Tuning

Tuning Africa Phase II

5th General Meeting

Brussels, 13 - 15 November 2017
TABLE OF CONTENTS

1. Agenda ........................................................................................................................................ 2
   1.1. General Agenda .................................................................................................................. 2
   1.2. Agenda for the 8 Subject Area Groups (Agricultural Sciences, Economics, Civil Engineering, Geology, Higher Education Management, Mechanical Engineering, Medicine and Teacher Education) ........................................ 5
   1.3. Agenda for the TAPAG ........................................................................................................ 8

2. Participants ................................................................................................................................... 10

WORKING DOCUMENTS

3. DOCUMENT: Subject Area Final Report - Teacher Education................................................. 37

4. DOCUMENT: A Proposal to Establish African Credit Transfer Systems ............................... 75
   4.1. English version .................................................................................................................... 75

This initiative is implemented on behalf of the European and African Union Commissions by:
1. AGENDA

1.1. General Agenda

TUNING AFRICA PHASE II
Agenda for the Fifth General Meeting
13 to 15 November 2017
Brussels, Belgium

Accommodation
Thon Hotel Brussels City Centre
Avenue du Boulevard 17
Phone: +32 2 205 15 11
Brussels
Belgium

Sunday 12 November 2017: Arrival of Tuning Africa II participants

18.00 – 20.30 Registration
20.30 Dinner: Thon Hotel Brussels City Centre

Monday 13 November 2017

Albert Borschette Conference Centre (CCAB)
(European Commission)
36 Avenue Froissart
B-1040 Brussels
Belgium

Morning Session

PLENARY

8.00 – 9.00 Registration

9.00 – 9.30 Welcome and Official Opening
Beatrice Njenga, Head of Education Division, African Union Commission
Jens Nymand Christensen, Deputy Director General, DG Education, Youth, Sports and Culture, European Commission


This initiative is implemented on behalf of the European and African Union Commissions by:
Beatrice Njenga, Head of Education Division, African Union Commission
Deirdre Lennan, Directorate General for Education and Culture, European Union Commission,
Pablo Beneitone, Director Tuning Academy, University of Deusto

Chair: Charles Awono Onana, Director, Ecole Nationale Supérieure Polytechnique, Yaoundé I, Cameroon

10.00 – 10.30
Designing programmes following the Tuning methodology: some reflections from Subject Area Groups
Round Table:
- New programmes in Agricultural Sciences: Hortense Atta Epse Daillo
- Revised programmes in Applied Geology: Digne Edmond Rwabuhungu R.
- Joint programmes in Mechanical Engineering: Charles Awono Onana
- Relevance of the new/revised programmes for employability from the Higher Education Management perspective: Ronald Bisaso

Chair: Ahmed ElGohary, President, Egypt-Japan University for Science and Technology (E-JUST)

10.30 – 11.00
Coffee Break

11.00 – 11.30
A Implementation of Tuning at University level: some experiences from Subject Area Groups
Round Table:
- Staff development initiatives: identification of needs and strengths for the implementation of Tuning in Medicine, Segun Akyniynka
- Impact of the Course design for outcomes based learning in higher education - Tuning Staff Development Course at institutional level from the Economics perspective, Charles Barnor
- Importance of Assessment for learning - Tuning Staff Development Course in Civil Engineering, Stanley Shitote
- Staff Development Workshops strategy: some experiences in Teacher Education, Honoratha Michael Kisenge Mushi, Open University of Tanzania

Chair: Hortense Atta Epse Daillo, University of Nangui Abrogoua

11.30 – 12.15
A Credit System from a global perspective
Round Table:
- Europe and ECTS credits: Robert Wagenaar, Director of Tuning Academy, University of Groningen, the Netherlands
- Latin American Credit: Leticia Suñé, Federal University of Bahia / Faculty of Technology and Sciences - FT, Brazil
- Russia and its credit system: Vera Ivanovna Zabotkina, Vice-Rector for International Cooperation, Russian State University for the Humanities, Russian Federation

This initiative is implemented on behalf of the European and African Union Commissions by:
- A Proposal to establish African Credit Transfer System: Damtew Teferra, Professor of Higher Education and leader of Higher Education Training and Development, University of Kwazulu-Natal, South Africa

Chair: Yohannes Woldetensae, Senior Education Expert, African Union Commission

12.15 – 14.00
Lunch: CCAB Building cantine

Afternoon session

14.00 – 14.30
Tuning and HAQAA: bridging two initiatives
Julia González, Tuning Academy Senior Advisor
Elizabeth Coluci and Youhansen Eid, representatives of HAQAA project

Chair: Etienne Ehouan Ehile, Secretary General, Association of African Universities

14.30 – 15.00
Research actions in Tuning Africa and their links with the Tuning Journal for Higher Education
Lupo Dona dalle Rose, Editor of the Tuning Journal for Higher Education – University of Padova, Italy
Anna Serbati, Assistant Editor of the Tuning Journal for Higher Education - University of Padova, Italy
Ladislas Bizimana, Manager Editor of the Tuning Journal for Higher Education – University of Deusto, Spain
Mohammad Megahed, Emeritus Professor of Solid Mechanics, Cairo University, Egypt

Chair: Damtew Teferra, Professor of Higher Education and leader of Higher Education Training and Development, University of Kwazulu-Natal, South Africa

15.00 -15.30
The Student Voice in the African Harmonization Process in Higher Education.
Short presentations from students

Chair: Digne Edmond Rwabuhungu R., Student Voice Taskforce, Head, University of Rwanda.

15.30 – 16.00
Summary of Tuning Africa II main outcomes and their relevance for AU and EU aims
Beatrice Njenga, Head Education Division, African Union Commission
Deirdre Lennan, Directorate General for Education and Culture, EU Commission,
Pablo Beneitone, Director Tuning Academy, University of Deusto

16.00 – 16.15
Certificate Ceremony

16.15 – 16.30
Official Closing

This initiative is implemented on behalf of the European and African Union Commissions by:
1.2. Agenda for the 8 Subject Area Groups (Agricultural Sciences, Civil Engineering, Economics, Geology, Higher Education Management, Mechanical Engineering, Medicine and Teacher Education)

Tuesday 14 November 2017

Thon Hotel Brussels City Centre
Avenue du Boulevard 17
Brussels
Belgium

ALL PARTICIPANTS WILL TAKE PART IN PARALELL WORKSHOP SESSIONS

09.00 – 10.30 Workshop sessions on 6 different topics:

- Enabling academics to facilitate student ownership of learning through innovative assessment practices, Zubeida Desai, University of the Western Cape, South Africa (English)
- Case-Based Lectures, Badr Mesbah, Suez Canal University, Egypt, Medicine SAG, EN
- Student Centered Learning: Introduction to the Team-based Learning approach, Esther Sakyi-Dawson, University of Ghana, Ghana (English)
- Promoting Constructive Alignment Between ILOs, Learning Activities, Teaching, and Assessment Methods, Jorge Fringe, Universidade Eduardo Mondlane, Mozambique (English)
- Rédaction des Résultats d'apprentissage visés et début de séquençage, Seydou Tiho, Université Nangui Abrogoua, Ivory Coast (French)
- Travail des Étudiants dans le Système de Crédit, Jean Baptiste Ramaroson, Université d’Antananarivo, Madagascar (French)

10.30 – 11.00 Coffee Break

11.00 – 12.30 Continuation of Workshop sessions on 6 different topics

12.30 – 14.00 Lunch: Thon Hotel Brussels City Centre

WORKING IN SUBJECT AREA GROUPS

14.00 – 15.30 Finalizing outcomes of Tuning Africa II
Discussion and general agreements in relation to Subject Area Group final report:
1) Introduction
   - Presentation of the countries involved in the SAG
   - Presentation of the Members/Universities
2) Definition of generic competences- A thematic perspective
   - Brief analysis of the generic competences from subject area perspective.
• Highlight some particular aspects considered and/or not considered in the list of generic competences for Tuning Africa.

3) Identification of specific competences
• Presentation of the subject specific competences agreed in the group.
• Explanation of the process followed to achieve the list of subject specific competences.
• Institutional/national/subregional/continental/international references that the SAG took into account to achieve the list of subject specific competences.

4) Consultation and reflections
• Presentation of analysis of the results of generic competences survey (in relation to SAG perspective).
• Presentation of analysis of the results of subject specific competences survey.
• Interpretation of the results.

5) Elaboration of Meta-Profiles
• Description of the process followed by the SAG to agreed a meta-profile.
• Presentation of the meta-profile as a graphic.
• Explanation of the main components/elements of the Meta-profile and how it is linked to the previous steps (generic and subject specific competences agreed).

6) Contrast of Meta-profile at regional level
• Reflection on the coincidences and differences between the meta-profile and real degree profiles at the Universities.

7) Some examples of revised/new programmes
• Presentation of some examples of revised/new programmes elaborated. (NOT ALL programmes, only 2 or 3 as examples)

8) Reflection on staff development: needs and possibilities at SAG level
• Description of the main strengths and needs in terms of staff development at SAG level. Some proposals to address these challenges.

9) Student Workload reflection
• Relevance of a continental credit system. Issues affecting its adoption that are related to the SAG.
• Main issues arising from the workload consultation for the SAG.

10) Conclusions
• Final considerations and proposals for future activities.

Document: - Draft version of Subject Area Report

15.30 – 16.00 Coffee break
16.00 – 17.30 Continue with final agreements related to SAG report.

This initiative is implemented on behalf of the European and African Union Commissions by:
Wednesday 15 November 2017

Thon Hotel Brussels City Centre
Avenue du Boulevard 17
Brussels
Belgium

WORKING IN SUBJECT AREA GROUPS

9.00 – 10.30 Subject Area Group Final Report
Strategies for dissemination of Tuning Africa II outcomes at continental, regional, national and institutional level.
Inventory of possible approaches.
Assignment of tasks for the coming weeks.

10.30 – 11.00 Coffee break

11.00 – 12.30 A Credit System proposal for Africa.
Suggestions and improvements.
Discussion of how to implement the proposal at institutional level.
Exchange of views and experiences.
Recommendation of strategies for implementation.

Document: A Credit System proposal for Africa

12.30 – 14.00 Lunch: Thon Hotel Brussels City Centre

Departure


1.3. Agenda for the Tuning Africa Project Advisory Group (TAPAG)

Tuesday 14 November 2017

Thon Hotel Brussels City Centre
Avenue du Boulevard 17
Brussels
Belgium

ALL PARTICIPANTS WILL TAKE PART IN PARALELL WORKSHOP SESSIONS

09.00 – 10.30 Workshop sessions on 6 different topics:

- Enabling academics to facilitate student ownership of learning through innovative assessment practices, Zubeida Desai, University of the Western Cape, South Africa (English)
- Case-Based Lectures, Badr Mesbah, Suez Canal University, Egypt, Medicine SAG, EN
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- Travail des Étudiants dans le Système de Crédit, Jean Baptiste Ramaroson, Université d’Antananarivo, Madagascar (French)

10.30 – 11.00 Coffee Break

11.00 – 12.30 Continuation of Workshop sessions on 6 different topics

12.30 – 14.00 Lunch: Thon Hotel Brussels City Centre

14.00 – 15.30 Linking Tuning Africa II outcomes to continental, regional and national policies.
Open discussion focused on:
- What are the policies each organisation is promoting linked to Tuning Africa II?
- How to enhance dissemination of Tuning Africa II outcomes and extend the debate to other higher education institutions in Africa?
- How to support Tuning implementation at institutional level?

15.30 – 16.00 Coffee Break

This initiative is implemented on behalf of the European and African Union Commissions by:
16.00 – 17.30 Strategies for dissemination of Tuning Africa II outcomes at continental, regional and national level. Inventory of possible approaches.

Wednesday 15 November 2017

Thon Hotel Brussels City Centre
Avenue du Boulevard 17
Brussels
Belgium

9.00 – 10.030 Discussion on how to implement Tuning Africa II outcomes at institutional level.
Exchange of views and experiences.
Recommendation of strategies for implementation.

10.30 – 11.00 Coffee Break

11.00 – 12.30 Summary of the outcomes achieved in the TAPAG
- Strategies for dissemination of Tuning Africa II outcomes
- Recommendations for implementation at different levels

12.30 – 14.00 Lunch: Thon Hotel Brussels City Centre

Departure
2. PARTICIPANTS

The organisational structure of the project is as follows:

- Management Committee
- 8 Subject Area Working groups
- TAPAG – Tuning Africa Policy Advisory Group

2.1 Management Committee

The responsibility of the Management Committee is to carry out specific tasks required by the project. It is made up of the 9 general co-ordinators of the project and other regional representatives. One co-ordinators of each SAG s will be joining the MC as well.

In addition, in the Management Committee there exists a Coordination Unit in charge of the practical aspects of taking the project forward, and responsible for the administrative and financial management involved in achieving this. This Coordination Unit will be assisted by an IT professional, in charge of keeping online forms and questionnaires up to date, managing virtual discussion fora, administration of the Portal, and the management of all technology necessary for the development of the project.

2.2 List of Participants by Subject Area

Currently, 123 academics from 105 African universities are participating in 8 working groups based around different disciplines (Agricultural Sciences, Applied Geology, Civil Engineering, Economics, High Education Management, Mechanical Engineering, Medicine and Teacher Education). The universities selected are centres of national excellence in the disciplines they represent and have demonstrated an ability to engage in dialogue with other institutions that work in the same knowledge areas. They have a significant presence in the system (size of the institution, track record, credibility and academic authority) such that a considerable part of the system is represented by their participation.

AGRICULTURAL SCIENCES

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<td>Université Catholique de l'Afrique de l’Oest , UCAO-UUC (Phase II)</td>
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**APPLIED GEOLOGY**

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**ECONOMICS**

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**HIGHER EDUCATION MANAGEMENT**

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**MECHANICAL ENGINEERING**

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**TEACHER EDUCATION**

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<td>Zimbabwe</td>
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2.3 List of Participants at Tuning Africa Policy Advisory Group (TAPAG)

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<th>Country</th>
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<tr>
<td>Angola</td>
<td>Fórum da Gestao do Ensino Superior nos Países e Regioes de Língua Portuguesa (FORGES)</td>
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<td>Botswana</td>
<td>Southern African Development Community (SADC)</td>
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<td>Burkina Faso</td>
<td>Conseil Africain et Malgache pour l' Enseignement Superieur (CAMES)</td>
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<tr>
<td>Egypt</td>
<td>National Authority for Quality Assurance and Accreditation in Education (NAQAAE)</td>
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<td>Ethiopia</td>
<td>Ethiopian Chamber of Commerce and Sectoral Associations (ECCSA)</td>
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<td>Ghana</td>
<td>All- African Students Union (AASU)</td>
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<td>Erasmus Mundus Students and Alumni Association (EMA)</td>
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<td>African Council For Distance Education (ACDE)</td>
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<td>Pan African University (PAU)</td>
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<td>Commission for University Education</td>
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<td>Jordan</td>
<td>Association of Arab Universities (AARU)</td>
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<td>Mozambique</td>
<td>National Council for Assessment and Quality Assurance of Higher Education (CNAQ)</td>
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<td>South Africa</td>
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<td>Tanzania</td>
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3. WORKING DOCUMENT – SUBJECT AREA FINAL REPORT

TEACHER EDUCATION

Introduction

The purpose of this publication is to capture the developments and outputs of the teacher education subject area group within the Tuning Africa Project. This publication captures work that was earlier published, extends on it and records the latest developments within the pilot phase in this subject area, and in the subsequent phase of the project.

Africa is the world’s “youngest” continent in demographic terms. In less than fifteen years, one-quarter of the world’s under-25 population will be African. This demographic reality presents exceptional opportunities for Africa as a whole but also significant challenges. The Civil Engineering Subject Area Group (SAG) in this project pointed out that Africa faces huge challenges in meeting the needs and aspirations of such a rapidly growing, youthful population. The potential stresses associated with this growth have already been signalled in the north with the “Arab Spring”, a movement at least partially motivated by the need for jobs for the young. In other parts of Africa, joblessness among the young has reached challenging levels, which could continue in spite of the promising economic growth experienced in most African countries. In Sub-Saharan Africa alone, the group of young men and women between ages fifteen and twenty-four will increase from 170 million to 360 million by mid-century. The population of some cities is set to swell by up to 85 per cent in the next fifteen years. The most populous city in 2010, Cairo, is predicted to grow by 23 per cent to 13.5 million (m) people. By 2025, however, it will have been overtaken by both Lagos (15.8 m) and Kinshasa (15 m) to mention only two. Such a demographic leap puts pressure on all aspects of social and economic development, but the impact on providing adequate schools and education puts teacher education on the front line with health services.

According to the World Development Report 2007, three key features contribute towards a successful policy response to youth unemployment. These are: (1) expanding opportunities for the accrual and preservation of human capital (i.e., access to formal education and training); (2) enhancing the capacity of the youth to take advantage of job opportunities; and (3) creating programmes and mechanisms to equip youth with the tools and/or skills needed to do the same (Elder, Schmidt, & Sparreboom, 2010). Teacher education for teachers at all levels is central to policies for increasing opportunities for youth of the present and the future in Africa.

