designing, implementing and marking both formative and summative student assessments, for recording results and for feedback to students. • For summative assessment, especially where more than one marker is involved, internal moderation checks are undertaken to ensure the reliability of the assessment procedures. • Procedures are in place and are followed to receive, record, process, and turn around assignments within a time frame that allows students to benefit from feedback prior to the submission of further assessment tasks.	Applies equally across all modes of provision.
(iii)	The learning achievements of students on the exit level of a qualification are externally moderated by appropriately qualified people who have been appointed according to clear criteria and procedures and who conduct their responsibilities in terms of clear guidelines. External moderation includes the following: • External moderators are recommended by the examining academic department, are independent experts in their fields, have qualifications at least on the same level as the qualification being examined, are changed regularly, are not appointed as part of reciprocal arrangements (where possible), and are approved by and responsible to Senate/equivalent body.	Applies equally across all modes of provision.

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
• The institution provides information on the curriculum and on continuous assessment, as well as guidelines to assist external moderators in the completion of their reports. • External moderators mark fully at the exit level of the programme at least 10 percent of the examination scripts for each paper written and do random checks of at least 20 percent of examination scripts for each paper. • Completed external moderator reports are returned to the lecturer concerned and also to the programme coordinator or head of department/school. Problems are discussed with the lecturer concerned and the programme coordinator monitors the implementation of agreed improvements. External moderators approve the final marks list for the qualification concerned. • External moderators are expected to comment on the validity of the assessment instruments, the quality of student performance and the standard of student attainment, the reliability of the marking process, and any concerns or irregularities with respect to the observation of institutional/professional regulations.	
(iv) Assessment practices are effective and reliable in measuring and recording student attainment of the intended learning outcomes. This includes the following: • Assessment criteria are commensurate with the level of the qualification, the requirements of SAQA and, where appropriate, professional bodies, and are made explicit to staff and students. • Learning activities and the required assessment performances are both aligned with learning outcomes at the programme and modular level. • Learning outcomes for a programme/module and their link to assessment criteria and judgements are clearly stated and communicated to students. A range of appropriate assessment tasks are effective in measuring student attainment of the intended learning outcomes. There is at least one integrated assessment procedure for each qualification which is a valid test of the key purposes of the programme.	Considerations include: • In distance education, coursework assignments provide formative assessment whilst at the same time they are an integral aspect of the teaching and learning process. There should be evidence of regular staff development for academic staff members on good practice in assessment processes and procedures for distance education generally and the use of technology to support assessment in particular. • Programmes delivered exclusively or mainly through electronic learning methods do not narrow the range of assessment to the assessment of factual knowledge (which is most easily assessed), rather than the full range of outcomes and depth of knowledge required for the particular programme of study. In technology-supported distance education delivery, there is the danger of limiting assessment tasks to low level cognitive skills (e.g. simple computer-marked MCQs) at the expense of high level skills (usually requiring more open-ended written and practical assignments) that enhance deep and critical engagement with concepts. There should be evidence of staff development to familiarise academic staff with online assessment strategies that take high level cognitive skills into account ensuring credible online assessment. • There are systems in place to communicate feedback and results quickly, efficiently and securely to a distributed student body.

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
(v) A system is in operation for maximising the accuracy, consistency and credibility of results, including consistency of marking and concurrence between assessors and external examiners on the nature and quality of the evidence which indicates achievement of learning outcomes. • Students' assessment records are reliable and secure. Assessment data is accessible to academic coordinators, administrators, teaching staff and students, as appropriate.	Considerations include: • There are appropriate systems in place to ensure the reliability, security and rigour of the assessment process, as well as the authenticity of the students' submissions, including for online provision where this is offered.
(vi) RPL is done in an effective, reliable and consistent manner.	Applies equally across all modes of provision.

Criteria 14: Assessment System

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
The programme has taken measures to ensure the reliability, rigour and security of the assessment system.	

