



Findings on Early Childhood Development and Education (ECDE) in Kenya from Tayari Baseline Evaluation

Why is ECDE important?

The first five years play a critical role in laying a solid foundation for life, as brain development is rapid and responsive to early experiences and environments (Eddie and Schmid, 2007). Participation in early childhood development and education (ECDE) programs is associated with higher levels of academic achievement and better adjustment during later years of schooling (Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2004), even among the most disadvantaged (Hungu and Ngware 2017).

The State of ECDE in Kenya

Despite the benefits associated with participation in ECDE programs, the guarantee of quality ECDE services for all children in Kenya is yet to be realized. Public pre-schools are poorly resourced and managed as demonstrated by inadequate play and learning materials, shortage of trained teachers, and lack of health and nutrition services (Ngware, et al., 2016). Application of the traditional teacher-centered methodology, which stresses memorization and recitation, illustrates the heavy focus on academic preparation and little emphasis on development and acquisition of social and emotional skills (Kariuki, et al., 2007). Moreover, the lack of relevant content and inconsistencies in the curriculum also creates problems for this sector (Ngware, et al., 2016).

The Tayari Program in Kenya

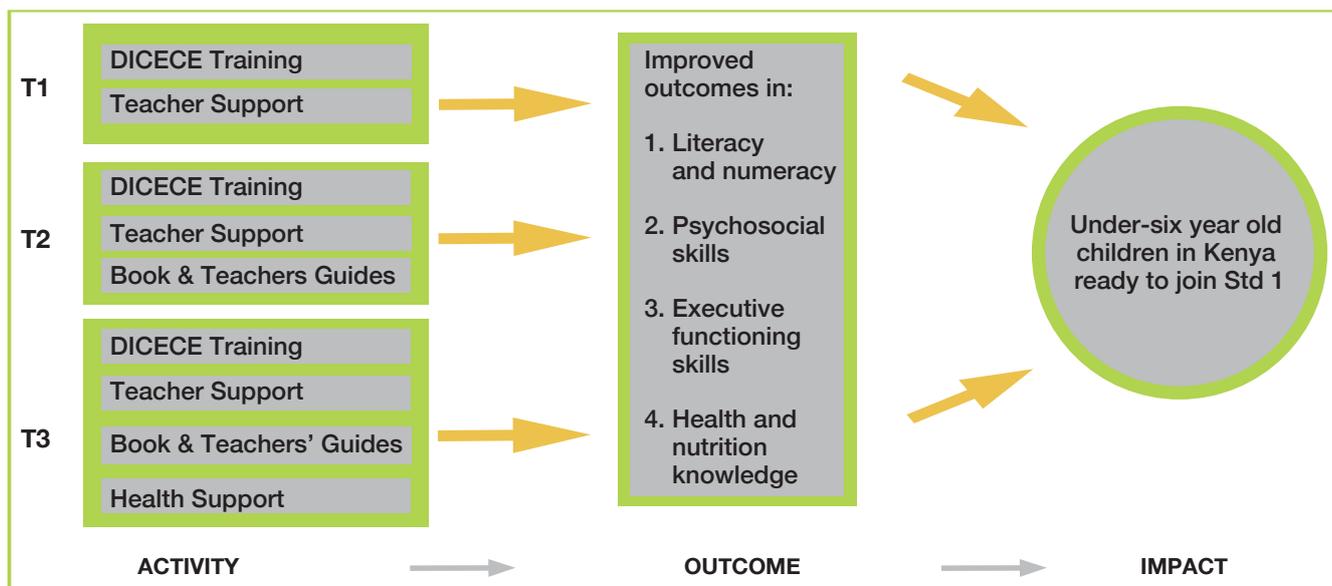
Tayari (Kiswahili for 'ready') aims to develop a cost-effective scalable model of early childhood education that ensures children in Kenya aged 3 – 6 years are mentally, physically, socially and emotionally ready to start, and succeed in primary school. Tayari is implemented by the RTI International, in partnership with the Ministry of Education (MoE), and is currently being piloted in public and APBET ECDE centers in four Kenyan counties: Laikipia, Nairobi, Siaya and Uasin Gishu. If found to be impactful and cost effective, Tayari will be expanded to additional counties.