Each of the five subjects or discipline areas in the pilot project is located primarily in one region of Africa. Teacher education was mentioned in all regions as a prime area of concern; however, as a result of the feedback obtained during the feasibility study, it was agreed that the hub for the Teacher Education Subject Area Group would be Southern Africa. The Southern Africa Development Community (SADC) represents a group of countries which has realised the crucial role that higher education must play in development and is seeking more sustained engagement with its universities, forging new ways through which higher education in the region can be revamped to meet pressing national, regional and continental needs (SARUA, 2012). However, the challenges faced by education and training in the sub-region of Southern Africa are largely common to all countries. These are access, equity, quality, efficiency, relevance and democracy in their educational and training policies (SADC, 2007). So while the majority of the countries in the Tuning pilot project are located in this region, all of the other regions are also represented.

From the southern region, there are representatives from Namibia, Mozambique, South Africa,
Tanzania, and Zimbabwe; from Central Africa, Cameroon and Gabon; from Northern Africa, Egypt; from East Africa, Kenya, Uganda, Somalia and Ethiopia, and from West Africa, Nigeria. The group thus has within it representatives from the three major historical foreign language groups in Africa, as well as the Arabic-speaking lands of the north.

There is a strong representation of distance education in the group, from the Open Universities of Tanzania and Nigeria and others, as well as through the participation of The African Council for Distance Education (ACDE), the professional body for distance education in Africa. Distance Education is seen as an effective way of expanding the reach of formal education and training through distance-learning strategies that integrate print-based material, remote study and access centres, and face-to-face components (ILO, 2012), and most universities now provide open or blended learning options.

While distance education may well have great potential for increasing the numbers of teachers across Africa in general, the focus on technical and vocational education (TVE) is likely to assume greater prominence in the future, in order to address the training needs of the young and the economy needs of the countries in Africa. Teacher education for TVE is represented by the specialist faculties in the Adama Science and Technology University, Ethiopia, and The University of Nigeria, Nsukka. Other universities are also beginning to offer specialist programmes for TVE teachers.

**Context for Curriculum Reform and Modernisation**

In an important document titled “Second Decade of Education for Africa (2006 -2015)”, the African Union describes its vision for Africa, which is that of an “integrated, peaceful, prosperous continent that manages its own initiatives in order to occupy its rightful place in the world community and in the knowledge economy.” For the Pan-African organisation, the realisation of this vision must of necessity require “the development of African human resources”, a process that must be based on the establishment of a quality education for all, in order that all African citizens should fully contribute, within the means available to them, to the economic and socio-cultural development of their country and the continent.

The Second Decade of Education action plan underscores the necessity of strengthening mutual collaboration between African states in order to ensure, when the second decade ends in 2015, the establishment of efficient information management systems in education at the national, regional and continental levels.

The changes in social affairs currently taking place in many countries in Africa are of a scope and intensity that never before experienced. The search for an understanding of the essence of these changes is compelling, for failure may lead to catastrophe. The issue of “modernisation” as a general term describing the processes of rapid change in African lives, as well as denoting the quality of the contemporary society being sought, has become central to the volatile and controversial debates taking place. However, the revolution in science and technology has, without question, fostered the most dramatic changes in people's lives, in addition to the application of science to practical human affairs in terms of technology.

Here lies the paradox: How should one reconcile these changes with the intellectual, cultural, political, and economic aspects of life? The challenges posed by modernisation are profound: How can modernisation be sought while the population is already growing faster than agricultural and industrial production? when illiteracy is rapidly increasing? and while the social status of women remains questionable? The conflict between tradition and modernity causes what has come to be known as the agony of modernisation: How is it possible to reconcile both through the production of quality teachers as instruments for sustainable development? The desire to be modern, opponents claim, has often led to the glorification of the transitory and to the frequent rejection of the most cherished and fundamental values and traditions.

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\[\text{TEFencing Academy}\]
Characteristics of the African learner

Reforms in teacher education must begin by considering the characteristics of Africa’s learners and the conditions in which they are learning. It has to be acknowledged though that Africa is not homogenous, the different countries and regions have their specific histories and identities. An attempt to characterise the African learner is a daunting task.

A common aphorism of the past was that “the African child is seen and not heard”. In the formal classroom, the African child rarely asked questions, rarely argued with the adult (and all teachers were adults), rarely questioned authority and rarely sought for explanations. Teacher education programmes in Africa reinforced this position; and in spite of the popularity of theories of individual differences, individualised instruction, participatory learning, mastery learning, etc., most African teachers regarded the child as a tabula rasa, of view of the child as a blank slate, ready to be written upon as the teacher wished, or as an empty gourd into which water should be poured. This form of teaching was, in essence, a “banking” approach in which the teacher deposited knowledge in the child. Banking education is domesticating if not indoctrinating. The children are regarded as passive listeners, whose role in the classroom is limited to taking orders rather than to negotiating meanings by means of asking questions, exploring ideas and postulations and collaboratively and collectively producing knowledge. (See Tessema Kedir, 2006; Freire, 1984).

These perceptions are changing. The African child today is both seen and heard. “Education during the colonial era had its specific mission and teachers were trained to respond to that mission. Today there are new expectations for education where the focus is on having teachers be visionary leaders to ensure sustainable education. The paradigm shift is from teacher dominated classroom practices to that of partnership between the teacher and the learners and their peers” (Tchombe, 2010). This calls for classrooms “where the learner is seen as an active, socially constructed agent and learning and literacy as creative activities through which learners can begin to analyse and interpret their own lived experiences, make connections between these experiences and those of others, and in the process, extend both consciousness and understanding” (Tessema Kedir, 2006).

However, this development does not occur automatically; it requires the transformation of African teachers, current and future, to enable them to work in ways that drive forward the development of relevant competences. The Tuning collaboration with the AU [African Union?] harmonisation strategy is therefore a welcome innovation at this point in the history of education in Africa.

Furthermore, the context may be a classroom where the language of education is foreign to students and in which they must master a different language even as they struggle to master the subject matter. In many African schools, classrooms are over-crowded. In some, due to political hostilities and wars, overburdened teachers must alternate the days of the week when learners can come to school.

In addition, another frequent characteristic of African schools is that children receive little academic support at home because their parents lack education or their own or, struggling with poverty, do not have the economic means to assure high-quality education.

The structure of teacher education

Teacher education programmes in Africa are very diverse. Before the establishment of regulatory bodies in some countries, each teachers’ college was highly autonomous, following only the goals of the school’s proprietor. Even within countries, great diversity was noticeable as teacher education developed. For example, Nigeria had Grade III Teachers Colleges, Grade II Teachers Colleges, Advanced Teachers Colleges, Colleges of Education, Institutes of Education, a National Teachers Institute and Faculties of Education in universities.
Today, Grade III, Grade II and Advanced Teachers Colleges have been phased out in Nigeria. The lowest teaching qualification today is the Nigeria Certificate in Education (NCE) obtained from Colleges of Education. All teachers in the senior secondary schools are expected to be degree holders. A similar process of reform can be seen across Africa, where the number of institutional levels has decreased as countries strive to create a teaching force in which all teachers hold degrees. (See Appendix 1: Teaching Qualifications in Africa.)

Context and challenges in teacher education programmes in Africa

There are many challenges facing teacher education in Africa and many of them derive from the context in which education has to be offered on the continent. Although colonialism began to unravel in the 1960s as country after country achieved independence, its legacy remained, supported in part by the desire of the former colonial administrations to help develop educational facilities that they had not themselves provided. During the colonial period, education supported minority populations, so that, at independence, all countries found themselves needing to increase educational opportunities for the majority of their citizens. Invariably, school enrolments increased. For example, in Zimbabwe, “the number of secondary schools increased by 245% while enrolments increased by 100% within one year after independence [in 1980]” (Government of Zimbabwe, 1987; Zengeya, 2011, p. 16). School candidates “increased from 5,400 in 1980 to peak at 185,730 in 2001” (Zengeya, 2011, p. 17; Government of Zimbabwe 1987, 1993, 2003, 2005). Zimbabwe is a typical example of what happened in many former colonies when they became responsible for providing education for all citizens. However, the model of schooling adopted was normally that of the colonial heritage, which may or may not have been appropriate for the context.

There had always been and still are traditional ways of learning entrenched in all African cultures. Historically, du’ti fa’ (work learning) has been the main strategy for developing life skills; even today, the advent of institutional learning has not displaced it. The learning content of du’ti fa’ (work learning) derives from the sociocultural and economic realities of the community. This system can nowadays be equated to the student-centred learning that many countries have introduced under reforms of school curricula. It has also close links with TVE. A gap may occur at the level of teacher education, where an emphasis on book learning and a focus on declaratory rather than functional knowledge have certainly taken precedence in some countries with but few links forged with work learning.

The demand for education

The demand for education is not simple. It is a demand for an education that can lead to employment. In many African countries, young people are leaving full-time schooling and going straight into unemployment. This is a complex problem, but part of the solution may lie with schools providing a more relevant work-oriented education, providing youngsters with the skills of language, numeracy, teamworking and technical skills that will access the labour market. In Egypt, for example, roughly 600,000 young people leave school each year, while there are only 200,000 jobs available – a problem of economic infrastructure. However, the situation is made worse by skills mismatches which create an on-going barrier for the school-to-work transition of young adults. It prevents employers from hiring young people.

Similarly, lacking skills constitutes a major constraint in terms of business creation. Findings from a School Transition Survey in 2007 show that 60 to 70 per cent of all employers interviewed complained that first-time job seekers lacked appropriate skills for the work place (Angel-Urdínola, Semlami [spelled Semlali in the References] and Brodman, [spelled Brodmann in the References] 2010).

In the vast majority of Middle East and North Africa (MENA) countries, secondary education is the standard education, and fewer than 10 per cent of secondary students are involved in
vocational or technical training. Syria, Lebanon, Bahrain, Libya and Egypt constitute exceptions with more than 10 per cent of secondary school students taking part in vocational training. Nevertheless, as the World Bank notes, the picture of VET across MENA countries is mixed—that is, VET systems are operating without taking into account market needs or any closer connection to the private sector (World Bank, 2002). [please add to references]

The country reports in the Teacher Education SAG show that two African countries have strong vocational teacher education strategies to enhance school achievement for employment. Nigeria is an example a country that has made a major investment in TVE. has Similarly, Ethiopia is investing in specialist institutions for the training of technical teachers.

In virtually every African country, investigative commissions have recommended ways to review, modernise and broaden the scope of teacher education curricula in order to cope with the new challenges. Posner, Strike and Hewson postulate in their 1982 model for curriculum reform (quoted in Chiromo, 2011):

Four conditions must be met for the successful implementation of a curriculum reform, namely, stakeholders (students, parents, employers and educators) must be dissatisfied with the existing curriculum . . . and start to agitate for an alternative curriculum; for the stakeholders to accept the alternative curriculum, it must be intelligible, i.e., it should make sense to the stakeholders; the alternative curriculum must be plausible and appear to have the capacity to solve the problems generated by its predecessors; and the alternative curriculum must be fruitful, opening up new areas of inquiry. (p. 43)

**Language of instruction**

Africa is a continent in which there are sometimes literally dozens of mother tongues within the same state. For example, almost all Senegalese speak an indigenous language, of which Wolof is the most widely used. About 50,000 Europeans (mostly French) and Lebanese and Vietnamese reside in Senegal, mainly in the cities. However, schooling takes place in the official language of French, and current plans call for introducing English as the language of instruction from the primary level. Cameroon also reveals a varied population consisting of 24 major African language groups and over 279 ethnic groups with a distinct dialect, as well as four colonial languages – Arabic, English, French and German (www.nationsencyclopedia.com/Africa/ Cameroon.html, 2010). Rarely are indigenous languages adopted as languages of instruction from the level of early childhood education through the university level as happens in some developed countries--although it is inaccurate to think that countries like the United Kingdom or France, for example, have only one language, indigenous or otherwise.

It was often the colonial language that was adopted as the language of instruction because none of the indigenous languages were sufficiently developed to serve as a lingua franca. Swahili is a different case, developed from a creole that itself developed over time in pre-independence East Africa and which was later subject to considerable research and development to accommodate academic and economic discourses. Swahili is thus faring well, as Torill Aagot Halvorsen’s research shows. Maya Kiesselbach (2012) reports:

Based on her research into staff and students’ participation in information and communication technology (ICT at the University of Dar es Salaam . . . Torill Aagot Halvorsen reports a gradual increase in academic online use of Kiswahili even though English remains the dominant medium of instruction in Tanzanian higher education. She points out that one sizeable colonial legacy is its continuing influence on modern education and languages. . . . Halvorsen makes the case for establishing Kiswahili as a language of instruction in Tanzanian universities and introducing English as a foreign language subject. This would end discrimination against students who currently have to
attend lectures and produce coursework in a language they are not proficient in.

Language acts as a barrier for many African students in that they are unable to access the curriculum, and Halvorsen further argues for Kiswahili as she says, “without the language barrier . . . students would be enabled to engage much more with the content of their studies. (p. 309)

Zimbabwe is another country in which the language of instruction acts as a barrier against education. As Chisaka (2011) writes, among the social dynamics that work against children and that deny them access to education “has been the maintenance of the English Language as a medium of instruction in Zimbabwe’s education system. With the language of transnational capital in command, the competence of which is used to measure knowledge and skills for one to engage in economic activities, the majority of the people are confined to poverty and deprivation” (p. 4). A teacher trainee in Uganda commented on this issue: “In the college we learn to teach reading in English, but I prefer to teach reading in Luganda because most children of lower primary age come to school when they are competent in it” (in Tuning, 2013 p. 180). [see question on this source in references.]

There are other viewpoints, of course. One limiting factor is the huge cost of language development, with the concomitant cost of producing materials. Students who progress to higher education must acquire the ability to access literature in some of the major languages of the world. Some parents and many students may wish to learn a world language. As noted above, Senegal is going to introduce English in schools, and it is also being considered in Gabon, both countries with many indigenous languages, and both with an external official language, French. The language issue is an important one, but it is not easy to discuss in short paragraphs. Another problem may lie in the focus of the curriculum for teacher education: Does it focus on language development, or on knowledge of grammar and vocabulary? It is a subject that can be pursued in Tuning II, the name applied to the phase of implementing programme planning.

**Resources and infrastructure**

Another challenge, not only for higher education, but for the entire education system in Africa has been limited resources and infrastructure. Most African countries bear a burden of economic hardships resulting from continued dependence on an unbalanced global economy. In that economy, Africa has been partly disadvantaged because of its colonial and neo-colonial legacies, leaving the education sector under on-going constraints in revenue and other resources. Omwami and Keller (2010) have discussed this issue of economic challenge eloquently. They argue convincingly that “a prerequisite of providing access to public education is funding. African nations have signed up to the United Nations (UN) Millennium Development Goals (MDGs) declaration, which guarantees, among other things, universal access to education by the year 2015 . . . [yet] today, as in 1990, a significant number of children remains out of school.” This situation of lack of funding does not spare the higher education sector. It is also affected negatively.

Omwami and Keller (2010) analyse data from the UNESCO Institute for Statistics (2007) for thirty-six countries\(^1\) to demonstrate the difference between Net Enrolment Rate and Gross

\(^1\) The thirty-six countries are (in order of how they are listed): [QUERY to author: I don’t know what "in order of how they are listed" means. They are obviously in inverse alphabetical order (Z-B rather than B-Z). Given the topic, however, the reader would expect them to be ordered by the difference between net and gross enrolment. Since that is not the case, I think it would be clearer simply to drop the material in parentheses. Do you agree?] Zimbabwe, Zambia, Tanzania, Togo, Swaziland, South Africa, Seychelles, Senegal, Sao Tomé and Principe, Rwanda, Nigeria, Niger, Namibia, Mozambique, Mauritius, Mauritania, Mali, Malawi, Madagascar, Lesotho, Kenya, Guinea, Ghana, Gambia.
Enrolment with the latter being less than the former. The UNESCO statistics show the economic growth of twenty-five countries between 1999 and 2004 inclusive. Seven of these countries recorded negative economic growth in 1999 and 2000. By 2004, there was an improvement with only two of the seven—Comoros and Zimbabwe—still posting negative growth (–0.24 and –3.80 respectively.). With such struggling economies, it is not likely that education would be funded adequately; and it is not surprise to find that budget allocations in twenty-five countries indicate such major challenge (Omwami and Keller, op. cit.). [what are the twenty-five countries? How to these twenty-five relate to the thirty-six countries cited in the paragraph above?]

