Chapter 6

Nurturing Every Learner's Potential: Education Reform in Kenya

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6.1 Introduction

Kenya has made significant progress towards increasing access to basic education over the past few decades. Since 2017, attention has, therefore, turned to improving quality as well by starting a wide reform of the content and structure of the education system from primary through to tertiary. This is one of the most significant education reforms undertaken in Kenya since independence was declared in 1963, and major aspects of this reform include the adoption of a Competency-Based Curriculum approach and changes in educational structure, among others. While nominally focused on curriculum, in reality the reform encompasses multiple aspects of Kenya's educational system and ambitiously seeks to initiate major changes in school cycles, the structure of school systems, and several of the country's socio-economic spheres. While other countries have implemented either a curriculum or a structural reform at a given time, Kenya's reform is uniquely ambitious in its approach to dually tackle both spheres simultaneously and introduce major shifts in the general understanding of the education system. Additionally, analyzing the reform from Reimers' (2020) five perspectives on education change, we find that the curriculum reform is most appropriately framed from a cultural perspective with the long-term shifts in shared norms and practices that it calls for. At the same time, this structural reform presents more immediate infrastructural and logistical challenges. We, therefore, argue that this dual process presents distinctive challenges in balancing the disparate needs of each sphere. As reform implementation is still in an early stage as of 2020, this chapter examines the process to date. It begins with an overview of the country context in Kenya, followed by a more detailed

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description of the reform, its theory of change, implementation timeline, and stakeholder involvement. Finally, we analyze major challenges to the implementation process at the moment of writing and conclude by looking forward in anticipation of the remaining implementation process.

Unless otherwise cited, all information in this chapter was obtained from documents provided by the Ministry of Education (MoE), as well as through in-person interviews conducted in January 2020. Interviews were conducted with representatives from the MoE, the Kenya Institute of Curriculum Development (KICD), the Teachers Service Commission (TSC), the Kenya National Examinations Council (KNEC), the Kenya Secondary Schools Heads Association (KESSHA), the Kenya Primary Schools Heads Association (KEPSHA), and the Kenya Institute for Public Policy, Research and Analysis (KIPPRA). Additionally, we held individual and group interviews with headteachers, deputy headteachers, classroom teachers, and champion trainers at a number of primary and secondary schools in Kakamega, Kajiado, Kiambu, and Meru counties, where we also conducted classroom observations.

6.2 Country Context

After independence, Kenya along with Uganda and Tanzania (three of the six East African Community countries) adopted a structure of education that strongly resembled Britain's education system: 7 years of primary, 4 years of secondary, 2 years of high school and 3 years of tertiary education, or 7-4-2-3. Students completed region-wide exams after primary and then after secondary school – East African Certificate of Primary Education (EACPE), East African Certificate of Secondary Education (EACE), and East African Advanced Certificate of Secondary Education (EAACE). This system did not achieve the desired outcomes, however, and was felt to lack flexibility to adapt to labor market demands and was considered too academically-oriented (Wanjohi, 2011). These failings became the focus of an ongoing debate over unemployment throughout Kenya. After the collapse of the East African Community in 1977, Kenya changed the names of the two exams to just the Certificate of Primary Education and Secondary Education, CPE and KCE respectively. Not until 1985 however, under President Daniel arap Moi, did the government overhaul the education system to create a new structure: 8 years of primary, 4 years of secondary, and 4 years of tertiary, a system known as 8-4-4. Once again, the exams changed names to Kenya Certificate of Primary Education and Secondary Education, KCPE and KCSE, respectively. Since then, the curriculum has undergone review several times but with no major reforms up until now.

In terms of access to education, the introduction of the Free Primary Education program in Kenya in 2003, followed by the Free Day Secondary Education program in 2008, has had wide-ranging impacts on the country's education sector. With the reduction of school fees came an unsurprisingly significant increase in enrollment across the country with millions more students entering into the educational system

since 2003. In 2000, prior to the reduction of school fees, net enrollment in primary schools was 59.6%, and 32.9% in secondary schools (UNESCO Institute of Statistics, 2000). In 2014, during the most recent national data collection, net enrollment in primary schools in Kenya had risen to 88.2%, and to 47.4% in secondary schools (Ministry of Education, Science and Technology, 2014a). While net enrollment in secondary schools is still significantly lower than primary net enrollment, the transition rate from primary to secondary was 98.8% in 2014 and by 2015 had further increased to 99.2% (UNESCO Institute of Statistics, 2016). Prior to 2014, the most recent data collection on transition rates dates back to 1980, at which point the transition rate stood at 85.6% (UNESCO Institute of Statistics, 2016).