The African Population and Health Research Center (APHRC) is conducting an independent evaluation to measure the impact and cost-effectiveness of the Tayari program. APHRC completed a baseline study in early 2016, followed by two waves of data collection. The final wave is scheduled for late 2017. The evaluation, which adopted a randomized control trial (RCT) design, involves three separate treatment arms and one control arm for each type of ECDE center (public and APBET).

The intervention is implemented in selected public and APBET ECDE centres within each of the four targeted counties through three treatment packages (T1, T2 and T3) as illustrated in figure 1.

¹ APBET - Alternative Provision of Basic Education and Training institutions, also referred to low-cost private schools in education literature.

Figure 1: The Tayari Model



² DICECE stands for District Centers for Early Childhood Education.

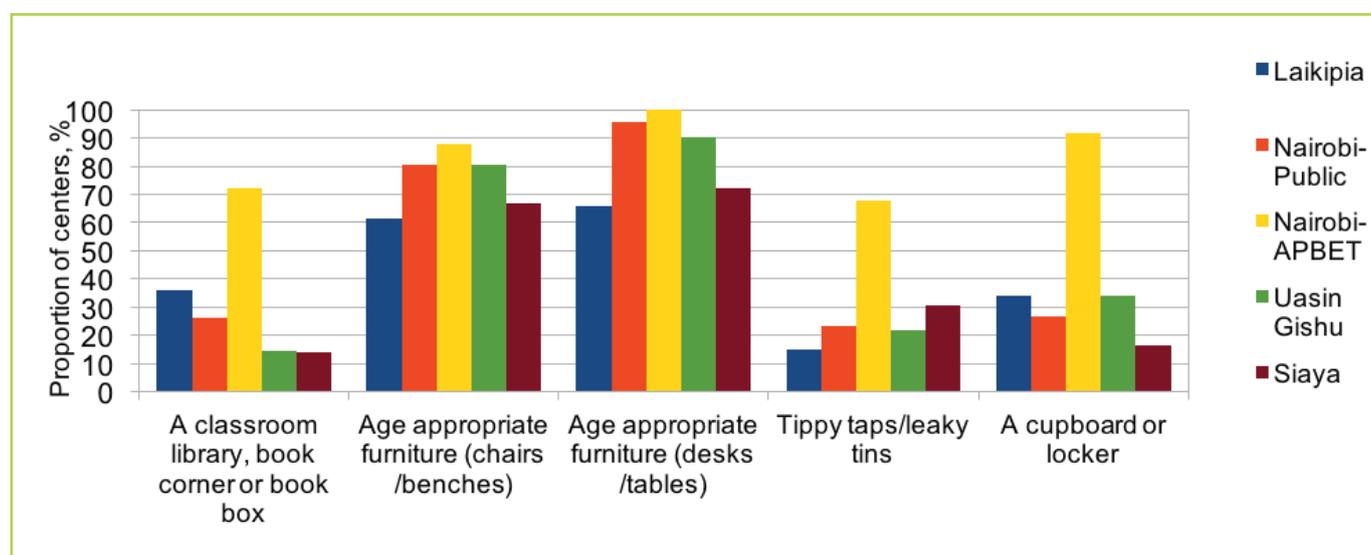
Baseline Findings

- For both public and APBET ECDE centers, the study found baseline balance across treatment and control arms. This means that most of the findings were similar across all the groups under study, making it possible to attribute changes observed in the treatment arms to the Tayari intervention.
- More than 90% of ECDE centres are affiliated with or attached to a primary school. This is important because it allows smooth transition of children from pre-primary to primary school and allows for sharing of play areas, libraries and other amenities.

