

Background Paper

Secondary Education in Sub-Saharan Africa
Teacher Preparation and Support

Case study: Uganda


MARCH 2019



Secondary Education in Africa:

**PREPARING YOUTH
FOR THE FUTURE
OF WORK**

This paper was prepared for the Mastercard Foundation report, *Secondary Education in Africa: Preparing Youth for the Future of Work*. The opinions, findings, and conclusions stated herein are those of the authors and do not necessarily reflect those of Mastercard Foundation.



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through knowledge*

CASE STUDY

SECONDARY EDUCATION IN SUB-SAHARAN AFRICA

Teacher Preparation and Support

CASE STUDY: UGANDA

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Acronyms and abbreviations

A levels	Advanced levels
ADEA	Association for the Development of Education in Africa
B Ed	Bachelor of Education
BPM	best practice model
CCT	coordinating centre tutor
CPD	continuing professional development
DEO	district education officers
DES	Directorate of Education Standards
DRC	Democratic Republic of the Congo
DSE	Diploma Secondary Education
EAC	East African Community
ECOWAS	Economic Community of West African States
ESC	Education Service Commission
GCE	general certificate of education
GCSE	general certificate of secondary education
GDP	gross domestic product
HEC	higher education council
IDA	International Development Association
INSSTEP	In-service Secondary Teacher Education Project
ITE	initial teacher education
ITEK	Institute of Teacher Education Kyambogo
LWA	Learning-working assignment
MDGs	millennium development goals
MINALOC	Ministry of Local Government
MINEDUC	Rwanda Ministry of Education
MoES	Ministry of Education and Sports
NDP II	Second National Development Plan
NGO	non-governmental organisation
NTCs	national teacher colleges
NTP	national teacher policy
O levels	Ordinary levels
PASEC	Programme for the Analysis of Education Systems
PCK	pedagogic content knowledge
PGDE	postgraduate diploma in education
REB	Rwanda Education Board
RSA	Republic of South Africa
SACMEQ	The Southern and Eastern Africa Consortium for Monitoring Educational Quality
SBM	school-based mentor
SEA	secondary education in Africa
SESEMAT	Secondary Science and Mathematics Teachers
SK	subject knowledge
SNE	Special needs education
SSA	sub-Saharan Africa



SSL	school subject leader
TDMS	Teacher Development Management System
TIET	teacher instructor education and training
TMIS	teacher management information system
TMIS	teacher management information system
TSC	teacher service commission
UIS	UNESCO Institute for Statistics
UN	United Nations
UNATU	Uganda National Teachers' Union
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNITE	Uganda National Institute for Teacher Education
UPE	universal primary education
USE	universal secondary education
WDA	Workforce Development Authority



Background

Commissioned by the Varkey Foundation, this report is one component of a wide-ranging study on the education of secondary school teachers in sub-Saharan Africa. It provides information for the larger study, which culminates in an Overview Report. The full set of research products produced is given in Appendix 1. The Overview Report is one of 13 background papers which contribute to a comprehensive study of secondary education in Africa (SEA) coordinated by the Mastercard Foundation and supported by a number of donors.

Methodology

Uganda is one of four case studies selected for this research. The rationale for inclusion was based on both design and practical considerations, weighing up the need to conduct timely, rapid research and an identification of Uganda as a country with a number of valuable lessons to add with significant read across for other countries in the region. The process was also supported by the Varkey Foundation Uganda Country Office. Alongside in-depth research from Rwanda, Senegal, and South Africa the case studies are designed to inform the development of a best practice model for the continent.

The study's theoretical framework was developed out of the Literature Review, which also produced a set of research questions (detailed in Appendix 2) that guided the work of all components, including this case study. The report is structured according to these questions, following an outline of the context in which teacher education in the country finds itself.

Data for the case study was derived from academic and other literature, as well as interviews with key role players in the field of teacher education. These role players include government officials responsible for teacher education on a national and/or regional basis, teacher educators responsible for initial teacher education (ITE) and Continuous Professional Development (CPD), and teacher unions. Face-to-face interviews were conducted where possible, but some actors provided information via telephonic or electronic means. The list of interviewees is given in Appendix 3.

Document Overview

We commence this report with a description of the context in which the country finds itself at present: historical trends, socio-economic climate and an overview of schooling and teacher education.

This is followed by an examination of the preparation, deployment and support of secondary school teachers in the country under the key areas identified in the Literature Review and listed in Appendix 2: institutions which deliver initial teacher education; the programmes they offer and selection criteria applied on entry; the induction, mentoring and certification of new teachers; continuing professional development; performance management; and promotion and career paths.

The conclusion assesses the extent to which the policies and practices described above accord with the ways in which teachers are treated in countries which maintain highly successful school systems, and speculates on the implications of these trends for the future of schooling in the country.



Country context

Up until the 1960s, there was only one teacher training institute in Uganda: the National Teacher College (NTC) at Kyambogo, and one university which trained teachers, the Makerere University Faculty of Education. During the 1980s, additional national teachers' colleges were established to provide the additional teachers needed to cope with expanded access to schooling, with the NTC at Kyambogo becoming the Institute of Teacher Education Kyambogo (ITEK), and thereafter an education department when Kyambogo became a public university in 2003 (Ngobi et al, 2009). Kyambogo University retains the mandate to design the curriculum and award certificates for teacher training institutions at both primary and secondary levels.

The 1992, a flagship Education White Paper was developed, signalling the start of some transformational reforms to the education system. The paper includes the broad aims and objectives for teacher education (Ministry of Education and Sports, 2010), including:

- To broaden teacher trainees' own academic knowledge of teaching subjects as well as their understanding of the developmental stages and needs of the learner;
- To produce competent, reliable, honest, and responsible teachers;
- To produce highly motivated, conscientious, and efficient teachers;
- To develop and deepen attitudes conducive to development, respect for work, loyalty and self-reliance and to cultivate the desire for life-long education;
- To establish professional ethics and develop an inquiring mind for innovative education;
- To cultivate a sense of national consciousness, patriotism and allegiance to the professional code of conduct; and
- To prepare teachers adequately for efficiency in educational administration, management and evaluation.

The aims still guide the teacher education agenda, which is challenged by both expanding number of pupils and by a poor education management system (Ward, 2004). Other legislation governing teacher education include: the 2001 University and Other Tertiary Institutions Act, providing for the establishment and management of universities and other tertiary institutions (including national teacher training institutions), the 2002 Education Services Commission Act (which authorises the Education Service Commission (ESC) to appoint, confirm, validate and discipline teachers as per the Uganda Public Service Standing Orders), the 2008 Education Act (which provides for the regulation of education and training and teacher training, registration and licensing) and the Second National Development Plan (Republic of Uganda, 2015) which prioritises human capital development and emphasises relevance, quality, efficiency and effectiveness in education service delivery at all levels.

