GESCI Research Series

A REFLECTIVE JOURNEY INTO THE ALICT-LATIC PROGRAMME FROM A QUALITY ASSURANCE PERSPECTIVE

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PREAMBLE

The Global e-Schools and Communities Initiative (GESCI) was established in December 2003, borne out of the work of the United Nations ICT Task Force which identified education as an area in critical need of development, and one where information communication technology (ICT) has the potential to make positive and transformative impacts. The Task Force approved the establishment of GESCI - a United Nations affiliated global partnership, which would provide demand-driven assistance to developing countries seeking to harness the potential of ICT to improve the quality, effectiveness, relevance and access levels of their education systems.

In 2010 GESCI, working together with the African Union Commission (AUC) and other African partners, engaged in the development of an African Leaders in ICT (ALICT) programme designed to intensify activities to implement the African Regional Action Plan on the Knowledge Economy.

The African Leadership in ICT is a flagship programme of the African Union Commission under the African Regional Action Plan on Knowledge Economy (ARAPKE). Its overarching goal is “to develop a group of ICT, and Knowledge Society leaders that can become agents for change in their respective countries and be catalysts for regional cooperation in the domain of ICT, and Knowledge Societies both at the country and regional levels”.

The ALICT programme, in itself was presented as Research and Development activity, in the initial concept note, where GESCI presented it as “feasibility action for modeling a methodology and multi-stakeholder approach for capacity building and awareness raising of African Leaders on the issues of the Knowledge Society, ICT, Education, Science & Technology and Innovations in support of the AUC Action Plan and the EU-AU P8” (Hooker 2010)

While the ALICT model was initially conceived and developed in collaboration with the African Union Commission to target countries in Eastern and Southern Africa, it has now been extended to target countries in Northern and Western Africa in the form of the “Leadership Africain dans les TIC (LATIC)” programme, which is essentially the French equivalent of the ALICT course, which was delivered in English speaking African countries.

The ALICT-LATIC programme has now been offered on a blended mode (with a major component in online modality) in 13 Anglophone African countries.

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1 African leadership in ICT Program (ALICT) - http://pages.au.int/infosoc/pages/african-leadership-ict-program-alict
covering Southern, Eastern and West Africa regions as well as 3 Francophone countries (Senegal, Ivory Coast and Morocco). 3 cohorts of the ALICT course have been offered since 2012, and 1 cohort of the LATIC course in 2015, amounting to over 500 leaders who have successfully completed the course across 16 African Countries as well as officials from the African Union Commission.

The course has since 2012, been accredited by the Dublin City University to a Graduate Diploma, and in October 2015 a Memorandum of Understanding was signed with the University of Mauritius, to offer the course as a Postgraduate Diploma in Leadership Development in ICT and the Knowledge Society under a joint partnership model between the two institutions.

The agreement with the Dublin City University was in operation since 2012. The first agreement was from initial period of July 2012-May 2014. The current Agreement is effective from 25th May 2014 until 27th July 2016. Since 2012, students of the ALICT programme could choose to take the Graduate Diploma at DCU, or exit the programme with a Professional Development Certificate co-signed by GESCI and the African Union Commission. However, not all ALICT participants registered for the Graduate Diploma.

The new partnership with the University of Mauritius, is in line with the agreement and funding arrangements with Finland, stipulating that 2016 is the year where GESCI must seek to develop a wider-access model” for ALICT/LATIC so that the programme is available in several countries from Leadership Institutes and Universities. The Graduate Diploma of the Dublin City University is an equivalent qualification to the Postgraduate Diploma Award by the University of Mauritius. The course will be offered under the new partnership with the University of Mauritius as from February 2016.

The aim of this research is to present a comprehensive review of the current ALICT-LATIC course delivery model, and to make an assessment of the e-learning maturity level of the initiative from a quality assurance perspective taking into account the delivery model, cultural context, and the distributed nature of the programme and its participants, from a geographical perspective. For this project, we make an underlying assumption that the term eLearning encompasses the concept of blended learning in the context of the ALICT programme, given that the majority of the course is run online, with 3 face-to-face workshops held at the beginning, in the middle and then at the end of the course.

In this report, we look at the key concepts governing the ALICT-LATIC course, such as the provision of transnational education and blended learning provisions. Quality standards have been developed and discussed over time with respect to the provision of online distance education, now commonly referred to as
distributed learning, which characterizes quite closely the ALICT-LATIC programme. Through a series of steps including desk studies, expert observation and the application of the eLearning Maturity Model, we conduct an in-depth evaluation of the eLearning provision from a quality assurance perspective. The key strengths and the gaps and challenges are identified, and key recommendations are made for the overall improvement of the quality of the programme and the eLearning capability of GESCI.

OBJECTIVES OF THE RESEARCH

The objectives of this research are to:

1. Develop an understanding of the issues and challenges of quality assurance in a multi-country cross-sectoral blended learning course design.
2. Review the ALICT course model based on international standards of quality blended learning course delivery – involving elements such as tutor development and support; instructional design and course development; quality assurance; and assessment.
3. Advise on current thrust towards blended learning course delivery based on the ALICT model two phases of implementation and critical success factors.

ACKNOWLEDGMENT

I would like to thank the GESCI team for their support throughout this work and for their trust to involve me, since 2011 in their activities. I wish to thank the tutor teams who have participated in making this report possible. I wish to extend a special thanks to Roshan Halkhoree who has acted as a first reviewer for the report and brought useful suggestions to improve it.

QUALITY ASSURANCE, ACCREDITATION, AND CROSS-BORDER (TRANSNATIONAL) eLEARNING

Vroeijenstijn (1995) postulates that

"The concept of quality is not new: it has always been part of the academic tradition. It is the outside world that now emphasizes the need for attention to quality...It is the relationship between higher education and society which has changed".

Quality has always been a confusing concept, and when extended to higher education, authors highlighted that it is not possible to have an authoritative
definition of quality assurance in higher education (Newton 2006; Scott 1994). Belawati and Zuhairi (2007), therefore claim that “while the definition of quality assurance may differ, all quality assurance terminology shares a common purpose in ensuring that students receive a high quality and relevant education and awarded credentials that are widely recognized by governments and employers”.

The world in the 21st Century is commonly referred to as a global village. Transnational communication through advanced digital and high-speed data networks has transformed the way that citizens live, study, work and do business in the modern world. With the advances of the Internet and the globalization phenomenon, the concepts of internationalization of education and cross-border education have taken a different dimension. Instead of only attracting foreign students on local territories, or setting up physical branch campuses of Universities from the developed world in foreign lands (mainly developing countries), many higher education institutions (including those from the developing world) are now providing distance education courses through the open and online mode of delivery. This is characterized by two related phenomena in the higher education context, namely the concepts of cross-border and transnational education.

The World Bank and the Organization for Economic co-operation and Development (OECD) (2002) define cross-border education as “movement of people, programmes, providers, curricula, projects, research and services in tertiary (or higher) education across national jurisdictional borders”. The term cross-border higher education is often used interchangeably with the term transnational higher education, although some authors have stressed the subtle but important differences between the two terms (Knight 2005). The Council of Europe and the UNESCO define transnational higher education as

“all types of higher education study programmes, or sets of courses of study, or educational services (including those of distance education) in which the learners are located in a country different from the one where the awarding institution is based. Such programmes may belong to the education system of a State different from the State in which it operates, or may operate independently of any national education system”.

While cross-border and transnational higher education are often projected to be a means of opening access to higher education, private and for-profit organizations are often the first-hand promoters of such initiatives with the exception of a few such as the Virtual University for the Small States of the Commonwealth (VUSSC) project of the Commonwealth of Learning (COL) and its related Transnational Qualifications Framework (West et al. 2009). However, there is divergence on the practicality and extent of adoption of the framework of
the COL within countries and institutions. The OER University (OERu) is another movement with a similar intention like the COL VUSSC project, but operating under a different educational model and philosophy.

According to its Wikieducator, OERu movement is described as

"a virtual collaboration of like-minded institutions committed to creating flexible pathways for OER learners to gain formal academic credit. The OERu aims to provide free learning opportunities to all students worldwide using OER learning materials with pathways to gain credible qualifications from recognised education institutions."

The emerging concept of MOOCs (Massive Open Online Courses) as well as virtual movements like the University of the Indian Ocean (UOI) or the OERu still have to make a bold statement in terms of adoption of courses, completion of studies and finally accreditation and recognition of qualifications obtained through those educational models. Most reports on trans-border higher education are conducted mainly by organizations with their roots in Europe such as OECD, and a significant emphasis is often laid against the provision of low quality education and this often creates the perception that trans-border education where the originating countries are developing ones, more caution should be exercised (Vincent-Lancrin & Pfotenhauer 2012). It is obvious that the new trends in higher education such as VUSSC, MOOCs, and the OERu movement are now presenting challenges to the concept of cross-border and transnational education. They promote of kind of ubiquitous, learn anytime, anywhere and just-in-time concept, under a model of pay if you are satisfied concept, to get an accredited and recognized qualification. Is it enough from a quality point of view to simply take and pass an exam or a one-off assessment to earn a qualification? While cross-border and transnational higher education posed a different type of challenge from the quality assurance perspective, models like VUSSC and OERu bring a further shift in the quality debate in terms of educational provision and the certification of learning achievements in the form of a recognized qualification.

Accreditation of courses and of institutions is another important and growing facet of cross-border educational provisions. Accreditation can have different meaning and interpretation in different educational jurisdictions and is an important key indicator of quality when it comes to cross-border educational provisions (UNESCO 2007). For example, accreditation in some context refers to the recognition of a particular course by professional bodies regulating a specific field. For example the Council of Registered Engineers can accredit an engineering course of a particular university for its graduates to be registered as engineers. In another context accreditation means national regulatory bodies of higher education invested with powers to provide operation permits to Higher Education
Institutions and hence recognition of the qualifications conferred by such institutions. These institutions are offered referred to as accredited institutions in those national or regional contexts.

