

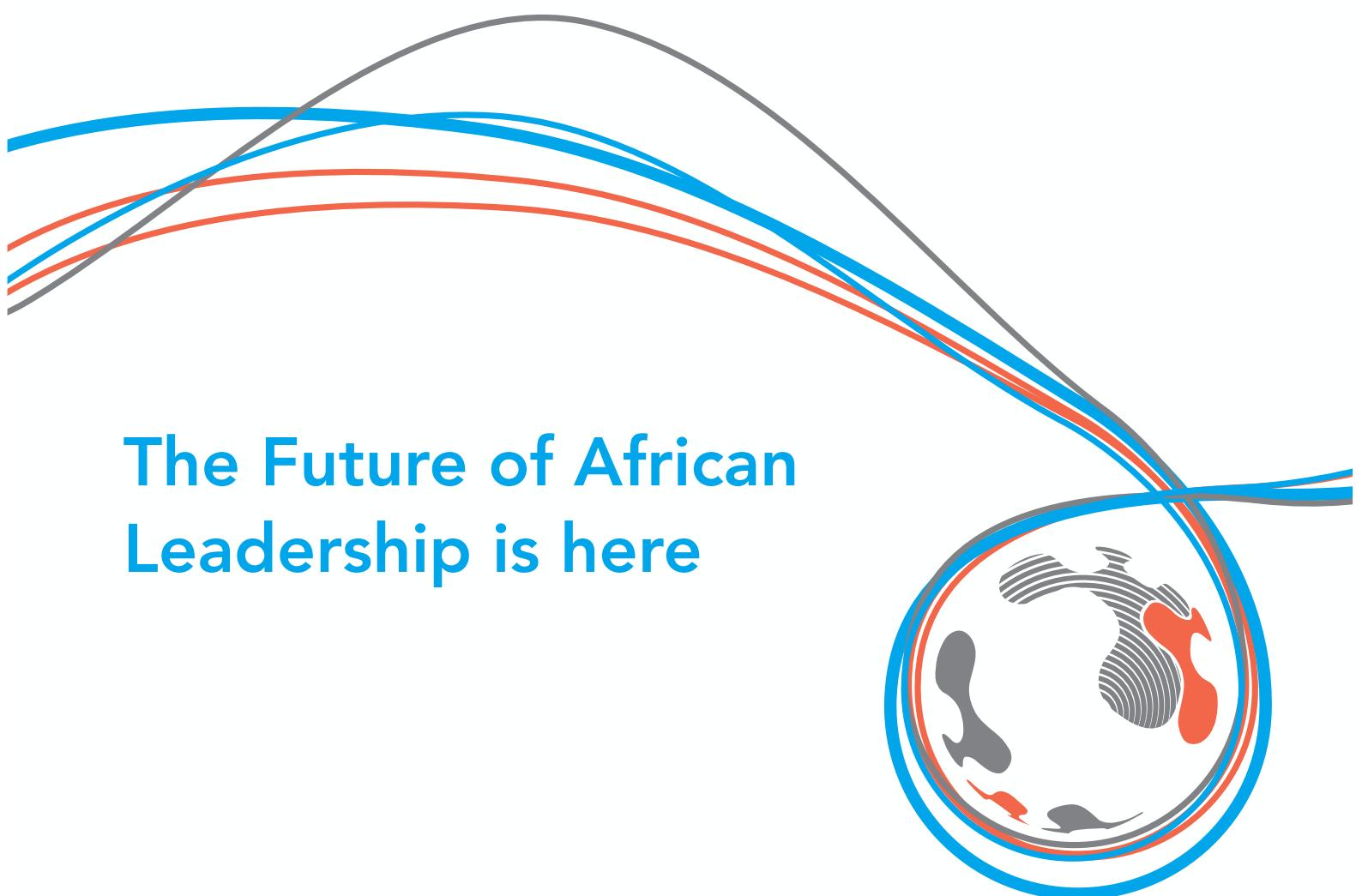


gesci
Founded by UN ICT Task Force



African Leadership in ICT

Model Document 2013



The ALICT Capacity Building Course Summary

Definition: The African Leadership in ICT course is a public sector leadership capacity building initiative for the advancement of knowledge societies across Africa.

Partners: ALICT is an African Union Commission initiative supported by the Ministry for Foreign Affairs of Finland and implemented by GESCI (Founded by the UN ICT Task Force).

Vision: A critical mass of public sector leaders with the skills and capacity to lead Africa's transformation to knowledge societies

Broad Objectives: Equip future African leaders with a commanding understanding of the key elements in the development of knowledge societies.

Build leaders' capacities to be agents of change in their ministries, organisations and regions for the development of knowledge societies.

Course Delivery: ALICT is a blended learning course. Participants undertake the majority of learning online with limited face-to-face learning.

Course Duration: 7/8 months, 15 hours a week (guideline)

Course Structure: 5 Modules plus an Orientation session

Course Accreditation: Participants who successfully complete the course receive a professional development certificate in Leadership in ICT for the Knowledge Society. They are also eligible for the award of a Graduate Diploma in Leadership in ICT and the Knowledge Society from Dublin City University (Ireland), a leading European University.

Detailed Objectives: The objectives of the ALICT programme are based on the original ARAPKE ALICT plan and further developed to fit and reflect Finnish Development Policy, the Africa-EU P8 and the AUC's Action Plan:

- 1) Provide direct personal experience of ICT as an enabler for human resource development, education, skills development and innovation contributing to Knowledge Society development.
- 2) Raise awareness and build strategic capacities of African leaders and policy makers in the human resource development sectors on the vision of Knowledge Societies and the role of ICT in Education, Science and Technology and Innovation as well as socio-economic development (in collaboration with other partners such as AUC and UNECA).
- 3) Introduce participants to leadership skills and avail of mechanisms on the continent for regional cooperation, solidarity and collaboration among African countries.
- 4) Harness the leadership skills of promising ICT leaders and policymakers to ensure the benefits of new technologies are available to all.

- 5) Promote policy dialogue on Knowledge Society issues on a regional and continental level.
- 6) Link and facilitate knowledge sharing among Knowledge Society initiatives and regional partners and promote policy dialogue on Knowledge Societies in Africa.
- 7) Build and disseminate information, knowledge and experiences on the role and use of ICTs in Education, Science and Technology and Innovation for Knowledge Society development.
- 8) Develop a platform to address the critical professional development needs identified in terms of management, leadership, project formulation and management, and build strategic capacities of the participants and partners in programme preparation, implementation and evaluation as relates to building capacity of Member States on Knowledge Society issues.

Major Results Achieved

- A well-developed curriculum and capacity building model for building capacity of African leaders on ICT, Education, STI and Knowledge Society issues.
- A multi-stakeholder knowledge exchange platform that brings together private, public and civil society to create Knowledge Partnerships, share knowledge and contribute expertise to building the capacity of African leaders.
- Capacities of selected African leaders built and appropriate model(s) for long term capacity building developed and tested. Appropriate management, leadership, project formulation and project management skills built for the identification and leveraging of different opportunities for African regional cooperation in ICT, Education, STI and Knowledge Society development.
- An alumni network created to encourage and sustain the application of new leadership skills and knowledge society competencies acquired on the ALICT course

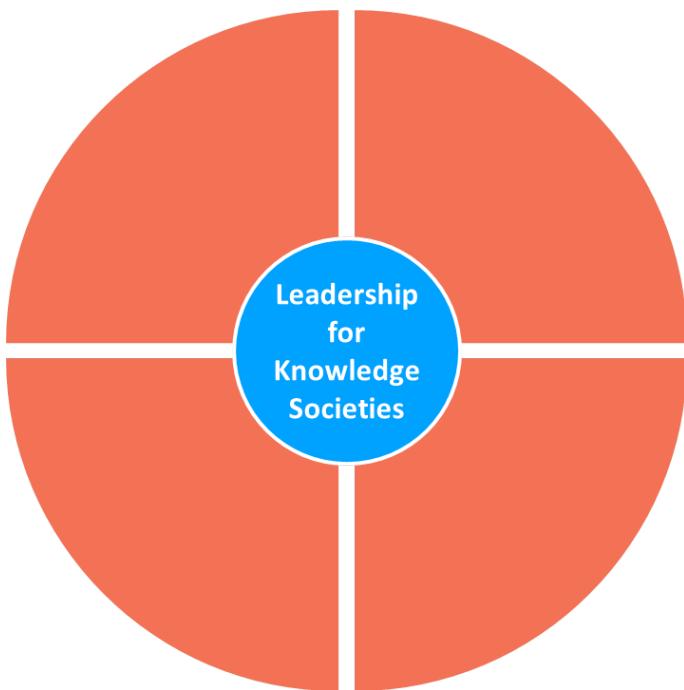
Application of this Model Document

This model document is a technical account of the successful implementation of the African Leadership in ICT capacity building course. It is GESCI's step-by-step account of implementing a blended learning course for leadership capacity building in the public sector in Eastern and Southern Africa. The model assumes a basic understanding of the knowledge society as a working model of social and economic development. It also assumes that the reader appreciates the central role that Education, Science Technology and Innovation, and ICT play in the development of knowledge societies, and that the reader is also aware of the basic workings of the African Union Commission and Ministry for Foreign Affairs of Finland as owners and funders, respectively, of this regional programme. This document will not attempt to provide an exhaustive catalogue of definitions of key knowledge society and pedagogical concepts on which the wider ALICT programme is premised, but will devote itself instead to a practical description of how this model came to be designed and implemented.

The objective of this model document is to illustrate the steps necessary to successfully implement a blended learning course for leadership capacity building in the public sector in Africa, in the hope that the model might be replicated in other fora and sectors by GESCI's partners, and by GESCI itself. For a full description of the wider ALICT programme, along with the full intellectual rationale for the programme, please refer to the following document:

[**ALICT Concept Note: Building Leadership Capacity for ICT and Knowledge Societies in Africa**](#)

1. Course Rationale: Leadership for Knowledge Societies



1.1 Course Goal

The ALICT course's overarching goal is to develop a group of African ICT, Education, Science, Technology and Innovation (STI) Knowledge Society Leaders that can become agents for change in their own countries and be catalysts for regional cooperation in the domains of ICT, Education, STI and Knowledge Societies both at the country and sub-regional levels.