The goal of Uganda's Ministry of Education and Sports (MoES) is to provide inclusive and equitable quality education and promote lifelong learning opportunities. The Ministry acknowledges the role the quality of teachers plays in achieving this goal. The Department of Teacher/Instructor Education and Training (TIET) housed in MoES and headed by a Commissioner is responsible for all teacher development programmes, both in-service and pre-service, at both primary and secondary levels. Its mission is to "provide support,



guide, coordinate, regulate, and promote quality teacher, tutor, and instructor, education for the production of adequate, competent, and ethical teachers, tutors, and instructors,” (Ministry of Education and Sports, 2017a) and its vision is to “produce self-motivated reflective life-long learners who have the passion to develop talent and transform lives of Ugandans thus significantly contributing to the propelling of the country to middle-income status by 2040.”

Government education policy in 1997 of free education to all primary school going eligible children was followed ten years later by the introduction of free secondary education in government aided secondary schools. With the introduction of USE, enrolment at the secondary level rose from slightly over 900,000 students in 2005/06 to over 1.5 million students in 2009/10, indicating a 67% increase between the two survey periods: in that year primary enrolment represented 81.5% of the eligible population, with 14.4% of secondary-age children at school (Guloba, 2011).

Challenges in teacher education and recent responses

The initiation of drives to universal primary education, and universal secondary education brought into focus the need for more teachers. In 2014, it was shown that the number of secondary school teachers required would have to increase from 67 168 in 2013 to 166 060 in 2025 (UNESCO and Ministry of Education and Sports, 2014). Further data published by the Teacher Education Initiative in Sub-Saharan Africa (TISSA) in 2013 indicates that at lower secondary level, the number of teachers in government schools will have to be multiplied by 2.6 (low scenario) or by 5.6 (high scenario), which works out as new teacher numbers varying between 4 400 (low scenario) and 10 000 (high scenario) per year. In private lower secondary schools, the size of the teaching force will have to be multiplied by a factor of 2.4 or 2.5, hence corresponding to an average annual new recruitments of about 7 800 to 8 400 new teachers per year. At upper secondary level, the number of teachers in government schools will have to be multiplied by 3.4 (low scenario) or by 4.4 (high scenario), which is about 735 (low scenario) and 975 (high scenario) new teachers per year. In private upper secondary schools, the size of the teaching force will have to be multiplied by a factor of 1.6 or 2.1, hence corresponding to average annual new recruitments of about 455 to 807 new teachers per year (TISSA/MoES, 2013).

Apart from a shortage of qualified teachers, Uganda faces several other challenges in teacher education: a lack of quality teacher educators, competency gaps in current teachers’ subject knowledge, variable quality and duration of teacher education (with little time devoted to pedagogical and professional training and mentoring), un-institutionalised CPD and no agreed upon basic standards for teachers and teacher educators. (UNESCO and Ministry of Education and Sports, 2014).

Following its 2016/17 performance review, TIET identified the challenges that continue to compromise the quality of teacher training (Ministry of Education and Sport, 2017b: 133):

- The capitation grant of UGX (Ugandan shillings) 1 800 (approximately US50¢) per trainee per day is insufficient to cover college operational costs;
- There is an ongoing ban on recruitment in teacher training institutions, despite these institutions being understaffed; and



- There is a need for constant support and supervision to ensure quality training, but the department lacks capacity and this compromises quality.

These problems are essentially finance-related. However, in the past five years, the MoES has taken a number of steps to address these challenges. According to a TIET official, a teacher management information system (TMIS) has further developed with support from UNESCO¹; and although not yet publicly accessible, frameworks for ITE, CPD and teachers' incentives/motivation have been developed with the support of UNICEF, along with teacher, tutor and instructor competency profiles.

In particular, a draft national teacher policy (NTP), intended to improve the quality of teacher education and to raise the status of the teaching profession to a level comparable to the high status professions such as medicine and the law, is pending approval by Cabinet and Parliament. Its specific objectives include (UNESCO, 2017):

- Streamline teacher management for better productivity, discipline, retention and motivation;
- Strengthen pre-service and in-service teacher training to enhance competences to effectively deliver quality learning outcomes and leadership at all levels of the education cycle;
- Standardise teacher development qualifications and practice across all levels of education; and
- Streamline the integration of cross-cutting issues, such as communication and other soft/transferable skills, into every aspect of teacher training, management and practice at all levels.

Taking its cue from Target 4.c of Sustainable Development Goal 4 - to substantially increase the supply of qualified teachers by 2030 – the NTP provides a comprehensive new vision for teacher education in Uganda. The NTS calls for policy and legislative measures to make the teaching profession more attractive to current and potential staff, and serves as an umbrella for various frameworks developed on teacher issues, including the Continuous Professional Development (CPD) framework, the Harmonized Initial Teacher Education Framework, the Teacher Qualification Framework and Competency Profiles, the Teacher's Motivation Framework, the Quality Assurance Framework for Teacher Education and the Gender Responsive Pedagogy (GRP) Mainstreaming Framework in Teacher Education. Adopted by the Education Sector Consultative Commission (ESCC) in September 2017, the impending implementation of the NTP by government renders much of what follows, which describes current arrangements with respect to teacher education, in a state of transition.

Added to this is the low status and remuneration of teachers in Uganda. Recent research on the status of teachers across the world found that in Uganda (one of two Sub Saharan African countries included in the sample), teaching is one of the least respected professions in the country. While Ugandan teachers are highly respected by their pupils, many people in the country equate the status of teachers to that of a librarian. The research also found that the wage that Ugandan teachers earn is significantly lower than the what many Ugandans perceive to be a fair wage, and much lower than their counterparts in other regions (Varkey Foundation 2018).

¹ See: https://www.tmis.go.ug/page/about_us



Developments in the PPP space

The large increase in learner numbers and has led to the development of an innovative public-private partnership (PPP) approach (Ward, 2004; Barrera-Osorio et al, 2016). Under the PPP programme, the government offers a per-student subsidy to participating private schools. The PPP programme was initiated in 2007 under the overall umbrella of the USE policy. Eligibility for this programme was defined to include all registered and certified private schools charging 75,000 UGX per term or lower. For these schools, government provides a grant of 47,000 UGX per term per eligible student. In addition, schools may enrol private students who are not eligible for the grant. Under the partnership, private schools apply to the Ministry of Education and Sports (MoES) and must meet a set of certification and quality benchmarks.

An evaluation of the public-private partnership programme (PPP) for secondary schools reported that teachers were present in class at the time of visit in PPP schools, and that it also had a discernible impact on infrastructure, with an increase in reported science laboratories in treatment schools. Furthermore, not only did schools that participated in the programme increased enrolment by 35%, but student performance in participating schools was significantly better: in particular, the set of students exposed to more than a year of the PPP programme exhibited test scores in Math, English and Biology that were in the range of 0.07 to 0.16 standard deviations better than students in non-participating private schools (EPRC, 2018; see also Crawford, 2017).