Last but not least, we look at the concept of affiliations in higher education. Affiliation of institutions is a practice that has gained momentum due to the advent of transnational education provisions. Many awarding bodies, i.e. recognized Higher Education Institutions, have also used the concept of affiliation to expand their reach to students within the home country and throughout the world. Often, institutions that are locally accredited in a particular State, and who do not hold awarding powers will seek affiliations with recognized Universities to offer courses of these Universities under different agreements, such as Memorandum of Understanding, and/or franchising agreements and models. In some countries of the developing world, institutions with awarding powers will sometimes acquire franchise from content providers who are not awarding bodies, to use their content to offer specific qualifications (Yorke 1993).

Altbach (2012) adopts a very critical stand of franchising using the term ‘McDonalisation of higher education’ to characterize such agreements. He postulates that more than 20% of students studying for a UK undergraduate degree are not residing the United Kingdom and are most likely to be at a foreign institution that has franchised a British degree. Quality assurance is perceived as a key element is franchising higher education and Britain’s (former) Higher Education Quality Council had raised a number of concerns as early as in 1997 following audits of education franchises that were offered by UK institutions (Girdwood 1998). The principle underlying these audits, according to Girdwood (1998), and rightly so, is that the awarding institution(s) must take full responsibility for the quality of the education which students receive, and for the procedural arrangements which guarantee that quality. Concerns raised by Girdwood (1998) are still fully valid almost about two decades later during which we have witnessed exponential growth of transnational and cross-border higher education provisions through franchise agreements. However, one should acknowledge the key role that franchising has played in the Higher Education Sector, especially with respect to opening access to education and the contribution to the socio-economic sectors of the developing world. In the next section we discuss the important components that make up quality indicators in terms of transnational and cross-border accredited educational provisions.

**DISTRIBUTED EDUCATION, LEARNER SUPPORT AND SATISFACTION**

The rapid expansion of the internet through digital technologies coupled with the constant gain in momentum of cross-border, transnational and franchising of
higher education has led to the phenomenon called distributed education (or learning). The term “distributed learning” was already put forward more than a decade ago (Oblinger et al. 2001). However, it is now gaining increased focus and perceived to be more relevant in the 21st Century education context and in the developing world. As Information and Communication Technologies have reduced the physical distance through virtualization, the term distance in Distance Education has lost its original meaning where the key characteristic was the separation of the learner and teacher both in time and space (Santally et al. 2012). The integration of technology in learning, needs to address the very important issue of enhancing the teaching and learning process, rather than just being seen as a new flexible delivery medium (Nichols 2003). The web therefore can be seen as (1) a delivery medium for distance education materials; (2) a flexible and rich medium (in terms of multimedia) for students to access their learning materials and (3) a medium offering a new paradigm for the transformation of teaching and learning. Distributed Learning therefore encompasses a different philosophy from distance education models, irrespective of whether it is through traditional distance education methods or more contemporary approaches known as online distance education. Distributed learning, therefore takes the form of a blended mode of education and is much more than an online substitute of lectures (Oblinger et al. 2001). Blended learning can be reasonably defined as a combination of components from both traditional learning and e-learning environments merging aspects of e-learning such as web-based resources, streaming media and including synchronous and asynchronous communication with traditional face-to-face learning (Cisco 2001; Al-Hunaiyyan et al. 2008).

A pedagogically sound distributed and blended learning environment needs to facilitate students’ engagement and interaction, be user-friendly in terms of exploration and user interface, needs to empower learners and improve pedagogical communication through effective communication and collaboration tools. Distributed education, with particular reference to the knowledge society also includes the teaching component where the teaching personnel can be highly qualified academics and professionals located remotely to match the needs of a rapidly changing world (Berge 2007). The distributed nature of the teaching and learning process gives rise to important considerations such as cultural and language issues (Mason 2007; Nisbet 2003), time zones and connectivity elements such as broadband provisions and Internet accessibility. Boldley (1994) stated that culture involves what people think, what they do, and the material products they produce. Culture touches members of a society in which it shapes their value, assumptions, perceptions, and behavior (Al-Hunaiyyan et al. 2008).

Researchers have highlighted the importance of the element of cultural sensitivity in the design of online learning environment, in the context of internationalization of education (McLoughlin 1999; Reeves & Reeves 1993; Collins & Rummers 1997).
According to Visser (2007), there is an emerging need to design *culturally adaptive learning experiences* that caters for the full development of the individual especially in an era there is a democratization of access to higher education. This clearly has an implication over the instructional systems design approaches that are used in the conception of courses and training programmes that target learners and involves teachers from a multi-cultural background. As pointed out by Gunawardena & LaPointe, (2007), there is indeed a need for educational providers to develop and acquire skills to deliver culturally sensitive and culturally adaptive instruction to a diverse population in a distributed and blended learning environment.

As we mentioned earlier, language is a key cultural element impacting on e-learning design practices. One of the key challenges of for blended e-learning to address the language issue is how to turn English-language training materials into culturally sensitive, intellectually stimulating, knowledge- and skill-transferring materials in a different language (Al-Hunaiyyan et al. 2008). However, it is argued that blended e-learning can bring solutions with local instructors who can facilitate learning with proper translation of the learning materials. In the context of technology evolution, subtle progress has also been made to cater for the language barrier in distributed blended e-learning environments. For example, Microsoft recently released in beta-version *Skype Translator*, a tool which can translate in real-time a conversation between two remotely located persons speaking in two different languages. However, as rightly pointed out by Boriarsky (1995), communication and interaction styles are also essential elements to be catered for in the design of cross-cultural learning environments. Referring to a study by Dowling et al (2003) which found out that when compared with traditional courses, the hybrid delivery mode can result in higher grades and improved learning outcomes, Babb et al. (2010) make the case for blended learning. Reference is further made to perceptions of improved learning and higher motivation and the feeling of a stronger sense of community among students and their tutors as compared to both traditional face-to-face instruction and fully online learning. Wighting (2006) reported that students named connectedness with peers as the most important variable in developing a sense of community, and that was influenced by the attitude of the instructor and the environment created by classmate, as well as interactive online tools (Babb et al. 2010).

One of the key issues in distance education, including eLearning is student retention. There are a number of studies carried out to research into the reasons that students drop out and factors that have emerged are reasons related to personal resilience, personal identity factors, support networks, as well as finding the course badly presented, poorly supported or too difficult (Hughes 2007). It is further pointed out that different student retention issues occur at different stages
in a course such as incomplete enrolment, leaving a course or institution or passively withdraw by not submitting assignments and failing modules. In his study, Hughes (2007) attempts through an action-research approach to evaluate the effectiveness of using blended learning to improve retention. The technique was to pro-actively identify at-risk students by maintaining a list documenting the reasons such as absence from platform, repeated request for support, reporting of personal problems and repeating students. The result was that in the batch where learner support was actively provided to at-risk student resulted in improved coursework submission and pass rate and well as retention in the course.

We find that technological advancements and new instructional tools have greatly aided in making learning ubiquitous and eliminated the notions of being separate in time and space when engaged in a remote learning experience. However there is a need for proper monitoring, evaluation and benchmarking tools to be adopted to ensure quality standards are met through a well defined quality assurance process or mechanism.

**CONTEXTUALISING QUALITY ASSURANCE IN (blended) eLEARNING**

The Internet has witnessed an exponential growth in the last decade and the modernization of global ICT Infrastructures have led to an acceleration of the move towards the knowledge society especially for developing countries. Education and ICT are two key pillars of the knowledge society and ICTs have brought a transformation of the education landscape with the growing influence of online education and e-learning programmes (GESCI 2012). eLearning is a form of educational delivery that has become quite prominent in universities worldwide and an activity that, to all intents and purposes, can now be considered mainstream (Oliver 2005).

There has been a growing interest from stakeholders, ranging from researchers to education providers including governments and policy makers to the implications and concerns of e-learning and online education. Such concerns are mainly related to the perceived lack of quality standards for eLearning (Oliver 2005). The Commonwealth of Learning emphasizes that online and distance-learning (ODL) providers must pay close attention to quality in terms of products, processes, production, delivery systems, and philosophy (COL 1997). While this is a genuine concern to some extent, there are however, a number of quality assurance guidelines and models with respect to quality provisions of online education (QAA 1999; Barker 2002; JISC 2004:2009; Marshall 2006). Newton (2006) provides a good expose of the notions of quality and standards, arguing that quality relates to the process, while standards are linked to the intended outcomes and actual achievement. This leads to a generic definition of quality assurance in the context
of higher education as being to ensure the contribution of educational process (quality) to attainment of a defined standard.

Grifoll et al. (2010) argue that “quality assurance policies need to formulate questions on how far e-learning methods are included in all study programmes, and on the adequacy between new technologies and the emerging new educational approaches, taking into consideration concepts such as efficiency in teaching, effectiveness in learning or equity in education”.

Guidelines for quality e-learning provision existed quite some time ago. For example Barker (2002) published the Canadian Recommended e-Learning Guidelines (CanREGs), covering aspects such as quality outcomes, quality processes and practices, delivery and management of learning, quality inputs and resources for e-learning products and services. Oliver (2005) highlights that there have been attempts to develop quality frameworks or model for quality assurance in eLearning. The four key elements of such frameworks can be categorized as per Oliver (2005) in four broad elements namely the curriculum, the learning design, the learning resources, and the delivery processes.

Grifoll et al (2010) further discussed the assessment of e-learning institutions using a methodology developed by the Quality Assurance Agency of Catalunya and which was tested over a period of two years. Zhang and Cheng (2012) used the PDPP (planning evaluation, development evaluation, process evaluation, and product evaluation) evaluation model for e-learning courses and applied it to a course on research methods. They identified 26 evaluation items with respect to the PDPP model for online courses quality assurance. The Commonwealth of Learning has developed a Review and Improvement Model (COL RIM), which is essentially a guided, do-it-yourself approach to quality assurance that helps keep costs to a minimum (Clarke-Okah & Daniel 2012). Self-evaluation is therefore another interesting facet of quality assurance in higher education. The COL RIM model is based on 5 steps namely initiation, staff survey, self-review, verification and follow-up.

Newton (2006) further explores the concept of quality in Higher Education by postulating that there are three areas of standards to be looked into. These are academic standards, service standards and finally quality standards. Academic standards are defined as a measure of the ability to meet a required level of academic attainment for example, meeting the minimum requirements for the award of a Graduate Diploma. Service standards usually refer to the measures that are devised to assess the level of service provided, such as administrative and technical support, availability of tutors to answer queries, and uptime of e-learning platforms amongst others. Finally quality standards are norms expressed in formal statements about expected practice. For example, the institution should
have a proper mechanism in place to provide students with timely feedback and to follow-up and monitor on actions taken. An effective quality assurance system should have clear definition of roles, responsibilities and procedures. It should be free from personal bias, and should be an inclusive process involving staff and main stakeholders, in a logic of bringing continuous improvement and to inform decision making so that institutional aims and objectives can be achieved (HEQC, 1994).