The public education system in Kenya is administered along county lines, with schools in each of the country's 47 counties overseen by county Directors of Education responsible for implementing national education policies, programs, and initiatives across the country's 21,718 public primary and 7,686 public secondary schools (Ministry of Education, Science and Technology, 2014a). The National Education Sector Plan, released by the MoE in 2014, highlighted regional disparities as a key area for improvement in Kenya's education system. Female literacy rates, for example, ranged from 90% in urban areas such as Nairobi to below 10% in poorer northern areas such as Mandera, Turkana, and Wajir counties (Ministry of Education, Science and Technology, 2014b). Across Kenya, disparities in school funding and insufficient infrastructure were identified as impacting arid and semi-arid land regions, informal urban settlements, and other pockets of poverty in particular (Ministry of Education, Science and Technology, 2014b, p. 42). Increased primary school enrollment numbers had not been matched by an increase in staffing and infrastructure, and in some regions led to overcrowding far in excess of national averages. In 2014, the average student-teacher ratio for public primary schools in Kenya was 34.5:1. However, a number of counties had much higher ratios of 60 or 70 students per teacher. For public secondary schools, the ratio was only 20.2:1 with lower levels of disparity between counties but reached up to 50 students per teacher in some areas (Ministry of Education, Science and Technology, 2014a). While these averages are on the low end compared to many other African countries, there is evidence – discussed in further detail later in this paper – that overcrowding in schools is currently a more serious concern than would be apparent based on these most recently reported statistics from 2014. While the Education Sector Plan cites population forecasts showing that the Kenyan population, which is currently primarily young, will age over the next few decades, it states that providing universal basic education will continue to strain the sector. The report also predicts a shifting trend in which overcrowding pressures will lessen in primary schools and instead increase at the secondary level (Ministry of Education, Science and Technology, 2014b).

6.3 Theory of Change and Reform Goals

6.3.1 *National Curriculum Reform*

It is within this larger context of educational change that a major curriculum reform was launched in 2017 with the expectation of full implementation by 2028. Despite the progress made in Kenya with regard to increased access to basic education, this curriculum reform is the result of a growing sense that Kenya's existing curriculum and educational structure are insufficient to meet the country's goals as set forth in Kenya Vision 2030 (Ji & Kabita Njeng'ere, 2017). The primary goal of Kenya Vision 2030, as articulated by the MoE in their 2014 statistical report, is to transform Kenya into a globally competitive country by 2030. An understanding of the education system as a core domain in working towards this vision became necessary. In working to achieve this goal, the report emphasizes the importance of education: "Within the social pillar, education sector plays a critical role in facilitating the process of inculcating knowledge, attitudes, and skills necessary for catapulting Kenya to a globally competitive country and acquiring new knowledge in a systematic way with a view to improving products and processes" (Ministry of Education, Science and Technology, 2014a). This shift in the focus of the educational system is expected to empower the next generation to be effective leaders in various domains of life.

In order for the education sector to support the achievement of this goal, a Competency-Based Curriculum (CBC) is in the process of being adopted across the country with the objective of equipping students with twenty-first-century skills and competencies and better preparing them to participate in a modern global economy. Such objectives reflect those that have been widely adopted in education systems across the globe, including in other sub-Saharan African countries such as Zimbabwe, as described in Chap. 7.

With the adoption of the CBC, the role of curriculum in leading the educational process toward a pre-defined set of goals (competencies) was introduced. In 2017, a Basic Education Curriculum Framework (BECF) was developed by the Kenya Institute of Curriculum Development (KICD) in collaboration with education stakeholders to guide implementation of the CBC. This framework was designed based on seven identified core competencies: communication and collaboration, critical thinking and problem-solving, creativity and imagination, citizenship, digital literacy, learning to learn, and self-efficacy (Kenya Institute of Curriculum Development, 2017).