Adequate funding for education is very important. In order to engage in relevant programme design, development and implementation, each institution of higher education requires major investments in the acquisition of such resources as, among others, hiring and retaining competent staff, purchasing or developing high-quality, relevant books or texts, effective machinery such as ICT hardware and software, science and laboratory equipment, furniture, reliable electronic libraries, laboratories, lecturer rooms, dining rooms, hostels, the availability of reliable water and food supplies, and so on. All these resources constitute prerequisite infrastructure for the provision of relevant quality education and meaningful expansion of a country's education system.

Members of the Joint Africa-European Union Strategy Tuning Seminars recommended enhancing the mobility of staff and students to ensure a greater exchange and sharing of ideas, expertise, talents, facilities and activities. Greater staff and student mobility would also encourage publication and research to address or expose common challenges and opportunities. This improved activity is essential since Africa's contribution to research and publication as a share in the world currently remains the lowest at the rate of only 1 per cent. Collaborations in research and publication initiatives would trigger more contributions from the continent in this area. If members have greater facility in movement, conducting research or publishing and enjoy the availability of relevant resources, it would be more meaningful, relevant and beneficial to the continent. Many higher education institutions are recent foundations; the older, more experienced higher education institutions can mentor the newer institutions at the same time while simultaneously innovations that the young institutions may have adopted and which older institutions could adapt to their own needs. Whichever way one looks at it, funding is still crucial for any meaningful research, growth and development to take place in either old or new universities.

Participants in the Tuning’s Teacher Education SAG acknowledged that knowledge of the shortfalls in the system as discussed above is widespread but that most countries in Africa have competing priorities for the sustainability of socio-cultural operations, a fact also acknowledged by UNESCO (2010). Many higher education institutions in Africa have failed to reach expected standards. In many cases, teaching staff are inadequately trained — or not trained at all in pedagogical practices for their professional work. Some staff may have practised their profession for very long periods while receiving little or no in-service training. Many still need to acquire doctoral degrees in order to continue to teach in universities. As with educators in all countries, they face tight budget constraints on public funding for research, with the result that very few staff have had sufficient financial support to conduct research that could inform

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2 The twenty-five countries are: Benin, Burundi, Cameroon, Chad, Comoros, Congo, Cote d'Ivoire, Eritrea, Gabon, Ghana, Guinea, Kenya, Lesotho, Madagascar, Malawi, Namibia, Niger, Nigeria, Sao Tomé and Principe, Sierra Leone, South Africa, Swaziland, Togo, Zambia and Zimbabwe.
improvements, changes and innovation to match with global, regional and local development requirements.

*Information and communication technology (ICT) for learning*

In spite of the limited access to connectivity or even electricity in many African countries, there are great demands for ICT to be a feature of learning. Indeed, in many cases for the education of teachers, ICT may prove to be the most effective way to improve teacher numbers at the entry level and to foster continuing professional development for working teachers.

ICT will continue to shape and determine the direction and manner in which teacher education is carried out, even if today we do not know exactly how this will happen. The challenges in Africa are many. The broadband issue, the worsening digital divide, even including intra-institutional divides and problems with adequate infrastructure for the operation of ICTs (such as poor and irregular electricity supply) all contribute to making accessibility problematic. The high cost of computers and the Internet also add to the causes of inaccessibility.

In many countries, there is no guarantee of access to a steady supply of electricity, particularly in rural areas. Distance learning thus still has to rely on paper-based materials and face-to-face sessions in many places.

However, mobile phones are widespread, and this technology is increasingly being used successfully in some countries for the training of professionals. An example is Sweden’s success in training nurses in the use of new equipment. At present, mobile phones have greater capability than in the past and are not prohibitively expensive. Thus, they may be a promising technology of the future.

As Figure 1 suggests, in an era where the use of ICT in teaching and learning may be widely recommended, there are many schools in Africa where basic electricity provision is limited. Even in universities, connectivity may be intermittent.
As noted above, even universities often lack very basic facilities. This is even more the case with primary and secondary schools, many of which are stark. There may be scant facilities, few textbooks and little developed infrastructure, let alone Internet connectivity and computers for the children to use in learning and exploring the world. What constitutes the African context for education in many cases in rural areas is a gathering place under the shade of trees. If a school building exists, children often have to sit on bare floors since there is no furniture.

Nevertheless matters are improving, and the education of teachers must look forward not back. Teachers must be educated in such a way that they become computer literate and versatile in order to lead and guide their own students in the use of technologies.

**Teacher availability**

In the drive to achieve universal primary education as one of the Millennium Development Goals, there is an increasing recognition of the urgency of focusing on teacher education to meet the demand for more than one million qualified teachers required to achieve this goal within sub-Saharan Africa, as well as to combat the sometimes poor quality of educational experience reported in schools. Currently, approximately only one third of teachers are qualified to teach. This dearth of qualified teachers also means that secondary and tertiary education must be improved to provide an educated cohort of graduates (Griffin, 2012). Figure 2 compares class sizes in African countries.
Figure 2. Class sizes compared in seventeen African countries.

Source: UNESCO (2011)

The issue of teacher unemployment in some African countries and teacher shortages in others is a real one. As Figure 8.1 illustrates, in some countries class sizes in schools are excessive. It is not simply a matter of employment, either, but of the need for pluri-employment in many countries, since the salary from a single job is too low for a family to survive on. This fact also affects students in many places where the demands of the local economy may require them to absent themselves from school. Girls may be particularly affected by sporadic schooling because of domestic duties.

Maintaining and sharing good practices

One challenge for teacher education programmes in Africa is to identify and document “good practices” which could be adopted or adapted by others continentally without having to re-invent the wheel. Across the African continent, great efforts have been made, not only to enhance the quality in teacher education programmes, but also to ascertain good practices that could be of general use and adoption across the board. Still, the provision of teacher education is not in any way uniform. Within and across nations, it is marked by variations in the structure and organisation as well as by the mode of curriculum implementation. In others, individual teacher education Institutions try out what they feel are the best ways of producing teachers, thereby determining how they operate, and translating the broader curriculum layout the way they feel best suits their vision and mission. The totality of what makes sense, what works, what produces results, what is effective and what makes for efficiency is summed up in the term “good practices.”

The harmonisation project of the African Union, supported by projects like Tuning, creates an opportunity to systematically document good practices in teacher education, and make them freely available to all.
General remarks

While teacher education programmes in Africa face many challenges, it is gratifying to note that none of the challenges is insurmountable. The challenge of context and content, the issue of diversity, language of instruction, funding and even that of curriculum reform are gradually being addressed by each country as most appropriate.

In virtually every country in the continent, commissions and reports recommend the review and modernisation of the education curriculum with a broadening of the view of the teacher education curriculum. Many such reports emphasise the need for teachers to acquire skills in analysis and reflection and to achieve greater articulation between theory and practice. Some stress the need to give greater value and relevance to teaching practice while others, consonant with the Harmonisation and Tuning objectives, call for a more competence-based approach to teaching/learning and assessment of quality. Yet others call for experimentation with more diversified types of professional development appropriate to a competence-based approach.

Taken together, a large proportion of African children learn under very difficult conditions; yet because of their zeal to learn, because parents emphasise to them that education is the key to the future, and because Africans believe in the power of education, the children, no matter how difficult their circumstances, learn and, in many cases, learn well. Should the same child not have the best-trained teachers? An African belief states that “parents give birth to the bodies of their children but not always to their character”. Having given birth to the bodies, parents join with society to birth the character. This is why among other things, traditional indigenous African education believed strongly in character training, in the use of the hand as well as the head and in a utilitarian focus in education and training.

The African context is a communal context where things are done together, created together and shared together. This approach could be reflected in our teacher education programmes. It is, at present, an ideal that has not yet been fully realised that “the role of the teacher in the classroom has shifted from the primary role of information giver to that of facilitator, guide, and co-learner. As a facilitator, the teacher provides the rich environments and learning experiences needed for collaborative study. The teacher also is required to act as a guide—a role that incorporates mediation, modelling, and coaching. Often the teacher also is a co-learner and co-investigator with the students. The teacher in this context will dramatically change the so called African context in the school learning environment.

“Ubuntu” featured strongly in discussions throughout the Tuning pilot project, both in the Teacher Education Subject Area Group and in other projects. The concept of Ubuntu is found in diverse forms in many societies throughout Africa. Desmond Tutu (1999), the chair of the Truth and Reconciliation Council (TRC) in South Africa, defined the Ubuntu philosophy as a methodology for reconciliation: “A person with Ubuntu is open and available to others, affirming of others, does not feel threatened that others are able and good, based on a proper self-assurance that comes from knowing that he or she belongs in a greater whole and is diminished when others are humiliated or diminished, when others are tortured or oppressed”. The philosophy stems from an African idiom that says “A person is a person because of others” or “I am because of others”. The philosophy reinforces the notions of “community” or “communal learning” within which teacher education reforms can be affected. The level of consciousness about “others” or the “other” suggested in the concept of Ubuntu ties closely with the recent concepts of peer education or learning communities, where learners do not recognise only the teacher as the source of knowledge, but also learn from each other.

A recent report of the World Economic Forum Annual Meeting (2013) argues that “the mark of a good leader with strong personal resilience is the ability to bounce back in times of adversity and rise to the occasion, adapt to adverse conditions and find opportunities in the most trying situations” (p. 10). The
report connects adversity to resilience and points out that those who survive adversity emerge from adversity with an added attribute of resilience in their character. The same can be said of African learners. Because of the level of adversity in the living and learning conditions they face, teacher education programmes should recognise the social capital that these learners bring to the classroom and build on their resilient character.

**Definition of Generic Competences: A Thematic Perspective**

**Competences in Tuning**

In Tuning two different sets of competences are the focus. Firstly, groups try to identify competences which would be expected of any graduate in any subject area and which are considered important by other academics, employers, students and graduates.

These are competences such as the capacity to learn or the capacity for analysis and synthesis—capacities, in short, which are common to all or most degrees. In a changing society, these generic competences are very important because they can give students greater flexibility when seeking employment. Second, the Tuning Africa working groups examined those competences which are *subject-area related*. These are intimately related to specific knowledge in a field of study. These subject-specific competences give identity and consistency to the particular degree programmes and link it to the world of broader professional practice.

Thinking on competences has evolved in conceptual terms in higher education in the last two decades, particularly with regard to generic competences, largely as a result of demands to make graduates better equipped for the rapidly changing world of work. The nomenclature to describe this constellation of desirable traits has evolved over time and include personal transferable skills (Drummond, Nixon & Wiltshire, 1998), core and generic skills (Bennett, Dunne & Carré, 1999), generic capabilities (Bowden & Marton, 2000), [QUERY: The References have a Bowden & Marton 1998 but not one dated 2000. Is one of these dates a typographical error? Are we missing a source?] graduate capability development (Kift, 2002), graduate attributes movement (Chanock, 2003), graduate skills (Chanock, 2004) [and generic graduate attributes (Barrie, 2005, 2006, 2007). Gairín and García-San-Pedro (2010) understand competence as the ability to successfully address the demands of contexts of uncertainty, the product of an original and global act (learning) by persons that integrates their person and their knowledge. They agree that specific differences for their formulation in the context of higher education would assume the four traits proposed by Bowden and Marton (2002): They would (1) be agreed upon by a “university community”; (2) be developed during students’ time spent at a university; (3) transcend disciplinary knowledge; and (4) prepare graduates as “agents for the social good in an uncertain future”. They point out that competence is a construct that brings together knowledge, skills and public and private behaviour. In this way, the term “competence” is more encompassing than “skills.” It is a construct that brings together the content of a subject and the outcomes into the world of real life.

Many programmes in teacher education have used—and indeed many still use—the term “learning objectives” in their course design, particularly since this term was frequently used in school-based learning. Objectives are sometimes confused with competences.

To remove this possible confusion, Tuning distinguishes between learning outcomes and competences. The intended learning outcomes of a programme or unit of learning are formulated by academic staff. They may also be informed by the input of internal and external stakeholders, including—ideally—student representatives, but essentially they are what academics intend the students to learn. Learning outcomes are thus statements of what the teacher intends that the learner know, do, understand and be able to demonstrate after the completion of learning. Competences, on the other hand, are developed by students during the process of learning and represent a dynamic combination of knowledge, understanding, skills
and abilities that the student builds on and develops during a period of study. Fostering competences is the object of educational programmes. Competences will be developed over the course of a number of units and assessed at different stages.

Competences can be developed, and this development can be assessed. This means that, normally, persons do not either possess or lack a competence in absolute terms, but command it to a certain level. That level of achievement can be positioned on a continuum and can be developed through practice and education. The important point for curriculum planning is that both learning outcomes and competences are accessible to assessment. The notion of competence is a useful grouping of capabilities and capacities that students acquire or develop during a programme into a number of broad skill sets.

Defining generic competences

The process of defining the generic competences started with this question: “What are the generic competences that graduates from African higher education need to acquire?” All five subject area groups (agricultural sciences, civil engineering, mechanical engineering, medicine and teacher education) worked separately to define what they saw as the expected profile of a typical graduate, then jointly reached consensus on a final list of eighteen competences as indicated below. Reaching consensus was not problematic; only one or two items demanded lengthier discussion and elaboration.

1. Ability for conceptual thinking, analysis and synthesis.
2. Professionalism, ethical values and commitment to Ubuntu (respect for the well-being and dignity of fellow human beings).
4. Ability to translate knowledge into practice.
5. Objective decision-making and practical cost-effective problem solving.
6. Capacity to use innovative and appropriate technologies.
7. Ability to communicate effectively in both the official/national and the local languages.
8. Ability to learn how to learn and capacity for lifelong learning.
9. Flexibility, adaptability and ability to anticipate and respond to new situations.
10. Ability for creative and innovative thinking.
11. Leadership, management and teamwork skills.
12. Communication and interpersonal skills.
13. Environmental and economic consciousness.
14. Ability to work in an intra- and intercultural and/or international context.
15. Ability to work independently.
16. Ability to evaluate, review and enhance quality.
17. Self-confidence, entrepreneurial spirit and skills.
18. Commitment to preserve African identity and cultural heritage.

Competences in teacher education programmes

Typically in the past the emphasis in designing teacher education programmes was on the subject content: knowledge of the subject(s) to be taught, and basic educational theories related
to the psychology of education, methodology and so on. However, teacher education programmes have always had to have a practical element as well, since the outcomes of learning would have to be a person who not only knew, but could also do. The notion of a competence-based approach to teacher education is not new and has been in use in teacher education in a number of countries for some considerable time. It has, however, often led to exaggeratedly long lists of competences to be achieved by the trainees. Coolahan (2007) has argued in his review of EU and OECD policy on teacher education that, depending on the mode devised, the competence approach can be “professionally positive and benign” or it can be of a narrow, “check-list” type that can be “professionally malign”.

The process of defining competences within the context of teacher education in Africa was inspired by the words from Nelson Mandela: “Education is the most powerful weapon which you can use to change the world”. These words suggest that teachers have a great responsibility: to serve as agents of change. In this regard, in the process of defining the subject-specific competences, the teacher education working group kept the following questions in mind: (1) What change is needed in Africa? (2) What change do teachers need to mediate?

There are at least two areas where change is greatly needed in the continent: (1) For socio-economic development and growth, with a precise focus on fighting poverty, and (2) For conflict resolution and reconciliation that will create sustainable and peaceful living environments across the continent.

The process of defining the subject-specific competences started by painting the contextual landscape of the fourteen universities represented in the group. After the description of the contextual landscape, the group conducted an exercise aimed at defining components of the teacher education bachelor’s degree. This exercise resulted in the eleven core components listed below:

1. Subject content
2. Educational theory
3. Methodology
4. Practice
5. Assessment
6. Planning
7. Values and ethics
8. Communication and ICT
9. Health and safety
10. Research
11. Quality assurance

From these eleven core components, the working group identified seventeen key competences:

1. Having mastery of the subject knowledge/understanding the discipline
2. Applying ICT
3. Developing resources and instructional materials
4. Having ability for critical thinking, problem solving, creativity and reflection
5. Ability to assess and evaluate, including self and others

This initiative is implemented on behalf of the European and African Union Commissions by:
6. Providing counsel, guidance and conflict resolution (peace education) for complex situations
7. Interpreting curriculum documents, information and sources, and seeing them as a roadmap
8. Managing projects
9. Being able to choose, use and design innovative teaching and learning strategies
10. Being able to research (observe, describe, analyse, etc.).
11. Understanding and applying policies and regulations.
12. Ability to identify and deal with students with special needs, gifted and otherwise
13. Ability to work in a team
14. Exercising professionalism, ethics and values; ability to understand and abide by the ethics and values of the teaching profession
15. Ability to become a lifelong learner
16. Ability to develop competences for employability in students (ability to enhance employability in one’s own profession).
17. Ability to inspire self-confidence in the learners.

**Identification of Subject-Specific Competences**

In developing the lists of subject-specific competences that guided the research and discussion to produce the subject-specific competences, the Teacher Education SAG borrowed references from the existing competences in partner African Universities, regulations and teaching standards in the member countries, the national frameworks of those participating in the Tuning Africa project, professional agencies, Tuning-compliant competences from other parts of the world and the Arusha Convention. From these sources, it was decided to group the competences under four broad categories: (1) knowledge, (2) educational practice and skills, (3) values and ethics, and (4) interpersonal attributes. This arrangement, it was felt, would make the descriptions more widely understandable to mixed audiences.