The course aims to build and strengthen visioning, strategic planning and management, policy making and related strategic capacities of future leaders and policy makers on the fundamental role all facets of Information and Communications Technologies play in the development of inclusive and sustainable Knowledge Societies in Africa.

1.2 Course Concepts

Capacity Building: The ALICT capacity building model aims to build and enhance the knowledge, skills and attitudes of future leaders to manage transformation and change, to manage institutional pluralism, to enhance coordination, to foster communication, and to ensure that data and information are shared and used in planning, resource mobilisation, implementation and evaluation processes. All of these concepts and processes have been built into the model design.

Knowledge Society: The ALICT model focuses on the role all facets of Information and Communications Technologies play in the building of the absorptive capacities

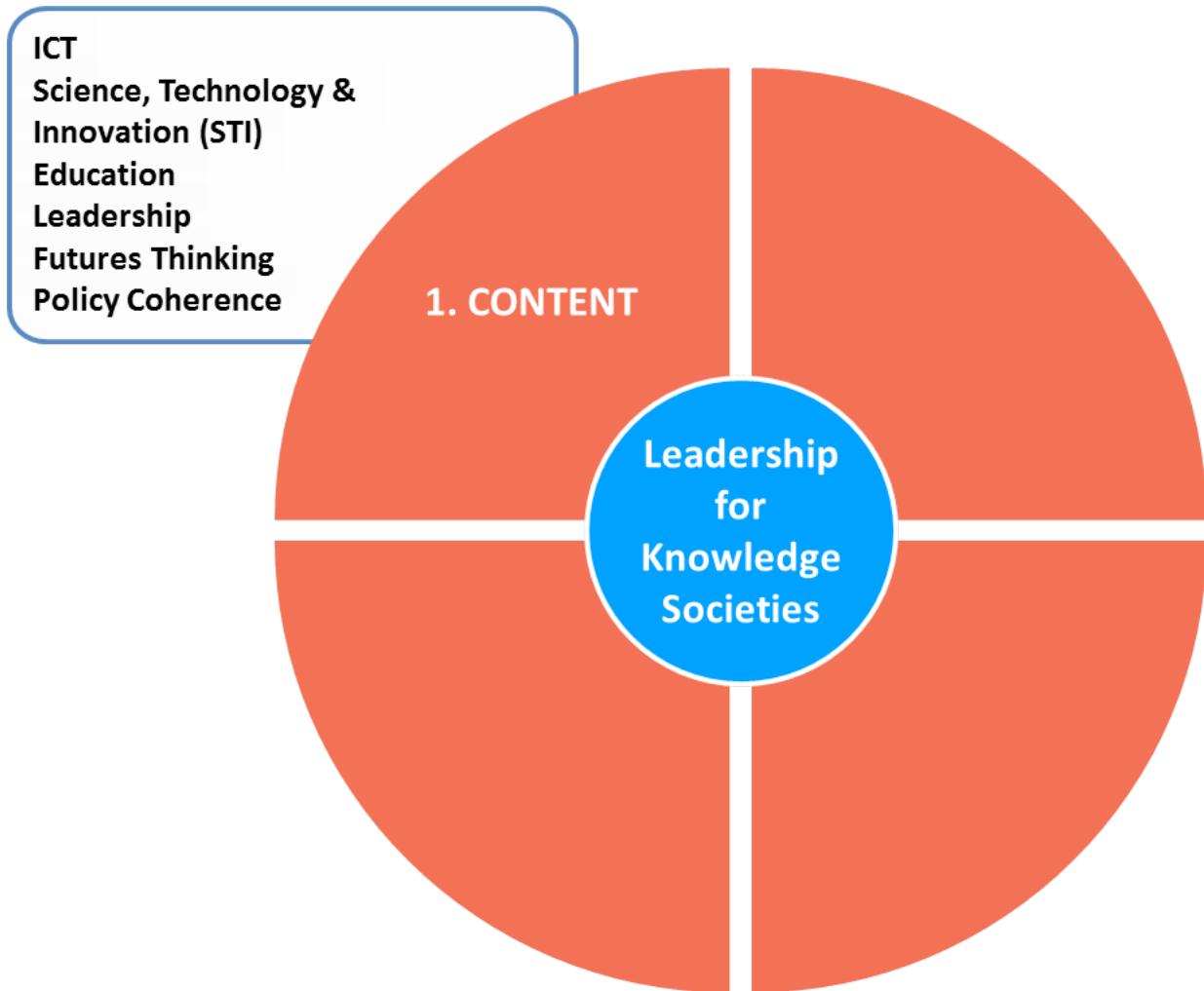
of current and potential future African leaders to acquire, assimilate, transform and exploit the benefits of ICT and knowledge to produce a dynamic organisational capability through peer knowledge sharing and exposure to technology. The ALICT approach to Knowledge Society development focuses on the interconnection between leadership, policy development, and future-proof planning and how they contribute to Knowledge Society development through Education, Science Technology and Innovation, and ICT.

Leadership: A prerequisite for leadership development for knowledge societies is policy coherence between the three pillars (ICT, Education, Science, Technology and Innovation) that form the basis of any Knowledge Society. For future African leaders to be able to steer their countries towards that goal, it is essential for them to not only be well versed in management, leadership, project formulation and project management skills, but also to acquire comprehensive knowledge about the interrelationship of the three Knowledge Society pillars (Education, STI and ICT) and then be able to apply that knowledge in the African context.

Policy Coherence: Policy Coherence is the development and implementation of conjointly supportive policy actions across all sectors of the economy and society, and more specifically across government departments and agencies. Policy coherence pursues the creation of synergies across policies that advance the achievement of shared and agreed objectives. Within national governments, policy coherence issues arise between different types of public policies, between different levels of government, between different stakeholders and at an international level.

Futures Thinking: Futures Thinking was first theorised by Jim Dator (Bezold, 2009). Among its many uses within complex and rapidly shifting economic and social systems is its relevance to policy development and implementation. Futures Thinking requires the revisit of plans and policies at regular intervals in order to take into consideration any new signals that appear in the environment that may affect a sector or number of sectors.

2. Course Preparation



2.1 Research for Content Development

Four papers on Knowledge Society and Education, ICT and STI, and 12 (target) country studies on leadership and KS, identified the leadership needs that the course should fill, namely:

- New leadership requirements for KS development including what is required of public sector leaders in the 21st century.
- Leadership capacity for understanding the innovation ecosystem.
- The ability of organisational leaders to transform policy frameworks into operational models.
- The capacity building for decision making that does not reflect the past ways of doing things.
- Giving leaders room to innovate through support and facilitation to ensure increased productivity and creativity.

2.2 Course Structure

The ALICT course structure was developed to address the overall requirement for building change leadership capacity. The structure encompasses a course curriculum to address specific capacity development needs for leadership knowledge and skills for 'new ways of doing things' appropriate for a knowledge age.

The ALICT course curriculum and content comprises a package of orientation and five modules on themes of STI, ICT, and Education. Underpinning all modular content are the cross-cutting themes of leadership, policy coherence, and futures thinking for effective planning and strategising.



Figure 1: ALICT Course Structure & Content – Needs Assessment Base and Module Set

2.3 Course Module Development

The ALICT module development process consists of a number of phases for analysis, design, development, delivery and evaluation, as is the norm in instructional design, but the phases do not necessarily follow in sequence as they often overlap.

The module and content development could be summarised in what some instructional and software designers describe as a "Release Early, Release Often" (RERO) (Wikipedia, 2013) approach to course design and development – involving course module deployment directly into cohort course implementation. The focus is to hear and use the on-going feedback of the end users and implementers (participants, tutors, tutor coordinators, specialists and experts) to enable timely customisation of the course to suit the participant needs and meet quality standards.

The following stages explain the phased development of the ALICT content and modules:

1. Analysis: The module development is grounded in analysis of the situational and needs assessment studies

that are conducted in selected countries for participation in the ALICT course.

2. Curriculum Mapping: The ALICT development teams of KS and multi-media experts map the curriculum ahead of module development. This involves the identification of high level objectives, proposed content and facilitation strategies that will shape the development of each module in alignment with the course purpose and identified needs.

3. Design: The development team constructs a set of design templates to lay out content and learning pathways that ensure consistency through all modules - inclusive of suggestions for activities, interventions and tools for interactive and critical engagement of participants on the module concepts.

4. Production: The development teams produce module content that includes expert inputs on course themes, the identification of open access and free resources (articles, web-sites, videos, graphics, and photographs), the creation of graphic and web design features that are aligned to the module topics and direction. Tutoring guidelines are also developed to ensure a systematic approach to tutoring across each module of course delivery.

5. Delivery: Each cycle of module deployment provides continuous opportunities for learning. Participants and tutors working through the modules in workshops and online course delivery enable a thorough testing of the assumptions of development teams.

6. Review: The modules are continually reviewed throughout course implementation. Participant, tutor coordinator

and tutor team feedback inclusive of comments on the course materials and suggestions for improvement are collected and collated to inform module revisions.

7. Revision: A revision phase follows each cohort implementation cycle so that the collected participant and tutor feedback and development team module reviews continually inform changes and revisions to curriculum and module development for future cohorts.