In terms of pedagogy, the curriculum changes call for an overarching shift from traditional didactic teaching methods to individualized student-centered instruction in which teachers act as guides and facilitators of the students' learning process. Accordingly, the new curriculum calls also for a shift from a focus on infrequent, high-stakes summative assessments to the inclusion of more ongoing formative assessment to make learning more individualized and student-centered. This shift broadly seeks to re-define the role of student assessments in informing and

supporting the learning experience through reshaping daily norms and practices around assessment within classrooms. In doing so, there has also been a recognition across stakeholders that this increase in activities requiring teachers to provide more individualized student attention will be challenging to implement in large classrooms in particular, and may exacerbate existing challenges of high student-teacher ratios.

While such pedagogical changes are more evident within the new curriculum framework than changes to the content itself, some content changes have also been introduced. Chief among them is the inclusion of personal values into various content areas, and teachers are expected to explicitly teach and assess certain core values and interpersonal skills. Assessment will be conducted through checklists and other tools for teachers to observe student demonstration of values and skills in regular classroom behaviors. In addition, the new curriculum explicitly incorporates parental involvement into learning activities with the hope of building a shared cultural mindset that sees education as an ongoing learning process with teachers, parents, and students all as active participants.

6.3.2 National Structural Reform

The second component of the national reform is a planned shift of the country's educational cycle from 8 years of primary school and 4 years of secondary school (8-4 cycle) to 2 years of pre-primary, 6 years of primary school, 3 years of junior secondary school, and 3 years of senior secondary school, i.e. a 2-6-3-3 cycle. One intention for the shift is to provide greater opportunities for learner specialization early on in schooling, with a particular emphasis on strengthening pathways for Technical and Vocational Education Training (TVET) (Ministry of Education, Science and Technology, 2014a). Once students complete primary and junior secondary schooling, they will have the choice of being offered and selected into three different planned pathways in senior secondary school: Arts and Sports Science, Social Sciences, or STEM. One possibility being considered is that students may also have the option to bypass senior secondary and continue straight to TVET programs. The three overarching pathways – with between two to four tracks within each pathway – are intended to allow students to pursue their interests and talents in secondary school rather than focusing solely on academic exam performance. In addition, they are intended to grant students a stronger sense of responsibility and ownership over their own education. Having these options for the students at a relatively early stage is believed to have a major impact on their performance and success in the educational system as well as their careers (Kenya Institute of Curriculum Development, 2017). This concept of pathways has been constructed by the MoE in an attempt to provide a broad curriculum that allows for specializations with the intention of combatting rising unemployment in Kenya, which rose from 8.9% in 2008 to 9.3% in 2019

(Kenya Institute of Curriculum Development, 2017; UNESCO Institute of Statistics, 2019).

In alignment with the move from summative to formative assessments driven by the curriculum reform, another feature of the structural reform will be an automatic promotion of students from primary to junior secondary school. In 2017, then Cabinet Secretary Fred Matiang'i had instituted a campaign of achieving a 100% transition rate from primary to secondary school called "Tupeleke Watoto Shule" (Let's take our children to school). This initiative was launched as part of a global campaign to provide all children with 12 years of basic education. As the new educational reforms promote the mindset that all learners have the ability to become successful and should continue to their schooling, the current Cabinet Secretary George Magoha is continuing the "Tupeleke Watoto Shule" campaign, partly through putting pressure on secondary school administrators to accept all students rather than restricting enrollment.

In further pursuit of this policy of 100% transition, President Uhuru Kenyatta announced in August 2019 that the KCPE (performance on which currently determines a student's secondary school options) will be dissolved by the end of the CBC rollout (Kenya Institute of Curriculum Development, 2017). Under the original 8-4-4 system, Kenya's secondary schools were classified into four groups: national, extra-county, county, and sub-county, with the names broadly referring to school catchment areas. Generally, students achieving top results in the KCPE would gain admittance to a national school, the next-best performers would be admitted to extra-county schools and so forth. However, some school leaders indicated in interviews that excellence in other areas could also secure admittance into a national or extra-county school, including students who were exceptional athletes or performers, particularly in the arts. Enrollment into a national or extra-county school is a strong predictor of admission into tertiary education, whereas students who attend county or sub-county schools more rarely continue onto higher education.

In part, the discontinuation of the KCPE is hoped to transform a culture of competitive high-stakes examinations and student rankings, and instead promote the vision that every learner has the potential to succeed. However, as of early 2020, it had not been announced how secondary school placement would be determined in the absence of student rankings based on the standardized exam results. Further complicating the question of secondary school placement is the stated intention of also dismantling the current hierarchy between school categories that places national schools at the top (Nyaundi, 2019). Instead, one vision is that each school would offer at least two of the three pathway options previously mentioned, and placement would be done on a more individualized level to best match students to schools based on these offerings and student competencies and interests.