The subject-specific competences identified are:

**Competences related to knowledge**

Understanding of:

- The subject(s) to be taught
- The underlying principles of the foundations of education
- Pedagogical knowledge of specific subject areas
- The local and international social, political, economic, cultural and environmental contexts of education
- National and institutional policies relating to education
- The language(s) of instruction

**Competences related to educational practice and skills**

- Develop schemes of work and teaching plans (#7)
- Select, adapt and use appropriate teaching methods and learning activities (#8)
- Use a range of assessment skills to set, mark and grade learners’ achievement (#9)
- Develop and use teaching, learning and assessment materials, including appropriate ICTs (#10)
- Identify and attend to learners’ needs (#11)
- Manage learners both inside and outside formal classroom contexts (#12)
- Develop own and learners’ entrepreneurial skills (#13)
- Create conducive learning environments that encourage learning (#14)
- Use language appropriately in the classroom and in the subject (#15)
- Conceptualise and analyse situations to solve problems (#16)
- Participate in basic educational research (#17).
- Manage time effectively (#18)
- Critically reflect on their work to improve practice (#19)
- Adapt to change (#20)

**Competences related to values and ethics**
- Care for and support the well-being of all learners (#21)
- Respect socio-cultural diversities (religious, ethnic, linguistic, gender, economic, etc.) (#22)
- Adhere to the rules and regulations of the profession and institution (#23)
- Maintain equity and fairness among learners and promote inclusive education (#24)
- Continuously upgrade their own knowledge and skills (#25)
- Be a role model (#26)
- Inspire self-confidence and appreciation of cultural heritage in learners (#27)

**Interpersonal competences**
- Is sensitive to the feelings of others (#28)
- Collaborate and network with others, including peers, head teachers, professional groups and parents (#29)
- Communicate effectively with different audiences and using appropriate tools, including ICTs and relevant forms of discourse (#30)
- Lead and manage groups (#31)

**Consultation and Reflection**

In order to validate the lists of competences that had evolved from the work of the Tuning groups, it was necessary to consult with an appropriate sample of interested teacher education stakeholders. Consequently, we consulted four categories of informants: (1) Graduates who had satisfactorily completed a full programme of studies/degree programme and had been taught at the university, and who had received a corresponding qualification; (2) Employers of university graduates and people and/or organisations which, although not currently employers of such
graduates, appear to have relevant jobs for them; (3) Academics who teach the subject area; and (4) Students in the last two years of a degree programme at university or who have finished their studies and are waiting to graduate.

Each participant consulted at least 30 informants from each of the four categories for the subject area. The informants were asked to rate each competence, using a scale of 1 to 4, on (1) the importance of each competence and (2) the level at which it was achieved during the programme of study. The consultation was done through an on-line questionnaire. This format was very practical in those cases where project participants/assistants had e-mail addresses, an option more common for academics and students. Where email addresses were not available, members of the working group used an alternative approach—viz., a face-to-face meeting with groups representing the four groups of stakeholders (e.g., employers) in which the SAG participant gave an introductory orientation to and lecture on the Tuning Africa Project and its importance for the education system. Having set out the aims and characteristics of the survey, the Tuning representative handed out the questionnaire in print format, which the participants filled out before leaving. This procedure facilitated information gathering, given that both tasks (explanation and survey) could be completed in just a short time. The competences were categorised as “important/unimportant” and “achieved/underachieved.”

Table 2
The Highest and Lowest Rated Subject-Specific Competence in Terms of Importance

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<thead>
<tr>
<th></th>
<th>Highest</th>
<th>Lowest</th>
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<tbody>
<tr>
<td>Academics</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Employers</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Students</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Graduates</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 3
The Highest and Lowest Rated Subject-Specific Competence in Terms of Achievement
The specific competences are:

#1. Understanding of the subject(s) to be taught

#4. Understanding of the local and international social, political, economic, cultural and environmental contexts of education

#6. Understanding of the language(s) of instruction

#13. Ability to develop one’s own and learners’ entrepreneurial skills.

The above results imply that the academics, employers and graduates perceived a similarity in both which competences were the most important and how successfully they were achieved. However, the students’ data shows a discrepancy between what they considered important and how well they felt it was achieved during their teacher education programs. The average ranking for all competences was 3.5 but achievement was 2.5. This finding implies that teacher education programmes have gaps in instructional service delivery.

The respondents singled out as poorly achieved (1) professionalism, (2) ethics and values, (3) ability to understand and abide by the ethics values of the teaching profession and (4) ability to develop one’s own and the learners’ entrepreneurial skills. Yet these are some of the most important competences a teacher should possess. The most striking revelation in the findings is that academics rate “develop one’s own and learners’ entrepreneurial skills” as both of least importance and least successfully achieved.

The findings seems to suggest that the teacher trainees are keen on being professionals by adhering to lessons of work, whereas the employers and graduates were more keen on performance in the field. However, in order to validate the findings further research is needed.

**The Teacher Education Meta-Profile**

Methodology of the Teacher Education SAG to define the meta-profile

To recapitulate on the Teacher Education SAG’s working method, the process began during the first Tuning seminar in January 2012 when academics representing sixty tertiary education institutions across Africa identified how many? generic competences of the ideal teacher education graduate from an African institution of higher education. These generic competences, as well as those identified by similar Tuning processes in other regions (e.g., were used by the
Teacher Education SAG to describe four categories of teacher education competences: (1) knowledge and understanding, (2) practice and skills, (3) values and ethics and (4) interpersonal skills. The group took care to ensure that the four categories encapsulated the eighteen generic competences.

To validate the competences, the Teacher Education SAG next conducted a survey to obtain perceptions of the importance and achievement of the generic and subject-specific competences from four stakeholder groups in education. Analysis of the survey data showed that the knowledge and understanding category and the practice category were seen as the essence of the teacher education task. The SAG working group consolidated them into one category. Also highlighted by the survey data was that context was an important element of the meta-profile, so it was added as an additional category. See Figure 3 for a Venn diagram representing the elements of the teacher education meta-profile.

Figure 3. Venn diagram representing the four categories comprising the teacher education meta-profile.

Main elements of the meta-profile

The advantage of representing the meta-profile with a Venn diagram is that it highlights the interconnectedness of the four areas/referent points: (1) context, (2) knowledge/understanding and practice, (3) interpersonal skills and (4) values and ethics. The overlaps in the Venn diagram stresses that these areas should not be treated in isolation and should not be taught in a fragmented manner. Rather, the specific pedagogies used in teacher education should be informed by an integrated approach.

Figure 4 expands the Venn diagram to show how both the specific and generic competences are spread across the integrated referent points: G = the generic competences developed by the whole Tuning Africa group and enumerated in Section 4.2. S = the subject-specific (teacher education) competences.
Competence 18G is an example of how a generic competence intersects all four categories in the meta-profile. 18G is “the commitment to preserve African identity and cultural heritage”. 27S reads “Inspire self-confidence and appreciation of cultural heritage in learners,” and is related to 17G, “Participate in basic educational research.” Similarly, competences 4S and 5S indicate the interrelatedness between interpersonal skills and context. (For the list of generic competences, see 4; for the subject-specific competences see 5.)

Comparison of the meta-profile at Africa regional level

Members of the teacher education SAT conducted practical investigations in their own institutions and countries as a second-level consultation following the Cape Town meeting in May 2012. It was agreed to consult only institutional-level participants, but a number of members consulted more widely at the country level, thus enabling the dissemination of the Tuning Harmonisation work as well as collecting valuable data for analysing the meta-profile.

The following processes were used to consult with individuals/groups selected to participate in developing the Africa regional-level meta-profile for the teacher education specialisation. In many cases, these methods were used in combination.

Face-to-face sessions: Tuning members met with selected individuals to discuss the identification and development of the teacher education meta-profile. At the university level, consultants included administrators, faculty/departmental board members representing various degree programmes, academic staff, and students at four levels: undergraduates, master’s degree candidates, PhD candidates and candidates for a diploma of education. At the ministerial level, SAG working groups members consulted ministers, permanent secretaries and teacher education directorate staff. One SAG member took special leave and relocated to another institution (Cape Town) to obtain reflective moments for developing the ensuing consultation documents.

This initiative is implemented on behalf of the European and African Union Commissions by:
The face-to-face sessions took place in a variety of settings such as meetings with individual peoples, group interviews, conducting seminars, holding conferences and hosting workshops. In each setting, SAG working group members first introduced participants to the Tuning Africa concept and summarised the meta-profile process conducted at Cape Town. After the introduction, groups conducted interactive discussions that included questions and answer sessions about their institutional and/or programme profile.

**Documentary reviews or paper-based analysis:** Members identified and reviewed relevant documents as one of the methods for collecting data/information. Some of the major documents that were reviewed included frameworks for curriculum design, institutional and programme profiles for degrees, strategic plans and institutional regulations. The information from the documents was compared with the profile for teacher education specialisations.

**Checklists:** Some members developed checklists from the documents and compared emerging meta-profile items with the profile identified at the Cape Town meeting to determine difference and similarities.

**Validation teams:** After developing institutional or programme meta-profiles, validation teams were constituted in order to validate the institutional/programme meta-profile that emerged.

**Discussion Papers:** Members who engaged ministerial-level participants developed discussion papers to enhance the interchange with ministerial-level staff. The papers also served as part of the dissemination process.

Except for a few competences that were slightly extended, modified or observed/seen as being non-existent in some of the teacher education programmes in African universities, most of the competences identified at the Cape Town coincided with those being taught/developed. The analysis revealed further coincidences between Tuning competences and those existing within some of the regulatory boards such as the Namibian Teachers Standards (NTS) and the Tanzanian Commission for Universities (TCU). The Zimbabwe University Tuning participant observed, “When this degree [i.e., the teacher education programme in Zimbabwe] is analysed in comparison with the meta-profile done in Cape Town there were more coincidences than differences”. The Open University of Tanzania (OUT) representative indicated, “There are only slight differences between the Tuning Africa meta-profile and that of teacher education programme at the Faculty of Education at OUT”.

Despite this general agreement between the competences lists developed by the SAG, most universities identified a few competences that were either non-existent or not given adequate emphasis at their institution. The most common items on this profile of differences were (1) the ability to mediate conflict resolution and reconciliation for sustainable and peaceful living environment; (2) the ability to learn to learn and capacity for lifelong learning; (3) commitment to Ubuntu (respect for the well-being and dignity of fellow human beings); (4) environmental and economic consciousness; (5) respect for social-cultural identities and (6) the ability to develop one’s own and learners’ entrepreneurial skills. It is not surprising that all consultants agreed that the fifth quality was the competence perceived as being least achieved by all informants and that, furthermore, academics rated it as the least important.

The consultation at the University of Western Cape in South Africa made specific analysis of the forty-six combined generic and specific competences and established that thirty-one fit well under the general category of knowledge, understanding and practice. Nine fit under the category of interpersonal skills. Five were seen as subsets of the context category, while only one fit under the category of values and ethics.

The most obvious implication is that teacher training in Africa gives the strongest emphasis to knowledge, understanding and practice. The low emphasis accorded to values and ethics could...
fittingly be interpreted as accurately representing Africa’s widespread conflicts due to limited or lack of education and training in valuing and respecting others.

Members noted that identification of the competences constituting the meta-profile at universities was arrived at through in-depth analysis of the course on offer at the different universities providing teacher education. Prior to the Tuning project, there has been no specifically organized forum by African higher education institutions to develop competences and meta-profiles to guide the adaptation of such important competences and ensure their quality. Hence, the Tuning Africa project has provided a model for institutions to emulate.

Analysis of additional observations

Analysis of the comparison consultations reports revealed some important issues that could not be directly captured through a mere comparison report. Members decided to report such observations in the interests of enhancing the outcomes of the Tuning consultation exercise. These added observations include:

Building capacities for existing course structures to incorporate new competences

It was learned that some existing course structures in teacher education programmes can incorporate the identified competences but some currently lack that ability given their current structures and staff perspectives. For example, at Zimbabwe University, members of the Department of Educational Administration indicated that they did not see the need for incorporating the competence of “pedagogical knowledge of specific subject areas” as one of the competences for their programme. However, a critical analysis of courses generally offered in its education administration stream shows that courses relating to planning are taught alongside courses in policy and administration.

One would realize the need for specific pedagogical approaches to the different strands of the courses where such a combination exists. It is suggested that, for those courses which currently have no inbuilt structures to accommodate important competences, the Tuning project initiative should exert some influence to encourage staff members to ensure adaptation of the competences for the sake of realizing the harmonisation target. New courses with structures that can incorporate necessary competences should be initiated, and existing courses can be restructured to provide space for including the competences.

The need to provide adequate emphasis for identified competences in existing courses

Through the consultations, members found out that, although some subject specific competences were incorporated in existing courses, they were not accorded adequate emphasis. There was a need to encourage teaching staff to give each competence adequate emphasis. One example of low-emphasized competences that appear to need more prominence comes from University of Zimbabwe:

1. Develop and use teaching, learning and assessment materials, including engagement of appropriate ICTs
2. Develop own and learners’ entrepreneurial skills
3. Care for and support of the well-being of all learners
4. Respect of social-cultural diversities
5. Adherence to rules and regulations of the profession and institution
6. Maintain equity and fairness among learners and promote inclusive education
7. Continually upgrade their own knowledge and skills

This initiative is implemented on behalf of the European and African Union Commissions by:
8. Become role models
9. Inspire self-confidence

Special varieties of teacher education programmes

The Tuning consultation exercise explored the competences in special varieties of teacher education programmes and related profiles. This was specifically the case with University of Nigeria, Nsukka; Adama Science and Technology University, Ethiopia; Makerere University, Uganda; and Zimbabwe University where technical teacher education programmes were offered. It was suggested that teacher education programmes for TVE do not follow the pattern of traditional subject teacher education because the development of vocational skills differs so significantly. This variety of teacher education should be given special attention if we are to address the issue of youth unemployment which exists across all African countries.

Many of the competences that were considered appropriate for the technical teacher education programmes were adopted from the [which one? Civil Engineering? Mechanical Engineering?] Engineering and Agriculture Special Area Groups. Among such competences were: ability to adapt and transfer technology, ability to create new technologies; ability to improve quality and safety along the agricultural value chains; skills in developing new construction technologies and material; ability to operate, maintain and rehabilitate mechanical engineering systems; capacity to supervise, inspect and monitor mechanical engineering systems; and capacity to integrate legal, economic and financial aspects in decision-making in mechanical engineering projects.

This finding reinforces the need for collaboration among institutions as well as among programmes and courses in Africa Higher Education and for further research into the curricula for teacher education for TVE.

Competences not featured in the Tuning meta-profile identified at the Cape Town meeting

Another finding from the consultation activity was that some competences that were deemed essential did not feature in the Tuning meta-profile. Some such competences were:

- the ability to continuously enhance quality in the field of practice
- sensitisation, lobbying and mobilisation skills
- ability to effectively use assistive devices and technologies for people with disabilities in inclusive settings
- ability to effectively use research and evaluation skills in education settings
- visionary thinking and foresightedness.

Contrast of Meta-Profile Findings with Russia, Latin America and Africa

At the Tuning meeting held in Brussels in November 2012, the African Teacher Education SAG had an opportunity to interact with its counterparts from Latin America and Russia. The meeting focused on comparing and contrasting meta-profiles of the groups from the three different continents.

With regard to the three regions’ different categories of subject-specific competences, comparison shows both similarities and differences. The differences are mainly derived from the contexts within each country with respect to socio-cultural, socio-historical, socio-political, socio-economic and climate conditions. These differences give rise to different emphases in the subject area competences of the three regions.

Similarities between the three regions can be seen in their emphasis on knowledge and
practice. Another similarity is the focus on the ability of a teacher to interact with others. Both Africa and Russia emphasise the interrelatedness of the competences. Some of the differences in the areas of context can be seen in what the Russians phrase as “ability to work,” which is not necessarily highlighted in Africa and Latin America. The emphasis on the social context in teaching in Africa and Latin America is not necessarily emphasised in Russia.

### Table 2. Comparison among Meta-Profiles of Africa, Latin America and Russia

Latin America and Russia focus on the professionalisation of teacher education, whereas it does not appear to be an emphasis in Africa. Africa, in contrast, emphasises moral and ethical issues in teaching, whereas such issues appear less salient in the other two regions.

A collapse of the three meta-profiles results in this combination:

- (Cognitive) Knowledge: subject + pedagogical knowledge
- Interpersonal skills
- Ability to learn
- Life-long learning
- Role of the teacher in society/teacher as an agent of change (capturing the emphasis on values and ethics)

The questions that remain are: (1) How to teach and assess values and ethics? (2) What good practices exist in these areas?