The eLearning Maturity Model (eMM) aligns with the concept of Newton (2006) with respect to the three areas of standards mentioned above. It is based on the concept of Software Capability Maturity Model (CMM) and SPICE (Software Process Improvement and Capability Determination). The model has been conceived by Stephen Marshall in 2003 and has undergone a number of improvements. The current version in use of the eMM is version 2.3. The eLearning Maturity Models assesses the institution’s ability in five main ‘process’ areas: Learning, Development, Support, Evaluation and Organisation. It is referred to as “a quality improvement framework designed to support educational institutions interested in improving their organizational capability to use technology in learning and teaching in a complex and changing environment” (Marshall 2013). Marshall & Mitchell (2007) highlight in the context of the application of eMM to assess an organizational ability in e-learning as follows:

“Capability, in the context of this model, refers to the ability of an institution to ensure that e-learning design, development and deployment is meeting the needs of the students, staff and institution. Capability includes the ability of an institution to sustain e-learning support of teaching as demand grows and staff change”.

With respect to the ALICT-LATIC programme, we find that the four process areas of the eLearning Maturity Model are compatible and applicable to assess the eLearning capability of GESCI within this context. We have focused the literature review and the evaluation methodology on concepts completely in-line with the philosophy of ALICT-LATIC, from two main perspectives, (1) from a systemic holistic level namely transnational education provisions and accreditation of programmes, including the instructional systems design processes, and (2) at the operational level related mainly to the instructional design and delivery of blended learning initiatives and the eLearning environment. This will form the basis for the elaboration of the methodology for this research as described in the next section.

**METHODOLOGY**
The main object of this research is the African Leadership in ICT (Anglophone and Francophone versions) offered by the Global e-Schools and Communities Initiative, supported by the African Union Commission and accredited to a Graduate Diploma level by the Dublin City University. As from 2016, the University of Mauritius will also accredit the programme. This research tries to address the following research questions from a mostly qualitative perspective with the ALICT-LATIC course as the case study.

1. What is the overall effectiveness of the current blended e-learning model of the ALICT-LATIC programme?

2. What are the gaps and shortcomings if any, to be addressed to improve of the delivery model of the ALICT-LATIC programme in future cohorts?

3. What are the issues and challenges of quality assurance in a multi-country cross-sectoral blended learning course design?

For this work, we use some of the guiding principles behind the action research approach. It is important to note that this work is not action research per se but more of a reflective approach and critical review. The key principles borrowed from action research are as follows:

- Critical Reflection (referred to as reflexive critique): An account of a situation, such as notes, transcripts or official documents, will make implicit claims to be authoritative, i.e., it implies that it is factual and true. The principle of reflective critique ensures people reflect on issues and processes and make explicit the interpretations, biases, assumptions and concerns upon which judgments are made. In this way, practical accounts can give rise to theoretical considerations (O’Brien 1998).

- Collaborative Resource: The idea is that action research initiatives do not occur in isolation and that participants are key stakeholders and considered to some extent as co-researchers. This allows the federation of different viewpoints into a possibly a single coherent vision and allows also the confronting of contradicting viewpoints to analyse the differences and issue that can lead to remedial action.

- Theory, practice, and transformation: In the context of action research, theory guides practice, practice refines theory, in a continuous and iterative transformation.

The main methods for this research work are as follows:
• Desk Studies

Over the past three years, GESCI has accumulated a number of key documentation, from initial concept note of the African Leadership in ICT programme, country KS development needs analysis, course content documents, course delivery reports and notes, participants’ feedback, DCU external moderation and a number of research reports related to the Project. The eLearning platform is furthermore a very rich source of information and presents a global and precise reflection of the course. The desk study will be the primary source of data gathering and will form the core foundation of this report.

• Qualitative Analysis

For the purpose of the current work, the eLearning Maturity Model has been chosen in the light of the literature review and the terms of reference of this work. The eLearning Maturity Model has been applied to a number of Australian institutions since its conception and is continually being evaluated and improved. The framework proposed by the eLearning Maturity Model is appropriate for the benchmarking of the eLearning initiative of the ALICT-LATIC programme as it covers the key areas that this report is based upon. For each of the process areas as defined above, there are five process dimensions for which the specific process statements (within process areas) will be assessed. The five process dimensions are: delivery, planning, definition, management, and optimisation.

• Expert Observation and Critical Reflection

Expert observation and practitioner’s experience provide important information on the initiative. It also provides consistency both in the process and in constructive criticism given that the practitioner has witnessed the evolution of the course since its inception. The researcher has participated in the action through the elaboration of country analysis reports, as a participant in the first cohort of the programme, then as tutor and tutor coordinator respectively. He has also actively participated in the instructional design and setup of the francophone version (LATIC) programme.

The main constraint of this research work is limited time and therefore a mixed approach which would have involved a comprehensive collection, retrieval and analysis of data (analytics) to identify patterns of participant activity and to consolidate the qualitative arguments put forward by the researcher, could not be adopted. However, this research sets the base for further activities to be carried out incrementally to add to the current body of knowledge.
THE ALICT-LATIC MODEL – A DESK REVIEW

COURSE OVERVIEW

Background of the ALICT Project

The African Leadership in ICT (ALICT) Program is a three-year partnership between the Global E-Schools and Communities Initiative (GESCI), the African Union Commission (AUC) and the Ministry for Foreign Affairs of Finland. The ALICT Programme is conceptualized to model a methodology and multi-stakeholder approach for capacity building and awareness raising of African leaders on the issues of the Knowledge Society, ICT, Education, Science & Technology and Innovation (Hooker 2011). The aim is to adopt an innovative approach to train the future leaders in knowledge society building. The target was essentially middle level managers in the public sectors in African countries.

The concept of knowledge society in the ALICT course is based on three critical pillars and key elements for development towards a Knowledge-based future (Hooker 2010; Tapper 2010). These are Information and Communication Technologies, Education and Training, and Innovation (incorporates Science, Engineering and Technology). Butcher (2010) establishes the ICT pillar as the enabler for Education and Innovation dynamics that will drive Development towards the Knowledge Society. The course is therefore built around the model proposed by Butcher in figure 1 below. It is further focused on two key competencies, namely leadership in ICT in the context of the Knowledge Society development in the African region and the fostering of new leadership approaches and theories to build a new mindset compatible with the knowledge age.

![Figure 1: ICT as an enabler of Education, Innovation and Development towards the Knowledge Society (Butcher 2010)](image)

The model as described above forms the theoretical core based on which the ALICT programme was going to be conceived. This model has emerged after the initial concept note (Hooker 2010) on the ALICT project. Prior to mounting any
programme of studies or curriculum, it is important to conduct a needs’ analysis and to understand the target audience to better design appropriate and fit-for-purpose instruction. One of the first elements that emerge from the ALICT model is that it clearly followed an Instructional Systems Design framework, namely ADDIE (Analysis, Design, Development, Implement and Evaluate) during the three years since the first cohort was launched.

After the initial concept note, in March 2011 GESCI conducted a four country needs assessment for the African Leadership in ICT (ALICT) pilot programme in selected countries in the Southern and East African regions. The needs assessment resulted in country reports from South Africa (Akpor et al. 2011), Zambia (Chilala & Kumar 2011), Mauritius (Santally et al. 2011), Tanzania (Senkondo & Twinomugisha 2011) and a summary report (Hooker & Bassi 2011). These studies revealed important information on the (perceived) status of the knowledge society development within these countries from the major stakeholders. In the summary report (Hooker and Bassi 2011), 4 core needs were identified that would take the form of four key modules of the programme. At the KS Dialogue level, the aim was to establish and strengthen the capacities of Senior and Middle Management staff to dialogue on KS and its related pillars. At the policy and strategy level, the idea was to strengthen the capacities of senior and middle management staff to develop inter-related policies and strategies and plans on KS and its pillars. At the monitoring and evaluation level, it was found that there was a need to develop and strengthen national and organizational level capacities to establish, implement and use monitoring and evaluation systems and practices as evidence-based foundation for KS planning, decision making and learning. Finally at the Personal Development and Management level, the aim was to develop and strengthen national, organizational and individual capacities to communicate effectively on the KS progress in pillars of ICT, Education, Science & Technology and Innovation. This activity by GESCI can be seen as a kind of an enlarged consultative cum advisory committee as is the practice in Universities prior to mounting a particular course curriculum. From those country surveys, the needs for leadership capacity building clearly emerged as well as the need for any capacity building initiative to cover the element of policy coherence.

This activity led to the development of version 1 of the curriculum, which was implemented and piloted with a first batch as from January 2012. The ALICT course consisted of the following modules:

- Orientation: Introduction to the Knowledge Society
- Module 1: Leadership in the Knowledge Age
- Module 2: New Strategies in Science, Technology and Innovation
- Module 3: Telecommunications Infrastructure and Quality Internet Provision
The ALICT programme was further offered in 2013 and 2014 and finally in 2015 the Francophone version called “Leadership Africain dans les TIC” (LATIC) was offered in three African countries.

**Design and Development of the ALICT Programme**

One of the key elements or steps in the design phase of the ADDIE model is the document of the project’s instructional, visual and technical design strategy\(^2\). The pedagogical model or philosophy of the project has to be clearly spelt out in the design phase. One of the key deliverables of this phase is a kind of roadmap for the project.

In March 2012, GESCI requested feedback from DCU on the contents of each module of the ALICT course prior to the programme being put forward for accreditation as Graduate Diploma. Some of the key recommendations were as follows:

1. Focus on learning outcomes rather than learning objectives.
2. Use of video and workbook to help explain some elements of the modules e.g. Telecommunications module.
3. Include up-to-date reference and literature on management and leadership content for module.
4. Elaborate on unit summaries and develop the reading list for each module.
5. Include interim submission of initial assignments to make sure students/teams are on track.