6.4 Reform Implementation

6.4.1 Initial Stages

Between May and September 2017, the MoE ran an initial pilot program in 470 schools across Kenya. The purpose of the pilot was to test the feasibility and validity of the planned curriculum, teacher preparation, and assessment in different contexts and levels. One of the distinguishing features of the pilot was continuous assessments instead of the traditional one-off examination at the end of the term. The program was implemented in both public and private schools and in rural and urban settings to ensure representation across different types of schools in Kenya. For this reason, ten schools in each of the 47 counties were selected: five primary and five pre-primary, with one of the selected schools in each county being a school for learners with special needs.

Following this pilot, the nation-wide roll-out had been planned for 2018 but was postponed as the pilot revealed concerns around capacity and logistics of implementation as well as resource gaps in supporting teachers. The KICD identified a lack of training for teachers and inadequate amounts of relevant teaching materials. A KICD (2018) survey discovered that one in five Kenyan teachers reported feeling 'unprepared' to implement the new curriculum. Teachers also opposed plans to merge the administration of primary and secondary schools, which would be a requirement of the reform. In light of these findings, 2018 was devoted to preparing for the nation-wide implementation and devising a plan for teacher professional development, as well as conducting CBC training sessions for teachers in pre-primary through grade three of primary school.

6.4.2 Teacher Training

The teacher training plan was developed and implemented by the MoE in coordination with multiple other bodies such as the Teachers Service Commission (TSC), the Kenya National Examinations Council (KNEC), the Kenya Institute of Curriculum Development (KICD), the Kenya Institute of Special Education (KISE) and the Kenya Education Management Institute (KEMI). The training courses were designed to be rolled out in an annual sequence beginning with teachers instructing in pre-primary and up to grade three receiving training, then continuing with teachers instructing in each subsequent grade level the following year. The sessions were intended both to introduce the content of the curriculum and to familiarize teachers with the pedagogical strategies it calls for. In advance of CBC implementation in each additional grade level, all teachers of that level complete training sessions conducted over school breaks in either April, August, or December. Trainings are organized along county lines by regional Training Centres and facilitated using a

train-the-trainer model. All trainings are intended to be conducted following a standard CBC Teacher Preparation Manual.

The duration of training varies by county density: in less populated counties, teachers may be able to receive 2 or 3 weeks of training in the year before the CBC is implemented in their grade level, while counties with greater numbers of teachers may have the capacity to provide only 1 week of training for individual teachers. At the start of the 2020 school year, it was reported that 228,000 primary teachers had been trained (Nyamai, 2020). In recognition of the limited time span relative to the amount of material to be covered, an online training course¹ was also developed by the KICD and made available for teachers nationwide. However, completion of this course is non-mandatory and dependent on individual teacher initiatives as well as on access to appropriate technology. Given these limitations, the course does not appear to be in wide use as only 4,817 teachers are currently using the platform (Kenya Institute of Curriculum Development, 2019).

In 2019, the first cohorts of students from pre-primary to grade three were introduced to the CBC curriculum nationwide (Kenya Institute of Curriculum Development, 2018) while simultaneously CBC training was held for teachers of grade four. Grade four students across the country began studying CBC in January 2020. 2020 is also a target year for the completion of development of the curriculum designs for grades six through twelve, and training will be held for teachers of grade five beginning in April 2020. In 2023, the first cohort of grade seven students will move to secondary school rather than continuing in primary school up to grade eight. The full implementation process is scheduled to be completed in 2028 when incoming students of the final grade, grade twelve, are scheduled to transition to the new curriculum.

6.5 Stakeholders Involved

The curriculum and structural reforms are a national collaborative effort that demanded the engagement of multiple agencies. Coordinated by the MoE, the effort also includes the Kenya Institute of Curriculum Development (KICD), the Kenya National Examinations Council (KNEC), the Teachers Service Commission, the Kenya Secondary Schools Heads Association (KESSHA), and the Kenya Primary Schools Heads Association (KEPSHA), among others. Apart from coordination during curriculum development, training of teachers, and roll-out, members from these bodies also sit on a 17-member Task Force overseeing the roll-out of the CBC. Task Force members are charged with key decisions about both reforms as implementation takes place, such as the decision that the new junior secondary grades would be housed within secondary schools rather than in primary schools.