**Overall remarks**

A necessary change, according to the view of the Teacher Education SAG, is to adopt a view of learning that includes the acquisition of competences, of functional as well as declarative knowledge and most of the constructive criticism of and evidence-based research into competence models. Such a change must derive from research largely based in education. For too long, education has been somewhat apologetic because of its necessary focus on competences and the importance of the practical. It has perhaps overemphasised its strong theoretical background. Other disciplines also value the practical. In the Tuning project, all five subject areas are linked in their practical vocational imperatives. Nevertheless, teacher education can offer a great deal in terms of practical experience in the ways in which theory and practice intersect.
practice are constructively aligned in developing competences.

The reports that colleagues have made on their validation processes suggest that teacher education is already competence-focussed in the member countries in Africa.

However, what we have developed to date is a broad competence framework. This framework assists programme design but does not really influence programme implementation. It is relatively easy to develop programmes using the broad competence categories represented in the profile or to characterize content-based programmes as being competence focussed as well. However, the reality lies in the implementation. If competences are not then broken down into learning outcomes that are thoughtfully distributed across the units of the programme, and if the teaching and acquisition of these competences are not accurately assessed, then it seems unlikely that teaching will magically become student-centred, that learning activities will develop functional knowledge as opposed to learned declarative knowledge which is not accessible to practice.

The results of the consultation survey in which achievement was invariably ranked lower than importance is suggestive in this connection. Tuning II will help participants in the Teacher Education SAG collaborate with others in demonstrating how this is done in teacher education and facilitate the collation of a database of excellent practices in teaching, learning and assessment. This collation will tell us much about how far competences are actually embedded in teacher education programmes.

Substantial similarity at the level of competences was evident in the country reports. All things being equal, and taking into account other aspects of programme structure, as well as other factors, makes the possibility of cross-African curricula feasible. This trend is beginning to be seen in other subjects through programmes like Erasmus Mundus and Nyerere. Achieving this outcome may seem to be more difficult in the regulated subject areas, but the limited amount of validation that members of the Teacher Education SAG have done with official bodies suggests that joint programmes are not impossible for teacher education. Certainly there should be no impediment at the master's degree level.

One very interesting issue that emerged is the finding on competences from colleagues working in technical and vocational teacher education who observed that substantial differences existed between the teacher education subject-specific competences and their own competences. They found that the subject-specific competences from both Civil and Mechanical Engineering SAGs and the Agricultural Sciences SAG made a better match with their TVE programmes. This is clearly an important area where further research and discussion is needed.

Another issue emerging from this pilot project are the differences between the structures and focus of programmes in higher education between countries. These differences must be considered during the later discussions about the viability of a credit system for Africa. A system of interchangeable credits works logically only if the key criteria of learning are shared across countries and universities. A number of practical differences and similarities have already emerged from the study. Entry points, length of programmes, credits systems and types of programmes all vary within the continent. For example, while many bachelor degrees are of three years duration, the country of Mozambique made a policy decision to have its bachelor’s degree require four years of work. Namibia has a two-tiered system, in which initial teacher education (non-degree) takes place in teacher education colleges and then is completed in the university where the degree is awarded.

Not all countries have national standards for teachers. Even where an evaluative or standards body exists, there may be no enforcement mechanism. It appears to be the case that there are frequently different regulatory bodies for primary and secondary teacher education. In some cases, universities, as autonomous bodies, exercise a great deal of independence in the design
of programmes. Again, these are areas where more detailed research will be useful in the future, and such research may well arise as a result of the validation processes about to be undertaken.

The Teacher Education SAG has noted other areas where further research is necessary. The consultation undertaken by members in their departments and countries suggests that, although there is significant agreement about the competences, there are also some differences. This is an area where further research into why some competences (e.g., conflict resolution, ethics and values, environment and economic consciousness) may be more important than others in certain contexts.

In all subject areas, no group rated the achievement of any competence as high as it rated the importance of that competence. However, in teacher education the gap between importance and achievement was smaller than the overall results from all five of the SAGs collectively. There is clearly a need for some research into the relative importance and perceived achievement of competence development in teacher education. We felt that mere speculation into this difference would not be helpful, but it is an area to that should be explored in Tuning II, the next step. There was also a concern that too little “unconscious competence” (Burch, 1970) or “reflective competence” (Baume, 2004) exists among teacher educators about the assessment of competences within the sphere of values and ethics.

Reflecting on our own procedures at the most recent meeting, held in January 2013 in Nairobi, allowed the Teacher Education SAG to reach an important conclusion. Our discussions revealed that the collective memory preserved of the processes we had undertaken together were not altogether clear. A communications protocol should have been developed and agreed upon at the outset to include agreements about keeping minutes of the meetings, answering emails, adhering to deadlines and acknowledging receipt of documents. It is worth mentioning this fact since such a procedure would have been very effective in saving time during our deliberations.

Recommendations for validation

As noted above, colleagues in the SAG undertook validation exercises within their own institutions and also within relevant institutions in their countries. The consideration of further validation in the consolidation period between the pilot project (Turning Africa) and the proposed second step (Tuning II) highlighted different levels of conducting such validation: on an individual level, on the level of a group within the same country, on a regional level involving a group of countries, and on an intercontinental level.

At whatever level validation and dissemination occur in the future, the Teacher Education SAG is unanimous in firmly recommending the absolute necessary of documenting the process: keeping notes of meetings, keeping records of people and organisations, archiving correspondence and emails, keeping copies of presentations at public events, recording feedback and share this documentation with the rest of the SAG.

Recommendations for dissemination

Many of the validation activities listed above would also serve as dissemination activities. However, a number of helpful initiatives would also focus directly on dissemination.

- A simple tri-fold brochure could describe and summarise the purpose and goals of sums up the intentions of the Harmonisation/Tuning project, set out the profiles we have reached and identify future plans both during the consolidation period and during the second-phrase now being called Tuning II.
- The project must reach the agenda of the African Ministers of Education (COMEDAF) with sponsorship at a level that will stress its importance, encourage discussion and
further validate the meta-profile (generic and subject-specific competences).

- Similarly, the meta-profiles must receive attention on the agenda of the AAU Vice Chancellors’ meetings for discussion and validation.
- In as many ways as possible, the Teacher Education SAG must continue to collect feedback of validation, dissemination and implementation activities at each country/institution to share at the Mozambique meeting scheduled for [what month and year?]

The following sections capture the work that was accomplished in phase two of the project, after the pilot phase. The subsections include, staff development initiatives and reflections student workload project.

STAFF DEVELOPMENT

Introduction

Contemporary higher education is undergoing a paradigm shift which is reflected in the expanding and transforming teaching, learning and assessment strategies currently being innovated in almost all education contexts. The era of teacher-centred teaching and learning is gradually becoming a thing of the past. Institutional systems today are therefore, tasked with the important responsibility of addressing ever-increasing demands in the areas of reducing learner achievement gap, adopting evidence-based practices, meeting adequate yearly progress goals, managing the requirements of second or third-language and inclusion with respect to special needs students, increasing use of interconnecting technologies for education delivery and remaining current on the increasing amount of pedagogical, content, context and value-based research. These new dimensions demand that, educators keep abreast of the contemporary and pertinent advances that are taking place in the education arena. Under these circumstances the issue of continuous staff development cannot be overlooked, especially at higher education.

Conceptualizing staff development

Staff development is conceptualized as a process of continually improving staff knowledge, skills and values, i.e., enhancing staff competencies, needed to produce outstanding educational results that serve students in their context of practice. Staff development in teacher education involves all activities that enhance individuals’ skills, knowledge, expertise and other characteristics needed for a teacher. Notable improvements in education cannot take place without staff development. Staff development is, thus, key to meeting current educational demands in learning institutions, especially at higher learning institutions which feed lower levels through their expertise services. Effective professional development programmes are imperative to quality facilitation in teaching, learning and assessment while aligning these processes to intended learning outcomes in higher education. Quality professional staff development programmes needs to be informed by relevant theoretical and practical principles if they are to deepen teachers’ knowledge of course content, pedagogical skills, opportunities for practice, research capacity and critical reflections.

Staff development within the Tuning Africa Programme

The Tuning Africa programme has effectively captured and implemented the teacher staff development intention as demonstrated in the sections that follow in this staff development section of the book. Generally, staff development assists teachers to update their knowledge of the courses they teach in the light of the modern advances in their areas of specialization as well as in other areas which relate, in one way or another, to their fields of
specialization. The Tuning Methodology lays emphasis on the implementation of outcomes-based education in higher education as a way of ensuring that the quality of education is grounded on serving learners’ interests instead of serving institutional, and teacher’s interests. Scoring high marks in written examinations for placement or promotion is valued only as long as it aligns with students’ capacity to transfer and successfully apply what they learn in practical lived contexts.

Within the context of the tuning Africa initiative, it has become apparent that professional development is utterly important. On the one hand Tuning acknowledges the chain of global transformations occurring within Higher Education. The transformations include expansion of institutions, diversity of courses that are offered, huge admission of huge numbers of students resulting in more diverse student populations, multiculturalism and the need to introduce new methods of facilitating learning and research in responding to the ever changing situations. These changes, along with the rapid increase of the body of knowledge, challenge lecturers in higher education to advance themselves as academics. On the other hand, the systems of higher education are diverse, based on various historical legacies. So, in the pursuit of African academic integration, there is a need for mutual recognition of degrees among universities. This process provides opportunity for peer-learning among the participating institutions as they develop curricula profiles in response to determined or expected outcomes and competences for the selected subject areas. It also helps to share experiences in the determination of credit loads, contextualized learning outcomes and the quality of higher education. Hence, the need for professional development becomes even more pressing in the quest for enabling academics’ familiarization with the tuning concepts and approach/methodology which is designed to collaboratively and harmoniously address local and global needs directed to the attainment of sustainable development at all levels and in all contexts as per the guiding Global Sustainable Development Goals (GSDGs).

**Tuning commitment as a staff development opportunity**

Tuning commitment to promote professional development for HEIs’ staff and students learning features in the Tuning programme’s approach and intention to harmonize the African education system in ways that encourage staff and students’ collaboration, partnerships, education/training and mobility. The programme’s general meetings (5 so far) for which members commit are organised in ways that ensure participants’ attainment and generation of knowledge, skills and values for the improvement of the continent’s higher education (HE) systems. The Tuning Africa general meetings constitute major learning spaces and fora for staff development. This characteristic is grounded on the fact the Tuning meetings with their embedding presentations, shared activities and experiences from across fields continuously generate learning spaces for staff development.

The position expressed above was clearly articulated during the 4th General Meeting held in Johannesburg, April 2017 where one among the project’s intentions was stated as strengthening higher education “institutional capacity in the area of curriculum reform in terms of design, teaching, learning and assessment based on competences and intended learning outcomes” (Tuning Africa Phase II, 4th Meeting, p. 37). Staff development under the mainstream Tuning learning fora has covered theoretical, research and practical aspects of in-service training for higher education academics. Meetings’ participants have been guided to collaboratively conduct and share research findings at their home institutions; such findings have contributed in dialogue and establishment of contemporary HE students’ learning needs according to higher education stakeholders who participated as research participants during the research. Such stakeholders included students, graduates, employers, academics and HEIs’ leaders. Findings from the learning research were used to aid the compilation of lists of required
generic and subject specific competences for HEI's graduates as they move from universities to employment.

On the basis of the preceding narrative, it can briefly be ascertained that staff development presupposes the non static nature of contemporary society and the reality of continuously preparing academics in higher education to remain on the edge of development through a lifelong learning scheme designed to match the eve of transforming and emerging technologies, human activity and development needs.

Online courses for Tuning Africa participants

Besides learning spaces provided through the Tuning Africa general meetings, the programme has offered two online courses for its participants. The first of the online courses was delivered between February and September 2016. It focused on “Designing courses for outcomes based learning in higher education”. The second online course was offered between February and September 2017. This second online course dealt with “Practical assessment for learning”.

Both courses have updated academics in different HE fields on appropriate contemporary approaches to teaching and assessment. Both have centred on learners and their actual needs within actual lived environments. The courses have advance a shift from past teacher-centred teaching approaches which mostly focus on the teacher and the curriculum instead of focusing on learners’ actual needs. They have made it obviously clear that an effective education system ought to direct itself to the needs of the learner and their communities. Through these online courses, participants and those intended to be reached by the same have been (and will) be exposed to critical stances advancing that teaching and assessing should be designed and delivered/conducted in such a way that they address actual learners’ practical needs especially after graduation, i.e., education should focus on what the learners ought to ‘be’ and ‘do’ at and after graduation. It is a credit for the Tuning courses since learners have been rightly positioned at ‘the’ first priority of the education sector and are central to teaching, learning and assessment. As far as assessment is concerned the Tuning Africa online staff development courses have stressed the need to make assessments both judgment tools for decision making about the extent to which learning has taken place (assessment of learning or summative assessment), as well as tools for facilitating and enhancing students’ learning (assessment for learning or formative assessment).

Through the online staff development courses that have been highlighted above, the Tuning initiative has enabled HEIs participants to reconsider their past practices and improved how they teach and assess their learners. The online courses have developed champions for a contemporarily relevant pedagogy in education delivery, such a pedagogy that propagates the need for competences developed among learners to enable the learners not only to pass examinations but also to ascertain the possibilities and opportunities for the gained competences’ transferability to actual life practices after graduation. This was accomplished through exposure of participants to a variety of teaching, earning and assessment methods and techniques.

Additionally, since Tuning participants have been exposed to comprehensive and extensively collaborative and partnership techniques during the staff development training processes as they worked together in developing joint courses, responding to joint course tasks, reviewing each other’s ideas as posed through discussions and exchanges of texts they have been exposed into a position of being able to apply the same or improved techniques for application at their home institutions. This way, they are now in better positions to competently align course intended outcomes with the programmes’ emphasis on intra-and-extra-institutional, national and global collaborations and partnerships. Such collaborations are most likely to enrich staff and student mobility as a way of attaining harmonization across HEIs in Africa, as mobility opens up
opportunities to share all forms or resources, including human capital, infrastructure, facilities and equipment. This is an advantage if Africa is to leapfrog the boundaries that dislocated and disabled the continent’s participation in development projects in the past; this is so since a meaningful and relevant education is essential for actual development.

**Tuning workshops at home HEIs**

It is worth noting that Tuning staff development training programmes have not been meant only for HEIs academics who constitute the core Tuning Africa General Meeting specialized group members, but it is also intended for all academics and students in HEIs. For this purpose, members of the core groups have been oriented to take responsibility over cascading what they learn from the Tuning general meetings and the courses they have undergone. On this ground, Tuning members have been guided to conduct workshops of their own preferences in line with academic niche areas they selected during the April 2017, 4th General Meeting at Johannesburg, South Africa.

In order to identify niche areas for staff development workshops which each HEI institution represented in Tuning Africa was to conduct after the general meeting, each academic member representing a HE institution at the general meeting was requested to report what she/he considered to be a staff development needs at her/his institution in the area of curriculum development, teaching, learning and assessment. The identified needs were listed and then discussed in small groups composed of academics from different institutions and different fields of specialization. The multi-disciplinarily composition was deemed important for cross fertilization of ideas as well as refining the suggested training themes from broad perspectives. The exercise assisted in narrowing the list for actual implementation. Topics suggested for the Teacher Education SAG workshops fell under four major themes: (i) curriculum design, (ii) student workload and credits, (iii) assessment, and (iv) intended learning outcomes (ILOs) and alignment. Of the four themes, majority (54.5%) of the academics representing different institutions opted to conducting workshops on assessment, followed by preferences for students workload (27.5%) and, curriculum and intended learning alignment. The last two themes were selected by 9.1% of the represented institutions at the Teacher Education Group (SAG) of the 4th Tuning Meeting. These topics were further refined at institutional levels to fit the context of the implementation.
The practice described above confirms that the Tuning initiative is strongly built on active contributions of each member of the general meeting fora. Members fall into various specialized subject Area Groups: Agricultural Science, Economic, Teacher Education, Medicine, Mechanical Engineering, Applied Geology, Civil Engineering, Policy Advisory, and students’ representatives from various HEIs in Africa. It was in the spirit of collaborative decision making that it was considered necessary to solicit general meeting members’ contributions in developing common thematic areas for workshop planning and implementation at each HEI after the 4th General meeting. The collaborative multidisciplinary spirit is evident in opening up for each Tuning academic representative of an institution to invite her/his home HEIs academics to join hands in the Tuning projects. Some members reported to have incorporated sister universities so as to plan and present the workshops while others invited colleagues from other HEIs in their countries to participate in the Tuning workshops. It is important to note that sharing and refining the workshop topics and proposals between and among general meeting members, academic colleagues as well as qualifying and endorsing the workshop proposal through the Tuning Africa management team served as quality assurance process for each of the topic that was ultimately implemented.