The PPP programme is an innovative way of increasing access for secondary school learners. However, it has two unintended negative consequences. First, quality is more difficult to assure in the private sector, where the tendency to maximise profit by cutting costs is an ever-present temptation, and employing less qualified teachers, which are inevitably cheaper, presents a relatively easy cost-cutting measure. That this tendency is happening is suggested by the fact that 86% of unqualified teachers work in the private sector. This situation must be of concern to government, particularly so given that 69% of all secondary schools are private (UNESCO, 2017).

The second downside of the PPP programme is that secondary schooling is becoming increasingly privatised, which places an additional financial on poor families, undermining the potential of schooling to provide an escape from poverty and widening socio-economic inequities.

The types and nature of ITE qualifications

There are differences between programmes for lower-secondary (diplomas) and upper-secondary (degree) qualifications. Lower-secondary programmes are of shorter duration and cover more subject bases. Upper-secondary programmes are longer in duration, and usually require subject specialisation. ITE qualifications include bachelor's degrees (three years in duration), Grade V diplomas (two years in duration) and postgraduate diplomas in education (a year in duration). Currently, Grade V teachers may only teach in lower-secondary schools.

Table 1: Teacher education qualifications for secondary teachers

Qualification	Duration	Awarding institution	Enables holder to
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Bachelor degree in Education	3 years	University	Teach Upper Secondary
Post-graduate diploma, following a Bachelor degree without Education	1 year	University	Teach Upper Secondary, or Specialise (e.g. in Leadership)
Diploma in Secondary Education (DSE)	2 years	National Teacher College	Teach at Lower Secondary

However, the status of these qualifications is currently in transition, with the Harmonized Framework for ITE (see below), due to be implemented in 2018, requiring that all secondary school teachers (i.e. in both lower- and upper-secondary schools) to obtain at least a bachelor's degree, which NTCs currently do not offer.

Forms of assessment vary by college and university, but generally consist of coursework, examinations, and lesson observations during school practice. School practice is constrained by insufficient resources and inadequate supervision, according to one Kyambogo University official interviewed.

Selection into ITE

Teachers in primary education should hold at least a Grade III certificate obtained after a two-year course in a teacher training college. The entry requirement into a PTC is successful completion of a UCE examination with at least six passes which must include English and Mathematics.

The entry level requirement for a Diploma in Secondary Education/Grade V is an Advanced Level (A Level) certificate with two principal passes in arts subjects, or one principal pass in a science subject and two subsidiary passes in science subjects.

The entry requirement for a Bachelor of Education (B Ed) degree (including BSc/Ed and BA/Ed) is an A Level certificate with two principal passes in any of the arts, science and vocational subjects, a Grade V teachers' certificate or a diploma in special needs education (DSNE) with two years of experience. In order to teach in upper secondary schools, teachers must hold a degree, and this will soon be required of lower secondary teachers as well (see below).

Entry into the postgraduate diploma in education (PGDE) requires a bachelor's degree.

Many ITE candidates possess low-quality literacy and numeracy skills. Many of them applied for, but failed to be selected into, other university academic programmes. Anecdotal evidence gathered during a 2012 World Bank study suggests that many of those who go into education programmes at university or NTCs do so because they do not have the required number of points in the joint admissions systems to higher education institutions to be admitted to a more prestigious course of studies (such as accounting or law), and those who enrol for diplomas typically come from poor-performing schools and backgrounds (Jaimovich, 2012). The low social recognition and perceived limited motivation of the teaching profession make it unattractive to the best candidates (Ministry of Education and Sports, 2017c)



Research shows that the poor quality of pupils' learning outcomes is strongly correlated with the poor quality of teaching and that effective pupil learning and achievement are hampered by teachers' pedagogical skills and classroom practices, something that is well recognised by the government (UNESCO and Ministry of Education and Sports, 2014). A principal at one of the teacher training institutions acknowledges this: "When the teacher students are admitted to the colleges and they are found to be lacking in subject content and knowledge, the teaching changes to remedial in order to improve subject knowledge before embarking on the curriculum."

However, as noted above, the draft National Teacher Policy envisages a comprehensive overhaul of ITE, including a pre-entry assessment of prospective teachers, to be undertaken by the Education Service Commission, the Ministry of Education and the Directorate of Education Standards (DES).

ITE institutions

ITE is offered at NTCs and universities. NTCs offer diplomas for lower secondary school teachers, while universities offer degree programmes.

There are currently 5 public NTCs and 1 private NTC and 10 public and over 25 private universities using mixed methods of delivery, including face-to-face and distance or part-time modules (Ministry of Education and Sports, 2017c).

In 2017 and 2018, enrolment numbers in the NTCs were estimated to be 3 751 for diploma courses, while over 12 000 students were reported to be pursuing diplomas and degrees at the universities (Ministry of Education and Sports, 2017d). The numbers enrolled in ITE programmes at private universities are not published and therefore not available for the purposes of this research, except through direct contact with the institutions concerned.

The figure for public universities was first calculated as an annual estimate in 2007, though, and was interpreted several years later – suggesting that Uganda was overproducing public secondary school teachers (UNESCO and Ministry of Education and Sports, 2014), with the problem becoming a lack of government funding to employ these additional teachers (Mulkeen, 2010). In addition, 20 285 trainee teachers were enrolled at the 52 Primary Teacher Colleges (PTCs) in 2016, across two yearly cohorts, in preparation for teaching in primary schools (Ministry of Education and Sport, 2017b).

Government pays a capitation grant of UGX 1 800 (approximately US\$0.50) per enrolled trainee per day at NTCs, and up to 80% of pre-service trainees in NTCs are subsidised in this way (UNESCO and Ministry of Education and Sports, 2014). In addition, students at both public and private universities may qualify for loans through the Higher Education Financing Board. Since 2016 teacher education has been allocated 2,5% of Uganda's recurrent education budget (Obiero and Ezati, 2018). For the financial 2017/18 year, UGX 10 068 000 000 (about US\$2,7 million) – equivalent to 0,4% of the total education budget – was allocated to teacher education.



The content of ITE programmes

National Teachers' Colleges

Kyambogo University, increasingly in conjunction with the National Curriculum Development Centre (NCDC), sets the national curriculum for NTCs. Programme content is usually a mix of pedagogical and subject knowledge, plus two school practice sessions in Year 2 and Year 3. NTCs award secondary teachers with a Diploma Secondary Education (DSE). The course's duration is two years. It is not yet clear what will happen to this programme when the new teacher policy is rolled out, as the policy requires that all secondary school teachers have a minimum of a bachelor's degree. The DSE offered in NTCs is also offered at Kyambogo University. The DSE has three compulsory foundational courses: professional studies, development studies, and educational psychology and various electives (see Appendix 4 for details).