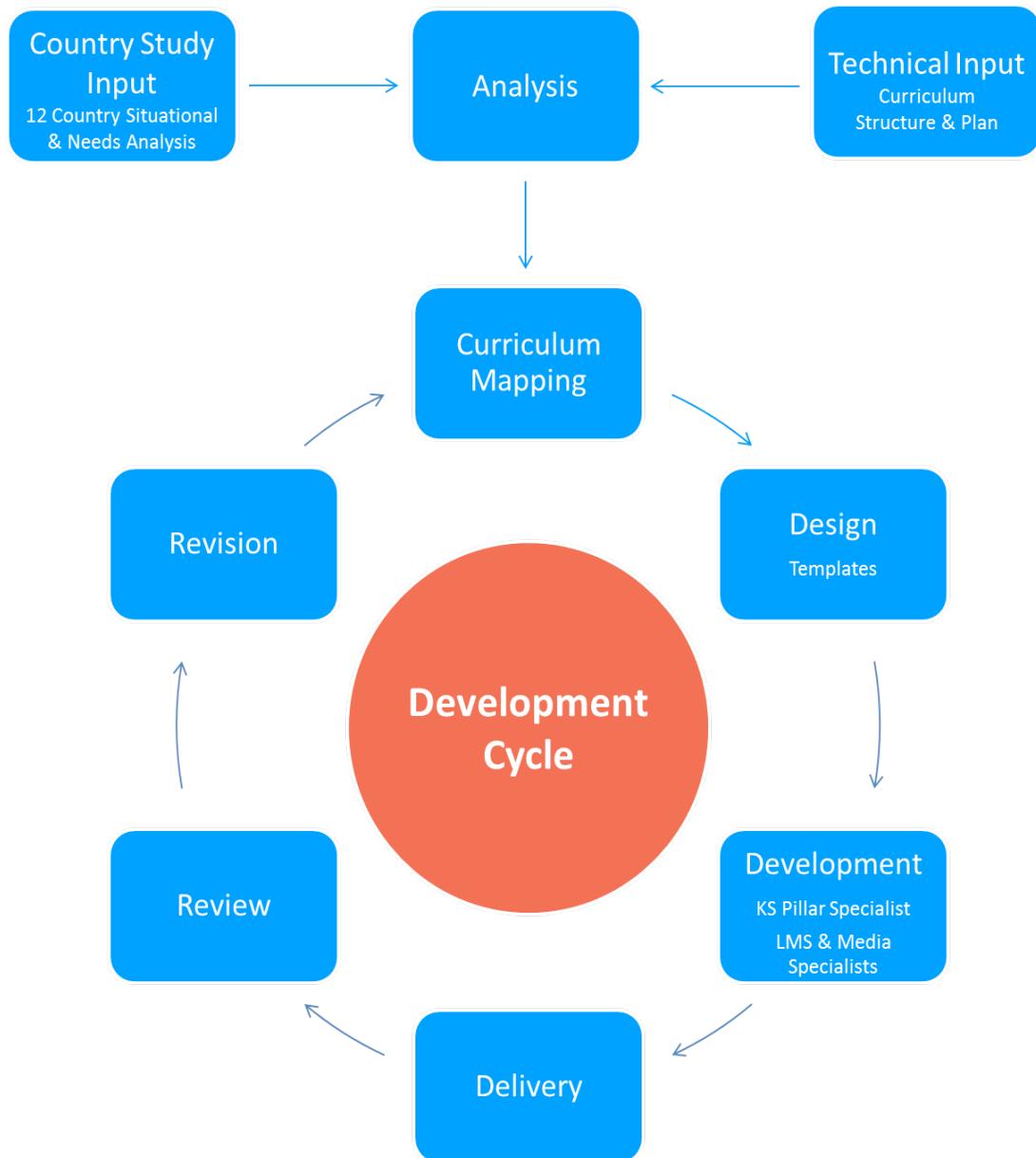
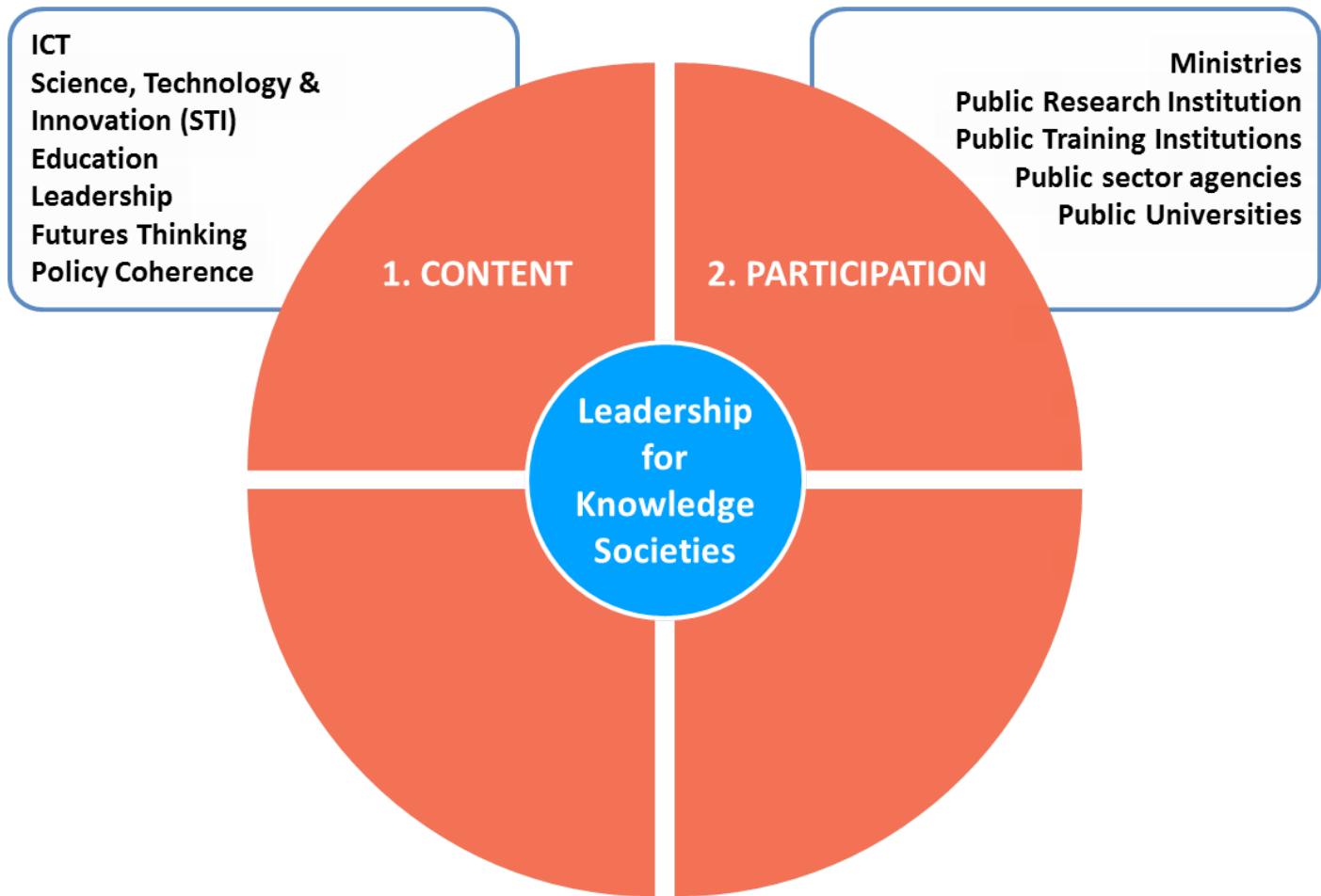


Figure 2: ALICT Course Materials Development Cycle
Adapted: Commonwealth of Learning, 2012

3. Course Participation



3.1 Levels of Engagement

The ALICT model does not focus on a particular organisation (or Ministry), but rather on the capacities needed by a range of people across a number of public sector organisations working in the same environment addressing a common concern. The model builds leadership capacities at the three levels appropriate for sustainable system change at the individual, organisational and stakeholder levels as captured in **Figure 3** (see next page).

The design of the model deliberately includes these three levels in the processes of encouraging collaboration and team work among course participants, application of new knowledge, skills and tools and changing of mind sets and raising awareness of decision making and policy implications.

At the individual level capacity includes knowledge, skills, values and attitudes related to self-awareness and efficacy, self-confidence and development, creativity, problem solving, and leadership. Capacity at the team and organisational level refers to all the elements that have an influence on the team and organisation. At the stakeholder level capacity refers to the necessary conditions, support

and environment required to optimise individual and team and organisational capacities.

The ALICT capacity building model emphasises the importance of teamwork in which collaborative learning is valued, respect for others exists, and where critical questioning is allowed in the spirit of open and respectful communication. The pedagogical model draws on and incorporates the African principle of Ubuntu: 'I am what I am because of who we all are'- emphasising the idea of community as one of the building blocks of society. It has also adopted principles from the Yenza leadership framework of action learning. The Yenza leadership framework embodies both the spirit of African leadership and developmental and change leadership which are required to enable learning and the creation of knowledge in learning organisations of the 21st century.