There is also evidence of support from DCU to GESCI in sharing of the assessment criteria and use of journaling that was taken on board when designing the assessment for the Graduate Diploma programme. GeSCI staff also visited DCU and met personnel in the Student Services who supplied key support documents to students with links to online student resources and guidelines for assignments writing etc.

With respect to the ALICT programme, the design and development phases of the project are well documented in the document titled ‘African Leadership in ICT – Model Document 2013’ (GESCI 2013).

\(^2\)The ADDIE Model - [http://www.instructionaldesign.org/models/addie.html](http://www.instructionaldesign.org/models/addie.html)
This document describes the key objectives of the African Leadership in ICT project, and the key expected outcomes from the curriculum that has been devised. It further provides detailed information about the programme structure and the accreditation of the course for the award of a *Graduate Diploma in Leadership in ICT and the Knowledge Society* by the Dublin City University. Figure 1 on Page 6 of the document referred above, provides a global picture of the approach taken after the needs analysis phase, clearly describing the philosophy behind each module of the course, and how this brings to the development of capacity, skills and competencies for African Leadership in ICT and Knowledge Society. The entry requirements and selection mechanism for the participants in the course are also well explained which promotes the quality, fairness and good governance in line with the core objectives of the project. Furthermore it emerges clearly that the course developers used well-established methods and frameworks as the ALICT followed the Course Materials Development Cycle, adapted from the Commonwealth of Learning.

**Delivery Model of the ALICT Programme**

The ALICT course is essentially an online programme using a blended delivery model. The key delivery methods are explicitly written down in terms of online and offline activities, and 3 face-to-face country meetings/workshop including a final regional workshop. The final regional workshop has been carried out in the first cohort and then subsequently it has been replaced by a final (closing) workshop at country level. The orientation workshop has proved to be very important as the kick-start session for each cohort as it helps to orient participants to the key concepts and working methods and requirements of the course and the use of the e-learning platform. The mid-term workshop is important in terms of feedback and helping the participants on the challenges and problems they encountered and to orient them to the rest of the course. It covers mainly module 2 & 3 and sets the pace for the rest of the course. This mid-term workshop is a key instrument in the blended model to maintain the momentum of the participants and is helpful in minimizing dropouts from the course. In terms of quality assurance, important feedback is obtained from participants that allow the tutoring team to take remedial actions in a prompt manner. The tutoring process for each module is done by a pool of online tutors who are responsible on average for a group of 30 participants, and the tutor team is supported by the tutor coordinator, e-learning coordinator, a blended learning specialist and a technical helpdesk. For each module there is a lead tutor. There is active tracking of student participation in the online learning environment using a variety of methods to ensure maximum retention of participants. Student assessment is done using continuous (formative) assessment utilizing a variety of techniques, such as self-assessment activities, participation in discussion forums and online chats, and formal assignments (individual and group).
**Evaluation and improvement**

GESCI has developed the ALICT Monitoring & Evaluation (M&E) framework, which adopts a series of approaches and tools to promote quality learning and adjustment throughout the programme lifecycle. GESCI personnel also visited DCU mid-way for each cohort and received feedback on the course, assessment and the assignments and advice on areas for development.

There is a governance structure in place that consists of three entities namely the Technical Quality Assurance Committee, the Steering Committee and the Secretariat, which consists mainly of GESCI personnel. Furthermore, the course accreditation process at Level 9 of the European Qualifications Framework through a partnership with the Dublin City University strengthens the evaluation and improvement mechanism as it adds an additional layer of QA processes.

**THE eLEARNING PLATFORM**

MOODLE is an open-source eLearning platform and it is widely used across reputed universities and higher education institutions throughout the world. The ALICT course is hosted on the MOODLE Learning Content Management System (LCMS) through an external hosting service and at least two mirrored servers to ensure a maximum uptime and an efficient load distribution for the server for a stable service level. From experience, a successful endeavor in eLearning has to cover the three key elements namely pedagogy, technology and usability. This triad, when applied consistently forms an iron triangle that constitutes a determinant with respect to the extent of perceived quality in terms of course delivery, participants’ satisfaction and educational outcomes. From experience and previous research, the key barriers identified in online learning relates to the change in the teaching and learning culture. This is a cultural element that has to be taken into consideration in the instructional design process and reflected in the student support framework and in the eLearning platform. The eLearning platform uses an intuitive design from the user interface perspective with a standard layout for all modules both Francophone and Anglophone version of the ALICT.

**The Usability Perspective**

Usability is an important aspect of any interactive system from a human computer interaction perspective. It characterizes in general the ease-of-use of a system from the user’s perspective and the central concept is user-centered design. In the ALICT model, the technical team already creates the user account and the username is the email address of the participant, which is a good approach as it
minimizes the cognitive load to recall and remember a username. The front-end of the platform has an intuitive design with an appropriate colour set which reflects the Logo of GESCI. The top banner is well designed reflecting well the African concept. However, when digitizing content into MOODLE greater care has to be given to visual communication aspects such as typography and color combination. A useful checklist can be found online. The main page consists of three columns with the left sided one containing elements like the **Main Menu**, and the **Navigation block** for the course.

The ALICT course also relies on the **Mahara e-Portfolio System**, which is integrated in the eLearning platform. On the right side, one can see the **Calendar block** and the **Online Users** block. The middle section contains the **ALICT Noticeboard** where the Lead Tutor and the support team post important information related to the course, and the weekly welcome messages amongst others. This is like the **news headline section** with the aim to capture at first sight, the attention of participants to important information (Figure 2). Scrolling further down in the middle section, the list of courses in which one has access to is available.

![Figure 2: Main Page of the Moodle e-Learning Platform](image)

Each module is presented in a collapsible list based on the chosen template/theme for the e-Learning platform.

The standard format is as follows:

- Module Information
- Module Assignments Overview
- Learning Unit

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For the LATIC programme, a novel element was brought into the instructional design, by providing a summary of the unit key content in the form of Interactive Video Lectures as SCORM packages. This was seen as an added value to the course content by the education technologists who worked on the LATIC instructional design. Hyperlinks were seen to be a kind of transformation given that it allows non-linear navigational sequences to be implemented (e.g. websites) where one can jump back and forth from pages without following a predefined navigation structure. This implies a certain degree of redundancy that needs to be present in the design of web pages. However, hyperlinks without a well planned navigational structure can result in the phenomenon referred to as the lost in hyperspace problem. In terms of educational web sites, it is important from a usability perspective to minimize such effect so as not to cause confusion and frustration from participants. Therefore redundancy needs to be controlled to its optimal level and not be a standard in an online course. Adaptive navigation can be seen as a potential solution for the problem, but MOODLE e-Learning platform does not cater for this functionality. The module content is structured in the form of MOODLE lessons, which is a widely used format for course deployment on MOODLE. The lessons break the content of the module into chunks and a number of pages that are instructionally sequenced. Module contents are also available in PDF format for offline reading by participants. Experience has shown that in such cases a majority of participants would download the PDF for either on-screen reading or will simply print out the notes to read.

The typical ALICT content module is a rich set of pedagogical approaches, educational content, assignment templates in Word format and a blend of online learning activities, and external pointers to reading materials on the web. Participants also have access to collaborative working space like Mahara.
modules as they are structured currently give rise to a high amount of redundancy in the materials. For example, the content is available as Moodle Lessons, PDF documents and Interactive video lectures. One could argue quite rightly that this is essential to address the different learning preferences of participants. However, there is the other perspective that many participants felt confused and lost especially at the start of each module and when they download the same document or template multiple times from different links situated at different places in the document. The same instructional design approach was followed in the LATIC version and the same observations have emerged especially from participants’ feedback and tutor reports.

**The Technology Perspective**

The technology component of the course is a key factor to its success as its main role is to support the underlying pedagogy that is being adopted. The key technologies that were used to support the ALICT’s underlying pedagogy were the communication and collaboration tools such as emails, forums, chats, webinars, Google forms, Mahara, the Delphi Tool and Turnitin. From the administration side, Dropbox and Skype were the most common tools for tutor coordination and sharing. For each module all tutors used a specific email account and they would use the email system to communicate with the specific groups that they were assigned to as tutors. This system has worked well in the different cohorts of the course despite some minor issues from time to time. Technology was a key enabler in the success of the ALICT-LATIC course, but it occasionally presented challenges for participants in terms of Internet accessibility and tutor meetings were often disrupted due to bandwidth issues. Internet access and bandwidth limitations can often play a negative role on the perceived quality of a course and may result in dropouts also due to frustration.

The integration of Mahara and Moodle added to the technological ability of GESCI to support the pedagogical approach of authentic activity-based teamwork. Furthermore, the Turnitin integration to the eLearning platform provides the added capability to promote academic honesty and to improve the course from the quality perspective in the context of accreditation. Mahara is also a piece of capable technology if integrated within the marking criteria, in terms of bringing clarity over individuals’ contributions in a particular team activity. The introduction of new technologies and software in a learning environment implies a learning curve especially at the start for the participants and the tutors. As such these are covered in orientation meetings with both tutors and students but it has been reported that there is a need to look into the actual model, and to streamline and formalize this process in the future. As such it has been observed that Mahara required a higher learning curve than the submission of an assignment through Turnitin, or for the use of the Delphi Online tool.
Synchronous chat was a key technology that was used to support real-time online tutoring throughout ALICT and LATIC cohorts. This technology is a subset of Moodle platform and in previous versions of Moodle the Chat functionality was not a stable feature. While its robustness from a technical perspective has been improved over the subsequent Moodle releases, the chat functionality of Moodle has remained in its basic form, devoid of added pedagogical value to improve the synchronous sessions. Tutors have had generally a difficult time to keep a structured approach in the chats and to promote a global discipline in the session. In the last module of the LATIC version, the webinar was introduced using Adobe Connect technology, which offered improved functionality over the simple chat tool. However feedback from tutors revealed the major hurdle to be bandwidth using the Adobe Connect tool.