Universities

The universities are autonomous entities, and the structure and content of their teacher education programmes vary. At Makerere University, the oldest traditional university in Uganda, the College of Education offers three-year programmes leading to bachelor's degrees for arts and science teachers for secondary school (BA/BSc with Education).

In their first year, students study courses in educational foundations, psychology and curriculum, together with two secondary school subjects (a major and a minor). Educational foundations courses are aimed at helping students acquire critical awareness of educational problems and processes, the skills to analyse, evaluate and interpret relationships between education and society and apply these in real educational issues and favourable dispositions in applying such knowledge and skills. Curriculum courses provide students with basic concepts and skills in curriculum theory, theory of instruction and curriculum design and development, train them in the use of instructional facilities and materials and equip them with the cognitive knowledge and practical skills for effective execution of their professional roles. Educational psychology courses also provide training in research methods. See Appendix 5 for the structure of the Makerere teacher education programme.

Other universities, such as Uganda Christian University (Faith Based- Protestant), the faculty of Education and Arts also offers three-year bachelor's programmes in Arts and Science with an added Bachelor in Education. Uganda Martyrs University (Faith Based Catholic) aims to develop an integral person by providing high-quality teacher/lecturer education in a conducive environment in order to produce creative and competent professional so as to serve the nation and the world guided by values in working in the education field. The university offers five three-year BA degrees in Education for Arts and Science secondary teachers including with specialisation in Early Childhood Education, English Language and Literature with Education and a specialised degree in Primary Education.



The Harmonised Framework for ITE

The proliferation of training institutions in both the public and private sectors, especially at university level, as well as the lack of agreed basic training standards present hindrances to improvements in the quality of teachers, with the quality of teacher education varying significantly between regions and universities (which often have different curricula) (Ministry of Education and Sports, 2017c). NTCs, on the other hand, are more homogenous in terms of curricula and curriculum delivery, although the quality is often questionable. For example, a study in 2007 found that only 15% of NTC students were studying mathematics, despite mathematics and science accounting for 40% of schools' curriculum time; entry requirements for prospective mathematics and science teachers at NTCs were subsequently lowered in an attempt to increase the intake in these subjects (Mulkeen, 2010). While anecdotal evidence suggests that NTCs produce better quality teachers than universities, a 2011 assessment found that teachers' tested results did not differ significantly in relation to their teaching qualifications (Jaimovich, 2012).

The poor quality of teacher education in general and the variable quality across institutions (World Bank, 2018) were significant factors motivating for the formulation of the NTP. While quality is seen as a problem in the sector overall, it is of particular concern with respect to the private sector which is subject to considerably less regulation than the public sector. In 2010, 12.7% of primary school teachers and 16.1% of secondary school teachers were unqualified, the large majority of which (86%) were employed in the private sector. Keeping in mind that 69% of secondary schools are private, this situation is particularly worrying, because it means a majority of secondary level students are taught by unqualified teachers, and another goal of the NTP is to increase the number of qualified teachers in private schools (UNESCO, 2017). A central part of the NTP - the Harmonized Framework for ITE - proposes that ITE programmes consist of 14 modules (Table 2) (Ministry of Education and Sports, 2016).

Table 2: Proposed modules for ITE, Harmonised Framework for ITE

Module title	M1: Participate in curriculum development
Module purpose	After completing this module, the trainee will apply theoretical knowledge of curriculum development to design and review curricula.
Learning-working assignments (LWAs)	LWA 1: Carry out situational analysis LWA 2: Determine curriculum goals and objectives LWA 3: Implement the curriculum LWA 4: Evaluate curriculum
Module title	M2: Facilitate teaching and learning
Module purpose	Upon completion of this module, a trainee will be able to plan and execute plans for teaching. In addition, they should be able to evaluate the teaching and learning process.
Learning-working assignments (LWAs)	LWA 1: Prepare to teach LWA 2: Implement teaching LWA 3: Oversee practicum/field-based/experiential activities
Module title	M3: Evaluate teaching and learning activities



Module purpose	On completion of this module, the trainee will be able to evaluate teaching and learning processes as well as assess learning achievement. The trainee should acquire skills in the design and administration of appropriate tools, and in marking and grading.
Learning-working assignments (LWAs)	LWA 1: Evaluate teaching and learning LWA 2: Assess learning
Module title	M4: Enhance teaching and learning effectiveness
Module purpose	After completing this module, a trainee will be able to create the necessary environment for enhancing learning effectiveness. They should counsel learners, ensure their safety and health, and provide the needed teaching and learning resources, including computers.
Learning-working assignments (LWAs)	LWA 1: Conduct health, safety and environmental conservation practices LWA 2: Apply computer skills in teaching and learning LWA 3: Carry out counselling and guidance LWA 4: Maintain equipment/tools/materials and supplies
Module title	M5: Implement non-teaching programmes
Module purpose	After completing this module, a trainee will be able to implement co-curricular and school-community programmes.
Learning-working assignments (LWAs)	LWA 1: Carry out co-curricular activities LWA 2: Carry out school-community activities
Module title	M6: Participate in professional and personal development
Module purpose	After completing this module, a trainee will be able to develop themselves at a personal and professional level. They are also expected to be financially literate.
Learning-working assignments (LWAs)	LWA 1: Participate in continuing professional development LWA 2: Perform entrepreneurship activities LWA 3: Carry out personal development activities LWA 4: Acquire financial literacy
Module title	M7: Carry out administrative roles
Module purpose	After completing this module, a trainee will be able to carry out basic administrative roles. They will be able to manage classroom or laboratory level activities and some school or institutional level activities.
Learning-working assignments (LWAs)	LWA 1: Keep records LWA 2: Participate in administrative activities LWA 3: Manage teams
Module title	M8: Carry out action research in education
Module purpose	After completing this module, the trainee will be able to carry out research and produce a research report. They will be able to use both qualitative and quantitative research methods in the area of education practice and policy, as well as disseminate scientific findings to the public.
Learning-working assignments (LWAs)	LWA 1: Write a research proposal LWA 2: Collect data LWA 3: Analyse data LWA 4: Prepare a research report
Module title	M9: Modules on education for sustainable development



Module purpose	After completing these modules, the trainee will have an understanding of the concept of education for sustainable development and be able to apply it in the classroom.
Module title	M10: Modules on psychology
Module purpose	After completing these modules, the trainee will be able to apply knowledge of psychology to improve the teaching and learning process, counselling and other educational aspects.
Module title	M11: Modules on foundations of education
Module purpose	After completing these modules, the trainee will be able to apply knowledge of philosophy, history of education, educational administration and comparative education to understand education in local and global contexts.
Module title	M12: Module on subject content
Module purpose	After completing this module, the trainee will be able to handle teaching at the relevant level of education.
Module title	M13: School practice practicum/field attachment/practical attachment
Module purpose	The main goal is to enable the trainee to acquire the necessary practical experience (knowledge, attitudes and skills) in the world of work. A period of six to 12 weeks should be the minimum, and this should be done at least twice during the course of training.
Module title	M14: Module on gender considerations in teacher training
Module purpose	After completing this module, the trainee will have increased awareness of gender issues in education, and will be able to design gender responsive interventions to address gender gaps in education.