(i) The assessment system is rigorous and secure. This includes:
• Institutional/faculty/professional rules governing assessment are published and clearly communicated to students and relevant stakeholders.
• Evidence is provided to demonstrate that these rules are widely adhered to.
• Breaches of assessment regulations are dealt with effectively and timeously.
• Students are provided with information and guidance on their rights and responsibilities regarding assessment processes (for example, definitions and regulations on plagiarism, penalties, terms of appeal, supplementary examinations, etc.).
• Student appeals procedures are explicit, fair and effective.
• There are clear and consistent published guidelines/regulations for:
  o Marking and grading of results.
  o Aggregation of marks and grades.
  o Progression and final awards.
  o Credit allocation and articulation.
	Considerations include:
	• Systems have been put in place to ensure reliability, rigour and security of the assessment system for remote students.
	• The system been designed to address the reality of geographically distributed staff and students (including issues relating to contexts, time zones and languages for cross-border provision).
	• Where students submit assessment individually by electronic means from homes or workplaces, and not in person at a recognized centre of the institution, the programme has the necessary security systems for electronic assessment.

Criteria 15: Coordination of Work-based Learning (where applicable)[3]

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
The coordination of work-based learning is done effectively in all components of applicable programmes. This includes an adequate infrastructure, effective communication, recording of progress made, monitoring and mentoring.	Arrangements for work-based learning will likely be more complex in distance provision due to the more distributed nature of students and the geographic footprint of distance programmes which may even extend beyond national borders. Appropriate arrangements will be needed for placement, mentoring and supervision for a more distributed student body to ensure an equivalent learning experience across a wider range of contexts.
(ii) Learning contracts or agreements are implemented through which the student, the higher education institution and the employer can negotiate, approve and assess the objectives and outcomes of the learning process. Various parties, i.e. the institution, students, mentors and employers, adhere to the contract or agreement on their roles and responsibilities.	Applies equally across all modes of provision.
(iii) Regular and effective communication takes place between the institution, students, mentors and employers involved in work-based learning. Good working relations are maintained between the various parties involved.	Applies equally across all modes of provision.
(iv) A system (both at the institution and at the place of employment) is in operation to record and monitor regularly and systematically the progress of the student's learning experience in the workplace.	Applies equally across all modes of provision.
(v) A mentoring system enables the student to recognise strengths and weaknesses in his/her work, to develop existing and new abilities, and to gain knowledge of work practices.	Applies equally across all modes of provision.

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[3] In some professional programmes, e.g. law and theology, work-based learning does not traditionally form part of the curriculum. In some professional fields of study, work-based learning occurs after the award of the qualification, for example, in accountancy.

Criteria 16: Delivery of Postgraduate Programmes

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
The postgraduate programme is managed properly, offers opportunities for students to develop research competence, and ensures that research is properly assessed. Policies for student admission and selection, criteria for the selection and appointment of supervisors, and guidelines on the roles and responsibilities of supervisors and students are effectively implemented.	
(i) The postgraduate programme is managed properly and offers students opportunities to develop research competence. This includes the following: • A senior academic with research and postgraduate supervision experience coordinates: o Research programmes, monitors the progress of postgraduate students and oversees assessment procedures. o Structured master's and doctoral programmes, monitors the progress of postgraduate students and oversees assessment procedures. • Training is provided in research skills, including guidance on research design and methodology. Training is also provided in language, writing and numeracy skills, where required. Employment-related skills are developed, where appropriate. • Monitoring and review of the postgraduate system takes place regularly and includes student feedback on the quality of the learning experience, supervision and support infrastructure.	Considerations include: • Where structured postgraduate programmes are offered via distance or online, the broad range of issues identified in Criterion 1 apply.
(ii) Research is properly assessed, which includes the following (in addition to the requirements for assessment specified in 3.2.1.4): • At least one examiner external to the institution is appointed per dissertation/thesis. • Without undermining the principle of assessment based on academic judgement, assessment decisions are made transparently and students are afforded reasonable access to information (e.g. examiners' reports). • There are opportunities for students to defend their theses (e.g. through an oral defence). • Higher degree committees or similar structures consider examiners' reports and make considered decisions about examination outcomes.	Considerations include: • There are systems to ensure that authenticity of assessment submissions of remote students is guaranteed. • There are resources/processes/tools to counter plagiarism.
(iii) Policies for student admission and selection are effectively implemented (see 3.1.7).	Applies equally across all modes of provision.
(iv) Criteria for the selection and appointment of postgraduate supervisors are effectively implemented, as well as guidelines on the roles and responsibilities of supervisors and students (see 3.1.7).	Applies equally across all modes of provision.