The Pedagogy Perspective

It is postulated that the interest that has been expressed for rich activity-based pedagogical scenarios have the objectives of creating more in-depth, integrated and applicable knowledge in different contexts (Schneider 2003). The ALICT course adheres to this philosophy. From an activity-theoretical point of view, learning is being reconceptualized in the sense that the course contents are no longer the object of the activity but they are perceived as tools to help learners achieve the object, which is now some skills, or competencies that they need to develop. The framework that governs the setting up of the modules is therefore compliant to the educational ecology concept (Santally 2005) where teaching and learning is re-conceptualized as an activity framework governed by the following rules:

- **Self-Reliance**: Act using the resources available locally using for example the existing GESCI databases.
- **Empowerment**: Enable subjects to react immediately to changing circumstances by having access to decision-making tools e.g. 360° Feedback and Delphi Real Time Analysis.
- **Interdependence**: Obtain resources elsewhere in order to act, to mutualize [human and content] resources using Internet, and peer-networks.
- **Asynchrony**: Enable subjects to operate as quickly as possible, given local circumstances (e.g. availability of offline learning resources, and face-to-face meetings for group work).
• **Reflexivity**: Enable critical thinking and creativity to continuously improve current practices (Learning Journals, PDP, Team Brainstorming).
• **Commitment**: Regulate social interaction, reciprocity and collaboration for knowledge construction and sharing.

What is interesting from this perspective is that each module brings about a set of different levels of learning outcomes. For each module, participants acquire a set of:

• Subject-specific skills, which include cognitive (thinking) skills and a set of psychomotor (practical) skills.
• Information technology related skills such as the use of e-learning platform, communication and collaboration tools, and use of Internet etc.
• General skills such as time management, self-discipline and emotional intelligence.

In the context of activity-based learning, the occurrence of successful learning in this ALICT course, and in each module is therefore defined as a three-phased activity (a) Knowledge Acquisition phase (content and resources) (b) Knowledge Application Phase (assignments) and (c) Knowledge Construction through Sharing and Reflexive Practice (learning activities such as forum discussion/chats/learning journals). Teamwork is a privileged instructional technique in the ALICT course, and this approach is particularly consistent with the rationale and philosophy behind the ‘new’ leadership that ALICT builds its strength upon. However, feedback from participants has shown that teamwork can cause problems in groups where there are participants who do not involve enough in the group’s activities. In the LATIC programme, the Mahara system was quite helpful to promote teamwork in some groups, but across cohorts, teamwork proved to be a major challenge and hurdle to the participants. Given the heavy emphasis on teamwork in the ALICT professional development course, there are implications and impacts on quality when it comes to accreditation and the award of a qualification. This will be discussed further in the later sections.

**TUTORING PROCESS & STUDENT SUPPORT**

*The tutor team and the Lead Tutor*

The overall global success of the ALICT-LATIC course is founded on a robust tutoring and student support model supporting the blended eLearning approach. The policy of GESCI to use existing alumni (from different countries) as tutors is a commendable approach. With respect to the observation that the core content of the course lacked the cultural element, the diverse group of highly qualified tutors brought that element into the course as they are in regular contact with the groups of participants assigned to them. The tutoring process was a highly structured one,
with clear expectations and instructions for tutors. For each module of ALICT and LATIC there was a lead tutor and three to five tutors depending on the cohort size. On average a tutor cohort contained about 30 participants. For each ALICT cohort there is also a tutor coordinator for the overall duration of the course. Prior to the start of each module, the lead tutor would send the tutoring plan to all the selected tutors for the module. A tutor initiation meeting would be held one week before the start of the module, where the lead tutor will lead them through the tutoring document. The walkthrough is an important element as it ensures tutors have gone through the document prior to the start of the module, and that they understand their roles and responsibilities throughout the module. Tutor induction is perceived to improve their effectiveness in the teaching and learner support process, and to help in student success as well as promote tutor leadership through the establishment of a collaborative culture (NTC 2014). The key constraint in the tutor orientation is that it is a virtual meeting and is subject from time to time to connectivity issues. One of the areas that was not stressed enough in the tutor orientation and subsequent weekly tutor meetings is the subject content knowledge. It is assumed that tutors will go through the content in detail again to ensure that they refresh themselves and master any concept that they might feel uneasy with. In some cases, this might create situations where the tutor does not give the right support to the participant, and this was an issue reported in some of the participants’ feedback. There seems to be a consensus from different stakeholders (GESCI, Tutor Coordinator and Tutors) that the tutor initiation especially for new tutors is inadequate.

The lead tutor normally comes from the GESCI staff, especially for the first two cohorts. This model changed in the third cohort of the ALICT (with a different lead tutor for different modules) and was restored in LATIC. After each module, the lead tutor will carry out a hand-over meeting with the next lead tutor. While GESCI key staff is the architect of the ALICT course, this was a natural task for them in terms of acting as lead tutor and the hand-over seemed to be a smooth process. However, in the last cohort of the ALICT in 2014, the tutor coordinator in her report highlighted some issues in terms of the Lead tutor being a non-GESCI staff. These related to the handover, as often the lead tutor would not have first-hand information on the next lead tutor especially if he or she is not in the next tutor team.

The key roles of the tutors were to send welcome emails at the start of each module, send the weekly email, animate weekly chat and lead discussion forums, attend to participants’ queries related to the subject matter, and mark assignments (including providing feedback). The templates and the guidance of the lead tutor facilitated the tasks of tutors and ensured consistency in their actions. Tutors would mark assignments in Turnitin using the DCU assignment-marking rubric.
Overall, no major issues, which could jeopardize quality, were experienced in the tutoring process across cohorts. It has been observed though that different tutors had different approaches to lead chat sessions and some tutors were not active enough in the discussion forums. In this respect the tutor guides are silent in terms of level of service expected by the tutor and this has to be more explicit in the future. It would be advisable that an e-tutoring training programme be developed to train tutors before they are enrolled in the team. It is also advised that a pool of regular tutors be established. Denis (2003) proposed an online tutor training model based on 6 key elements namely experience of a online learning system, sharing representations of the tutors’ roles, definition of a tutor’s target profile, consensus on tutor’s roles and editing of a charter, practical preparation, animation and feedbacks loops. The issue of tutor training could be addressed under the new academic partnerships that GESCI is forging for the project.

Tutor feedback has been a valued resource for GESCI in improving subsequent delivery of the course to new cohorts, and tutors have been particularly active in contributing to the module tutor report in the LATIC contrary to the ALICT cohorts where they were most passive recipients of the report. The authoring of the report was the responsibility of the lead tutor. The main issues raised were the need for in-depth tutor induction, the need for more structured and shorter tutor meetings and for improved bandwidth, and the need to simplify assignment sheets and minimize redundant information on the e-learning platform. Some examples of tutor inputs are quoted below:

“All the team members should learn to use the adobe connect which gives many options in meeting like: sharing documents on the screen, recording the session for future use, chat session, raise hand button, etc.” – Unnamed Tutor, Module 6 – LATIC

“After the second week, the participation on the forum has almost stopped. Continuous encouragement is required for participation. Email has to be sent to participants on a frequent basis.” Unnamed Tutor, Module 3 – LATIC

“The regular meetings help to clarify issues and to help members to get prepared for the next week. Weekly tutor meetings were very essential as they helped us share experiences and strategize towards better delivery. Meeting to be of maximum duration of 1 hour as far as possible” Unnamed Tutor, Module 3 – LATIC

**Student Support (Technical and Administrative)**

The lack of student support is a well-documented feature in terms of high dropout cases in distance education and online courses. However, the student support model (tutoring – technical – administrative) in ALICT-LATIC as setup by GESCI is one of the strongest elements of the course. Dr Yvonne Emmet, the DCU external
evaluator of the ALICT course, in her evaluation report 2014/2015 highlights that “this is a well-considered dimension of the programme, which anticipates and addresses student support needs in a variety of ways”.

I would concur with her observations, from overall participant feedback, and having been part of the ALICT participants, tutor and tutor coordinator at some point in time. The three key structures put in place are the (1) the student support officer for general programme enquiries, (2) the helpdesk for technical problems and (3) Module tutors for enquiries in relation to module content and assignments. The key role however of the administrative support was to track slow learners, at risk participants and to keep a permanent communication channel with them to ensure they catch up on time and to maximise participant retention in the course.

As in all e-learning or technology-enabled learning environments, technical support is an essential element to maintain a satisfactory service level to the participants. Email is the key communication method by the participants to the helpdesk, and the highest percentage of those emails concern forgotten passwords, downloading of assignment templates and submission of assignments. In the first cohort, participants also had problems to locate chat and discussion forums. This issue has however been taken care of in subsequent cohorts.

**Student Feedback**

According to Seldin (1997), student feedback has become the most widely used, and in many cases the only source of information to evaluate and improve the effectiveness of teaching. However, it is further highlighted that it is not recommended to limit the appraisal of teaching effectiveness and classroom performance to students only. Therefore there is a need to add more sources of information, for example classroom observation, self-appraisals, peer-review of instructional materials and of the teaching process (Seldin 1997). Participant feedback is a key instrument in the ALICT-LATIC quality assurance model, and as mentioned throughout this report, this is not the only method for the assessment of the quality of the course, tutor intervention and student support.

Participant feedback has been systematic throughout the ALICT – LATIC programme and there is evidence through course reviews that GESCI team has been continuously addressing issues raised in the feedback thereby providing a mechanism to close the feedback loop. There is also evidence through a number of email correspondences from the QA Lead in terms of remedial actions to be taken from module to module based on both tutor reports and participant feedbacks. There is however, a need to review the feedback model and some statements, as well as their articulation. For example for one particular statement
a rating of 1 would be positive and for another statement a rating of 1 might denote the poorest score. There is also a need to keep a record on issues that were addressed and the actions taken, as well as issues that could not be attended to and their rationale and reasons. This will improve on the quality reporting process of the course.

Overall participant feedback throughout cohorts has been very positive and this definitely strengthens the ALICT-LATIC course from a quality perspective, especially in the context of accreditation and award of a postgraduate qualification by a recognized institution. Major strong points from participant feedback related to the richness of the course and quality of learning materials, as well as the tutor team and student support available.

“I enjoyed the chat sessions because I was able to discover the visions of other people horizons. learning by e-learning platform is a real pedagogical and didactic revolution” – Unnamed participant (LATIC Module 1)

The chats and especially the forum were very helpful to me. The tutors have always been reactive. During the chat last week our questions overwhelmed the tutor and yet, he would calmly answer us. – Unnamed participant (ALICT Module 2)

The Module content was good and insightful, as well as very relevant to my work and future projects. The module is very engaging and the assignment insightful in the kind of responses it sought – Unnamed participant (ALICT Module 3)

The constant issue was the heavy workload imposed on the participants within modules, and the relatively short time frame to complete assignments and the start of a new module. The last two modules of the course were generally seen as the most important modules, but with too much to assimilate and to achieve in a very short period of time, given the professional commitments at country levels of many of the participants. This is an issue highlighted in the DCU evaluation report 2014/2015 suggesting the need to review and lighten the course activities to promote deeper learning.