The Harmonized Framework for ITE highlights five competence areas in the professional life of a teacher that collectively contribute to teacher effectiveness, and these form part of the school practice assessment. A student teacher supervisor should be able to assess the extent to which the student teacher's competency in the following areas during school practice: facilitating student learning, understanding and organising subject matter for learning, assessing and reporting student learning outcomes, engaging in professional learning, participation in curriculum policy and other programme initiatives, and forming partnerships with the school community and beyond.

Induction

The Education Service Commission's 2013 *Scheme of Service for Teaching Personnel in Secondary Schools* stipulates mandatory formal school-based induction for all new teachers. However, an interview conducted with a Ministry official as part of the present study indicates that this is not always done. Moreover, induction programmes, where they take place, focus largely on introducing the teacher to other teachers and school management, briefing them on the school's mission and rules, and issuing them with instructional materials and textbooks, rather than focusing on instructional support (Jaimovich, 2012).



Licence to practice

There is a formal licensing process for teachers which is undertaken by the Ministry. Section 13 of the 2008 Education Act provides for application of registration as a teacher for any person who has successfully completed a teaching training course (Government of Uganda, 2008). Once a teacher is qualified with a diploma from NTC, or a Bachelor degree in Education or a non-Education Bachelor degree and PGDE from a university, they may apply for a license to practice. There is a probationary period of six months (formerly two years) after which a teacher may be confirmed following a satisfactory appraisal by their supervisor (normally the head teacher). This presents a considerable lag-time whereby newly qualified teachers are immediately unemployed following graduation.

The supervisor submits the appraisal to the Ministry, which in turn submits a request for confirmation to the Education Service Commission (ESC). Recommendations for confirmation are made by heads of institutions and inspectors of schools and submitted to the Ministry at the end of the probationary period. The draft NTS of 2017 identifies a lack of procedures for accrediting teachers to ensure that individuals who wish to teach possess the necessary knowledge competencies and attributes, and has proposed putting an accreditation mechanism in place to assess these competencies (Ministry of Education and Sports, 2017c).

Teacher performance management

The Uganda Public Service Standing Orders provides guidelines for performance management of teachers, according to which teachers are to be appraised by head teachers or principals, who, together with individual teachers, agree on certain performance targets each year (such as preparing schemes of work timeously and in the appropriate format, preparing teaching aids and lesson plans in advance of lessons, teaching at the specified times, student satisfaction with lessons and prompt feedback to and assessment of learners (Ministry of Public Service, 2007; Jaimovich, 2012). However, interviews conducted during the present study indicate that, while appraisal does take place, it is often ritualistic and ineffective. Furthermore, the SABER country report for Uganda notes that, while principals are expected to monitor teacher performance and provide support to teachers to improve instructional practice, there are no specific training requirement to ensure that principals have the necessary skills to act as instructional leaders and successful managers (Jaimovich, 2012).

The Continuous Professional Development Framework, another key element of the NTP, proposes that teacher assessment, appraisal and support supervision be competence- and school-based, with the following recommendations (Ministry of Education and Sports, 2017e):

- Schools set targets to be achieved at the end of the year through consensus with teachers from different departments;
- Individual teachers set their annual competency targets and performance goals;
- Supervisors/administrators evaluate competency levels throughout the year;
- Teachers consult with their supervisors at the end of the year for the appraisal; and
- Teachers undergo a major performance review when considered for promotion.



Continuing Professional Development

CPD activities may be initiated by government agencies, donors, schools; and those initiated by individual teachers, although the latter two categories are rare (Ssebbunga-Masembe et al, 2013). Regarding the first or these, a teacher in service may grow professionally either vertically or horizontally through upgrading to improve qualifications, refresher courses, planned induction courses, workshops and seminars, research to improve quality of education or service, publishing relevant materials and ethical and moral training (Education Service Commission, 2008; Jaimovich, 2012). A government-sponsored Coordinating Centre Tutor (CCT) system has been providing CPD since the 1990s (Centre for International Education, 2018), but a survey conducted in 2009 found that 78% of teachers interviewed reported that their CCTs never conducted a session in their district, with 65% saying that their schemes of work and lesson plans had never been checked; these shortcomings were attributed to a lack of funds, a lack of transport and heavy workloads of staff concerned (Jaimovich, 2012). Interviews conducted by Eto (2016) with teacher trainers revealed that they find it difficult to conduct more CPD activities due to the lack of funds as well as human resources.

These projects normally do not cover the entire teaching force. Recent projects have included:

- The In-service Secondary Teacher Education Project (INSSTEP), funded by the World Bank's International Development Association (IDA) and the government of Uganda, works to increase efficiency and effectiveness of secondary education by establishing a network of secondary teacher resource centres in 39 districts;
- The Secondary Science and Mathematics Teachers (SESEMAT) project, funded by the Japan International Cooperation Agency (JICA) and government of Uganda since 2005, is aimed at improving the classroom practices of science and mathematics teachers; and
- The Teacher Development Management System (TDMS), which aims at improving the effectiveness of teaching and learning through increasing the availability of well-trained teachers, institutionalised in-service training of service managers, school managers and administrators, and enhanced community participation in schools.

CPD is not linked to re-licensing, because licensing is done only once. CPD is also not linked to career progression.

The draft 2017 CPD framework, yet another element of the NTP, recognises that in-service training for teachers is generally limited, not well organised, and not institutionalised, resulting in a qualification driven self-sponsored teacher rush for upgrading (Ministry of Education and Sports, 2017e). The new CPD framework has been developed to enable the development of a coherent long-term plan to improve teacher effectiveness, institutional leadership and student learning in the country. It outlines how CPD should be structured, monitored and evaluated. The framework also spells out teacher competency standards which were not previously emphasised in Ministry policies. The framework aims to achieve the following objectives:

- Strengthen teacher competencies, ethics and professionalism;
- Guide the implementation, monitoring and evaluation of CPD for teachers;



- Guide the identification of teacher professional development needs;
- Guide the development of standards for teaching and leadership at various levels of education;
- Provide a basis for assessing, recognising and rewarding teachers' achievement in a variety of professional activities;
- Guide the formation of communities of practice to enhance ethical conduct, professionalism and cross-disciplinary collaboration among teachers.