Key Finding 1

Most public ECDE Centers in the study were poorly resourced with inadequate facilities. They also had inadequate storage and health promotion facilities such as fixed water taps or taps made from improvised materials, commonly known as tippy taps/leaky tins. APBET ECDE centers were better resourced and had more amenities than public ECDE centers.

Figure 2: Availability of Facilities by County



Key Finding 2

About 10% of teachers in public ECDE centers, compared to about 20% of teachers in APBET ECDE centers have not attended pre-service training.

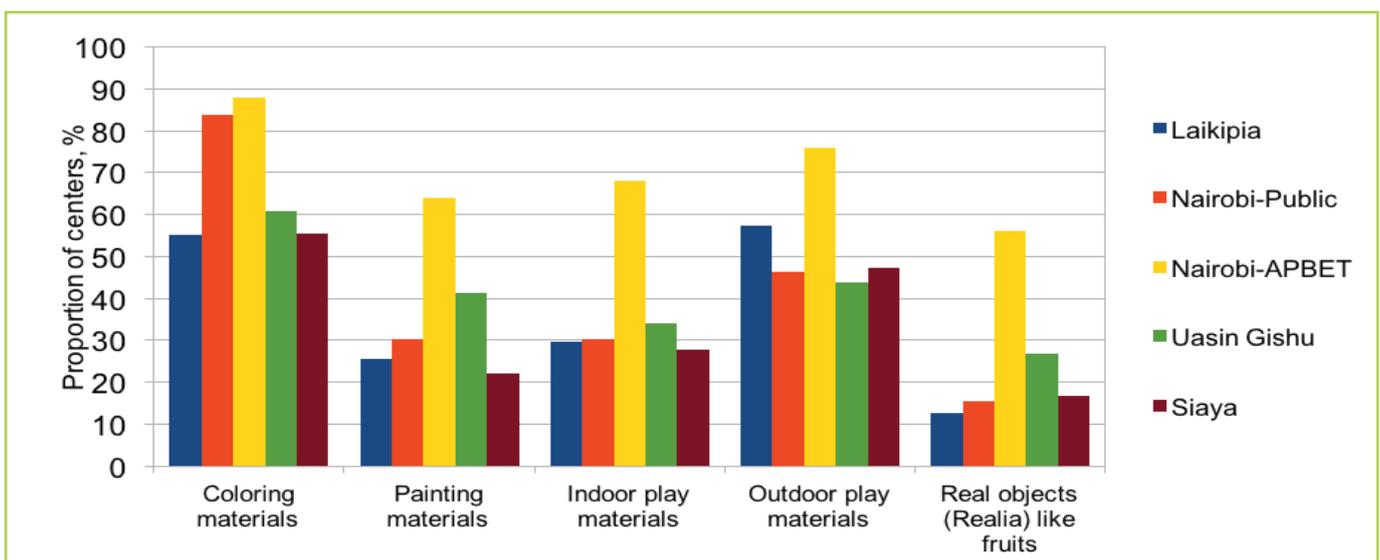
- The highest professional qualification among ECDE teachers is certificate training, obtained by about 60% of ECDE teachers in both public and APBET ECDE centers.
- About half of the ECDE teachers in both public APBET ECDE teacher have not attended any form of in-service training. This is despite having average teaching experiences of 14 years for Public ECDE teachers and seven years of teaching experience for APBET ECDE teachers.
- Only three out of every 10 head teachers in public ECDE centers and slightly less than half of APBET head teachers have undergone specialized training in school management.

Key Finding 3

While teacher-centered approaches such as whole class teaching methods that involve lectures, low teacher-learner engagement and low interaction among learners are not known to be effective, they are the most dominant approaches, taking more than half the lesson time in ECDE centers.