¹ <https://elimika.kec.ac.ke/course/cbc-online-training/>

As mentioned previously, the education system in Kenya is administered along county lines, and the cascaded train-the-trainer model for the CBC is structured around these county lines. This model involves the engagement of County Directors, Sub County Directors, Curriculum Support Officers (CSOs) at the zonal level, and champion trainers who are selected teachers from schools within each zone. Despite this involvement in the training process, however, broad scope decision-making related to the reforms remains concentrated at the top level of administration. As of the first few years of implementation, there was little communication between the national government and stakeholders at the country, sub-county, or school level during the implementation process (Barchok, 2019). As of 2020, for example, stakeholders at the lower levels of administration had not been involved in decision-making processes regarding the many upcoming changes for the secondary level in terms of training, placement of students at schools, and teacher reassignment.

With regard to engagement of parents and families, during the early stages of reform implementation such efforts were organized primarily at the school level with the Curriculum Support Officers occasionally organizing meetings at the zonal level. While active Parent Teacher Associations at some schools facilitated this engagement process, many teachers saw the lack of a centralized parent outreach and communication strategy as a weakness of the implementation process. There was believed to be a low level of parental understanding of the goals and theories of the CBC, as well as a low level of support in providing many of the materials that curriculum activities called for parents to provide (Oduor, 2020a, 2020b; Owiti & Kamau, 2019).

6.6 Implementation Challenges

6.6.1 *Framing the Reform*

Having now provided an overview of the dual process of curriculum and structural reform currently being undertaken in Kenya, we see that the MoE has a clear aim of building a new culture around education across the country. As discussed in earlier chapters, culture in this sense is understood as “a set of shared norms and practices that define how education is understood by a society, meanings about how instruction should be conducted” (Reimers, 2020, p. 26). This includes ideas about what instruction should look like, what a student-centered approach means, what the role of the teacher is, what types of competencies students should have upon graduating a school system, what the purpose of examinations is, and how examinations inform decision making at classroom, school, county, and national levels. This is not to say that there are not also psychological, institutional, professional, and political dimensions to the reform. From an institutional perspective, education is seen as a system “structured by elements such as curriculum regulations, instructional resources, school structure and buildings, governance, staff, assessments and funding”

(Reimers, 2020, p. 35). The CBC reform in Kenya certainly attempts to make multiple such systemic shifts including through re-tooling of teachers and head teachers, providing new learning resources, and infrastructural developments. Similarly, from a political perspective, the reform seeks to negotiate the interests of various groups and resolve conflicts during the design and implementation of a reform (Reimers, 2020, p. 23). As described, the design and implementation process of Kenya's reform brought together a multitude of politically and technically relevant stakeholders, incorporating their interests and perspectives into the reform. Despite the relevance of these other perspectives to the reform process however, we find that an examination of Kenya's reform process from the cultural perspective to be most illuminating given the long-term significant cultural shifts necessary to fulfil the reform's theory of change.

With this framing in mind, we turn now to an examination of implementation challenges that have arisen thus far. Given the ambitious scope and long-term outlook of Kenya's education reforms, it is perhaps unsurprising that implementation has encountered an equally wide scope of challenges to date. Broadly, these challenges can be organized into three areas: mindset challenges, capacity challenges, and challenges related to the timeline of implementation. While some of these challenges may be unavoidable for any large-scale educational reform of this nature, we believe that many of them stem more directly from the attempt to implement curriculum and structural reforms simultaneously. In doing so, Kenya faces the difficult task of initiating far reaching long-term shifts in the fundamental culture of education while simultaneously balancing more immediate infrastructural and logistical needs.

6.6.2 Mindset Challenges

Among the perhaps unavoidable challenges with a reform of this type was what many interview participants described as a general "resistance to change." A number of teachers, school leaders, and government officials all identified this resistance to change amongst both parents and teachers as the chief source of opposition to the CBC reforms. The previous 8-4-4 system had been in place since 1985, and was therefore the primary system experienced by many stakeholders.