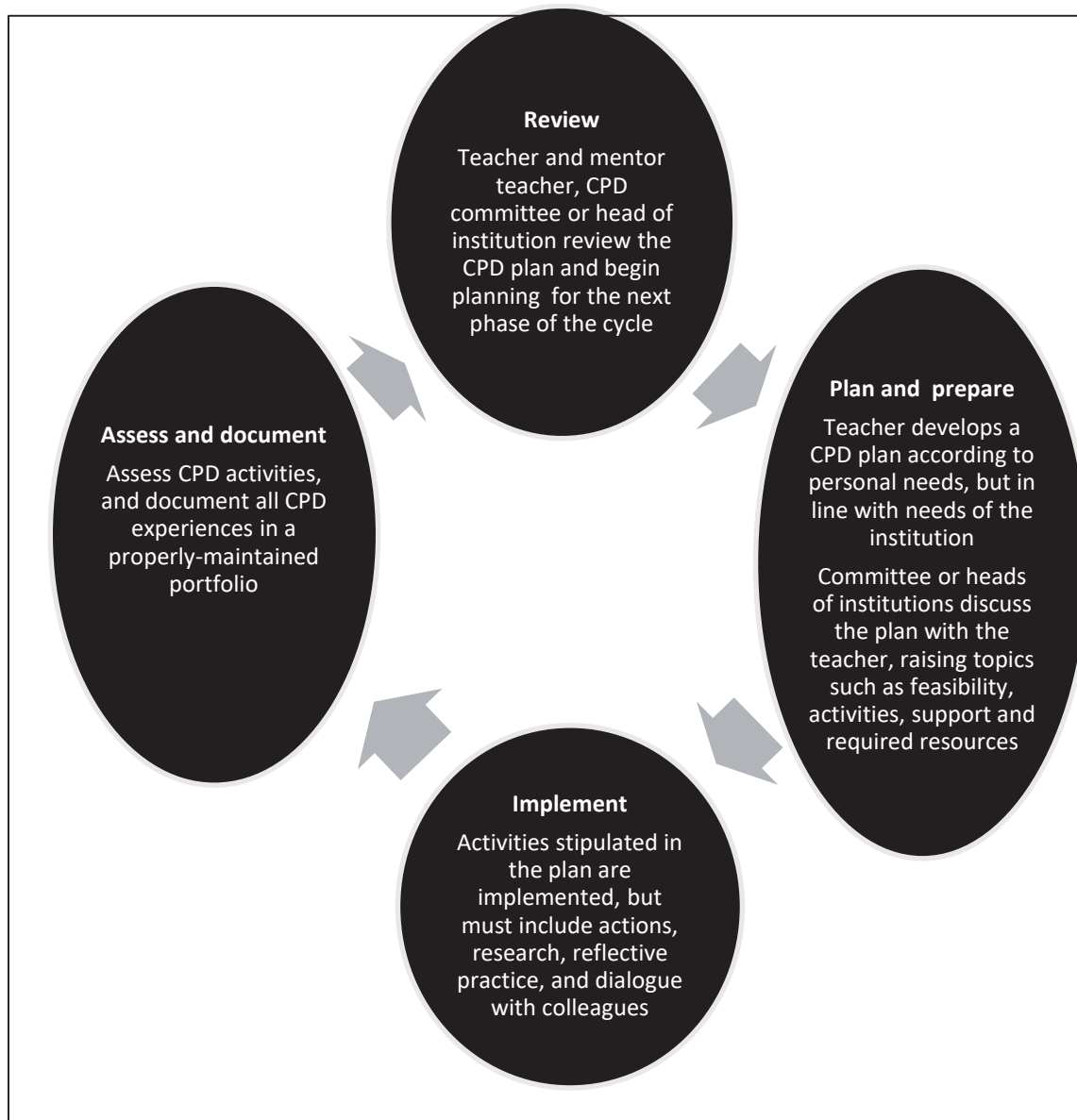
According to the CPD Framework, every teacher will be required to have accumulated 20 points of CPD activities which would be documented by the National Teachers' Council and other relevant organs for purposes of career progression each year (Ministry of Education and Sports, 2017e). The CPD framework also recommends the establishment of the Uganda National Institute for Teacher Education (UNITE) as an autonomous institution to be responsible for spearheading the training of tutors and the delivery of CPD activities. Through UNITE, teacher training institutions will be linked to the CPD implementation framework.



Note: Administrative support, including the assessment of competences and appraisals, as well as induction, mentoring, coaching and support supervision activities take place throughout the implementation cycle.



Figure 1: Implementation of the CPD cycle



Source: CPD Teacher Framework (Ministry of Education and Sports, 2017e)

Promotion

The Uganda Public Service Standing Orders specify the procedures for promotion (Ministry of Public Service, 2007). The promotion process is undertaken by the ESC following a request from the Ministry of Education and Sports to fill existing gaps. According to an interview conducted with an ESC official for the present study, promotion depends on the existence of vacancies and eligibility such as required competencies and experience: normally a minimum of three years' service at the lower grade is required although there are cases of accelerated promotion.



The Scheme of Service lays out six promotional steps for progression from an assistant education officer to head teacher. Promotion beyond head teacher in the current career structure is restrictive, and encourages teachers to seek promotion by moving out of the classroom and into leadership positions. However, a 2009 study found that head teachers are not adequately prepared for their roles, enjoy few professional development or up-skilling opportunities and require training which is contextualised and targeted (DeJaeghere et al, 2009).

Sometimes promotion depends on further training (such as through CPD), but this is mostly ad hoc and prospects for advancement are limited until someone retires or dies; There is also a lot of lobbying in the system, which may prevent the best candidate from securing a promotion post (UNESCO and Ministry of Education and Sports, 2014).

Conclusion

In conclusion we turn to an analysis of how the recent development in the Ugandan schooling system described above accord with international 'best practices', and how they may be directed so as to achieve optimal impact. What can be called 'best-practicology' has enjoyed a great deal of attention in the last decade, manifesting in influential publications such as the two McKinsey Reports (Barber & Mourshead, 2007; Barber, Chijioke and Mourshead, 2010), the work of Marc Tucker (2011) and others, and most recently a new book by Andreas Schleicher (OECD, 2018).

This literature converges around a list of reforms for improving teaching practices and learning outcomes, what we described as the best practice model (BPM) in the Literature Review which initiated the present study. But the BPM is not a list of boxes to be ticked in any order. When pressed to prioritise among his list of seven key reforms, Tucker opts for two: developing a quality teaching force, and ensuring coherence in the design of the overall education system. It is self-evident that well-educated teachers are required to educate learners well. Countries which are proud of their teachers and the performance of schooling select the best candidates and educate them thoroughly in subject knowledge, pedagogical knowledge and the practical arts of pedagogy (defined by Tucker as High mastery of complex content). All the pundits agree on this, with the first McKinsey report coining what has become a popular rallying cry: The quality of an education system cannot exceed the quality of its teachers (Barber & Mourshead, 2007).

