AN EVALUATION OF THE AFRICAN LEADERSHIP IN ICT PROGRAMME FROM A QUALITY ASSURANCE PERSPECTIVE

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Abstract

The aim of this paper is to present a comprehensive review of the African Leadership in ICT (ALICT-LATIC) course delivery model, offered by the Global e-Schools and Communities Initiatives (GESCI) 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. In this paper, we look at the key concepts governing the ALICT-LATIC course, such as the provision of transnational education and blended learning provisions. Through a series of steps including desk studies, expert observation and the application of the eLearning Maturity Model, we conduct an evaluation of the eLearning provision from a quality assurance perspective. 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 academic standards adopted by institutions of higher education through their internal and external quality mechanisms.

Abstract in French

L'objectif de ce document est de présenter une évaluation complète du modèle de prestation des cours de leadership africain en TIC (LATIC), offert par le Global e-Schools and Communities Initiatives (GESCI), en tenant compte du modèle de prestation , le contexte culturel et la nature distribuée du programme et de ses participants, d'un point de vue géographique. Dans cet article, nous examinons les concepts clés régissant le cours LATIC, tels que la provision d'une éducation transnationale et des dispositions d'apprentissage mixte. Grâce à une série d'étapes, y compris des études de documents, des observations d'experts et l'application du modèle de maturité eLearning, nous effectuons une évaluation de la prestation eLearning du point de vue de contrôle de qualité. À ce stade, nous pouvons raisonnablement admettre que le modèle d'apprentissage mixte actuel est propice au développement des compétences et des compétences attendues en termes de résultats escomptés et d'expérience de l'apprenant. La qualité du cours est comparable aux normes académiques adoptées par les établissements d'enseignement supérieur à travers leurs mécanismes internes et externes de qualité.

Introduction

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" (African leadership in ICT Program (ALICT) – http://pages.au.int/infosoc/pages/african-leadership-ict-program-alict).

The ALICT-LATIC programme has now been offered on a blended mode (with a major component in online modality) in 13 Anglophone African countries 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 700 participants who have embarked on the course with 487 participants who 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.

In this paper, we look at the key concepts governing the ALICT-LATIC course, such as the provision of transnational education and blended learning provisions. Through a series of steps including desk studies, expert observation and the application of the eLearning Maturity Model, we conduct an 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.

Cross-Border (Transnational) eLearning

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.

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).

Distributed Education and eLearning Methods

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). ICT integration in the educational process, needs to address the problematic of enhancing the teaching and learning process, rather than being viewed only as a new flexible mode of delivery (Nichols, 2003). 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).

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; Nisbett, 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 behaviour (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; Collis & Remmers, 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 and 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.

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.

Contextualising Quality Assurance in (blended) eLearning

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).

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.

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 and 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, (a) from a systemic-holistic level namely transnational education provisions and accreditation of programmes, including the instructional systems design processes, and (b) 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.

Background Context of the ALICT Project

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, 2010). 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 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.

This model has emerged after the initial concept note (Hooker, 2010) on the ALICT project. 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.

The table below illustrates the student population in the course in successive years over the period 2012-2015, spread over 16 African Countries.

Table 1:

	Participants started the course	Total dropped OUT	Total Completed
2012	110	27	83
2013	201	71	130
2014	302	79	223
2015 (French)	87	36	51
Totals	700	213	487

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 perceived 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 namely critical reflection, collaborative resourcing, and theory, practice & transformation concept.

The main methods for this research work are as follows:

- Desk Study
  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 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 framework proposed by the eLearning Maturity Model is appropriate for a first-level benchmarking of the eLearning initiative of the ALICT-LATIC programme as it covers the key areas that this report is based upon.

- 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.

In the next sections we report and discuss the findings and observations after the application of the above three approaches.

Findings and Observations

Design and Development of the ALICT Programme

The programme was designed after intensive consultations and it constituted of 6 modules, namely Leadership in the Knowledge Age, New Strategies in Science, Technology and Innovation, Telecommunications Infrastructure and Quality Internet Provision, ICT Applications and the role of Government, Education in the Knowledge Age, and finally Knowledge Society for Africa.

The course was built around the following guiding elements by GESCI 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.

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).

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 is 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.

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 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.

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. This element was commended by the external moderator highlighting that "this is a well-considered dimension of the programme, which anticipates and addresses student support needs in a variety of ways".

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)*

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 centred 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.

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 was raised 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. 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)*

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, from the expert's perspective and from the ratings of the tutors and technical staff including participant feedback. Five process areas were looked at, namely Learning, Development, Support, Evaluation and Organisation.

The Learning dimension is one of the main strong points as revealed by the assessment of the course. 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, 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, there is 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. The details of the eMM assessment were 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.

Discussion and Recommendations

Based on the observations made above, we can reasonably postulate that the ALICT-LATIC course reflects a high quality trans-national and cross-border accredited higher education provision of the 21ˢᵗ Century. 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* and in successive cohorts. These issues are highlighted consistently 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 findings 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 as many participants reported the feeling of the "lost in hyperspace" phenomenon.

- 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 will help reduce the learning curve for the e-learning environment and reduce cognitive load on the participant to recall technical processes. This aspect should not be integrated with the current Orientation Module, which is an introductory module on Knowledge Society concepts.

- 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, given that time constraints, and sometimes unclear instructions caused issues.

- 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.

- 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.

Conclusion

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 views of external moderators, participant feedback and internally established mechanisms. The recommendations as put forward in this paper will hopefully help to address the gaps and challenges that were identified.

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Acknowledgement