ASSESSMENT & EVALUATION

The robustness of an e-learning programme resides on student assessment and evaluation. The ALICT-LATIC course do not contain supervised written examinations and is mainly centered on formative model of assessment using a variety of techniques such as individual reflective journal, forum and chat participation, and group reports. The strong point on the assessment model in force is multifold:

- Integration of Turnitin for assignments promote originality in the work submitted by participants and a culture of academic integrity and honesty.
• Well-defined assessment criteria and rubrics as per the exigencies of the accrediting institution, the Dublin City University.
• A well-established process of moderation by the tutor coordinator, and also by the external moderator from DCU.
• Possibility of participants’ group to request for a review of the marks allocated to their work.
• Well-defined mechanism to provide tutor feedback to participants on marked assignments.
• Application of penalties for late submission.

From the documents available, and my own involvement as tutor coordinator for the LATIC course, the number of request for re-marking has been quite low which suggests the marking was fair and the model in place is working fine. When there has been request for review, the tutor coordinator would act as the reviewer, and if needed the views of another tutor or the lead tutor will be sought to ensure the principle of fairness is applied. There is a need however to harmonize the style and form of tutor feedback and may be a template for tutor feedback on assignments could be worked out. The model used by GESCI in terms of the participant assessment and evaluation mechanism is in line with quality assurance processes at Universities.

In the external moderation process, the issue around the adequacy of pedagogical support with respect to the group work component of the ALICT-LATIC programme from the tutor support perspective especially when participants are working on group assignments. Are students getting enough support in terms of their assignment? However, we also find there is a constant need to remain in contact with participants and to chase them regularly to ensure work is submitted on time and to deter dropouts. There is no clear indication if tutor commitment is the fault here or rather participants’ other professional and social commitment should be further probed into. I quote here the highly pertinent comments of the DCU moderator for one of the ALICT cohorts:

"Is the balance between individual and group assessment right? It has been readjusted but it is still weighted heavily in favour of group work, this is defensible even a possible strength of the assessment process. However the course team might like to consider how they can support individuals in groups, which are not functioning well and whether some individuals are taking over the group, or if some individuals free load on the work of others? “ – (DCU moderator)

Groups are also quite big and there are situations where we can get participants not meeting the minimum standard to successfully complete the course, yet they will end up with a postgraduate qualification. Some participants in their feedback have also highlighted the issue of passive participants with respect to group work.
“Content and tools are of very great value but not to control resources and the participation of all group members.” – Unnamed Participant (Module 5, LATIC)

“...when the work is based on a person or two, the result can only be to the expectations. There are too many people who swell the numbers and we must find a solution for Futures groups.” – Unnamed Participant (Module 6, LATIC)

SPECIFIC OBSERVATIONS ON LATIC

LATIC is the francophone version of the ALICT course and was launched in April 2015. The aim of LATIC was to extend the ALICT model to francophone African countries and participants from three countries took part in LATIC namely Morocco, Senegal and Ivory Coast.

The key methodology for the design of the LATIC version was to (1) translate the core content from English to French, (2) Re-adapt the content to meet the context of the three countries participating in the programme, (3) verification and validation by a Programme Development Specialist for the Francophone and North African Region. The participants and the tutors in general commended the quality of the content. However, in some areas it was reported that the translation needs to be reviewed, and in the assignment sheets the instructions have to be clarified and simplified.

One of the key issues and constraints encountered during the re-design of ALICT into LATIC were with external learning resources. The initial approach was to search for French versions of the documents or the equivalent. However, while key documents were found, a number of the mandatory and optional learning resources did not exist in French versions. In terms of the course digitization process for the e-learning platform, the same theme has been kept on the platform to maintain consistency. However it is proposed that the theme and the module’s logical structure on the platform have to reviewed based on tutor and participant feedback regarding the confusion caused especially due to the same information being available at different places. The tutoring in the LATIC was however more consistent due to the same Lead Tutor throughout and who was a GESCI staff. Furthermore tutor rotation was not to the same extent as in ALICT cohorts and this brought stability, cohesion and coherence in the process. The tutor coordinator’s report contains some interesting points and reflection with respect to tutoring in the LATIC cohort.

In terms of technology, the 360-feedback tool was translated in French and some statements were confusing and have to be reviewed for the next cohort. On the other hand the Delphi tool worked well but in both cases, the environment was in
English. However participants did not report any major inconvenience with the use of these tools in an English environment.

Participant commitment was slightly on the higher side with the Moroccan participants and this was reflected in the results and more specifically in the research report module. There is a need to probe further into the reasons why some specific country groups tend to perform better and be more committed towards the courses. These can be linked to cultural factors such as experiencing competition at early stages of their education cycle. For e.g. competition in the primary sector is high and this was obvious in terms of the first cohort’s high achievers.

The role of the Quality Assurance (QA) Lead by one GESCI staff throughout the LATIC helped improve the tutors' performances and the way they stimulate the participants. The QA Lead would ‘mine’ through the user-generated data throughout the delivery schedule of a module, and make interesting remarks and highlights to continuously improve the tutoring process. Some quoted comments from the QA Lead are highlighted below:

"What is also interesting in this chat summary are 2 developments you can see emerging from the discussion - one negative and one positive - as in:

- at the beginning of the chat it is clear that the participants are feeling overwhelmed with module 6 - particularly with the amount of resources that they see in front of them and the tight timelines
- during the chat you can see how the tutor stays very focused with the participants bringing out for them a clear outline of what exactly the participants are expected to do in the 2 exercises of the first worksheet"

"From the evaluations of modules 2 and 3 - it seems that the participants are saying that they enjoy the modules and materials and the support of the tutors - but are overwhelmed at times by the amount of content in place - and by the processes for coordinating group work. In the mid-term workshop we are addressing a lot of these issues - particularly techniques for using tools like Mahara to address group work and using group collaboration and learning to address issues on content and conceptual understanding. We will continue to work with the tutor teams to assist in group work and to build deeper understanding in the final modules”

(Quality Assurance Lead, GESCI Team)

This is a commendable approach from the quality perspective in terms of stimulating knowledge creation through social interaction by creating and animating an online community of practice. The role of the QA lead has also been very positive in the overall improvement of tutor reports from ALICT to LATIC especially as from Module 4 onwards. This is an interesting element bringing to light how continuous improvement is being achieved throughout the programme over its different phases and cohorts.
CAPABILITY ASSESSMENT

Using the first level of the eLearning Maturity Model, a high level overview of GESCI’s eLearning capability is presented. The analysis presented here is dependent on the desk studies and materials accessible, and the mean ratings provided by each participant in the first level rating. The table below provides a high level overview of the averages ratings per process area for the multi-rater survey that was conducted.

<table>
<thead>
<tr>
<th>Process Areas</th>
<th>Average Rating (1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning: processes that directly impact on pedagogical aspects of e-Learning</td>
<td>3.47</td>
</tr>
<tr>
<td>Development: Processes surrounding the creation and maintenance of e-learning resources</td>
<td>2.95</td>
</tr>
<tr>
<td>Support: Processes surrounding the support and operational management of e-learning</td>
<td>3.14</td>
</tr>
<tr>
<td>Evaluation: Processes surrounding the evaluation and quality control of e-learning through its entire lifecycle</td>
<td>3.33</td>
</tr>
<tr>
<td>Organization: Processes associated with institutional planning and management</td>
<td>3.13</td>
</tr>
</tbody>
</table>

Table 1: Average Ratings per process areas of the LATIC-ALICT programme

For the purpose of this assessment a multi-rater approach was adopted, namely with tutors, QA Lead, the Lead Tutor and technical staff involved in the ALICT-LATIC programme. This is a kind of self-evaluation by those who are part of the ALICT ecosystem. It is important here to quote Marshall and Mitchell (2007) here that

“while the eMM is based on widely accepted indicators of e-learning capability, in many cases there is a lack of empirical evidence supporting their use. Assessments of individual institutional capability in particular areas should thus be used as a guide to further investigation and planning rather than absolute measures of performance”

It is along the above quoted paragraph that the assessment has been carried out within the context of ALICT-LATIC. The Learning dimension is one of the main strong points as revealed by the assessment of the programmes. Most of the statements were rated to be between largely adequate and fully adequate indicators, as illustrated by Table 1 above and in Annex 2.

For the Development dimension, the statements received mixed responses
making this dimension to be rated mainly as largely adequate. While the ALICT course is not specifically designed to cater for disabled students, which is clearly reflected in the ratings, on the other hand, the perceived reliability and robustness of the e-learning infrastructure is rated to be between partially and largely adequate. This can be attributed to issues of connectivity and bandwidth as experienced during tutor meetings and webinars.

In terms of support and evaluation processes, the raters showed a general consensus of the services being largely adequate with the only weak point being the absence of online library services to promote quality research and referencing materials for the participants.

It is clear that GESCI has achieved a higher than average rating on the eMM maturity scale, with the ALICT-LATIC programmes as case-studies, achieving an overall average of 3.2 (largely adequate) in all the process areas. This is more or less the norm for institutions with experience in quality eLearning provisions. It is however important to note that only the first level of the eMM was applied in this evaluation. The details of the eMM assessment are cross-examined with elements emanating from the desk-studies and the expert observation to reflect the key observations, the gaps and challenges, and finally the recommendations with respect to improvement of the ALICT-LATIC programme, and the overall eLearning capabilities of GESCI.

**KEY OBSERVATIONS**

While conducting the evaluation of the ALICT-LATIC programme, a number of elements were investigated, such as the use of a well-defined instructional systems framework such as ADDIE, and instructional design models while implementing the courses on the eLearning platform. Furthermore process models were looked into to ensure, that the programme was designed after a through research and needs-analysis and in line with programme development procedures at international universities. The aim was also to ensure that GESCI had put in place the appropriate evaluation and monitoring mechanisms to ensure continuous improvement on the content, delivery models and learner experiences.