The rapid expansion of primary schooling in Uganda from 1997, followed by the introduction of universal secondary education in 2007, have been very successful in increasing access to schooling at both levels. At the same time, these developments have placed enormous strain on resources available to the school sector, the most important of which are quality teachers. In response to these challenges, the Ministry of Education and Sports – in conjunction with other government agencies and departments, the teachers' union, the private sector, teacher education providers and a number of international development actors – produced a wide-ranging National Teacher Policy (NTP). Although currently in draft form, the NTP is a comprehensive plan which encompasses the standardisation and integration of ITE and CPD; a set of probationary, induction and licensing procedures for new teachers; and the linking of professional development to teacher management and promotion.



At face value these policy proposals accord with the BPM. However, they do present something of a double-edged sword. On one hand, if faithfully implemented in all aspects, the NTP holds the promise of placing the Ugandan school system on track to progressively ascend to the higher levels of quality required to equip citizens with the knowledge, skills and attitudes they need to build a prosperous nation. On the other hand, the danger exists that implementation will be incomplete and, while the NTP lulls policy makers into a sense of complacency, things will continue unchanged. Indeed, a number of the proposals contained in the draft new policy – such as the promotion of educators – have been in place for some years and it would seem that their incomplete application has been due to a lack of capacity at successive levels of management.

Key to the successful implementation of the ambitious new policy proposals is the ability of teachers to teach effectively; of school-level leaders to assess and support the work of teachers; of managers throughout the system to reward good practice and diagnose and remediate the kinds of problems which inevitably arise in any large and complex system such as schooling; and, most important of all, of teacher educators – those responsible for both ITE and CPD – to provide the knowledge, skills and attitudes required for all these functions. On Tucker's first priority, no country can hope to improve the quality of education conveyed to the next generation without very well-educated teachers.

A number of factors should be taken into account in designing the details of a teacher professional development programme for Uganda. First, there is wide agreement in the literature that teacher professional development is key to the quality of teaching (Darling-Hammond, 2000; Musset, 2010), and that ITE and CPD should be integrated into a continuum which supports teachers' capacity throughout their careers (Nakabugo et al, 2009; Musset, 2010; McMahon et al, 2015). Second, there is strong evidence that teacher development is more likely to improve student learning outcomes if it increases teachers' understanding of the content they teach, how students learn that content and how to represent and convey that content in meaningful ways (Darling-Hammond, 1999; Cohen & Hill, 2000). Third, is the broad distinction made most explicitly by Musset (2010) that ITE provides teachers with a solid base of the knowledge and the skills that they will need for their task, while CPD allows them to update their knowledge and skills, and to adapt these to changes in the teaching environment. Fourth, account needs to be taken of the research findings that CPD in the form of short workshops has little effect on teaching practice, and that an effective programme should last at least for several days, it must be subject-matter specific, and its content and emphasis must be articulated taken into account the instructional goals and the challenges faced by the school in which the teacher is working (Hill, 2007).

How do we take all four factors into account in designing a comprehensive professional development programme for Uganda? If, as detailed in the body of the present report, student teachers come into ITE with poor foundation skills which will require extensive training to remediate, and if teachers have to take time off school to attend CPD workshops, it follows that these foundation skills will be best taught during ITE, when extended periods of time are available and no classroom duties compete for teachers' time. This logic provides a strong argument against teacher education policies which provide a relatively short period for ITE – on the grounds that this is a less expensive option in terms of both finances and time – and plan to make up any knowledge and skills gaps during CPD. In the long run, the most effective strategy for improving the quality of learning outcomes is to prioritise ITE and ensure that students do not graduate without a sound grasp of both the subject matter they are to teach and the most effective ways of teaching



it. It goes without saying that the latter aspect, effective pedagogy, requires extensive time in schools under the expert guidance of experienced mentors.

Prioritising ITE in the development of foundation skills in disciplinary knowledge does not mean that CPD should be neglected, merely that the specificity of each should be recognised and optimally exploited. What is the specificity of CPD? There is a growing realisation that the most effective forms of CPD place the school at the centre of the programme and are designed accordingly (Musset, 2010). Research indicates that programmes that are linked to specific school needs are more effective, especially activities based on demonstration and peer-review. School-focused CPD provides opportunities for synergies develop among the teachers and the staff of the school. There should be tight linkages between teachers' own professional development, their classroom responsibilities and the school's goals. Successful education systems such as Ontario, Finland, Japan, South Korea, and Singapore devote considerable time at the school level to activities that are related to instructional improvement, such as collaboration among teachers on the analysis of instructional practice, mentoring, and professional development (Darling Hammond & Rothman 2011, Darling-Hammond 2010, Levin 2008). Teamwork of this kind has also been found to improve teachers' sense of job satisfaction, which in turn reduces teacher attrition.

School-focused CPD models hold important implications for the skills required by school-level leaders, who hold the responsibility for structuring regular engagements between teachers on matters of curriculum, pedagogy and assessment. These skills would include strong disciplinary and pedagogical knowledge on the part of school leaders, as well as the ability to lead teams of educators through structured activities focused on improved teaching and learning. It follows that school leaders should be selected on the strength of and trained in these skills.

A final point on educator professional development concerns quality assurance. On the input side, the NTP currently under consideration in Uganda envisages the harmonisation of both ITE and CPD programmes. This is an important first step to building quality in the system. However, programmes which appear to be well designed and follow a set of standards do not necessarily lead to knowledgeable and skilled teachers. In recognition of this problem, Musset (2010) reports that in half of the OECD countries, to have followed a teacher education programme is no sufficient to get a certification to teach: thus, in France, Germany, Greece, Italy, Japan, Korea and Spain, aspirant teachers have to pass a competitive exam to be certified and enter the profession. The examination can be used to obtain a teaching license but also to obtain tenure in a public school. In other countries, they also have to complete a probation period before getting their certification. Here Uganda's NTP makes provision of teacher licensing, which provides space for assessing teachers' knowledge and skills prior to employment.

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Appendix 1: Research products

The investigation into the education and support of secondary school teachers in SSA produced seven research reports:

1. Literature Review

Taylor, N. and Robinson, N. (2019). SECONDARY EDUCATION IN SUB-SAHARAN AFRICA: Teacher Preparation and Support. LITERATURE REVIEW

2. Market Scan Report

Robinson, N. and Taylor, N. (2019). SECONDARY EDUCATION IN SUB-SAHARAN AFRICA: Teacher Preparation and Support: MARKET SCAN REPORT

3. Four Case Study Reports:

Adotavi, J. & Taylor, N. (2019). SECONDARY EDUCATION IN SUB-SAHARAN AFRICA: Teacher Preparation and Support. CASE STUDY: SENEGAL.

