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POLICY BRIEF

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Teacher training and re-training are critical for delivering the competence-based lower secondary curriculum.

Executive summary

In February 2020, the Ministry of Education (MOES) rolled out the revised lower secondary education curriculum prematurely. The revised curriculum presented new student-centred methods of teaching that focussed on innovation and self-reliance. These aimed to produce secondary school graduates with skills that are competitive in the current job market. However, due to inadequate resources, teachers were ill-prepared to implement the curriculum effectively. Retraining of teachers followed a cascade model; the initial teacher training curriculum is yet to be revised. Some schools do not have vocational teachers, and teachers lack ICT skills. The brief recommends heavy investment in education to train and retrain teachers to deliver this competence-based curriculum effectively.

Introduction

In February 2020, the Ministry of Education (MOES) prematurely rolled out the revised lower secondary education curriculum. Unlike the old curriculum, which emphasises knowledge acquisition from a theoretical approach with little emphasis on skills and values, the new curriculum aims to provide students with 21st-century skills, including critical thinking, creativity, collaboration or teamwork, communication, information literacy, ICT, and life-long learning. The revised lower secondary curriculum presents new student-centred methods of teaching that focus on innovation and self-reliance. Lessons are founded on more ICT-based and practical learning methods. These are all intended to produce **secondary *school graduates with employable skills that are competitive in the current job market.***

Notably, subjects have been reduced in the new curriculum from 43[1] to 21. Every school is expected to teach 12 out of the 21 subjects in S.1 and S.2, of which 11 are compulsory, and one is elective. The compulsory subjects are English Language, Mathematics, History, Geography, Physics, Biology, Chemistry, Physical Education, Religious Education, and Kiswahili. Elective or optional subjects are categorised as vocational or practical electives and include Agriculture, ICT, English Literature, Art and Design, Performing Arts, Technology and Design, Nutrition and Food Technology, and Foreign Languages (French, Latin, Arabic, Chinese). Students pursuing vocational subjects (6-month course) are examined through skills-based Directorate of Industrial Training (DIT) examinations. This allows the students to acquire a Competence Certification of Level 1 on the Uganda Vocational Qualifications Framework (UVQF) for the world of work.

This new curriculum is undeniably good because it has elements of operationalization through research and project work at the end of each topic to ensure knowledge and skills application instead of just knowledge acquisition. It has added a provision for exiting any time and getting a competence certification for learners pursuing vocational subjects. Moreover, the revised curriculum advocates

integrating digital technology in teaching and learning, a critical element for delivering a 4IR-ready workforce.

The new curriculum has a new pedagogical framework that requires teachers to integrate ICT to facilitate interactive, digital, and self-paced learning. This framework requires a shift from a knowledge transmission mode of teaching to a more active-learning approach in which teachers challenge learners to think for themselves, solve problems and make judgments. Although this new curriculum is student-centred, emphasis is still placed on the importance of high-quality teachers to deliver it effectively.

However, because of inadequate resources, the curriculum was rolled out prematurely with equally ill-prepared teachers to deliver its content. Therefore, the re-training of teachers had to follow a cascade model in which direct training is provided to a few teachers and subsequently assigned as trainers to transfer their new skills to a wider group of teachers. This training system has been deemed inadequate, leaving many teachers with limited knowledge of the curriculum as only a few received training from the National Curriculum Development Centre. Teachers cannot adapt their methodology to the new curriculum since they lack the skills required to deliver vocational skills and integrate ICT into the learning process. Without prior preparation, a teacher cannot deliver exactly what is expected of them; thus, the need to train those in colleges and re-train practising teachers in the new curriculum before it is rolled out to ensure that it delivers products ready for the current work environment.