- Only 10% of classroom time was spent on individual deskwork and less than 2% of the time on small group work, implying that learners at this level spend very little time working independently or co-operatively.
- Most classrooms lacked adequate resources to vary teaching styles, as learning and play materials such as painting materials, indoor play materials, real objects, fixed play equipment and big books were only available in about 50% of the ECDE centers or less.

Figure 3: Availability of Play/Learning Materials in Classrooms by County

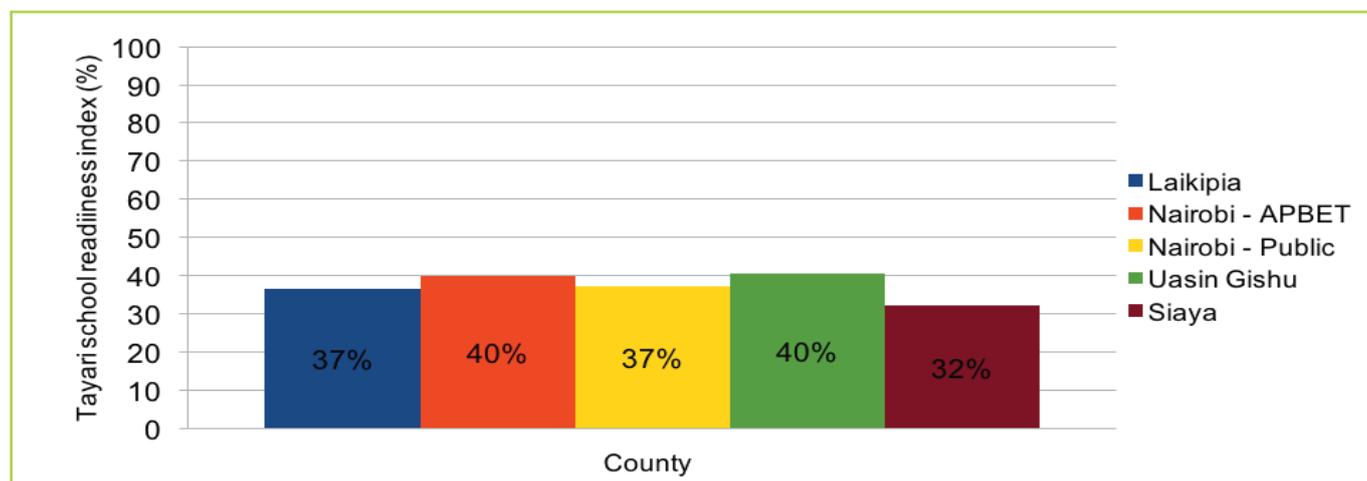


Key Finding 4

School readiness was measured using a school readiness index, which is a weighted percentage score based on 10 groups of items in the direct assessment administered to learners. School readiness was generally low, though this was not surprising as this was at baseline. The average school readiness score for learners in public ECDE centers was 37% and around 40% for those in APBET ECDE centres. This suggests that the learners did not possess some of the skills assessed by the direct assessment test.

- Mean scores in most literacy and numeracy domains were around 50% or below in both public and APBET ECDE centers.
- However, performance of the learners in one literacy sub-domain (listening comprehension) and three numeracy sub-domains (quantity discrimination, measurement vocabulary, and shape identification) was fairly good (ranging around 50-70%).

Figure 4: School Readiness by County



Recommendations

- ECDE centers need to be adequately resourced with facilities to provide storage space for books and learning materials. This is essential in enhancing organization among teachers as well as protecting books and other learning materials from damage, loss and/or constant replacement.
- ECDE centers can play a critical role in promoting hygienic practices among learners by ensuring the availability of functional taps (fixed or improvised). This is also a cost-effective mechanism of ensuring regular school attendance by reducing infection-related absenteeism among learners.
- Prioritization of in-service training for both teachers and head teachers is important to help ensure that teachers and head teachers are adequately equipped to teach ECDE learners and manage ECDE centers respectively.
- Teachers need to be made aware about the effect that varied teaching styles and different types of materials have in facilitating learning and overall development of young children.

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