The ALICT-LATIC course followed a well-defined instructional framework from its conception to delivery and improvement of the course. It is obvious that an instructional design framework like ADDIE can be abstracted from the processes that were followed, and which were well documented. The e-Learning courseware design and blended course delivery model are well aligned with best practices and models described in literature such as the ASSURE model for integration of ICT in teaching and learning (Marshall 2006; Barker 2002). The digitization of content
on the online e-learning platform is standardized and has experienced gradual improvement across cohorts from the technology-pedagogy-usability triad. Face-to-face workshops, real-time online interactions and asynchronous communication are used effectively to add value to the learning experiences, to support participants from a pedagogical perspective and as a tool to maintain learner motivation, commitment and retention throughout the course (Al-Hunaiyyan et al. 2008).

Furthermore, there is a well-defined framework for student assessment, evaluation, internal and external moderation to ensure a quality programme is delivered that meets the specified learning objectives. This is essential to maintain the quality provision and reliability of the course aligning therefore with international standards of transnational and accredited learning provisions. The Accreditation by DCU for the ALICT-LATIC courses, through the European Credit Accumulation and Transfer System, is a solid indicator of quality assurance and delivery and places the course as a high value product aimed at high-level civil servants and executives. The future partnership with the University of Mauritius further strengthens the perception of stakeholders vis-à-vis the course and opens new avenues to promote the recognition of the course on a regional and global basis.

There is finally a robust student support framework in place, and a mechanism to handle tutor and participant feedback to ensure the course is continuously improved. For example, the introduction of interactive multimedia materials as complementary support to the learning materials following feedback from the previous ALICT cohorts. GESCI through the ALICT-LATIC and the multi-country expertise-pooling concept has turned the organizational model into a concrete example for the provision of high-quality blended e-learning courses. This emerges clear from its e-learning maturity assessment.

On the other hand, there are gaps that have been identified along with some challenges and constraints that can be overcome to improve the overall quality of the programme. There is a lack of consideration for the cultural dimension and context in the content, although they are generic and technical, and in the external reading resources.

For e.g. one participant from Morocco highlighted the attention on a map of Morocco, being erroneous from the Moroccan perspective in an official document which was recommended as a reading material. This is an essential element to be taken into consideration with respect to transnational and cross-border educational provisions (Gunawardena & LaPointe, 2007).
Along the same philosophy, with respect to culture, here is an interesting feedback from a tutor –

“Do not forget that the cultural context of the Africans is not pro-reading, but much more pro-hearing. So the audio and visual teaching materials must be more promoted than those in reading”
– unnamed Tutor, Module 6 LATIC.

Internet Connectivity and bandwidth issue remains a major barrier and constraint to the ALICT-LATIC programme, both from the perspective of tutors and participants. While this is not a critical issue, it does present some challenges from a quality learning experience perspective. The issue of dropouts can also be attributed in some cases to bad connectivity (Hughes 2007).

The modality paradox of the ALICT-LATIC programme as this is a part-time course, offered over roughly a 9-month period, but which requires the official equivalence of one year of full-time study. 60 ECTS credits are needed for the Graduate Diploma, which is equivalent to a 1 year of full-time study. Participant feedback has repeatedly highlighted this issue, including the tutors and the DCU moderators who also raised this issue.

The Group Assignment being a major component that contributes towards the final grade of each participant, presents challenges to the tutor and GESCI management team to ensure the minimum contribution of each team member is well defined and clear so as not to create a perception of ‘easy to pass’ programme with minimum effort. Based on the average weekly amount of time that participants reported spending on the modules, it might not seem coherent with the total notional learning hours expected to add to the minimum of 60 ECTS to earn the graduate diploma. However this does not suggest that the course is not equivalent, but the reported average time spent from participants does not necessarily reflect the actual hours that are really needed for the course. This might be linked to the division of labor for group work that diminishes the overall individual involvement.

The instruction sheets for assignments and the presence of redundant but important information cause confusion and lack of focus for many participants. This has been observed across cohorts and highlighted by tutors throughout and especially for the last module on Research, where participants felt that the module had so many repetitions that it looked not necessary for them to have it. While this module is very important, it seems the repetition of information related to modules 1-5 took them away from grasping the ‘big picture’ of module 6. While participants have access to a variety of online learning resources, and external
references (commonly known as the Knowledge base of the course), access to digital libraries and high impact research is limited.

The user interface (theme) of the e-learning platform and the logical structure of the modules on the e-learning platform have passed the test of usability and is generally perceived by the participants and tutors to be adequate. However, there is a quite big learning curve for same, and a lack of a technical handbook to complement the face-to-face initiation workshop. Participants who are not well versed with ICTs and eLearning have reported issues with respect to being lost in the environment’s navigation structure. The Orientation workshop lacks depth in terms of addressing eLearning platform functions and technologies to the participants.

**RECOMMENDATIONS & CONCLUSION**

The ALICT-LATIC course reflects a high quality trans-national and cross-border accredited higher education provision of the 21st Century. The course meets the key quality standards for eLearning as per well-defined benchmarks and indicators. There is clear evidence of a robust instructional design framework and methodology guiding the design and delivery of the programme and continuous improvement is achieved through cycles of course reviews.

On the other hand, there are challenges and issues that are inevitable and which are most of the time, detected at *run-time*. These issues are highlighted through participant feedback, tutor reports, QA Lead observations and internal/external moderation. An improved tracking and reporting method on these issues would help improve the QA processes and improve the overall learning experiences of the participants.

Quality Assurance is a constantly evolving area especially in a dynamic context of technology-enabled instruction. Therefore going through each cycle of course delivery and evaluation, improvements have to be identified and incorporated on an incremental basis.

Based on the above, the key recommendations are as follows:

- Conduct a full usability evaluation of the eLearning platform including the way Mahara is integrated with the learning environment, and redesign the user interface, and course structural layout. In other words, revise the instructional and visual arrangement of the programme online.
• Devise a set of instructional videos, interactive tutorials to support a comprehensive induction to the eLearning platform and other environments like Mahara, Delphi tool and 360 Feedback. This should not be integrated with the current Orientation Module, which is an introductory module on Knowledge Society concepts.

• Review the course content in the following ways:
  
  o Proofreading of the LATIC content to improve on the overall meaning of the translated content.
  o Review the assignment sheets and instructions for both ALICT and LATIC to simplify the work and facilitate understanding.
  o Crosscheck the status of all external readings and links on a regular basis.

• Review the course structure and delivery model, to allow more time for participants, to assimilate, apply and achieve desired learning outcomes in an optimal setting.

• Propose a mechanism for better monitoring and assessment of individual’s contributions in group work, and integrate a research seminar workshop (as a webinar or face-to-face workshop) to introduce participants to basic research methods.

• Conceive and develop an e-tutoring course dedicated to tutor induction to online course delivery and tutoring to improve tutor competencies and effectiveness.

• Investigate into the possibility to introduce open-book online assessment based on scenarios and knowledge application questions that count towards the final assessment of a module.

• Devise a mechanism to document issues highlighted and encountered and to keep track of actions taken and constraints if any that hinder the issues to be solved.

This study has been to probe into the ALICT journey from its conception to delivery of three cohorts, including its adaptation in the Francophone version referred to as LATIC. We can reasonably argue at this stage that the current blended learning model is conducive for the development of skills and competencies as expected in terms of intended outcomes and learner experience. The quality of the course is comparable to what is offered in recognized and
reputed institutions of higher education, and this is clearly evidenced by the DCU accreditation and the views of external moderators, and further strengthened by the new partnership with the University of Mauritius. The recommendations as put forward in this report will hopefully help to address the gaps and challenges that were identified. This report also sets the context for further research that would contribute to the knowledge base of such innovative projects as the ALICT-LATIC course. There are avenues for further investigation into the cultural context and influence with respect to participant performances and commitment to the course, including an understanding of reasons for dropouts. It further provides a good platform for further research into 21st Century Educational models that is based on a multiple partnership model, to redefine the Universities of the future.

REFERENCES


## ANNEX 1 – MOODLE COURSE USABILITY CHECKLIST

<table>
<thead>
<tr>
<th>Accessibility</th>
<th>Yes/No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Site load time is reasonable</td>
<td>Yes</td>
<td>Depends on user bandwidth</td>
</tr>
<tr>
<td>2. Good text-to-background contrast</td>
<td>Yes</td>
<td>Some areas need to be reviewed to address principles of good visual communication</td>
</tr>
<tr>
<td>3. Images have appropriate ALT texts</td>
<td>Yes</td>
<td>To cross-check in all lessons</td>
</tr>
<tr>
<td>4. There are no not-found pages/dead links</td>
<td>No</td>
<td>Needs constant check and verification as the course relies quite much on external resources</td>
</tr>
<tr>
<td>5. Well-balanced page layout</td>
<td>Yes</td>
<td>But needs improvement and to evolve with time and new approaches</td>
</tr>
<tr>
<td>6. Only the necessary elements for communication</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

### Navigation

<table>
<thead>
<tr>
<th>Navigation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Clear navigation to main pages</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>8. Navigation texts and symbols are clear</td>
<td>Yes</td>
<td>Not always though due to the theme used.</td>
</tr>
<tr>
<td>9. Links are consistent and easy to identify</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>10. Users can easily find and access materials</td>
<td>No</td>
<td>The learning curve is high initially and too much redundant information</td>
</tr>
<tr>
<td>11. Users always know where they are and go back</td>
<td>No</td>
<td>In some cases the navigational aspects are not clear</td>
</tr>
</tbody>
</table>

### Content

<table>
<thead>
<tr>
<th>Content</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Clear and descriptive major headings</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>13. Styles and colors are consistent</td>
<td>No</td>
<td>There is a need to review to match the standards</td>
</tr>
<tr>
<td>14. Descriptive paragraphs are short and easy to read</td>
<td>Yes</td>
<td>It has been reported in LATIC some paragraphs are not so clear</td>
</tr>
<tr>
<td>15. Font size/spacing is easy to read</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>16. Clear distinction between headings, subheadings, paragraph and image texts</td>
<td>Yes</td>
<td>There is a need to cross-check throughout</td>
</tr>
<tr>
<td>17. Max 3 different fonts</td>
<td>No</td>
<td>Has to be aligned with this principle</td>
</tr>
<tr>
<td>18. User-friendly URLS</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>19. Self-explanatory page titles</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>20. Objects that are related are grouped</td>
<td>Yes and No</td>
<td>There is a need to streamline</td>
</tr>
</tbody>
</table>
ANNEX 2 – CAPABILITY ASSESSMENT