Arinaitwe, J., Taylor, N., Broadbent, E., and Oloya, C. (2019). SECONDARY EDUCATION IN SUB-SAHARAN AFRICA: Teacher Preparation and Support: CASE STUDY: UGANDA.

Taylor, N. and Robinson, N. (2019). SECONDARY EDUCATION IN SUB-SAHARAN AFRICA: Teacher Preparation and Support. CASE STUDY: SOUTH AFRICA.

Uwase, J. & Taylor, N. (2019). SECONDARY EDUCATION IN SUB-SAHARAN AFRICA: Teacher Preparation Support. CASE STUDY: RWANDA.

4. Overview Report

Taylor, N., Deacon, R. and Robinson, N. (2019). SECONDARY EDUCATION IN SUB-SAHARAN AFRICA: Teacher Preparation Support. OVERVIEW REPORT.



Appendix 2: Research questions

A set of research questions was formulated to probe policies and practices in each of the eight areas of interest:

1. SELECTION INTO ITE:

- What criteria are applied in selecting prospective teachers into ITE programmes?
- What is known about the knowledge and skills they bring from school?

2. ITE INSTITUTIONS

- What kinds of institutions train teachers (colleges/universities/schools)?
- What are the delivery modalities (face-to-face/distance/mixed)?
- What is the size and shape of the ITE system in terms of:
 - number of institutions;
 - enrolment numbers, through-put and drop-out rates, number graduating;
 - spend per teacher on teacher training;
 - the nature and extent of financial support offered to students;
 - percentage of the education budget allocated to teacher education; and
 - regional differences in provision and capacity?

3. THE NATURE AND CONTENT OF ITE PROGRAMMES:

- Describe the content of ITE courses in terms of the subject mix, the balance between content and pedagogical knowledge, the breadth and depth of subject content addressed, the pedagogical strategies advocated, and the nature of the teaching practice component.
- Are there differences between programmes for upper and lower secondary teachers? If so, how do they differ?
- Describe the content of the various programmes.
- To what extent are academic support programmes offered to assist learners with poor school results?
- If these academic support programmes are offered, what is the nature of these programmes and what are their success rates?
- What kinds of qualifications are offered (degree/diploma, length of study)?
- How is assessment done?
- What are the through-put rates and graduation numbers?

4. INDUCTION

- Is there a formal induction process? If so, what is its nature?
- Are the schools used for induction selected? What about mentors?
- Do teachers feel they are adequately prepared for teaching in the schools in which they are placed, not only during formal induction (if this exists) but also during their first school placement as a certified teacher?

5. LICENSE TO PRACTICE

- Is there a formal licensing process?
- If so, who undertakes this?
- How are prospective teachers assessed?

6. PERFORMANCE MANAGEMENT OF TEACHERS

- Is there a formal performance management system?



- If so, how does it work?

7. CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD)

- Is CPD formal (in terms of teachers being required to acquire CPD points over a certain period) or is it ad hoc?
- If CPD is formal, how does it work, and is it linked to re-licensing?
- What types of programmes are typically offered (in-school/out-of-school, length, frequency, content)?
- Are these programmes research-based? If so, describe kinds of research evidence available and the findings.
- Describe the content and duration of the various programmes.

8. PROMOTION

- Does promotion depend on further training?
- If so, what types of training programmes are required (qualification types, content, duration)? If not, how are teachers promoted into leadership positions



Appendix 3: Key actors interviewed

Name	Position
Ms Rose Agoy	Secretary-general, Uganda National Commission, UNESCO
Dr Cleophus Mugenyi	Commissioner for Teacher Training, Directorate of Education Standards
Dr Jane Egau	Commissioner, tutor, instructor – Education and Training, Ministry of Education
Mr Filbert Baguma	General secretary, Uganda National Teachers Union
Mr Nabende Robert	Principal analyst, Education Services Commission
Dr Grace Lubaale	Head of department, Teacher Education, Kyambogo
Mr Tom Otim	Academic registrar, Makerere University College of Education
Ms Brenda Atike	Programmes Officer, STIR Education
Ms Caroline Taliba	SESEMAT Project
Mr Iraalya Bakamya	Principal, Kaliro National Teachers College
Mr Edward Sebukyu	Assistant commissioner, Ministry of Education and Sports, Private Schools department



Appendix 4: Compulsory modules offered at NTCs

Professional studies

This course is aimed at inculcating professionalism and a deeper understanding of the education system and society, as well as to aid student teachers develop their personal philosophy. The aims of this course are to:

- Help students develop a greater understanding of the process of education and its contribution to the socio-economic development of the country;
- Help students understand that education is an agent of socio-economic and political change in society;
- Introduce students to an in-depth analysis of educational issues in the system of education at both philosophical and comparative level;
- Raise awareness that teachers have a part to play in the day-to-day administration of schools and colleges;
- Study the curricula at both primary and secondary levels in Uganda, as well as the factors that have influenced their implementation.

Development studies

This course is intended to equip adult learners with the communication skills needed for effective study with emphasis on listening, speaking, reading and writing. The objectives of the course are to enable student teachers to:

- Communicate effectively and confidently;
- Acquire a wide range of teaching techniques/methods in the classroom; and
- Participate in valuable activities of local, national and international significance outside the classroom.

Educational psychology

A student teacher must attend 75% of lectures to qualify for this certificate. Student teachers must be able to:

- Apply knowledge of growth and development in their classrooms;
- Explain how pupils learn;



- Identify skills and techniques which will enable them to guide and counsel learners effectively; and
- Carry out realistic assessment of learners.

NTCs offer academic support programmes to assist students with poor school results, including support supervision and coaching and mentoring (VVOB, 2016).



Appendix 5: Structure of Makerere teacher education programme

Year/Course	Educational foundations and management	Educational psychology	Curriculum, teaching and media
Year 1, Semester 1			
	General theory of comparative education	Introduction to psychology	Foundations of curriculum studies
	Introduction to economics of education		
	Early development of informal education		
	Sociology of education theories and practice		
Year 1, Semester 2			
	Introduction to theory of educational administration and management	Social psychology	Curriculum design, development and implementation
	Social psychology 1		
	Introduction to sociology of education		



Year 2, Semester 1			
	Education policy studies	Human learning and instruction	Educational technology
	Introduction to educational planning	Human growth and development	
	Colonial and post-independence education		

Year 2, Semester 2			
	Education and social development	Educational research, measurement, and evaluation	Teaching techniques and planning for teaching
	Philosophical orientation to education		School practice

Year 3, Semester 1			
	Administration and principles of education	Special needs education	Evaluation of instruction

Year 3, Semester 2			
	Teachers' profession ethics	Guidance and counselling	Supervision and guidance to school practice
			School practice