Some reflections from some workshop participants

Some of the participants’ opinions of the workshops that were implemented

Workshop Participants’ verbatim comments from the Open University of Tanzania (OUT)

Q. What are your general comments about the workshop?

• The workshop was good as the facilitators were explaining the concepts in details and members of the workshop participated well with their respective contributions.

• The workshop was well organized.

• The workshop was good, however, time was constraining on your side...next time 3 days workshop would be adequate.

Q. What is the relevance of the workshop theme/topic to your teaching profession at a higher learning institution?

• It is timely because we need to change from traditional ways of doing things to a competences based approach so as to match with the market requirements.

• It is very relevant especially with regards to the Open University of Tanzania.

• Has addressed the real challenges encountered at in Higher/University education. Participants have discussed different ways of resolving the challenges.

• The relevance of the workshop is to assist me shift from the traditional way of teaching towards the learning outcome direction and learner-centered teaching.

• The workshop was very relevant and should be provided to all academic staff at the institution.

Q: What things have you learnt during the workshop that you plan to use when teaching your courses (after the workshop)?

• Apply Solos taxonomy framework of teaching and developing clear intended learning objectives for my courses.

• Revised Blooms taxonomy and solos taxonomy

• Authentic assessments grounded in intended learning outcomes.

This initiative is implemented on behalf of the European and African Union Commissions by:
• Solos taxonomy and improved Blooms taxonomy.
• The importance of conducting a broad needs assessment before developing a curriculum
• Preparing assessment tools based on ILO and involving our students in preparing assessment tools.

Q: What did you like most about the workshop?
• The training materials (three articles about authentic assessment were sent to the workshop invitees through e-mail communication before the workshop to allow them prepare for effective participation).
• The mode of collaborative teaching and learning.
• How to prepare effective assessment tools.
• I liked everything that was done and presented.

Q: What did you like least about the workshop?
• The time for the workshop did not consider that we were also having examinations going on at the university.
• Time for the workshop was too short, more days should have been added.
• Management staff and policy makers were not present, they need to be informed of these necessary changes that we have to make for changing our way of teaching.

Some reflections on the Tuning Africa staff development initiatives
A general reflection on the Tuning Africa staff development initiatives, shows several strengths including among which are listed below:

(1) The project has encouraged in-house institutional training which does not oblige many staff to travel outside their institutions for staff development purposes while leaving their teaching responsibility behind, a situation most likely to have negative implications for the learners and the institutions. As noted earlier, Tuning academics have been trained through online courses while still attending to their day-to-day tasks at work, home and at their local communities. Further, while only a few academics travelled to learn from the core Tuning Africa General Meetings, they received guidance to select other members at their own institutions to pursue the online courses together. Hence, while preparing and implementing the in-house workshops, academics who did not participate at the Tuning Africa General Meetings formed part of the teams that facilitated the workshops. The act of embedding professional development within work-places is advanced and informed by situated cognition, constructivism as well as contemporary connectivist theorists in education.

(2) Another strength that emerged through these courses was the promotion of collaborative and collegial approaches, which are valuable because they open up room for provision of assistance, guidance, sharing and support between and among colleagues who usually have key influence on teaching practices. Such collaboration represents an opportunity for participants to engage with socially interactive methods requiring them to actively search and analyse information, to explain, elaborate and defend their positions through collegial discourses. It is one way of promoting peer mentoring. These initiatives align with the belief that effective professional development events give participants opportunities to discuss,
think about, try out new practices as well as ideas and develop new directions that capture contemporary contexts and development strides.

(3) The Tuning approach constitutes an asset since it is closely associated with the sustainability of development initiatives in HEIs in Africa. Organizing professional development in the way Tuning is doing has a potential to positively contribute to staff members who have been engaged in the initiative. Such academics are most likely to thereafter remain empowered as they support and assist each other, instead of remaining dependent on other professional staff members whose contribution could only feature in designing professional development opportunities and engaging others who never learn to develop their own initiatives. This idea supports a contemporary position on staff development as key to the global knowledge economy since staff development keeps academics updated in respect of new innovations in the field of education, these could be innovations in educationally relevant technologies, new knowledge in specific fields study and practice, curriculum innovations, and pedagogical resources.

(4) The Tuning Africa approach has contributed in generating a sense of ownership and increased commitment towards the professional development initiatives since membership to the programme is voluntary and both institutional management and academic staff have been voluntarily involved in one way or another. This idea of ownership is grounded on the fact that participants at the initial Tuning General Meetings conducted a very broad research/study on what learners, staff, employers and other HEIs stakeholders considered wanting and needing being addressed. Further, for each of the programmes that have emerged from the Tuning initiative participants have been involved in proposing the programmes either partially or totally. This approach makes Tuning decisions and activities part and parcel of members’ contributions and therefore their own initiatives.

Future Potentials and growth of the Tuning initiatives
The workshops presented at different institutions have revealed a thirst for academics at HEIs to learn the current approach to teaching learning, and assessing in alignment with intended learning outcomes as opposed to teaching only for the development of competences. A good number of participants reported that they enjoyed the collaborative nature of the workshop presentations, specifically the high level of participants’ engagement into workshop proceedings as they were given ample space/chances to interrogate emerging ideas and suggested techniques. They reported having been made aware on the difference between curricula guided by only teacher directed ‘objectives’ and one guided by ‘intended learning outcomes’. They reported that following intended learning outcomes was more realistic and advantageous since learners ought to be guided to learn following learners’ future dreams of employment, whether it be self-employment or getting employed by an organization. On this basis, there was an outcry that the time for the workshop should have been longer to allow more coverage and more space to discuss the new approach, in terms of appropriate techniques, relevance within diverse contexts and how best to deal with old conservative mind sets- updating thinking and enabling broad acceptance of the Tuning contextually relevant intended learning outcome driven teaching approach.

On the basis of the observations in the preceding paragraph, Tuning participants ought to be encouraged to continue with institutional as well as cross institutional training of the Tuning concepts and methodology. Staff development training for academics should be prioritized in each HEI. Collaborative initiatives and partnerships ought to be encouraged and developed.
Student Workload Reflections

The Tuning methodology is mainly concerned with four lines of work: identifying relevant generic and subject specific competences future graduates should be acquainted with; exploring how a mutually agreed cumulative credit system can facilitate degree comparability, graduate mobility and employability; exchanging good practices in approaches and techniques in teaching, learning and assessment; and finally exploring how quality assurance frameworks can be used at programme level to enhance student learning (Tuning Academy, 2015).

As far as identifying “a credit system” is concerned, Tuning projects give more attention to “Student Voice” in identifying such a credit system so that the estimation of student workload is student oriented rather than staff-centred.

The recognition that higher education is a major driver of economic competitiveness in the global knowledge economy has made its quality ever more important, and hence one of the most crucial challenges facing countries has been how to manage a rapidly growing higher education sector while maintaining its quality. In that respect, several countries all over the world have been trying to set credit systems and qualification frameworks which demonstrate students’ academic progress or completion of their courses and degrees, facilitate student and staff mobility; improve transparency and mutual recognition between higher education institutions nationally and internationally.

The Course-Credit System or Credit Hour System, for instance, provided an effective means of measuring academic work for more than a century in the United States of America and has been successful in providing accountability, mobility, and regulation for a mass academic system (Altabach, 2001, Noda, 2016). On the other hand, the European Credit Transfer System (ECTS) has been introduced in 1989 to promote comparability and compatibility, students and staff mobility, transparency and fairness to students and integrate European Higher Education Area (EHEA). It represents an approach to European learning and teaching which places the student at the centre of the educational process (ECTS User’s Guide, 2016). However, this is not the case for African higher education as there is no unified academic credit system shared by all African countries.

During the second general meeting of Tuning Africa Project - II, a method was defined for estimating student workload using a questionnaire survey. There has been a call to develop a country report on Credit System in each of the African countries (Tuning Africa II. Second general meeting, 2016). In response to this call, Alexandria University - as a Tuning member - has started surveying both academics and students on student workload in one of its programmes, which is being revised to be compatible with Tuning methodology and competence-based learning.

A study was conducted by Alshamy (Alshamy, 2017) at Alexandria University by which a survey was conducted to both academics and students in the chosen programme, the main findings show significant differences between the perceptions of academics and students on student workload almost across all courses, where students’ estimation of the number of hours needed to complete the independent work during the semester were much higher than that of academics. The independent workload as estimated by academics is 62% of students’ estimation. Only 36.4% of academics have taken students’ feedback on workload into consideration when planning the workload for their courses. It was also found that 92% of students were not informed about the number of hours planned for independent work at the beginning of the course. In addition, 88% of students were not asked to express their feedback about workload. These findings indicate that there are no unified regulations among academics to the estimation of student workload. It is also made clear that the process of estimating student workload in Credit Hour System at Alexandria University is staff-centred rather than...
student-oriented as the majority of academics follow traditional methodologies in the estimation of student workload. It is also enunciated clearly that there is marginal coordination between academics teaching in the same programme. It can be concluded that “student voice” about their workload is not adequately considered as their feedback is not taken into consideration, which can be interpreted in light of the absence of a “paradigm shift” from staff-centred to student oriented approaches to the estimation of student workload (Alshamy, 2017).

Thus, there is an indication that effort and intentional strategies should be put in place to minimize the gaps between the perceptions of academics and students on student workload. This calls for the adoption of a “paradigm shift” from input and staff-centred programmes to output and student oriented ones. In order to achieve such a “paradigm shift”, several actions concerning policy and practice should be promoted. Among them, the study proposed:

- Moving from Credit (teaching) Hour System to a Credit System similar to ECTS where the focus is on the student workload required to achieve the objectives of a programme, objectives specified in terms of the learning outcomes and the required competences.
- Students, alongside academics, should have a crucial role in the monitoring process to determine whether the estimated student workload is realistic (Alshamy, 2017).

To enable students and academics to achieve that task properly, there was a need for sort of orientation and training on the process of determining and calculating student workload. Thus, Alexandria University’s Tuning team has developed a workshop on “Student workload in higher education institutions”.

In that workshop, participants were first oriented about Tuning methodology, Tuning Africa Project I & Project II, student workload, the relation between credits and student workload and the Tuning Approach for determining and calculating student workload.

The workshop was a way to scope out the methodology to calculate student workload and to have actual experience in implementing the methodology as proposed within the Tuning Project. The workshop results were captured in a report that articulates the successes and challenges involved in calculating student workload.

Conclusions

The staff development initiative has provided design templates for staff to drive professional development of their colleagues on all areas that were part of the Tuning Project. The process included (peer) evaluation of the design plans by colleagues before they could be implemented. It is hoped that Tuning participants will be encouraged to continue with institutional as well as cross institutional training on the Tuning concepts and methodology. The work in the project has created momentum to continue to prioritise staff development training for academics in the different institutions involved. Cross institutional collaboration and partnerships are encouraged and enabled.

The work on calculating student workload should be encouraged to continue across different institutions and regions, and the results should be used as useful data to feed into the project on determining the credit system for the continent. The team working on developing the credit system should further encourage more institutions to participate in the calculation of student workload so that there is enough representative data across regions and subject areas to work with in supporting work on developing the credit system, and in ensuring the student voice (in the development of the credit system).
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UNESCO. (2011). Sub-Saharan Africa: Measuring the Quality of School Conditions and Teaching Resources. [AUTHOR: please complete with city and publisher or, if you found this information on a website, the complete URL and the date of retrieval.]*

World Bank. (2002). [please complete]


4. WORKING DOCUMENTS

4.1 ENGLISH VERSION

~— FOR ENDORSEMENT —~

Prepared on Behalf of the

African Union Commission and European Commission
within the Framework of Tuning Africa-II Project Implemented by the Tuning Academy
Table of Contents

I—Background
II—Introduction
III—What is Tuning?
IV—Credit System: The Concept
V—Workload: The Concept and the Trend
VI—The Rationale for a Credit System
VII—Global Perspectives
VIII—African Higher Education System
IX—Workload in Africa: Highlights of a Study
X—Conclusion
XI—Recommendation
XII—References
I—Background

The vision of African Union, to build an integrated continent, requires a harmonised education system, where intra-Africa mobility and skills portability are key elements in its realization. Harmonized education and training systems are essential for effective implementation of the Continental Education Strategy for Africa (CESA) and Agenda 2063. Harmonisation is an instrument for enabling African higher education to contribute to and be aligned with the African vision of integration. The African Union Commission therefore developed a framework for harmonisation of higher education in Africa to facilitate the mutual recognition of academic qualifications.

There are increasing efforts “in Africa toward “harmonisation of higher education” since the diverse systems of higher education have resulted in the lack of recognition of university degrees constraining academic integration and the mobility of students across the continent. The implementation of the Harmonisation Strategy involves, among others, designing common curriculum development frameworks to enable comparability and equivalence of learning outcomes in African universities.

Within the framework of the AU Strategy for Harmonisation of Higher Education a project—on harmonisation of curriculum development in African universities using the “Tuning” methodology—was launched in collaboration with the European Commission. One of the activities in the initiative is the drafting of a Proposal for a Credit System for Africa to further advance student mobility and contribute to harmonization process.

It is imperative to develop a common measure of student workload in terms of credit hours so that it is possible to harmonize the range of credits and compare programmes in different countries. A vital instrument to facilitate comparability of qualifications is the development of an agreed credit transfer system. Study programmes and periods of learning will be more comparable and compatible by making use of credit transfer system. A common credit transfer system that can be recognized and transferred at national, regional, and continental levels is paramount in advancing the harmonization of the higher education systems in Africa.

II—Introduction

In the last decade, higher education has witnessed unprecedented growth globally. Africa stands as one of the regions which has entertained massive expansion and development—with all indications that this will continue unabated in light of the anticipated youth bulge in the continent for several decades.

This phenomenon is taking place at an opportune time when key development players, policy makers, and relevant organisations—from the African Union (AU) to the African Development Bank (AfDB), from the World Bank to the Organisation for Economic Cooperation and Development (OECD), and from the Association of African Universities (AAU) to the Association for the Development of Education in Africa (ADEA)—all concur that higher education must be centrally placed in the strategic development plan of African nations for a meaningful and sustainable economic development to take effect (Teferra, 2014). Higher education is now undisputedly established as “core” (AU, 2006), “critical” (OECD, 2010), “central” (AfDB, 2008), “key” (European Commission, 2014), and “unambiguous” (World Bank, 2010). This initiative is implemented on behalf of the European and African Union Commissions by: Tuning Academy.
2008) to national development and global competitiveness thereby enormously catapulting its role.

As succinctly articulated in CESA 2016-25, virtually all development players now concur that for any meaningful and sustainable economic growth to be realized and sustained, tertiary education must be centrally placed in the development agenda of nations. Building a tertiary education system is no more a luxury African countries were once chastised for indulging in it; but a critical imperative for national development and global competitiveness (AUC, 2016).

STISA-2024 (AUC, 2014), another parallel strategy of the African Union Commission, affirms that higher education provides a conducive environment for the development and full exploitation of the potential of science, technology and innovation to promote sustainable growth and socio-economic development. It further underscores its capacity to improve global competitiveness to research, innovation and entrepreneurship that entail quality knowledge production in African universities.

Agenda 2063 (AU, 2014), the blueprint for Africa’s development agenda unequivocally state the need to,

Build and expand an African knowledge society through transformation and investments in universities, science, technology, research and innovation; and through the harmonization of education standards and mutual recognition of academic and professional [sic] qualifications.

In the current era of the knowledge economy, the key role of higher education could be expressed in a number of ways. Higher education enables graduates to effectively use new technologies—and develop new tools and skills as well as promote job creation and entrepreneurship. By producing well-trained teachers, it can enhance the quality of primary and secondary education systems; by training physicians and other health workers, it can improve a society’s health thereby, raising productivity at work; by nurturing governance and leadership skills, it can provide countries with the talented individuals needed to establish a policy environment favourable to socio-economic growth. Setting up robust and fair legal and political institutions, making them part of a country’s fabric, and developing a culture that encourages the creation of new businesses and jobs, for example, call for advanced knowledge and decision-making skills. Addressing environmental problems and improving security against internal and external threats also place a premium on the skills that advanced education is best positioned to deliver (Bloom, Canning, Chan, & Luca, 2013).

African higher education has recorded unparalleled expansion in the last decade with enormous implications for the sector in particular and social and economic development of the region as a whole. This unprecedented development, needless to say, carries a solid promise in situating Africa as a significant, even critical player, in the global knowledge society if expansion is concurrently augmented with quality—a key issue Africa is grappling with to address it at multiple fronts.

In undertaking its Agenda 2063 and the Continental Education Strategy for Africa 2016-25, the African Union Commission, in cooperation with a number of bilateral and multi-lateral players has initiated several endeavors to promote quality higher education in the continent. Among others, the Commission closely works with European Union Commission, its counterpart, among others in harmonizing the higher education systems in Africa.
The harmonization of higher education in Africa is a multidimensional process that promotes the integration of the higher education space in the region. This objective is to achieve collaboration across borders, sub-regionally and regionally, in curriculum development, educational standards and quality assurance, joint structural convergence, consistency of systems as well as compatibility, recognition and transferability of degrees to facilitate mobility. The African Union Commission promotes the harmonization of African higher education to integrate the region. The European Commission supports these efforts through the Africa-EU Strategic Partnership including the Africa-EU Migration, Mobility and Employment Partnership and the Joint Africa-EU Strategy Action Plan. Various initiatives to foster harmonization have been launched in the last three decades (Teferra and Hahn, 2012).