In particular, the elimination of the high-stakes KCPE exam as the placement tool into secondary schools was the focus of significant opposition. Competitive, high-stakes exams were considered an indispensable part of Kenya's educational system. One ongoing challenge faced by the MoE, therefore, is to reduce the prominence placed on high-stakes exams in the country's cultural mindset. Due to their standardized nature, such exams are considered equalizers, offering all students a theoretically equal shot at being accepted into prestigious national secondary schools regardless of background. Many specifically feared that widespread corruption, tribalism, and a general lack of integrity would distort the secondary school placement process in the absence of the KCPE as an objective measure. On the

other hand, despite their benefits, high-stakes exams were also acknowledged as a source of both significant anxiety for students and of frequent cheating. However, many teachers and school leaders were unable to envision viable alternate solutions for student placement. Such fears may have been exacerbated by the fact that as of January 2020, no decision had been made about what placement process would be followed starting in 2023. In the absence of an official direction, the process of mentally adapting to a new placement system could not begin, and concerns persisted amid this uncertainty. Apart from the question of exams, additional resistance to change centered on resistance to the general philosophy of “student-centered learning” and emphasis on formative assessment embodied by the new curriculum. While widespread, many believed that this resistance would be naturally overcome with time as both teachers and parents adapt and become more comfortable with these new elements.

6.6.3 *Capacity Challenges*

In addition to the need for changing cultural mindsets, a second widely identified challenge facing the reform was an anticipated insufficient capacity for the number of learners in the system in terms of both school infrastructure and human resources. Of course, the high student-teacher ratios in some parts of Kenya are not a result of the current reforms but have been a longstanding concern for the country as access to basic education was widely expanded, compounded by natural population growth and persistent understaffing of teachers.

However, there are several aspects of the reforms which are predicted to – or already have – put additional strain on the existing conditions. First is the commitment to the 100% primary to secondary transition policy, as previously discussed. The impacts of the policy had already been clearly felt by secondary schools as of the beginning of the 2020 school year as incoming classes of Form One (grade nine) students exceeded previous enrollment rates and placed significant strain on existing facilities. Second, the learner-centered pedagogical and continuous assessment strategies at the center of the new curriculum necessitate a more individualized approach to teaching. While many teachers recognized the educational benefits of such an approach, they also identified it as highly time-consuming and difficult to implement in large classes (Oduor, 2020a, 2020b). Designing, administering, and marking regular formative assessments was noted as particularly challenging with the existing student-teacher ratios. In recognition of these concerns, the MoE has identified potential decreases in quality of education – particularly with the goal of 100% transition – as one of its top priorities to address during the reform implementation process.

In addition to these ongoing capacity concerns, the structural component of the reform and the introduction of a junior secondary level creates entirely new challenges for secondary schools in particular. As announced by President Uhuru Kenyatta in August 2019, the government has directed that students in junior

secondary grades will be housed in secondary school facilities (Nyaundi, 2019). As a result, those facilities will experience a double-intake of students starting in 2023 when the structural reform goes into effect. In that year, secondary schools will admit both the normal class of Form One students as well as incoming grade seven students (under the current plan, grade eight students in 2023 will remain at primary schools to finish out the 8-4-4 cycle). Eventually, once all grades have transitioned, there is a possibility that some facilities would house exclusively junior secondary students (grades seven through nine) and some senior secondary (grades ten through twelve). However, until facilities have been prepared for such restructuring, current secondary schools anticipate needing to accommodate two additional grades worth of students during the first few years of the transition. Accommodation will require serious infrastructure expansion of both classroom and living spaces, already a pressing need at many schools with the existing enrollment. Teachers will also need to be reallocated from primary to secondary schools to follow the shifting classes, an additional logistical hurdle as teacher certification requirements for the two levels differed as of the start of the reform. School leaders also expressed some concerns with integrating younger ages into secondary school bodies, particularly at boarding schools: staff anticipated the possibility of increased bullying and a potential need to hire additional caretaking staff for younger, less mature students.

In addition, the reform's introduction of three specialized pathways for senior secondary schools will carry its own capacity challenges for both infrastructure and human resources beyond those described above. Depending on which pathways are designated for individual schools to offer, many will need to add or expand specialized facilities in order to do so. While pathways will be matched to schools partially based on existing facilities, the reform's increased emphasis on "non-academic" learning areas such as TVET and the arts will necessitate an increased number of performing arts spaces, laboratories, and TVET facilities regardless. Staffing challenges are also anticipated with the introduction of the pathways, particularly for areas with few qualified teachers such as the arts and foreign languages.