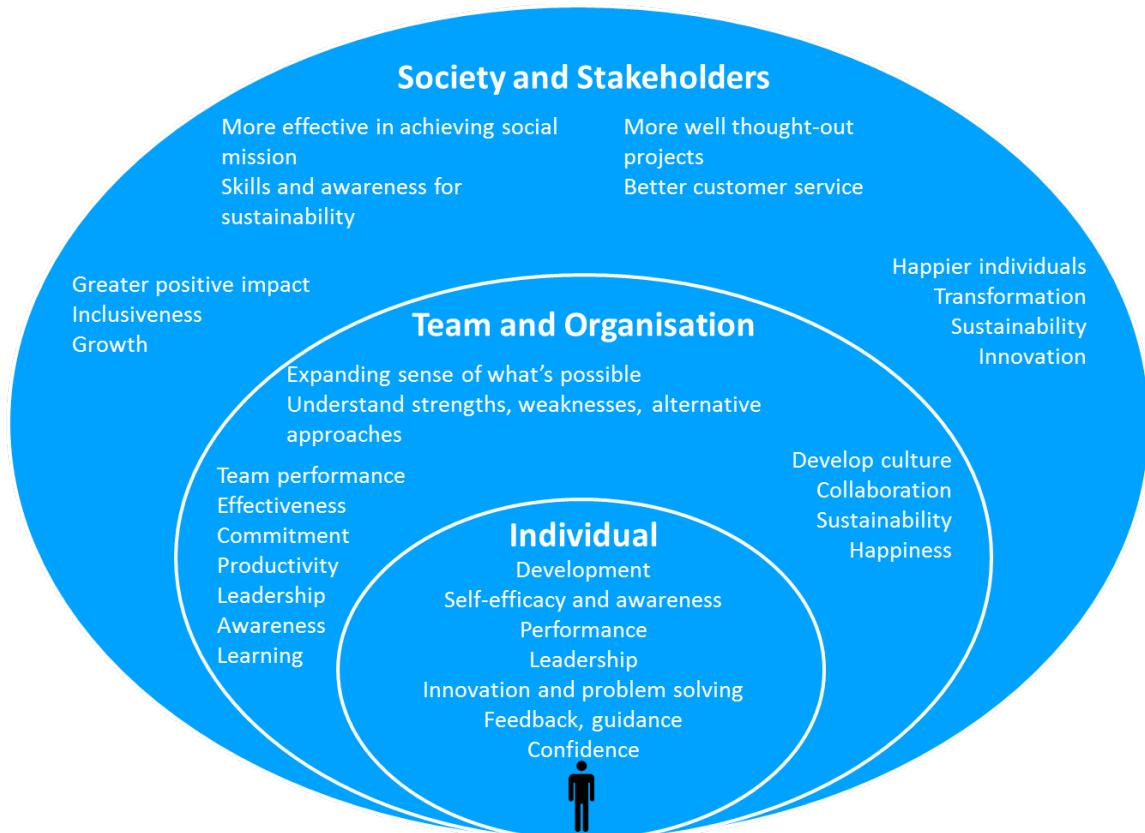


Figure 3: Three Levels of Capacity Building

3.2 Recruitment of Participants

The recruitment of ALICT course participants is a carefully planned series of activities designed to ensure, as much as possible, that the right candidates in terms of background, qualifications, sector relevancy and experience, receive essential information that will encourage them to apply for a place on the course. Much of the success of the course depends on the initial selection process, as unsuitable candidates are the first to drop out. By identifying essential course information and a variety of channels through which that course information can reach the right prospective candidates, the odds of attracting appropriate candidates are increased. The application process itself also has to be made as thorough but as efficient as possible for both candidate and recruiter to aid the selection and evaluation processes.

Recruitment Objectives

- To attract as many qualified applicants as possible that meet, as closely as possible, predefined selection criteria.
- To ensure female participants account for at least 30% of course enrolments.

Making the Call for Applicants

A call for applicants -document is created which includes: criteria for participation, guidelines for ministries/institutions wishing to propose an applicant, links to application forms, deadlines for submission, course outline and GES-CI contact details.

Stage 1 – A letter is issued to Ministers, Permanent Secretaries and Directors/Heads of Units and Departments across key ministries (STI, ICT and Education) inviting

them to nominate appropriate mid to senior managers to apply for the course.

Stage 2 – ALICT programme staff identify important contacts from the organisational contact database with whom to share the call for applicants.

Stage 3 – The call for applicants, as well as appearing on the organisational website, twitter, Facebook and LinkedIn sites, is hosted on as many appropriate development and government websites as possible.

Stage 4 – Calls made to heads of units and departments across key ministries reminding decision makers in targeted institutions to nominate members of their staff to apply.

Stage 5 – Advertisements in national and regional newspapers and weekend supplements.

Application Forms

The application forms collect essential information for evaluation and selection of participants.

In Addition They Seek

- Nominations by the organisation through supervisors
- Evaluation/recommendation of an individual/s by the organisation through supervisors.

Applicant Details

An online application form is developed to collect all of the above information and hosted on the organisational site. The link is easily shared through email and other websites to attract applicants.

Selection Criteria

The criteria require the following from a suitable applicant:

- Must be a public sector employee
- Must have a minimum of a Bachelor's degree qualification

- Must be at middle or senior management level
- Must be committed to participate fully and to complete the course
- Computer skills including word processing, e-mail and Internet proficiency and access to a computer with Internet connectivity.

In addition to the above, applications from women are encouraged with a minimum threshold of 35% female participation on the course.

Evaluation Criteria

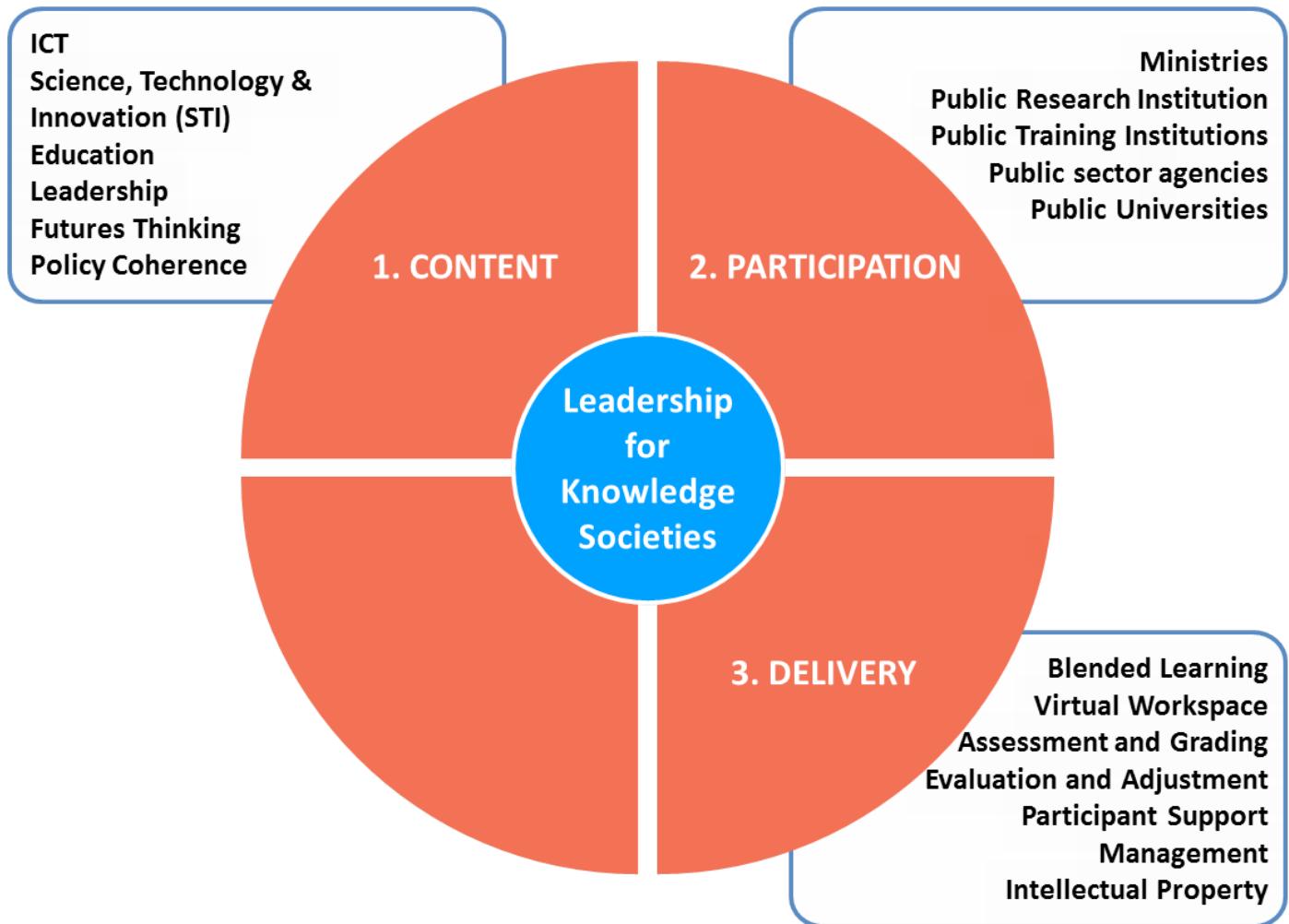
The panel reviewing applications for admission apply the following criteria, in addition to other suitability consideration:

- Qualifications (minimum of Bachelors)
- Experience (relevant to a pillar of the Knowledge Society, e.g. ICT, STI, ICT)
- Institution (public sector or related agency), Position (mid to senior management) and Strategy (for application of leadership competencies to be acquired)
- Strengths (good at team work, or organised, ambitious or creative)
- Leadership potential
- Institutional Strategy for leveraging candidate once skills are enhanced
- Expected contribution to institutional development.

Evaluation Process

- Candidates who fail to complete the application process are excluded
- A database is created to calculate the score for each participant
- Scoring of candidates by a panel
- Several rounds of internal review.

4. Course Delivery



4.1 Blended Learning

From the perspective of delivery, a blended learning course should "integrate online with traditional face-to-face class activities in a planned, pedagogically valuable manner" (TeachThought, 2013), which means that online tools are not just integrated to the learning process as supplementary elements but, instead, that all the delivery methods and course elements serve a certain pedagogical purpose. In the ALICT capacity building model, this has been implemented on two levels:

Level 1 – ALICT Module Design: The ALICT modules and workshops consist of curriculum content and new pedagogical approaches which have a specific purpose in engaging participants in experiential, interactive and collaborative learning.

Level 2 – ALICT Course Design: The whole ALICT course is broken down into phases of online and offline working periods all of which have a specific purpose in contributing to the course's two transversal elements, i.e. development of policy coherence across the sectors of ICT,

Education and STI in building knowledge societies, and personal leadership development

Table 1 (see next page) presents the delivery/learning methods used in the ALICT module design and their pedagogical purpose.

The ALICT pedagogical model combines abstract principles with practical experience, allowing course participants to bring theory and practice together. It also combines theory and instruction phases with more practical experiential phases where participants implement tasks and plans and apply newly acquired skills and knowledge. Through the sequence of practice, experience, debriefing, theory and feedback participants are being guided into more reflected leadership practices.

Delivery/learning method	Purpose in ALICT module design
Face-to-face workshops (country level/regional)	Course and assignment orientations; introduction to key concepts, tools, e-learning platform and leadership toolkit
Online self-study material	Presentation of unit-specific themes, core theoretical content, case studies and additional reading
Moderated online forum and chat discussions	Group reflection, where the participants get involved in deeper analysis of the unit themes and topics through inter-country knowledge exchange
Group work (offline/online)	Simulating the inter-organisational nature of the policy coherence process in inter-ministry and multi-disciplinary groups
Individual work (offline/online)	Preparation of individual assignments/individual information retrieval; assessment of individual learning
Tutor feedback	Detailed feedback on the group assignments, leadership journals and 360° reviews (either online or face-to-face)

Table 1: The ALICT Module Design

Transversal Elements

The transversal elements, i.e. individual leadership development, policy coherence for knowledge society development, ICT skills development and futures thinking are integrated in the six online modules and are also focal areas for the face-to-face workshops.