Criteria 17: Student Retention and Throughput

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
Student retention and throughput rates in the programme are monitored, especially in terms of race and gender equity, and remedial measures are taken, where necessary.	
(i) The programme coordinator has access to and monitors information on retention and throughput rates for the programme, also in terms of national benchmarks. Appropriate remedial action is taken where necessary.	Considerations include: • There are mechanisms to track student performance, to identify and proactively support students-at-risk and to monitor retention and throughput in line with national policy requirements.
(ii) The profile of the qualifying class in terms of race and gender increasingly resembles that of the entering class.	Applies equally to all modes of provision.

Criteria 18: Employability and Recognition

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
The programme has taken steps to enhance the employability of students and to alleviate shortages of expertise in relevant fields, in cases where these are the desired outcomes of the programme.	There is a regular review of the strategic and operational plans for use of distance education/ educational technology in teaching and learning in order to evaluate progress in meeting goals for promoting access to high quality higher education through distance education.
(i) There is evidence that the programme attempted to have an impact on the employability of students, where these are the desired outcomes of the programme.	Considerations include: • Systems are in place to track graduate employment and performance and to feedback lessons of experience into enhanced programme design.
(ii) Conscious efforts are made to get the programme acknowledged in the workplace/community and by other institutions. An improvement plan is put into operation, where necessary.	Applies equally across all modes of provision.

Criteria 19: Programme Evaluation

General minimum expectations	Considerations for interpreting the general programme expectations for distance provision
User surveys, reviews and impact studies on the effectiveness of the programme are undertaken at regular intervals. Results are used to improve the programme's design, delivery and resourcing, and for staff development and student support, where necessary.	
(i) User surveys are undertaken at regular intervals for feedback from academics involved in the programme, graduates, peers, external moderators, professional bodies and employers, where applicable, to ascertain whether the programme is attaining its intended outcomes.	Applies equally to all modes of provision.
(ii) There are regular reviews of the effectiveness of benchmarking in the programme against equivalent national and international reference points, with a view to goal-setting and continuous self-improvement in the programme.	Considerations include: • There is evidence of ongoing benchmarking of programmes and of subsequent interventions to improve the quality of distance provision accordingly.
(iii) Student throughput and retention rates are regularly reviewed, also with regard to national requirements.	Considerations include: • Throughput and retention rates are differentiated at local, provincial, regional and cross-border levels to indicate equivalence of access, support and success across the distributed student body.
(iv) Impact studies are regularly undertaken to measure and evaluate the impact of the programme and its graduates on the employability of students and in alleviating shortages of expertise in relevant fields, where these are the desired outcomes of the programme. Impact studies could also ascertain the degree of acknowledgement of the programme in the community, by other institutions and in the workplace, where applicable.	Considerations include: • Impact studies are differentiated at local, provincial, regional and cross-border levels to indicate equivalence of access, support and success across the distributed student body.
(v) Results of user surveys, reviews and impact studies are utilised in a regular evaluation of all programme aspects and to develop improvement plans.	Considerations include: • Findings from differentiated reviews at local, provincial, regional and cross-border levels lead to improvements that ensure equivalence of access, support and success across the distributed student body.