As of January 2020, it had yet to be determined how many of the specifics of the structural reform would be carried out: how students would be placed into junior secondary schools (and therefore what the capacity needs at each individual school would be), which pathways would be offered at each senior secondary school and how they would be staffed, and which infrastructure projects would be planned and funded. All of these are complex and weighty decisions currently faced by the MoE, and, therefore, constitute a significant challenge at this point in the reform implementation process. In the meantime, secondary school leaders are left unable to begin preparations to meet the anticipated capacity demands, and many identified this lack of official directive as their top concern approaching 2023, particularly given the long timeframe that would be required for such intensive adjustments.

6.6.4 *Timeline Challenges*

Considering the long-term scope and the ambitious aims of the educational reforms in Kenya, a substantive roll-out period was necessary to phase in various stages of reforms. Even with a lengthy transition process, however, many teachers and other school staff across Kenya expressed concerns that the implementation was being rushed, particularly with its “re-tooling” of teachers. In part, concerns stemmed from the fact that each grade’s curriculum designs were developed by KICD just one year in advance, and training materials and other resources could not be made available until each year’s curriculum was complete. While waiting, teachers and schools were unable to begin to prepare themselves in advance despite believing that a lengthier preparation time would be necessary to implement the new curriculum with fidelity.

In addition, the simultaneous use of both the prior 8-4-4 system and new CBC system during this lengthy transition phase generated a number of difficulties. At the systems level, it was decided that teacher training institutions would continue to prepare teacher candidates to follow the 8-4-4 curriculum up until September 2020, although no new teacher trainees were admitted in 2019. The new class admitted in 2020 would then be the first to receive initial certification following the CBC. As younger grades had begun following the CBC starting in 2018, a consequence of this decision was several years of mismatch between teacher preparation and classroom needs, and a delay before schools would be able to fill positions with CBC-trained teachers. At the school level, a similar difficulty was encountered in 2020 when the CBC reached grade four. While younger grades are taught all subjects by a single teacher, starting in grade four teachers are generally subject-specific and teach older grades as well. Grade four teachers would therefore begin teaching some classes with the CBC and the new pedagogy while continuing to teach the remainder of their classes following the old curriculum until the CBC was fully rolled-out to upper primary grades as well. Several teachers described the challenges of switching back and forth throughout the school day and needing to divide their efforts and preparation time between the two systems. While these challenges will be resolved once transition has been completed in primary schools, in the meantime successful adoption of the new pedagogical strategies will continue to be hindered in the absence of full focus from teachers.

Finally, it had also been decided that while 2023 would be the first year of the structural reform from 8-4-4 to 2-6-3-3, students in grades eight and above that year would continue to follow the old system until it was fully phased out. In practice, this means that while the seventh grade cohort of 2023 will begin attending secondary rather than primary schools, the eighth grade cohort will likely remain at primary schools under the current plans. Similarly, the student populations of secondary schools may then become a combination of students placed there based on KCPE results under the old system, and students placed in the new, as of yet undetermined, method.

6.7 Conclusion

Kenya's curriculum reform is one that relies heavily on significant cultural shifts, calling for changes in mindsets towards education at multiple levels; parents, teachers, and even employers. This will by necessity be a long-term process. As Reimers emphasizes, "[the] cultural perspective underscores the need for relatively long cycles of reform" (p. 26, 2020). As Kenya's reforms are still in an early stage of this extended cycle, specific outcomes cannot be analyzed just yet. There are reasons for Kenya to be hopeful, however. Despite the significant challenges facing the implementation process as detailed above, many schools expressed optimism regarding the changes. With some exceptions, the general feeling as of early 2020 was a firm belief in the merits of the CBC. Most criticism was aimed towards an implementation process which was seen as rushed and insufficient, particularly towards the teacher training process (Nyamai, 2020), with the overall content and underlying theory of the reforms meeting wider approval.

On the other hand, while many schools and teachers have faithfully adapted their behaviors in alignment with the new curriculum and teaching methods, these behavioral changes have yet to be followed by the hoped-for changes in belief itself. Indeed, many of the current changes as a result of the reforms to date could be characterized as technical rather than adaptive change. One teacher, for example, when asked what had changed most in her classroom as a result of the reforms, saw terminological changes as most significant referring now to "assessments" rather than "exams", or "strands" rather than "topics." It remains to be seen at this point whether the corresponding changes in belief will eventually be realized at the national level.