Assignments

As ALICT is a professional development course, the emphasis is on participant application of knowledge and new competencies in the organisational environment. Assignments are closely linked to the contents of each module. Each module has both group and individual assignments. A module consists on average of 3-4 weeks online studies and includes weekly forum discussions and chats facilitated by the online tutors. Each participant contributes towards a group assignment and produces an individual leadership journal as a reflection of their learning per module.

360 Degree Leadership Analysis

As the course builds leadership capacity, a 360 degree leadership analysis is carried out for each participant. Based on the feedback report the participant produces a personal development plan (PDP). This plan should provide guidance for her/his professional development.

Modules

The course consists of an Introduction to the Knowledge Society and six modules online. Introduction to the Knowl-

edge Society guides the participants through the key concepts and structure of the course and introduces them to the Futures Thinking methodology. The course modules are listed in Figure 5 (see next page).

The course duration is 8-9 months or equivalent to two academic semesters. In progressing through the modules the participants familiarise themselves with theoretical knowledge and case studies on the three identified knowledge society pillars, and leadership, and work on individual and/or group assignments, all of which contribute to the final project, "Policy Coherence in STI/ICT/Education in Country X", that the participants complete in **Module 5**.

Chats and Discussion Forums

Each module has discussion forums and chats which are structured around the thematic area of the module. The guiding principle of the chats and forums is to bring together participants from different countries and domains to share their experiences. It is a mandatory course requirement that everyone participates in one chat and one forum discussion per module.

The other mandatory assignments are the group assignment in each module (in **Module 1** individual assignment) and an individual reflection of their learning as a leadership journal. Country teams produce a group assignment in each module. The country teams are drawn from various organisations to share their knowledge and experience across their sectors to encourage and facilitate cross-fertilisation of knowledge and learning.

These processes are supported by participants' and groups' independent offline work and three face-to-face workshops.

Face-to-face Workshops

There are three face to face workshops of two days duration each:

- The Orientation workshop in the beginning of the course is held in each participating country to orient participants to the key concepts and working methods and requirements of the course and the use of the Moodle online environment.
- The Mid-term workshop is held to receive feedback from the participants on the challenges and problems encountered and to orient them to the rest of the course.
- The Closing workshop is held at the end of the course to produce Policy Coherence Roadmaps for the Knowledge Society in participants' countries. This workshop is regional and brings all participants together.

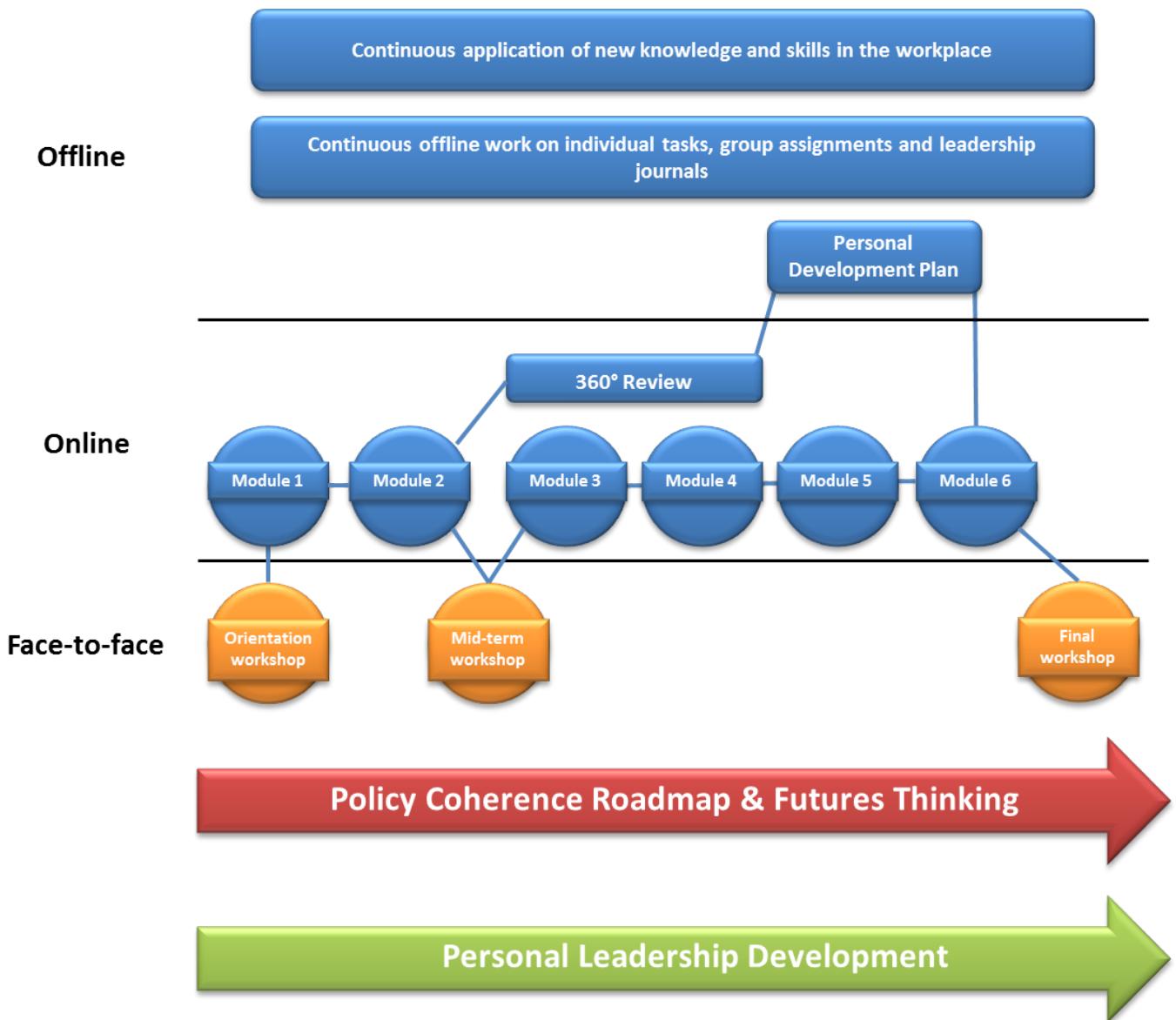


Figure 4: ALICT Course Structure



Figure 5: ALICT Modules

4.2 The ALICT Virtual Workspace

Through the ALICT virtual workspace on the Moodle platform participants access learning materials, engage in forum and chat discussions, and complete their individual and group assignments with the support of online tutors. Participants are expected to allocate 10 hours per week for studying consisting of 50 % online studies and 50 % independent studies.

The ALICT virtual workspace consists of two elements:

- Learning Management System: Moodle 2.2.1 (hosted by NetSpot, <http://netspot.com.au>, a certified Moodle partner from Australia)
- Resource Library: <http://www.gesci.org/library.html> .

The GESCI Moodle theme is customised to match the design of the GESCI website. In addition, some of Moodle's inbuilt modules have been further customised for a better look and feel together with some additional plug-ins for wider range of functionalities and modes of presentation. A resource library is incorporated to the GESCI website and is managed through the ModX content management system.

The course design has been built on the customised collapsible topics format where the participants navigate through the collapsible sections for module/unit information and activities (**Figure 5**):

The online learning material has been designed on the customised Moodle lesson module (see **Figure 6** on the next page). The instructional design follows the module design principle of having a pedagogical purpose for all the elements of the learning material. See **Table 2** (for more on usage of different media elements, see e.g. Ghiardini 2011, pp. 75-89):

Element	Purpose in ALICT instructional design
Static text	<ul style="list-style-type: none"> • Presentation of core theoretical knowledge • Instructions for assignments/exercises
Pop-up text boxes	<ul style="list-style-type: none"> • Additional information/case studies • Feedback on reflective questions
Graphics	<ul style="list-style-type: none"> • Decoration: to add aesthetic appeal • Supporting the understanding of concepts
Animated/interactive presentations	<ul style="list-style-type: none"> • Decoration: to add aesthetic appeal • Support the understanding of complex concepts • Instructions for more complex assignments/exercises
Video	<ul style="list-style-type: none"> • Presenting cases that relate to the unit topics ("food for thought")
Quizzes	<ul style="list-style-type: none"> • Pretesting to determine the participants' baseline knowledge
Interactive exercises	<ul style="list-style-type: none"> • Supporting the understanding of complex concepts

Table 2: ALICT Instructional Design

The screenshot shows the Moodle course front-page for 'Module 5: Education in the Knowledge Age'. The page features a navigation bar on the left with sections for 'Unit 3 – Activities', 'Progress Bar', and 'Navigation'. The main content area includes a 'Welcome' message, 'Module Information', 'Module Assignments – An Overview', and 'Unit 1 – Education in the Knowledge Age'. Each section is presented in a red box with a collapse/expand icon. The 'Introduction' section at the bottom contains text about the purpose of the unit and a 'Unit Time' box indicating 5 hours of learning including assessments.

Figure 6: An Example of a Course Front-page with Collapsible Sections

Unit Menu

- Test Your Knowledge on ICT Infrastructure
- 1. Introduction to Telecommunications
 - 1.1. Overview of Network
 - 1.2. Telecommunication Network Model
 - 1.3. The Internet
 - 2. Internet Security Threats
 - 2.1. Protecting Against Internet Threats
 - 3. Transmission Media
 - 3.1. Optical Fibre Technology
 - 3.2. Wireless Communications
 - 4. Internet Access and "Last Mile" Connectivity

Unit 1 – Telecommunications Fundamentals

1.1. Overview of Network

A typical network consists of end user devices, transmitted data, the transmitting medium, intermediate devices and protocols (click the highlighted areas to read more about each element) as depicted in the illustration below:

Figure 7: An example of an online learning material page

To ensure that all the content can be accessed as text-based material, a PDF version of the content of all the units is made available for the participants that have unstable or slow connectivity. In addition to the online learning material, each unit also introduces a comprehensive set of non-compulsory additional reading and case studies. The ALICT online material is under constant development and redesign for increased interactivity within the current bandwidth constraints in the participating countries.