Approach

This policy brief builds on the findings of a country case study for Uganda on ***"Strengthening Education and Learning Systems to deliver a 4IR-Ready Workforce"*** conducted by the Economic Policy Research Centre (EPRC) with funding from the African Center for Economic Transformation (ACET), Ghana. The study was based on both quantitative and qualitative research methods involving desk reviews of development literature and official documents and a data analysis based on primary data from surveys conducted in secondary and tertiary schools (that is BTVETs and Universities), formal and informal businesses, Ministries, Departments and Agencies, and development partners in the education sector.

Key findings

1. **Pre-service[1] teacher training still follows the old curriculum.** The curriculum for teacher training has not been revised. Teacher's training colleges still train future teachers using a theoretical approach to knowledge acquisition. Yet, once they join the workforce, these teachers are expected to deliver a revised lower secondary curriculum that is operational and follows a practical approach to acquiring skills. This means that the content teachers are exposed to during training and what they are expected to deliver in the classroom differ widely. Therefore, they will not ably implement the revised lower secondary curriculum without re-training teachers early enough. Indeed, one of the PACT champions wondered in disclosure,

"…. how can we have teachers still being retooled based on the old curriculum, yet they are expected to deliver the new curriculum…" (EPRC 2023)

2. **In-service[2] training follows a cascade model because of inadequate resources**. With this model, a few representatives are trained on a program of interest, like a new curriculum in this case, and then tasked with training others. Characteristically, the cost-effective nature of the model makes it an ideal fit. However, this training model is faulted for its "trickle-down effect," which is the watering down of content as it is passed on to trainees. More succinctly, as information is being transferred from master trainers to trainees, the original content often becomes "adulterated," leading to its ineffectiveness. At the inception of the new curriculum in 2020, the NCDC started with training 1,600 in-service teachers. The trainers would train about 50,000 other teachers in private and government-aided schools. This is ineffective because most teachers receive diluted, adulterated information as information moves through different layers.

3. **There are not enough specialized teachers in vocational disciplines to effectively cover both private and public.** The revised lower secondary curriculum has some elements of operationalization. This is because it has added a provision for exiting at any time and getting certification in different vocational subjects. The curriculum aims to subject students pursuing vocational subjects in S.3 and S.4 to skills-based DIT examinations. This allows the students to acquire a Competence Certification of Level 1 on the Uganda Vocational Qualifications Framework (UVQF) for the world of work. However, most schools do not have the required teachers to handle the vocational subjects as teachers' pre-service training does not provide training in these areas, and re-training was inadequate. Teachers need skilling and re-skilling in vocational courses to deliver the curriculum to

1 Pre-service teacher training is the education and training that occurs prior to a future teacher obtaining a college degree or diploma and entering the workforce.

2 The process by which teachers engage in further education or training to refresh or upgrade their professional knowledge, skills and practices in the course of their employment.

benefit their students.

"……mostly teacher training is done theoretically, and the practical bit is lacking. This nature of the curriculum (more exam-oriented) is hard to relate it with the job market" (KIIs, February 2020).

4. **There is limited training for teachers in digital/ICT skills, so it is underutilised in lesson delivery, despite** the apparent benefits of using digital technologies for educational purposes (such as enhancing the roles of students and teachers in the learning process and helping to create a collaborative learning environment as required by the curriculum). Survey findings revealed that teachers' competence requirements in basic computer programmes such as PPT, Word, and Excel were very low (18.5%), and the use of ICT in teaching and learning stands at 35.3%, albeit access being high (Figure 1). Indeed, key informants noted that,

"...there is no special programme that trains teachers in ICT-related activities. Either teachers who teach ICT offered such courses during their training programmes (diploma or degree) or privately attend training courses outside their teaching qualifications to add to their knowledge space" (KIIs, February 2020).

5. **Teachers have limited opportunities for Continuous Professional Development (CPD).** The few available opportunities are limited to science teachers, for example, Secondary Science and Mathematics Teachers (SESEMAT) Programme. In addition, MoES often works with the cascade approach to CPD, intending those tutors pass on skills and competencies to teacher trainees, which is very ineffective, as discussed above. Evidence shows that Uganda's CPD programmes face several challenges, including the absence of an institutionalized system of in-service teacher education to enable teachers to improve their professional competencies. Here, CPD, in this case, refers to the conscious updating of professional knowledge and improving teachers' professional competencies throughout their working life. It is, therefore, important that mechanisms are put in place to address the challenges of inadequate CPDs or in-service training programmes.