Also remaining to be seen is whether the many logistical challenges facing the implementation process will be overcome. Given that the reform's most significant impacts for schools are still to come – the restructuring of secondary schools and redistribution of students and teachers – the concerns over a rushed implementation process must be taken seriously. It will be critical for those concerns to be addressed to allow for sufficient preparation time in order for later stages of implementation to succeed. Kenya currently faces the unique task of managing dual processes of long-term cultural shifts in beliefs called for by its curriculum reform as well as the short to medium term logistical challenges presented by the structural aspect of the CBC reform. If this difficult balancing act can be achieved, however, the impact on education across Kenya has the potential to be considerable and lasting.

References

- Barchok, H. (2019, June 11). Four technical queries on CBC system. *Daily Nation*. <https://www.nation.co.ke/oped/opinion/Four-technical-queries-on-competency-based-curriculum/440808-5151994-1nd4bz/index.html>
- Ji, L., & Kabita Njeng'ere, D. (2017). *The why, what and how of competency-based curriculum reforms: The Kenyan experience*. UNESCO International Bureau of Education. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000250431>

- Kenya Institute of Curriculum Development. (2017). *Basic education curriculum framework*. Retrieved from <https://kicd.ac.ke/wp-content/uploads/2017/10/CURRICULUMFRAMEWORK.pdf>
- Kenya Institute of Curriculum Development. (2018, January). *Report on competence based curriculum activities*. Presented at The National Steering Committee. Retrieved from <https://kicd.ac.ke/news/presentation-on-competency-based-curriculum-activities/>
- Kenya Institute of Curriculum Development. (2019). *Competency based curriculum course – Elimika LMS*. Retrieved February 20, 2020. <https://elimika.kec.ac.ke/course/cbc-online-training/>
- Ministry of Education, Science and Technology. (2014a). *Basic education statistical booklet: Kenya Institute of Curriculum Development*. Retrieved from <https://kicd.ac.ke/curriculum-reform/basic-education-statistical-booklet/>
- Ministry of Education, Science and Technology. (2014b, March). *Volume one: Basic education programme rationale and approach 2013/2014-2017/2018*. Retrieved October 2, 2019, from Kenya National Education Sector Plan website: <https://www.globalpartnership.org/content/education-sector-plan-2013-2018-kenya>
- Nyamai, F. (2020, January 4). Teacher crisis: Are schools ready for Grade 4? *Daily Nation*. <https://www.nation.co.ke/news/education/Are-schools-ready-for-Grade-4-/2643604-5406530-557dcb/index.html>
- Nyaundi, L. (2019, August 17). End of KCPE exams in new curriculum implementation roadmap. *The Star*. Retrieved from <https://www.the-star.co.ke/>
- Oduor, A. (2020a, February 17). A year later, teachers yet to master new system. *The Standard*. <https://www.standardmedia.co.ke/article/2001360714/a-year-later-teachers-yet-to-master-new-system>
- Oduor, A. (2020b, February 17). Why you're paying more under new curriculum. *The Standard*. Retrieved February 18, 2020, from <https://www.standardmedia.co.ke/article/2001360715/why-you-re-paying-more-under-new-curriculum>
- Owiti, N., & Kamau, C. (2019, July 28). Education: Teachers want sensitisation of parents on CBC fast-tracked. *K24 TV*. <https://www.k24tv.co.ke/news/education-teachers-want-sensitisation-of-parents-on-cbc-fast-tracked-4516/>
- Reimers, F. M. (2020). *Audacious education purposes: How governments transform the goals of education systems*. Cham: Springer.
- UNESCO Institute of Statistics. (2000). *World Bank Indicators*. School enrollment (% net). Retrieved February 18, 2020, from <https://data.worldbank.org/indicator/SE.SEC.NENR?display=graph%2D%2D%3E&locations=KE>
- UNESCO Institute of Statistics. (2016). *Progression to secondary school (%) – Sub-Saharan Africa (excluding high income) | Data*. Retrieved October 3, 2019, from World Bank Indicators website: <https://data.worldbank.org/indicator/SE.SEC.PROG.ZS?locations=ZF>
- UNESCO Institute of Statistics. (2019). *Unemployment, total (% of total labor force) (modeled ILO estimate) – Kenya | Data*. Retrieved February 18, 2020, from <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS?locations=KE>
- Wanjohi, A. M. (2011). *Development of Education System in Kenya since Independence*. KENPRO Online Papers Portal. Available online at www.kenpro.org/papers/education-system-kenya-independence.htm

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