4.3 Tutoring

The tutoring team consists of GESCI tutors and external online tutors, a Tutor Coordinator, and an e-Learning Coordinator. Each module has a lead tutor and external tutors. The lead tutor is a GESCI staff member supported by external tutors recruited internationally. Some tutors are graduates of the ALICT course.

The lead tutor prepares a tutoring plan and a tutoring report and shares it with the tutoring team for each module.

The tutoring process is developed by the ALICT team and the Tutor Coordinator to make the process fluent and efficient. It is guided by the Tutoring Manual. The tutoring process is further enhanced during the course based on feedback from the tutoring team and participants.

The tutor team is assisted by the following support team:

- **E-learning coordinator:** Student management and non-content related participant support. The e-Learning Coordinator tracks the participant activities, follows up on delayed assignments and provides summaries of module assignment assessments.
- **Blended learning specialist:** ID work, management of online content and activities.
- **Helpdesk:** Technical support for the participants (account management etc.).

- **Tutor coordinator:** Pedagogical assistance for and supervision of the tutors. The Tutor Coordinator provides guidance and feedback to the tutoring process and reviews the final evaluation of module assignments.

Depending on the module, each tutor manages approximately 30-50 participants. The role of the tutor is to facilitate the learning experience of their own inter country groups which include participants from each participating country. Each tutor also supervises and evaluates group assignments and leadership journals for two country groups. In general, the tutor's role in the ALICT course is to facilitate the learning process as opposed to being a teacher in the traditional sense. However, besides the e-tutoring capabilities, the ALICT course tutors also have content expertise in relation to the modules.

The final module, **Module 6: Knowledge Society for Africa**, makes an exception to this framework by dividing the groups for tutoring per knowledge society pillar (STI, ICT and Education, with an additional tutor to help each group in the futures thinking methodology).

4.4 Assessment and Grading

The ALICT course became an academic accredited course by Dublin City University (DCU). Participants who successfully complete the course receive a Graduate Diploma from DCU in Leadership in ICT for the Knowledge Society in addition to the joint Professional Development Certificate issued by GESCI and the AUC. The ALICT course team developed assessment criteria both for group and individual assignments closely aligned to the accrediting institution requirements.

Each module has a general assessment rubric and grid. The rubric is further instructed by specific assessment cri-

teria. The general weighting is 80% for group assignment and 20% for individual assignment. Assignments are assessed by the tutor team in each module based on rubrics developed by GESCI and approved by the accrediting institution. The Tutor Coordinator provides the final evaluation comments to module assessment. The course assessment results per module are submitted to the accrediting institution for moderation by an external evaluator.

All assignments are run through Turnitin-software to check for any plagiarism. The ALICT course uses the Harvard Style referencing.

4.5 Course Evaluation and Adjustment

There are on-going opportunities to collect feedback and make adjustments during course implementation. A revision phase follows each cycle of course implementation so that collected feedback, evaluations and needs assessments can inform adjustments to the course content. The two cycles of blended course implementation has produced a consolidated course module set and platform for entering the second phase of the ALICT course implementation and expansion in Eastern, Southern and West Africa countries.

4.6 Participant Support Management

A rigorous system for participant support management is vital to successful course implementation. It supports the confidence and well-being of participants and helps to pre-empt participant drop-out with timely two-way communication. The main goal of participant support management is to support the learner in order to reduce the interpersonal relationship gap normally experienced by participants who are used to learning via traditional face-to-face methods.

Participant Support Management combines personal communication and technical administration through database management, a technical helpdesk, and SMS and email communication:

Participant Tracking and Retention

Progress of course participants is measured and tracked on a weekly basis throughout the course. The screen capture below shows the participant tracking database. The tracking enables course support services to identify those participants who are falling behind and to contact them to remind them of deadlines and encourage their full participation in the course.

This progress checklist is a record of chats, discussion forum participation and also the final assignment submissions. The chats and discussion records are obtained from the Moodle platform.

In addition to these support functions performed by the e-learning coordinator and helpdesk, the participants have a help and technical support page on the virtual workspace and a user manual in PDF form. The virtual workspace also has a shared calendar with a detailed course schedule with deadlines for assignments. The ALICT tutoring policies are captured in the African Leadership in ICT Online Tutoring Manual and platform administration policies in the Moodle Administrator Manual.

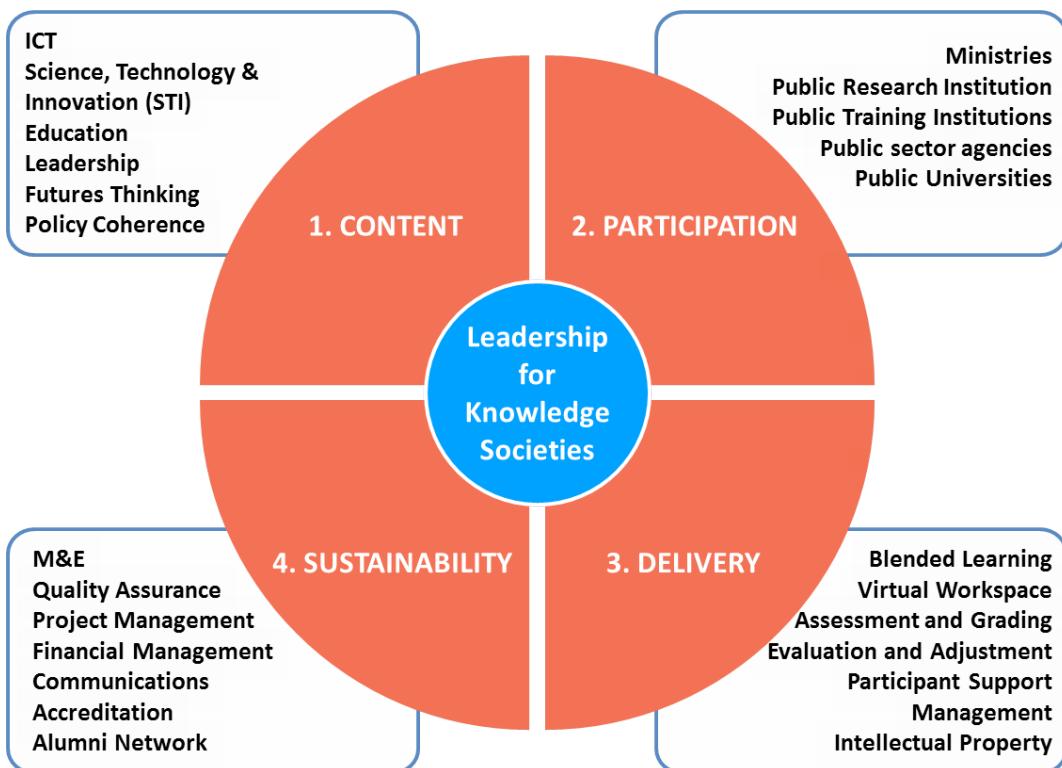
4.7 Intellectual Property Rights

GESCI has copyright for all the online content created for the ALICT course. Use, reproduction, publishing or adaptation of GESCI materials and resources for commercial or other gainful purposes is strictly forbidden.

	Emails	Percentage
Forgotten passwords	332	21
PDP reviewer uploading errors	91	6
Downloading assignment templates	245	16
Assignment submission problems	234	15
Locating module chats	170	11
Locating module forums	231	15
Forgotten URL for the e-learning portal	70	4
Online ALICT Course application	187	12
Total emails received	1560	100

Table 3: Helpdesk Support

5. Sustainability



5.1 Monitoring and Evaluation Framework

The ALICT Monitoring & Evaluation (M&E) framework adopts a series of approaches and tools for nuanced learning and adjustment throughout the programme implementation. These consist of the Logical Framework Approach (LFA) (AusAid, 2002) in combination with Outcome Mapping (OM) (OM Community, 2013) for measuring general programme and course implementation. There is in addition Thomas Guskey's Framework (Guskey, 2000) for measuring the five levels of the leadership course. Level capacity refers to the necessary conditions, support and environment required to optimise individual and team and organisational capacities.

The following overview outlines approaches and tools incorporated in the M&E framework (see **Figure 7** on the next page):

- 1) Monitoring Programme Activities (Outputs)
- 2) Monitoring Change (Outcomes & Strategies)
- 3) Monitoring five levels of the ALICT leadership development impact
- 4) Informal monitoring data collection

5.2 Quality Assurance

- Course and module review carried out by three entities, namely: the ALICT development team using an adapted Open ECBCheck (Open ECB Check 2012)

criteria for checking the quality of technology enhanced programmes and courses, the ALICT Technical Quality Assurance Committee (TEQAC) and the Dublin City University (DCU) accrediting partner.

- Participant evaluation of modules carried out via online questionnaires at the end of each module completion - where results are used to enhance course delivery throughout implementation and course review at the end of each course implementation cycle.
- Tutor evaluation of modules carried out in reporting format at the end of each module to ensure continual review and improvement of tutoring processes throughout course implementation.
- Tutor co-ordinator supervision and guidance of course tutoring and assessments to ensure consistency and quality of tutoring processes across all modules.
- E-Learning coordinator evaluation and tracking of participant attendance and participation in workshops, in online discussions and chats, in team collaboration on assignments and in completion of leadership 360 review and personal development plans.
- Progress bar on the ALICT online platform to assist participant tracking of their own progress in completion of module tasks.
- Evaluation of module assignments, leadership journals and final research reports carried out by tutoring teams using DCU assessment criteria and Turnitin originality assessment tool and by DCU external moderation.