One such initiative to harmonize the continent’s higher education system is a Tuning Africa Project which has been running for over half-a-decade now. The Project, now in its second phase, is undertaking to propose a common credit system for the continent, as one of the key endeavors in advancing the harmonization of the higher education systems in Africa. This effort comes on the heels of existing and emerging similar continental and sub-continental efforts as pursued by Association of African Universities, Conseil Africain et Conseil Africain et Malgache pour l'Enseignement Supérieur (African and Malagasy Council on Higher Education (CAMES), Inter-University Council for East Africa (IUCEA), and the key initiative the Addis Ababa Convention (further elaborated later), among others. This current effort intends to draw from these experiences in building the continental wide credit system.

III—What is Tuning?

Tuning higher education started in 2000 in Europe as a project to link the political objectives of the Bologna Process strategically and at a later stage the Lisbon Strategy to the higher education sector. Overtime, Tuning has developed into a process and an approach to (re-) design, develop, implement, evaluate and enhance quality for degree programmes and has expanded around the world.

Tuning is a methodology to improve teaching, learning and assessment in higher education reform. It guides the development of curriculum, a credit accumulation mechanism, and transfer system so as to obtain intended learning outcomes, skills and competences. One of its objectives is to ensure consensus of academics across borders on a set of reference points for generic and subject-specific competences alongside subject lines (Teferra and Hahn, 2012).

The name Tuning was considered to reflect the idea that universities do not and should not look for uniformity in their degree programmes or any sort of unified, prescriptive or definitive European curricula but simply look for points of reference, convergence and common understanding. The protection of the rich diversity of European education has been paramount in Tuning and in no way seeks to restrict the independence of academic and subject specialists, or undermine local or national authorities.

Whereas educational systems are primarily the responsibility of governments, educational structures and content remain within the purview of higher education institutions and their academic staff. Tuning focuses not on educational systems, but on educational structures with emphasis on the subject area level, that is the content of studies.

This initiative is implemented on behalf of the European and African Union Commissions by:
As a result of the Bologna Process, the educational systems in all European countries have been vigorously reforming and harmonizing. This is the direct effect of the political decision to converge the different national systems in Europe with requisite academic and professional profiles reflecting and anticipating the needs of society. For higher education institutions, these reforms have been instrumental for initiating intensive dialogue including the comparability of curricula in terms of structures, programmes and actual teaching, as well as credit systems. For more information please visit http://www.tuningacademy.org.

IV—Credit System: The Concept

The concept of credit system appeared in the United States at the end of the 19th century. In 1872, Harvard University replaced the system of the classical fixed curriculum with an increasingly wide choice of courses for students. Starting with electives only for senior students by 1884, the university offered almost complete freedom of choice to all students and shifted in the 1890s to measuring progress towards a degree on the basis of the accumulation of individual courses rather than completing a total course of study. Other universities and colleges quickly followed the Harvard model. The credit system thus emerged as a result of electives.

Towards the end of the 19th century and into the early 20th century, it became increasingly common for colleges and universities to list the number of credits offered for each course in their catalogues; the number being determined by the hours of classroom and laboratory work devoted to the course per week. Degree requirements were stated in terms of numbers of required credits as well as in course distribution. Also in the early 1900s, the credit system extended beyond undergraduate study to include postgraduate programmes.

The system in the United States remains to be based on a fixed number of teaching hours per unit which, in principle, doesn’t cover thesis or work placements, among others. It is based on a teacher-driven concept used to organize the loads of a teacher. College students generally receive credit hours based on the number of "contact hours" per week in class, for one term. Credit system was not designed for covering contemporary educational discourses and pedagogical approaches such as experiential learning, problem based learning, and so on. Though critiqued for being rigid, this system continues to be used in North America and also in large parts of Asia.

Nowadays, the definition of credits in higher education systems may be based on different parameters, such as contact hours, student workload and learning outcomes.

V—Workload: The Concept and the Trend

The workload based system was initiated in Northern part of Europe in the second half of the 1970s. It further became popular with the emergence of theories such as student-centered learning, active learning, participatory learning, and experiential learning, on the accounts of theorists such as John Dewey, Jean Piaget, Carl Rogers, and Lev Vygotsky. This system takes into account hours of not simply classroom activities, laboratories, workshops, and internships, among others, but also time spent for independent and group studies associated with these activities.

At the end of the 1980s, and at the birth of the Erasmus programme, the European Credit Transfer and Accumulation System (ECTS) initiative was introduced to facilitate the mobility of students and recognition of their credentials. It is a student-centred system based on
the student workload required to achieve the objectives of a programme of study. A workload is a key element of the learning-outcomes based educational system.

ECTS was taken on board by the Bologna Process in 1999 (and included in the Bologna declaration) and it became the cornerstone of the student centred/active learning approach. It is now the formal system of 48 signatory countries\(^3\) of the Bologna Process, including the European Union and Russia. Recently, it was introduced to the Central Asian Countries. In Latin America the same approach was introduced to improve quality on the design and delivery of degree programmes. The Latin American Reference Credit (CLAR) system is a result of internal discussions and decisions of the region’s 18 Ministries of Higher Education which have adapted the system to their needs.

Thus, this approach seems to be part of an emerging global trend. In Asian region, a comparative initiative has been taken for mobility and credit transfer purposes. China has also expressed interest to develop a workload based/learning based system. For more comparative perspectives on this and credit system later.

In Africa, the Tuning Methodology has been employed to contribute to the key features of the African Higher Education Harmonization Strategy, following the launch of the Tuning Africa Project in 2010 as an African Union and European Union partnership initiative. This project, which is in its second phase now, has several layers of bodies with clearly identified roles.

The Tuning Africa Policy Advisory Group (TAPAG)—a collective of national, subregional and continental bodies involved in higher education and established by Tuning Africa Project II—is one of them. As part of its remit, TAPAG extensively interrogated the two concepts, i.e., credit and workload, at its last meeting in November 2016 in Accra, Ghana.

TAPAG defined credit as a measure of workload required for a typical learner to achieve the objectives of a programme, specified in terms of the predetermined learning outcomes and competences that is expected to be acquired. A credit thus measures student workload required to achieve expected learning outcomes.

Workload, according to TAPAG, is an estimated account of the learning activities such as lectures, seminars, projects, practical activities, work placements, individual studies all measured in time, which a learner typically needs to achieve the defined learning outcomes.

These two definitions might be the pillars of an African Credit System.

\(^3\) 48 Signatories of the Bologna Accord of the European Higher Education Area include Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, and Vatican City.
VI—The Rationale for a Credit System

The importance of a common credit system for internationalization of higher education was understood early in the 1990s, as for example reflected in the UNESCO World Declaration on Higher Education for the Twenty-First Century: Vision and Action (October 1998). A common credit system is key for harmonizing different higher education systems—characteristic of the African continent—and central to the African Union’s Agenda 2063 which explicitly states the critical need for harmonization of education standards and mutual recognition of academic and professional qualifications in the continent. This was further pronounced in CESA 2016-25 which affirms that “Harmonized education and training systems are essential for the realization of intra-Africa mobility and academic integration through regional cooperation”.

A credit system is a key instrument for the accumulation and transfer of knowledge, skills and (wider) competences expressed and measured in terms of student workload and learning outcomes. The objectives and importance of a credit system in the higher education sector are intended to:

i. Promote student mobility
ii. Improve the comparability and compatibility of study programmes
iii. Render more transparency to study programmes
iv. Provide more flexibility and diversity of pathways
v. Facilitate easier development of well-balanced programmes
vi. Promote feasibility of programmes
vii. Enhance quality of programmes
viii. Advance recognition of (periods of) studies taken elsewhere successfully
ix. Facilitate different types of learning such as informal, non-formal, formal, part-time, among others.

x. Facilitate more substantive collaboration among different higher learning and research institutions towards a common higher education space.

For continents and sub-continents with a desire to harmonize their higher education systems and those with interest in articulating and building a common area of higher education, developing a common credit transfer system continues to be of utmost importance. The next section provides a global perspective of different credit systems, including trends in Africa (a dedicated section at the bottom), to help draw experience in the interest of building a robust one for the continent.

VII—Global Perspectives

1. United States

Two major credit systems exist in the United States, including a few local ones in certain higher education institutions. The two major credit systems are the semester-hours of credit and the quarter hours of credit as illustrated in Table 1.

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4 http://www.unesco.org/education/educprog/wche/declaration_eng.htm#world%20declaration

5 Ulicna, Daniela (2011) Study on the use of credit systems in higher education cooperation between the EU and the US.


This initiative is implemented on behalf of the European and African Union Commissions by:
The “semester hours of credit” system is the most commonly used in the United States. Overall, the US credit systems are rather tightly related to the education and training programmes and instruction hours. In the US, the credit system is based on how the inputs are organized; and thus the weight of credit points is based wholly on the inputs.

### Table 1: Credit System in the United States

<table>
<thead>
<tr>
<th>Name</th>
<th>Terms per academic year</th>
<th>Duration in weeks</th>
<th>Total credits for the period</th>
<th>Total credits per academic year (undergraduate level)</th>
<th>Total credits for a bachelors degree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester hours of credit</strong></td>
<td>2 semesters</td>
<td>15</td>
<td>15</td>
<td>30 (15 credits x 2 semesters)</td>
<td>120 (15 credits x 8 semesters)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>16</td>
<td>32 (16 credits x 2 semesters)</td>
<td>128 (16 credits x 8 semesters)</td>
</tr>
<tr>
<td><strong>Quarter hours of credit</strong></td>
<td>3 quarters</td>
<td>10</td>
<td>15</td>
<td>45 (15 credits x 3 quarters)</td>
<td>180 (15 credits x 12 quarters)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
<td>16</td>
<td>48 (16 credits x 3 quarters)</td>
<td>192 (16 credits x 12 quarters)</td>
</tr>
</tbody>
</table>

2. **Europe**

European Credit Transfer System (ECTS)\(^6\) is a learner-centred system for credit accumulation and transfer, based on the principle of transparency of the learning, teaching and assessment processes. Its objective is to facilitate the planning, delivery and evaluation of study programmes and student mobility by recognising learning achievements and qualifications and periods of learning.

ECTS was first developed as an instrument to support credit transfer between higher education institutions in the framework of student mobility organised under the Erasmus programme. At that time, it was predominantly based on teaching inputs. It has progressively evolved into a system used for both credit accumulation and credit transfer in the framework of transnational mobility but also for mobility within a country or within a single institution.

The main goal behind the development of ECTS was to enable the recognition of studies abroad. When ECTS was first introduced in Europe in the 1980s, the procedures for recognition of foreign studies were rather rigid and based on a detailed comparison of curricula. Furthermore, it was quite common that higher education systems were based on the use of contact hours, however these lacked a good account of the work a student was expected to do during his/her studies. The work that students were expected to do autonomously through independent studies, project work, or periods of practical training were not accounted for. Another reason why a system based only on contact hours was considered inappropriate was the diversity of higher education structures, approaches and traditions across Europe. Higher education institutions in Europe combine different learning activities to develop programmes,

\(^6\) ECTS’s User Guide 2015
but the proportion of classroom teaching, practical work, autonomous work, project work, and so
on, varies greatly.

While different learning activities can lead to similar outcomes in terms of students’
knowledge and competences, some are more intensive in contact hours than others.
Consequently, it was considered that a system based on contact hours would not give a
sufficient account of the equivalence between courses, even though the expected learning
outcomes were equivalent. As a result, ECTS was progressively redefined to strengthen the
core role of two main concepts:

i. The concept of learning outcomes: the award of credit signals that the learner
has achieved the expected learning outcomes independent of the inputs that
s/he has been through;

ii. The concept of workload which embraces all learning activities that a person is
typically expected to complete in order to achieve the expected learning
outcomes.

Each programme component (unit, module, course, etc.) is defined in terms of learning
outcomes which set out what a learner is expected to know, understand and be able to do upon
the completion of the programme component. Based on the definition of the learning outcomes,
the higher education staff identifies the typical student workload needed to achieve these
learning outcomes. Calculation of student workload covers all learning activities including the
teaching hours, independent work, practical assignments, among others. In ECTS, 60 credits
are allocated to a full time year of formal learning. One credit is typically between 25 and 30
hours of workload.

The major conceptual or structural differences between the use of credit in the US and
ECTS in EU are:

i. The use of learning outcomes to describe and define the content of programme
components when using ECTS, while in the US components are generally
described through curricula/teaching inputs;

ii. The use of contact hours as a basis for calculating credit value in the US while
in ECTS student workload covering a full range of learning activities is expected
to be used; and

iii. Standardised approach to describing the level of programmes’ components/
courses in the US, while in Europe there is no common approach to describe
the level of courses other than designating them as either Bachelors or
Masters.

3. United Kingdom

Credit Accumulation and Transfer Scheme (CATS) is used by many universities in the United
Kingdom to monitor, record and reward passage through a modular degree course and to
facilitate movement between courses and institutions. One credit is equivalent to 10 notional
hours of study (contact time and allocation for self-study). For example, a university course of

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7 Souto-Otero, Manuel (2013) Review of credit accumulation and transfer policy and practice in UK
higher education, University of Bath.

This initiative is implemented on behalf of the European and African Union Commissions by:
150 estimated study hours would be worth 15 credits, and a university course of 300 estimated study hours would be worth 30 credits. A full academic year is worth 120 credits.

CATS schemes use in the UK include CATS (England & Northern Ireland), SCOTCAT (Scotland), the Credit and Qualifications Framework for Wales (Wales), the Learning and Skills Development Agency credit framework and Open College Network credits. There is an official equivalence with ECTS: two UK credits equal to one ECTS credit. Thus, in the UK 120 credits constitute one academic year while it is 60 for ECTS.

4. Latin American\(^8\) Reference Credit (CLAR)\(^9\)

The Latin American Reference Credit (CLAR) has been devised as a unit of value for calculating a workload, measured in hours, required to be carried by a student in order to attain learning outcomes and pass a subject or teaching period.

From a complementary standpoint, CLAR represents a system that displays the relative complexity of the different curricular components and facilitates the assessment and comparison of learning results within different contexts of qualifications, degree programmes and learning environments. It provides a shared method for the purpose of comparing learning between the different degree programmes, sectors, regions and countries.

CLAR recognizes an annual full-time student workload to be equivalent to 60 credits. Use of this normalizer was approved at Tuning Latin America Project in 2011, taking into account:

i. its divisibility, which enables it to be easily adapted to diverse ways of structuring the academic year (six, four and three-month periods and modules);
ii. its wide use in other parts of the world, which would thus facilitate its understanding and compatibility.

If as a general rule, one (academic) year of full-time study is equivalent to 60 credits, then one semester will be equivalent to 30 credits. Thus, in accordance with existing degree courses and programmes in different countries, a four-year, five-year and seven-year programmes would be equivalent to 240, 300, and 420 credits respectively. The workload assigned to a CLAR credit is defined by a record of the total amount of time a student sets aside to learning on an annual basis—and thus has no single value.

5. Asia (ASEAN)\(^10\)

Credit transfer systems designed to be used specifically among universities in Association of South East Asian Nations (ASEAN) member states is a fairly recent phenomenon. Traditionally, recognition of periods of studies abroad involving the ASEAN region has been carried out on case-by-case basis. Although no global credit transfer system for the ASEAN region currently exists, certain systems are used to help streamline the process.

\(^8\) 18 Latin American countries involved in CLAR include Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, México, Nicaragua, Panamá, Paraguay, Perú, Uruguay and Venezuela.

\(^9\) CLAR (2013)

\(^10\) Mapping student mobility and Credit Transfer Systems in ASEAN region (2016).
Three major credit transfer systems are in use in the region: the AUN ASEAN Credit Transfer System (AUN-ACTS), the University Mobility in Asia and the Pacific Credit Transfer Scheme (UMAP-UCTS), and the SEAMEO-RIHED Academic Credit Transfer Framework (AIMS). Of these the AUN-ACTS is the only credit system exclusive to intra-ASEAN mobility. These systems have been created to meet a variety of interests and motivations.