Conclusion and policy recommendations

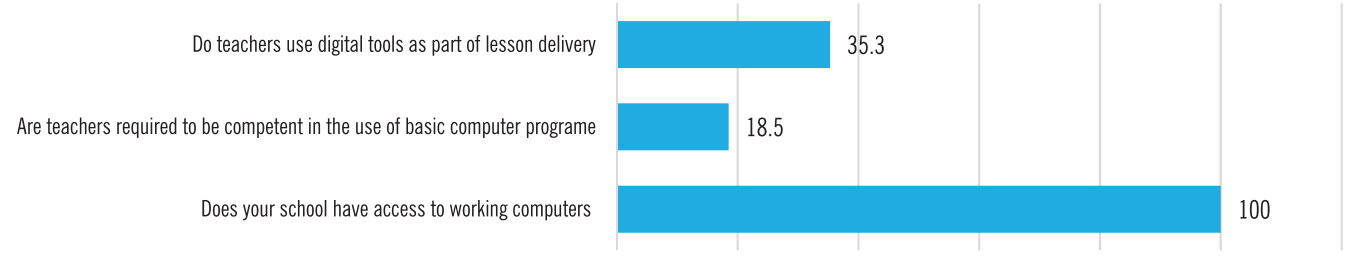
The new curriculum emphasizes conducting student-centred teaching, performing extensive practical and -ICT-based lessons, and a new teaching approach aiming to produce highly innovative and self-reliant students. Curriculum implementation occurs ultimately when professional teacher training is allowed for all intending teachers to learn vital skills necessary to deliver the content of the curriculum. However, teacher training must catch up with new and innovative developments and changing demand patterns. Therefore, teaching strategies must evolve to unlock individual student potential and prepare students with the skills to shape the future through technology-supported innovations.

In this regard, we urge the government to invest heavily in education to:

1. **Retool teachers in vocational courses**. Teachers should be trained to operationalize the vocational disciplines that are so important for learners that may drop out of school. The new curriculum can only equip learners with practical skills when the school trainers teach practical subjects 'practically,' as they require training.

2. **Provide training courses for teachers to gain experience in emerging technologies.** Through the Ministry of Education and Sports (MoES), the government should develop pre-service and in-service staff training programmes tailored to the new curriculum requirements to keep teachers up to date with the technological changes that will promote

Figure 1 Teachers' ICT competencies and use in lesson delivery.



Source: Field survey respondents, February-March 2020

proper integration of ICT in teaching and learning. Beyond training already-produced teachers, integrating ICT knowledge into training teachers as professionals before enrolling in schools is highly important.

3. **Revamp Continuous Professional Development training for teachers**. This helps teachers address the inadequacies in the Initial Teacher Education programmes and equips them with the knowledge and skills that are relevant and current, including those required to deliver the new curriculum. Notably, the holistic approach to teacher training will produce qualified and competent teachers to make sound judgments and continually renew their knowledge and skills to benefit the students.

Reference

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Endnotes

1 English Language, Literature in English, Fasihi ya Kiswahili, CRE (Christian Living Today), CRE (with traditional African religions), Islamic Religious Education, History, Geography, Political Education, Latin, German, French, Luganda, Lugha ya Kiswahili, Arabic, Mathematics, Additional Mathematics, General Science, Agriculture: Principles and Practices, Physics, Chemistry, Biology, Art, Music, Health Education, Clothing and Textiles, Foods & Nutrition, Home Management, Woodwork, Technical Drawing, Metalwork, Building Construction, Electricity & Electronics, Power & Energy, Commerce, Principles of Accounts, Shorthand, Typewriting, Office Practice, Computer Studies and Entrepreneurship Skills

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