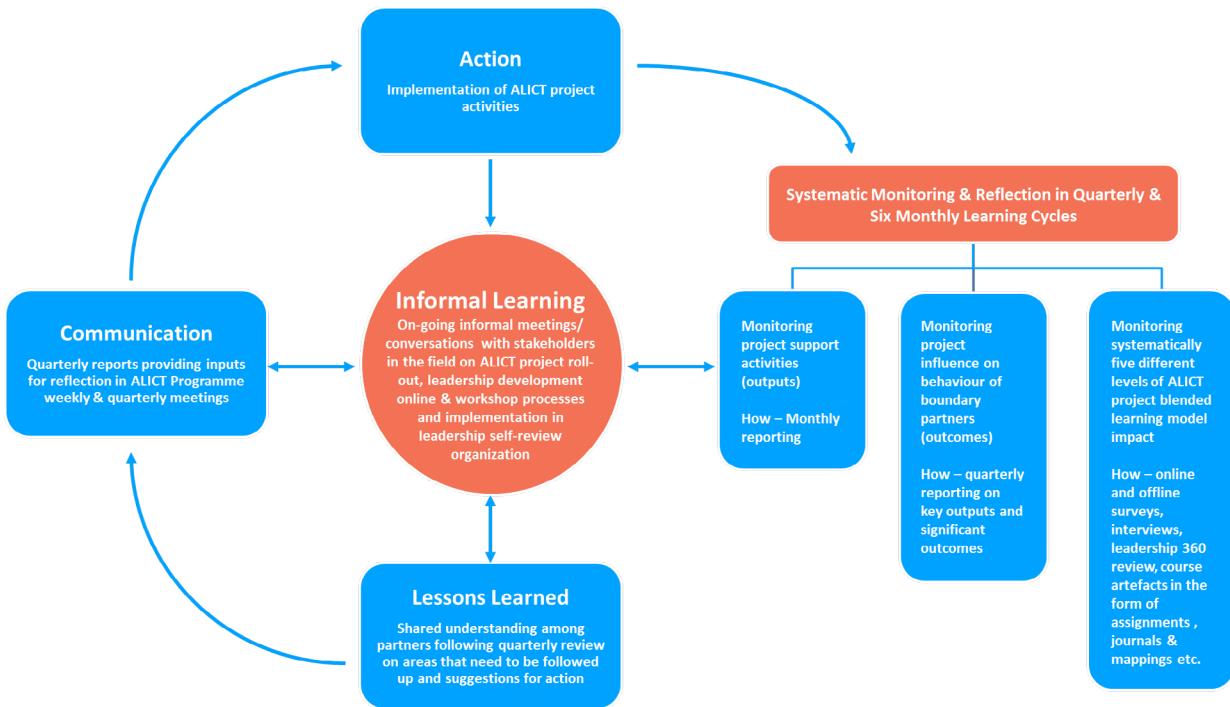


Figure 8: ALICT Course M&E Framework & Learning Cycles
Adapted: Ongevalle et al. (2013)

5.3 Project Management

The programme management and coordination function is the back bone of the ALICT programme successfully co-ordinating internal cross functional teams, external talent resources and stakeholders, and efficient programme delivery within set timeframes.

Implementation Arrangements

The Programme is managed by the Programme Management team which consists of General Manager, Programme Manager and Deputy Programme Manager. The programme work packages and activities are supported by the GESCI's global experts on Education, ICTs, Research, Monitoring & Evaluation, Communications and Knowledge Management as well as external talent resources as and when needed.

The programme governance structure is captured in **Figure 8** below.



Figure 9: ALICT Governance Structure

The Steering Committee (SC) provides overall oversight and is the main decision making body responsible for approval of annual Work Plans, budgets and main implementation activities.

The Advisory Board (AB) is a strategic advisory body for providing strategic and technical advice to the planning (annual work plans) and implementation of the programme. Its representative nature ensures that the multi-stakeholder partnership voices, including those of civil society and private sector, are represented.

The Technical Quality Assurance Committee (TeQAC) is a committee of experts from inter alia UN agencies, international financing institutions, academia, public, private and civil society. They provide technical input into the model review, content development and quality assurance processes.

Work Packages

The major milestones and outputs of the programme have been converted into work packages to ensure the quality of results of project activities and tasks and target dates for deliverable deadlines are achieved. Each work package is assigned to a work package leader who coordinates with internal and external talent resources to deliver the objectives.

Programme Management Tools

The following project management tools are used during programme implementation:

- **Gantt chart:** The work packages are detailed with micro level activities and each activity is assigned with timeline, predecessor and successor activities, and talent and financial resource allocations. The progress of each activity is closely monitored and stock

take is done during weekly progress review meetings.

- **Intervals Online:** Intervals Online tool is used to account for the talent resource allocation vs. utilisation in line with the annual work plan, work package and activities. A monthly analysis is done and a variance analysis is carried out and submitted to senior management. The cumulative quarterly, half yearly and yearly analyses extracted from Intervals online is submitted to the MFA and Steering Committee.
- **Monitoring and Evaluation:** The M& E Function acts as an internal progress audit function which collects the quarterly progress details and carries out the Results Based Management (RBM) surveys on the achievement of outputs, outcomes and impact of programme activities.

5.4 Financial Management and Cost Effectiveness

Cost Effectiveness: It is important that the capacity building model can be delivered cost-effectively to demonstrate its value and viability among other models.

The Activity Based Costing (ABC) method is used to track the costs for each of the activities and provides excellent clarity on the fund utilisation and plan vs. the variance analysis.

Budgeting: The annual budgeting pays great attention to detail capturing the percentage of time spent by each of the talent resource against each activity, external resource consultants, travel, workshops and any other associated cost to deliver the activities efficiently as well as up to the quality standards of GESCI. The detailed budget is reviewed and approved by the SC and the annual audited reports are submitted to the donor on a yearly basis.

5.5 Communications

Communication Objectives

The development of a communications strategy that supports each phase of course implementation from the design of course information (including branding and message design), and participant recruitment, to awareness raising, annual reporting, graduation, and alumni network management is an essential component of the end-to-end ALICT model.

Some of the key objectives of the ALICT communications strategy are to present an accurate impression of the ALICT course to potential course candidates, donors and partners, policy makers and regional and international development agencies, as a highly professional course customised to the African leadership and knowledge society context, aspirational in nature and designed to the highest academic and professional standards.

Every effort is also made to inform potential participants about ALICT: course relevance and benefits; course structure; and application procedures. The strategy also seeks to communicate course progress, successes and outcomes to public sector employees and governments

across Africa and wider AUC and GESCI stakeholders.

This is achieved through:

a) Branding: An image of the ALICT programme is created to convey a highly professional, innovative, pioneering, technology centered leadership development course, employing aspirational images of African professionals using technology, as well as futuristic motifs of science, innovation, education and ICT.

b) Language: The language of ALICT is constructed to communicate the uniqueness of the programme in terms of its very African perspective on Knowledge Society, integrating leadership, policy coherence and futures thinking themes. Key terms such as policy coherence, the three pillars of the Knowledge Society, and transformational leadership are used repeatedly throughout the course.

c) Traditional Communications: Conferences, talks and workshops are an excellent means of spreading information about the ALICT course.

d) ALICT Promotional Material:

Professionally designed brochures are developed in several languages (English, Arabic, French and Portuguese) to aid in the dissemination of course information ((see brochures here: <http://www.gesci.org/african-leadership-in-ict-licht.html>):



Figure 10: ALICT Brochures

Inserts are also created with participant quotes, press cuttings and other endorsements:

What the Participants are saying....

This block contains five testimonial quotes from participants, each with a small portrait and a quote. The participants are Dr. D.C. Mwangi, MBS (Ministry of Youth Affairs and Sports, Kenya); Rezaid Achbar (Ministry of Education and ICT, Mauritius); Esther Gomo (Assistant Director, Kenya Institute of Education); Johan Nagelring (Department of Science and Technology, South Africa); and Merissa Matimba (Assistant Director, Examinations Council of Zambia). The quotes are in various languages, reflecting the international nature of the course.



Figure 11: ALICT Insert with Testimonials

Banners are created to advertise ALICT at major conferences such as e-Learning Africa. Posters are used to reinforce key messages such as In a Knowledge Society Learning is for Life, and A Knowledge Society is a Connected Society:



Figure 12: ALICT Banners and Posters

Policy recommendation leaflets are produced to share the main course findings following course implementation.

e) Media Coverage: Media coverage is secured at key junctures in Kenya, East Africa and in donor countries such as Ireland and Finland (see the Finnish MFA article here: <http://formin.finland.fi/public/default.aspx?contentid=280409&nodeid=15317&contentlan=1&culture=fi-FI>). This includes the recruitment drive and graduation.

Figure 13: Kenya's Business Daily announces second round of ALICT course September 16th 2012

See more media coverage here: <http://www.gesci.org/press.html>.

f) Social Media: All recommendations, research and news of events are released on twitter, LinkedIn and Facebook, where GESCI has accounts (see twitter file [here](#) with list of ALICT tweets).

g) Website: All information pertaining to the ALICT course is housed on the GESCI website:

- <http://www.gesci.org>
- <http://www.gesci.org/african-leadership-in-ict-alict>
- <http://www.gesci.org/goals-and-objectives.html>
- <http://www.gesci.org/alict-final-workshop-and-graduation-ceremony-july-2013-materials.html> <http://www.gesci.org/alict-partners.html>
- <http://www.gesci.org/alict-team.html>

h) e-Update: An ALICT e-Update is created for all alumni and issued every 6 weeks approximately. It contains alumni network posts, articles and reports on the knowledge society, and leadership development.

Figure 14: ALICT e-Update

i) Video and Photography: Video and Photography are used to reinforce the sense of community among the ALICT alumni and to motivate participants to complete the course. Picture and video galleries are created and shared on the alumni network, e-updates and the website. See example [here](#).

5.6 Course Accreditation

The ALICT course is designed based on sound research, rigorous needs analyses and in accordance with best practices in leadership development worldwide making it eligible for course accreditation by reputable higher learning institutions. GESCI obtained accreditation for the African Leadership in ICT course at graduate diploma level (level 9) on the European Qualifications Framework through its partnership with a young, innovative and internationally reputable university in Ireland. The advantages of such accreditation are:

- Accreditation generally means that a programme has been evaluated by an independent group, and meets the quality standards of that accrediting agency for a particular qualification.
- Business and industry leaders as well as employers are interested in the quality of programmes and consid-

- er accreditation status an important factor as accreditation provides professional quality and therefore a sense of public trust.
- Individuals are assured of accountability and of value for their efforts through the arrangement between the programme and the accrediting entity via procedure and policy control and compliance with established standards.
- It serves as an incentive to attract participants to the course.
- Individuals can further their studies and obtain credits for the course.
- Accreditation is a high-quality benchmarking process.