<table>
<thead>
<tr>
<th>Countries involved</th>
<th>AIMS participating countries</th>
<th>UCTS</th>
<th>ACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia, Brunei, Cambodia, Fiji, Guam, Hong Kong, Indonesia, Japan, Republic of Korea, Laos, Macau, Malaysia, Mongolia, Myanmar, New Zealand, Papua New Guinea, Philippines, Samoa, Singapore, Taiwan, Thailand, Timor-Leste, Vietnam</td>
<td>Australia, Brunei, Cambodia, Fiji, Guam, Hong Kong, Indonesia, Japan, Republic of Korea, Laos, Macau, Malaysia, Mongolia, Myanmar, New Zealand, Papua New Guinea, Philippines, Samoa, Singapore, Taiwan, Thailand, Timor-Leste, Vietnam</td>
<td>ASEAN + partners: Brunei Darussalam, Cambodia, Indonesia, Japan, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit definition</th>
<th>1 academic year = 30 to 35 credits</th>
<th>1 academic year = 60 credits</th>
<th>1 academic year = 60 credits</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Student workload per year</th>
<th>1800–2100 hours</th>
<th>1800 hours</th>
<th>1500–1800 hours</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Student workload per credit</th>
<th>38–48 hours (includes 13–16 academic hours of instruction)</th>
<th>30 hours of work</th>
<th>25–30 hours of student workload</th>
</tr>
</thead>
</table>

6. **Russia**

The introduction of “credit units”, зачетный единиц / zachetnaja edinitsa in Russian, is a result of Russia's participation in the Bologna process, which requires the use of credits that are compatible with ECTS. The development of a credit system in Russian higher education was first approved in 2002. The new credit unit is defined as representing 36 academic hours per credit whereby an academic hour in Russia is equal to 45 minutes.

A full-time year consists of 60 credits, making the Russian system compatible with the ECTS credit system. A four-year bachelors requires 240 credits while a five-year one requires 300 credits. A two-year masters programme, which follows the bachelors, requires 120 credits. The credit system is not applicable for the research-based degrees: the Candidate of Sciences and Doctor of Sciences.

7. **Summary: General Aspects**

The majority of the systems discussed above have undertaken research on the number of hours that are necessary to achieve learning outcomes. Different types of interrelated elements that

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11 Ann M. Koenig (2013) Latest Russian higher education curriculum standards mandate use of “credit units” in AACRAO International Education Services

http://www.aacrao.org/resources/resources-detail-view/latest-russian-higher-education-curriculum-standards-mandate-use-of--credit-units-
influence “productivity”—i.e. the time to obtain the required level of learning by a student—could be identified. These include:

i. Diversity of traditions
ii. Curriculum design and context
iii. Coherence of curriculum
iv. Teaching and learning methods
v. Methods of assessment and performance
vi. Organization of teaching and learning
vii. Ability and diligence of the student
viii. Personal and material means available

VIII—African Higher Education System

1. Introduction

One of the challenges facing African higher education system is the difficulty in transferring part or whole of a study from one region to another or from one institution to another. This is due to lack of reliable tools for measuring student achievements in a transparent way as well as the absence of defined systems which allow adequate recognition of degrees and other credentials among institutions and between countries.

The concept of “credit” refers to the amount of learning contained in a qualification or part-qualification (SAQA, 2014). In the Bologna system, credits reflect the total workload required to achieve the objectives of a programme—objectives which are specified in terms of the learning outcomes and competences to be acquired—and not just through lecture hours. It makes study programmes easy to read and compare for all students, local and foreign, and therefore facilitates mobility and academic recognition (Khelfaoui, 2009). Little information is available on how a period of study is recognized—both among universities and between countries in Africa.

In Africa, there is no common and reliable means of measuring and transferring acquired knowledge. In some countries, the concept of credit has limited understanding and a variety of meanings and different applications. There is thus a compelling need to understand and recognize the different types of credits systems that are being used in different parts of Africa and hence this endeavor to establish one.

A study was carried out to investigate the different types of credit systems that exist in African countries. It is anticipated that this endeavor will contribute to the realization of transferability of studies in the continent possible by promoting comparability of degrees, diplomas and certificates. The contribution of a streamlined continental credit system—for the development of the African higher education space in particular the integration of the continent in general—is paramount.

2. Methodology
This study was carried out through a questionnaire survey distributed to country participants in the Tuning Africa Phase II programme. Country participants with an average of four institutional membership in each country were requested to complete questionnaires. Responses were received from 35 African countries, as indicated in Table 3.

After the surveys were completed, they were subjected to verification by respective regulatory agencies or ministry officials in their countries (where the former does not exist). The analysis of the various country reports constitutes the focus of this section.

3. Results
3.1 Status of Regulatory Agencies in African Countries

Among the 35 countries covered in this survey, 25 of them have national regulatory agencies. Three of the five countries in North Africa in this study have national regulatory agencies. All the countries in North Africa under this study are committed to the Licentiate-Masters-Doctorate (LMD) reforms.

<table>
<thead>
<tr>
<th>Region</th>
<th>Countries covered by the study</th>
<th>Countries with established quality assurance regulatory agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
<td>Algeria, Egypt, Libya, Mauritania, Morocco, Tunisia</td>
<td>Egypt, Libya, Tunisia</td>
</tr>
<tr>
<td>Southern</td>
<td>Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zimbabwe</td>
<td>Botswana, Lesotho, Mozambique, Namibia, South Africa, Zimbabwe</td>
</tr>
<tr>
<td>East</td>
<td>Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Madagascar, Mauritius, Somalia, Sudan, Tanzania, Uganda</td>
<td>Burundi, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, Uganda</td>
</tr>
<tr>
<td>West</td>
<td>Benin, Burkina Faso, Cape Verde, Cote d’Ivoire, Mali, Nigeria, Senegal</td>
<td>Conseil Africain et Malgache pour l’Enseignement Supérieur (CAMES) for Benin, Burkina Faso, Cote d’Ivoire, Mali, Senegal. Regulatory agencies in Cape Verde, Mali, Nigeria</td>
</tr>
<tr>
<td>Central</td>
<td>Cameroon, Democratic Republic of Congo (DRC)</td>
<td>Cameroon</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>

In Southern Africa, there are well established quality assurance regulatory agencies in Botswana, Lesotho, Mozambique, Namibia, South Africa and Zimbabwe. The ministries of education currently carry out regulatory functions for higher education in Angola, Madagascar, Malawi and Mauritius. All the Southern African countries under this study, except Angola, have credit systems.
In East Africa, Djibouti and Somalia have no national quality assurance regulatory agencies, while Burundi, Eritrea, Ethiopia, Kenya, Rwanda, Tanzania and Uganda have well established national quality assurance agencies.

In West Africa, the Ministry of Education and Conseil Africain et Malgache pour l'Enseignement Supérieur (CAMES) provide regulatory functions for higher education institutions in the French speaking countries of Benin, Burkina Faso, Cote-d’Ivoire, Guinea, Mali, Niger, Senegal, and Togo. Although Guinea Bissau is a Portuguese speaking country, it has also subjected itself to the regulatory activities of CAMES. As expected in existing regional protocols such as CAMES and the ECOWAS Convention on the recognition and Equivalences of Education, some Member States (Cape Verde, Ghana, Mali, Nigeria, Senegal and Sierra Leone) have established national regulatory agencies.

Only three countries were covered in Central Africa under this study. Higher education regulations in Cameroon is under the CAMES system, while that of the Democratic Republic of Congo is under the control of the Ministry of Education. The number of countries with national higher education regulatory agencies has increased since the report produced by Materu (2006) on the same subject.

3.2 The Prevalence of a Credit System

In North Africa, all the countries in this study are committed to the LMD system; and credit systems operate in their higher education institutions. However, not all the universities in the five countries employ a credit system. Some universities are still using the old British system.

In Southern Africa, only Angola lacks a credit system. All the other eight countries have one form of credit system or another. All universities in Madagascar, Mauritius, Namibia and South Africa maintain a credit system. As in the case of the North African countries, not all universities in Botswana, Lesotho, Malawi, Mozambique and Swaziland currently operate a credit system. In Zimbabwe, 15 universities have committed to change from Course Unit System to Credit System.

In East Africa, a credit system started with Kenya in 1968; and in 2012, Burundi became the latest country to adopt the system. It is only in Somalia that a credit system does not exist in east Africa. Some of the countries, such as Djibouti, have not been able to apply a credit system to their medical programmes.

In West Africa, a credit system started in Nigeria in 1968 and developed widely between 2008 and 2010 in other countries. Some programmes in medicine are exempted from the credit system.

In Central Africa, a credit system started in Cameroon in 2007 and most universities there operate the LMD. Not all universities in the Democratic Republic of Congo (DRC) operate a credit system though LMD is at a pilot phase at the University of Lubumbashi.

There are various publications in the different regions on their operations of a credit system. Countries where these publications have been produced include Algeria, Cameroon, Madagascar, Mozambique, Nigeria, South Africa, and other countries under the purview of CAMES protocol.
3.3 Measuring Credit

Generally, the process of accreditation includes peer reviews, site visits and a report to establish quality, capacity, outcomes and need for improvement.

In North Africa, credit is measured in terms of the teacher contact hours with the learners. In some cases, both the staff contact hours and the time taken for the students to carry out independent studies are taken into consideration. Tunisia is an exception.

In Southern Africa, most of the countries use notional hours including contact time, structured learning, workplace learning, assessment and self-study. (One credit amounts to 10 notional hours.) However, in Mauritius, a credit is based on staff contact hours where one credit unit is equivalent to one hour lecture or three hours of practical or one hour of tutorial that spans over 15 weeks.

In many countries in East Africa, contact hours and independent work of students are employed in determining credit. However, in Ethiopia and Djibouti, contact hours are employed for measuring credit.

In West Africa, credit is measured using the staff contact hours only. In Nigeria, one credit unit means a course work of one hour lecture or three hours of practical or one hour of tutorial, over a 15-week semester term.

Similarly, contact hours are used to measure credit in Central Africa. There are few universities which are using both contact hours and students learning hours in the calculation of credits.

3.4 Value of Credits in Different Levels

A credit does not have the same value in the countries and regions studied, as shown in Table 4. One credit load is made up of 20 to 25 hours of teaching and learning hours. In some other cases, it is one hour of teaching over a period of 15 to 16 hours, or practical classes of two to three hours over a semester made up of 15 to 16 weeks.

<table>
<thead>
<tr>
<th>Credit system</th>
<th>Value of one credit unit course</th>
<th>Region where applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact hours teacher’s workload</td>
<td>1 hour of lecture over 15 weeks</td>
<td>Northern Africa, Western Africa</td>
</tr>
<tr>
<td></td>
<td>2 hours of practical over 15 weeks</td>
<td>Northern Africa</td>
</tr>
<tr>
<td></td>
<td>20-25 teaching and learning hours</td>
<td>Northern Africa</td>
</tr>
<tr>
<td></td>
<td>3 hours of practical for 15 weeks</td>
<td>Western Africa</td>
</tr>
<tr>
<td></td>
<td>1 hour of tutorials for 15 weeks</td>
<td>Western Africa, Northern Africa</td>
</tr>
<tr>
<td></td>
<td>10 hours of notional hours made up of contact time, structured learning, workplace learning, assessment, and self-study</td>
<td>Southern Africa, Eastern Africa</td>
</tr>
<tr>
<td></td>
<td>15-18 hours of notional hours made up of</td>
<td>Eastern Africa</td>
</tr>
</tbody>
</table>

This initiative is implemented on behalf of the European and African Union Commissions by:
In Eastern and Central Africa, contact hours and independent work of students are employed in determining the value of credits. Accordingly, one unit is equivalent to 10 notional hours; one credit is equivalent to 15 to 18 contact hours or students workload; and one unit is equivalent to 15 hours of lectures and 10 hours of independent work.

In many countries in West Africa, contact hours are used in determining credits. Accordingly, one credit is equivalent to one contact hour or three hours of practical or one hour of tutorial per week for 15 weeks. The credit load per year varies from institution to institution and from country to country, as shown in Table 5.

<table>
<thead>
<tr>
<th>Region</th>
<th>Credit Points Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>30 – 60 units</td>
</tr>
<tr>
<td>South</td>
<td>18 – 60 units</td>
</tr>
<tr>
<td>East</td>
<td>36 – 60 units</td>
</tr>
<tr>
<td>West</td>
<td>30 units, 48 units, 60 units</td>
</tr>
<tr>
<td>Central</td>
<td>36 – 60 units</td>
</tr>
</tbody>
</table>

The credit load for various programmes is different among the regions as shown in Table 6. However, a common credit point per year across the continent appears to be 60 units.

A study was undertaken to establish the scope and prevalence of workload in African higher education systems based on a survey which involved 571 academics and 5,266 students in 107 institutions which are participating in the Tuning Africa II Phase. The study explored the extent of workload to learn a unit/course/module in a semester on the basis of contact hours and independent work.

**Table 6: Credit Loads for Different Programmes**

<table>
<thead>
<tr>
<th>Region</th>
<th>Bachelors</th>
<th>Masters</th>
<th>Doctorate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
<td>120–180</td>
<td>36 units or 130–136 units</td>
<td>No information provided</td>
</tr>
<tr>
<td>Southern</td>
<td>60, 100, 120 credits</td>
<td>60, 120, 180</td>
<td>120, 360, 480</td>
</tr>
<tr>
<td>East</td>
<td>In Burundi, 180 (But 420 for Medicine and 240 for Engineering) 60, 135, 120, 180 units for others</td>
<td>120–136, 360</td>
<td></td>
</tr>
<tr>
<td>West</td>
<td>180–360</td>
<td>36–180</td>
<td>120</td>
</tr>
<tr>
<td>Central</td>
<td>108–180</td>
<td>120</td>
<td>300</td>
</tr>
</tbody>
</table>

**IX—Workload in Africa: Highlights of a Study**

This initiative is implemented on behalf of the European and African Union Commissions by:
The study examined workload by field/discipline which included seven undergraduate disciplines: Agricultural sciences, Economics, Civil Engineering, Mechanical Engineering, Applied Geology, Medicine, Teacher Education, and one post-graduate programme: Higher Education Management. Except Teacher Education, a striking similarity of opinion between students and academics, as regards to contact hours vs independent work, is recorded. In a similar trend academics and students from all the five African regions—North, South, Central, East, West—have exhibited considerable congruity on the number of contact hours vs independent work to learn a unit/course/module in a semester.

Figure 1 presents the number of hours that students and academics thought it would be required to complete all the requirements of a unit/course/module in a semester, per fields/discipline, taking into account both contact hours and independent work. Civil Engineering stood highest, followed by Medicine and Teacher Education, for academics. Civil Engineering stood again the highest, followed by Teacher Education and Applied Geology, for students.

![Figure 1: Hours Needed to Complete All the Requirements of a Unit/Course/Module in a Semester per Disciplines/Field](image)

According to the study, the student workload over a period of a year spans from 1,350 to 1,800 hours, which TAPAG endorsed after further deliberation. This compares relatively well with Europe standing at 1,500 to 1,800 hours and Latin America at 1,440 to 1,980 hours for both contact hours and independent work.

**X—Conclusion**

African higher education has an array of schemes in credit systems, credits, and workloads without whose harmony the key mission of the continental higher education space in particular and the African Union’s vision—of an integrated, prosperous and peaceful
continent—in general may remain elusive. Hence, the need for a systematic and rigorous description and analysis of establishing common and basic, but key and critical, frameworks and pillars of the harmonization process.

Through extensive research undertakings and intensive dialogue of the TAPAG, the definition of a credit system and workload have now been established. The Group also agreed to the total number of hours of a workload per year.

From the study, the following findings can be deduced about the state of the art of credit in African higher education system.

i. Credit system has been functional in the African Higher Education systems for many years.

ii. African universities consider credit as a tool for measuring the load of the teacher rather than as an expression of the volume of learning based on defined learning outcomes and associated workload.

iii. In many African institutions, credit is measured based on the contact time with the teacher.

iv. Credit does not have the same value in all the countries and regions. (Anglophone and Francophone credit systems differ.)

v. There is currently no credit transfer system among institutions in Africa.

vi. The load of credit is not comparable among institutions in Africa.

XI—Recommendation

i. There is a compelling need to have a common agreement on the definition and value of a credit in the African higher education systems in order to promote transferability and comparability—key to harmonizing the African higher education space and promote mobility.

ii. There is a need for consensus on the workload of a credit unit. The general trend is that 60 credits are equivalent to the workload of full-time student during one academic year. We thus recommend to adopt this widespread international trend of 60 credits for Africa.

iii. There is a need for consensus on the number of credit units for each year and for the different programmes, i.e. Bachelors, Masters and Doctorate.

iv. There is a need for a consensus on the student workload over a period of a year which straddles between 1,350 and 1,800 hours. We thus recommend to adopt between 1,350 and 1,800 hours of workload for Africa which sits well within the international norms.

v. There is a need for a harmonized continental credit system that balances the different systems that span the continent: Anglophone, Francophone and Lusophone countries.

vi. With increasing harmonization and recognition of credentials at sub-continental level within the Regional Economic Communities (RECs), as in East Africa and

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79
West Africa (CAMES), lessons could be drawn for—and thus consolidate—the continental credit system.

**XII—References**


Association for the Development of Education in Africa (ADEA). [http://www.adea.org](http://www.adea.org)


*This initiative is implemented on behalf of the European and African Union Commissions by:*