Learning: Processes that directly impact on pedagogical aspects of e-learning

Answered: 6  Skipped: 0

- Learning objectives...
- Students are provided with...
- Students are provided with...
- Students are provided with...
- Students receive...
- Students are provided with...
- Learning designs and...
- Assessment is designed to...
- Student work is subject to...
- Courses are designed to...
<table>
<thead>
<tr>
<th></th>
<th>Not practiced</th>
<th>Not adequate</th>
<th>Partially adequate</th>
<th>Largely adequate</th>
<th>Fully adequate</th>
<th>Not assessed</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning objectives guide the design and implementation of courses</td>
<td>0.00%</td>
<td>0.00%</td>
<td>66.67%</td>
<td>33.33%</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>3.33</td>
</tr>
<tr>
<td>Students are provided with mechanisms for interaction with teaching staff and other students</td>
<td>0.00%</td>
<td>16.67%</td>
<td>33.33%</td>
<td>50.00%</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td>3.33</td>
</tr>
<tr>
<td>Students are provided with e-learning skill development</td>
<td>0.00%</td>
<td>16.67%</td>
<td>50.00%</td>
<td>33.33%</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>3.17</td>
</tr>
<tr>
<td>Students are provided with expected staff response times to student communications</td>
<td>0.00%</td>
<td>0.00%</td>
<td>16.67%</td>
<td>83.33%</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>3.83</td>
</tr>
<tr>
<td>Students receive feedback on their performance within courses</td>
<td>0.00%</td>
<td>0.00%</td>
<td>16.67%</td>
<td>83.33%</td>
<td>5</td>
<td>0</td>
<td>6</td>
<td>3.83</td>
</tr>
<tr>
<td>Students are provided with support in developing research and information literacy skills</td>
<td>0.00%</td>
<td>33.33%</td>
<td>16.67%</td>
<td>50.00%</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>3.17</td>
</tr>
<tr>
<td>Learning designs and activities actively engage students</td>
<td>0.00%</td>
<td>0.00%</td>
<td>66.67%</td>
<td>33.33%</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>3.33</td>
</tr>
<tr>
<td>Assessment is designed to progressively build student competence</td>
<td>0.00%</td>
<td>0.00%</td>
<td>33.33%</td>
<td>66.67%</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>3.67</td>
</tr>
<tr>
<td>Student work is subject to specified timetables and deadlines</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>83.33%</td>
<td>6</td>
<td>16.67%</td>
<td>6</td>
<td>4.17</td>
</tr>
<tr>
<td>Courses are designed to support diverse learning styles and learner capabilities</td>
<td>0.00%</td>
<td>16.67%</td>
<td>66.67%</td>
<td>16.67%</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>3.00</td>
</tr>
</tbody>
</table>
Development: Processes surrounding the creation and maintenance of e-learning resources

Answered: 6  Skipped: 0

- Teaching staff are provided...
- Course development...
- An explicit plan links...
- Courses are designed to...
- All elements of the physiology...
- All elements of the physiology...
- E-learning resources are...
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Not practiced/not adequate</th>
<th>Partially adequate</th>
<th>Largely adequate</th>
<th>Fully adequate</th>
<th>Not assessed</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching staff are provided with design and development support when engaging in e-learning</td>
<td>0.00% 0</td>
<td>33.33% 2</td>
<td>33.33% 2</td>
<td>33.33% 2</td>
<td>0.00% 0</td>
<td>0</td>
<td>3.00</td>
</tr>
<tr>
<td>Course development, design and delivery are guided by e-learning procedures and standards</td>
<td>0.00% 0</td>
<td>33.33% 2</td>
<td>33.33% 2</td>
<td>33.33% 2</td>
<td>0.00% 0</td>
<td>0</td>
<td>3.00</td>
</tr>
<tr>
<td>An explicit plan links e-learning, technology, pedagogy and content used in courses</td>
<td>0.00% 0</td>
<td>33.33% 2</td>
<td>33.33% 2</td>
<td>33.33% 2</td>
<td>0.00% 0</td>
<td>0</td>
<td>3.00</td>
</tr>
<tr>
<td>Courses are designed to support disabled students</td>
<td>68.87% 4</td>
<td>16.67% 1</td>
<td>0.00% 0</td>
<td>0.00% 0</td>
<td>16.67% 1</td>
<td>6</td>
<td>1.83</td>
</tr>
<tr>
<td>All elements of the physical e-learning infrastructure are reliable, robust and sufficient</td>
<td>0.00% 0</td>
<td>33.33% 2</td>
<td>50.00% 3</td>
<td>16.67% 1</td>
<td>0.00% 0</td>
<td>6</td>
<td>2.53</td>
</tr>
<tr>
<td>All elements of the physical e-learning infrastructure are integrated using defined standards</td>
<td>0.00% 0</td>
<td>16.67% 1</td>
<td>50.00% 3</td>
<td>0.00% 0</td>
<td>33.33% 2</td>
<td>6</td>
<td>3.50</td>
</tr>
<tr>
<td>E-learning resources are designed and managed to maximise reuse</td>
<td>0.00% 0</td>
<td>50.00% 3</td>
<td>50.00% 3</td>
<td>0.00% 0</td>
<td>0.00% 0</td>
<td>6</td>
<td>3.50</td>
</tr>
</tbody>
</table>
Support: Processes surrounding the support and operational management of e-learning

Answered: 0  Skipped: 0
<table>
<thead>
<tr>
<th></th>
<th>Not practiced/Not adequate</th>
<th>Partially adequate</th>
<th>Largely adequate</th>
<th>Fully adequate</th>
<th>Not assessed</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are provided with technical assistance when engaging in e-learning</td>
<td>0.00%</td>
<td>0.00%</td>
<td>56.00%</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3.00</td>
</tr>
<tr>
<td>Students are provided with library facilities when engaging in e-learning</td>
<td>16.67%</td>
<td>30.00%</td>
<td>33.33%</td>
<td>6.00%</td>
<td>0</td>
<td>0</td>
<td>2.17</td>
</tr>
<tr>
<td>Student enquiries, questions and complaints are recorded and managed formally</td>
<td>0.00%</td>
<td>0.00%</td>
<td>80.00%</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>3.50</td>
</tr>
<tr>
<td>Students are provided with personal and learning support services when engaging in e-learning</td>
<td>0.00%</td>
<td>16.67%</td>
<td>33.33%</td>
<td>56.00%</td>
<td>0</td>
<td>0</td>
<td>3.33</td>
</tr>
<tr>
<td>Teaching staff are provided with e-learning pedagogical support and professional development</td>
<td>16.67%</td>
<td>0.00%</td>
<td>33.33%</td>
<td>56.00%</td>
<td>0</td>
<td>0</td>
<td>3.17</td>
</tr>
<tr>
<td>Teaching staff are provided with technical support in using digital information created by students</td>
<td>16.67%</td>
<td>0.00%</td>
<td>33.33%</td>
<td>56.00%</td>
<td>0</td>
<td>0</td>
<td>3.17</td>
</tr>
</tbody>
</table>
Evaluation: Processes surrounding the evaluation and quality control of e-learning through its entire lifecycle

Answered: 0  Skipped: 0

Students are able to provide feedback on the quality and effectiveness of their e-learning experience:
- Not Practiced/Not Adequate: 0%
- Partially Adequate: 0%
- Largely Adequate: 0%
- Fully Adequate: 0%
- Not Assessed: 100%

Teaching staff are able to provide feedback on the quality and effectiveness of their e-learning experience:
- Not Practiced/Not Adequate: 0%
- Partially Adequate: 0%
- Largely Adequate: 0%
- Fully Adequate: 0%
- Not Assessed: 100%

Regular reviews of the e-learning aspects of courses are conducted:
- Not Practiced/Not Adequate: 0%
- Partially Adequate: 0%
- Largely Adequate: 0%
- Fully Adequate: 0%
- Not Assessed: 100%
Organisation: Processes associated with institutional planning and management

Answered: 6  Skipped: 0
<table>
<thead>
<tr>
<th></th>
<th>Not produced/Not adequate</th>
<th>Partially adequate</th>
<th>Largely adequate</th>
<th>Fully Adequate</th>
<th>Not assessed</th>
<th>Total</th>
<th>Weighted Average</th>
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<tbody>
<tr>
<td>Formal criteria guide the allocation of resources for e-learning design, development and delivery</td>
<td>0.00%</td>
<td>0.00%</td>
<td>33.33%</td>
<td>66.67%</td>
<td>0.00%</td>
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<td>3.17</td>
</tr>
<tr>
<td>Institutional learning and teaching policies and strategies explicitly address e-learning</td>
<td>0.00%</td>
<td>16.67%</td>
<td>50.00%</td>
<td>33.33%</td>
<td>0.00%</td>
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<td>3.17</td>
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<tr>
<td>E-learning technology decisions are guided by an explicit plan</td>
<td>0.00%</td>
<td>16.67%</td>
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<td>50.00%</td>
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<tr>
<td>Digital information use is guided by an institutional information integrity plan</td>
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<td>33.33%</td>
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<td>16.67%</td>
<td>16.67%</td>
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</tr>
<tr>
<td>E-learning initiatives are guided by explicit development plans</td>
<td>16.67%</td>
<td>16.67%</td>
<td>50.00%</td>
<td>16.67%</td>
<td>16.67%</td>
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</tr>
<tr>
<td>Students are provided with information on e-learning technologies prior to starting courses</td>
<td>16.67%</td>
<td>0.00%</td>
<td>66.67%</td>
<td>16.67%</td>
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<tr>
<td>Students are provided with information on e-learning pedagogies prior to starting courses</td>
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<td>Students are provided with administrative information prior to starting courses</td>
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<td>50.00%</td>
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<td>3.17</td>
</tr>
<tr>
<td>E-learning initiatives are guided by institutional strategies and operational plans</td>
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<td>0.00%</td>
<td>66.67%</td>
<td>16.67%</td>
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