GESCI as the course delivery agency also applies a rigorous internal review system for its learning content, tutoring and support of participants, assessment and grading moderation and for its interactive learning platform within the overall GESCI M&E framework.

5.7 The ALICT Alumni Network

The ALICT Alumni Network is the most important sustainability mechanism built into the ALICT model. The network provides a means for course graduates to continue engaging in peer-to-peer knowledge sharing across sectors, countries and regions, with a seamless transition from course participant to course graduate ensured. The absence of public sector specific leadership networks in Africa makes the ALICT alumni network an even more indispensable platform for the encouragement of on-going professional development, with a focus on the application of newly acquired leadership competencies, planning and futures thinking tools. The ALICT alumni network is a vital extension of the ALICT course, there to encourage, motivate and enable the full realisation of those leadership, planning and policy development competences acquired through the hard work and dedication of ALICT graduates.

Alumni Network Value-Add

The most significant value additions of the Alumni Network are:

- Provision of a platform where ALICT course alumni can be encouraged to keep applying the skills and knowledge they have acquired on the course.
- Provision of a platform through which the alumni can continue to engage in cross-sector, and cross-country knowledge sharing.
- The creation of a feedback loop between the alumni network and e-updates to reinforce the sense of being part of this community and to motivate them to contribute and to give notice of 'new themes' and schedules.
- A platform on which new themes can be created that will reinforce the course content and encourage participants to apply their learning and then share it with the group.

Platform Selection Mandatory Criteria

Prior to developing the network a suitable platform is chosen to host the network. Various platform offerings are considered against the following platform features:

- Closed subscription, by invitation only

- Online forums
- Emailing to members
- Noticeboard/news
- Enabling use of the most common web 2.0 tools
- Integration with other common social media platforms
- Control of the community (membership, content published etc.)

Eight commonly used social media applications/software were compared for the purpose of selecting a platform for the network. LinkedIn was chosen as the most appropriate option because:

- It is a professional network which many participants already use
- Easy to link with other social media sites (blogs, Facebook, YouTube)
- Highly visible and so appealing to participants in terms of prestige
- Easy to connect to people on it
- LinkedIn is the world's biggest professional network, so the ALICT alumni network must have a presence there, even with the separate platform that will be designed in the future

Network Features

- Knowledge Society Posts
- Discussions
- Videos
- Reports
- News
- Surveys

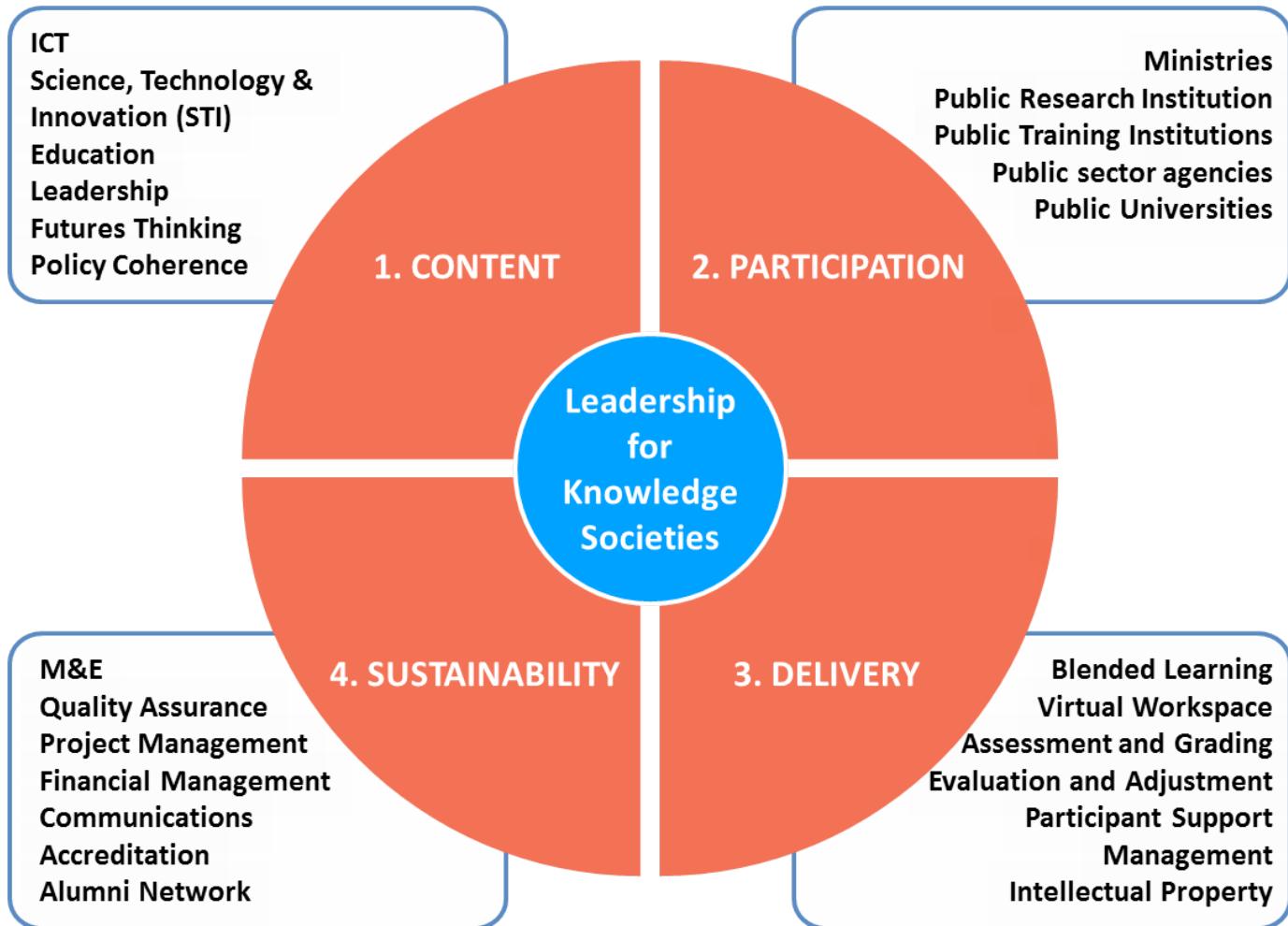
ALICT e-Update and the ALICT Alumni Network

All ALICT alumni receive the ALICT e-update which guarantees that even those who are not yet members of the alumni network are kept engaged in the leadership transformation process and remain a part of the ALICT community.

Monitoring

Number of participants viewing and clicking on e-updates (and what they are clicking on) is monitored from Campaign Monitor and allows greater tailoring of content to suit the preferences of participants

Model Summary



1. Conduct rigorous research to inform the design of a bespoke course on leadership capacity building for knowledge society advancement with a focus on STI, ICT and Education, embedded in the transversal themes of leadership, policy coherence and futures thinking.
2. Develop a course structure and approach that encourages cross-sectoral, and cross-country collaboration to facilitate peer-to-peer learning. Carefully recruit mid-to-senior public sector managers across key knowledge society domains.
3. Deliver the course through a blended learning approach whereby learning 'on the job' is entrenched in the pedagogical model with a virtual learning environment that facilitates self-study, and collaboration through chats and forum discussions.
4. Ensure the course is sustainable by submitting it to a rigorous M&E system and by applying excellent standards of project and financial management. Communications and an Alumni Network are engaged to enable the continued professional development of participants and alumni during and after graduation. Accreditation ensures that the highest of academic and technical standards are applied to the course.

Conclusion

At the end of the first phase of testing and implementation of the ALICT leadership capacity building model, the viability of the model for building the capacities of middle to senior level public leaders across 12 countries in Eastern and Southern Africa in the domains of leadership, ICT, Education and STI for Knowledge Society development has been demonstrated. The results and impact of the first phase serve as validation of the feasibility of the model in that 213 African leaders were equipped with mastery of the Leadership Toolkit for the Knowledge Society and 21st century leadership skills, including working knowledge of Futures Thinking and web 2.0 tools. The robustness of the model was proven through the successful capacity building of participants in diverse countries with differing contexts and complex challenges.

The underpinning philosophy of the model is breaking down institutional, sectoral and regional barriers to facilitate and enable better consultation, planning, collaboration, coordination of efforts and ultimately national policy coherence for social and economic development using new technologies and 21st century leadership techniques and skills. The first phase of implementation shows the potential of this approach not only for national development, but also for regional cooperation and development. In this way the model has demonstrated its feasibility to contribute towards achieving the objectives of the ARAP-KE and EU-AU P8.

The model has also shown that the multi-stakeholder approach to developing and implementing a leadership capacity building course across a number of countries can be beneficial to all parties involved. A wider spectrum of perspectives were considered in terms of course design, development and implementation leading to better understanding of the complex environment and richer learning experiences. In addition, the capacities of all the stakeholders and partners were built through their participation and involvement in the various processes.

The replicability and scalability of the model has also been proven. The course started with five countries for cohort 1 and then it was successfully replicated and scaled-up to eleven more countries and participants from the AUC. Through this exercise the cost-effectiveness of the model was also demonstrated as a means to provide quality and accredited professional development to a large number of participants across several countries.

Since donor funding was the major source of funding during phase 1 of the programme, financial sustainability has not been achieved as that was not the purpose of this phase – the purpose was to develop and demonstrate the feasibility of a leadership capacity building course for several countries using the blended learning approach, relevant content and new technologies. This is an issue which will need serious consideration in phase 2. Sustainability of the professional development activities and processes was initiated during course delivery is encouraged and facilitated by the ALICT alumni network hosted on LinkedIn. The potential for the creation of a continent-wide transformative leadership network for public sector leaders is significant.

Instrumental to the success of the initiative was the excellent collaboration between the main partners (AUC, MFA and GESCI) and the overwhelmingly supportive environment which nurtured the evolution, development and implementation of the capacity building model. Each partner engaged fully and enthusiastically and pursued their mutual interest with vigour and thereby created the necessary synergies for effective collaboration and success. The AUC provided access to high-level officials and institutions, the MFA provided guidance and funding for the initiative and GESCI provided its experience and expertise for the successful design and implementation of the model. The tripartite partnership was based on trust, mutual respect, openness and a shared vision for social and economic development in Africa – critical ingredients in a an initiative of this nature.

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