Learning Agenda

Fursa kwa Watoto (FkW)
(Opportunities for Children)

Baseline and early results

Candace Miller • Laura Meyer

FURSA KWA WATOTO

Overview

- **The challenge:** Providing quality pre-primary education
- The **FkW Learning Agenda**
  - Assessing changes in schools, instruction, and student outcomes
  - Evidence to action approach
- **Early findings**
  - Teachers' instructional skills
  - Enrollment and attendance
  - Student outcomes
  - Early recommendations
- Next steps

The case for pre-primary Education

Recognition is growing on the critical role quality pre-primary education plays in improving learning and developmental outcomes.

Evidence shows that investments in early childhood education for vulnerable children yield an estimated return of 7 to 16 percent annually.

Further, earlier investments in human development are cheaper and more impactful than programs implemented later in life.

The Challenge

Pre-primary education in Tanzania

Historically, low value placed on early childhood. Before 2016:

- The government did not funded pre-primary (not in capitation grants)
- Youngest children relegated to worst classrooms
- Developmentally inappropriate curriculum and instruction

Human resource limitations

- Teacher shortage
- Teaching work force is untrained and underqualified
- Insufficient pre-service and in-service training

1 in 5 Tanzanians **(>7 million children)** will begin primary school in the next 5 years.

The challenge of providing **quality pre-primary education** is growing.

SOURCES: Tanzania National Bureau of Statistics 2014

The Central Challenge

To build a pre-primary model that is:

Sustainable

Cost-effective

Effective under crowded, resource-constrained conditions

Scalable

Fursa kwa Watoto

(Opportunities for children)

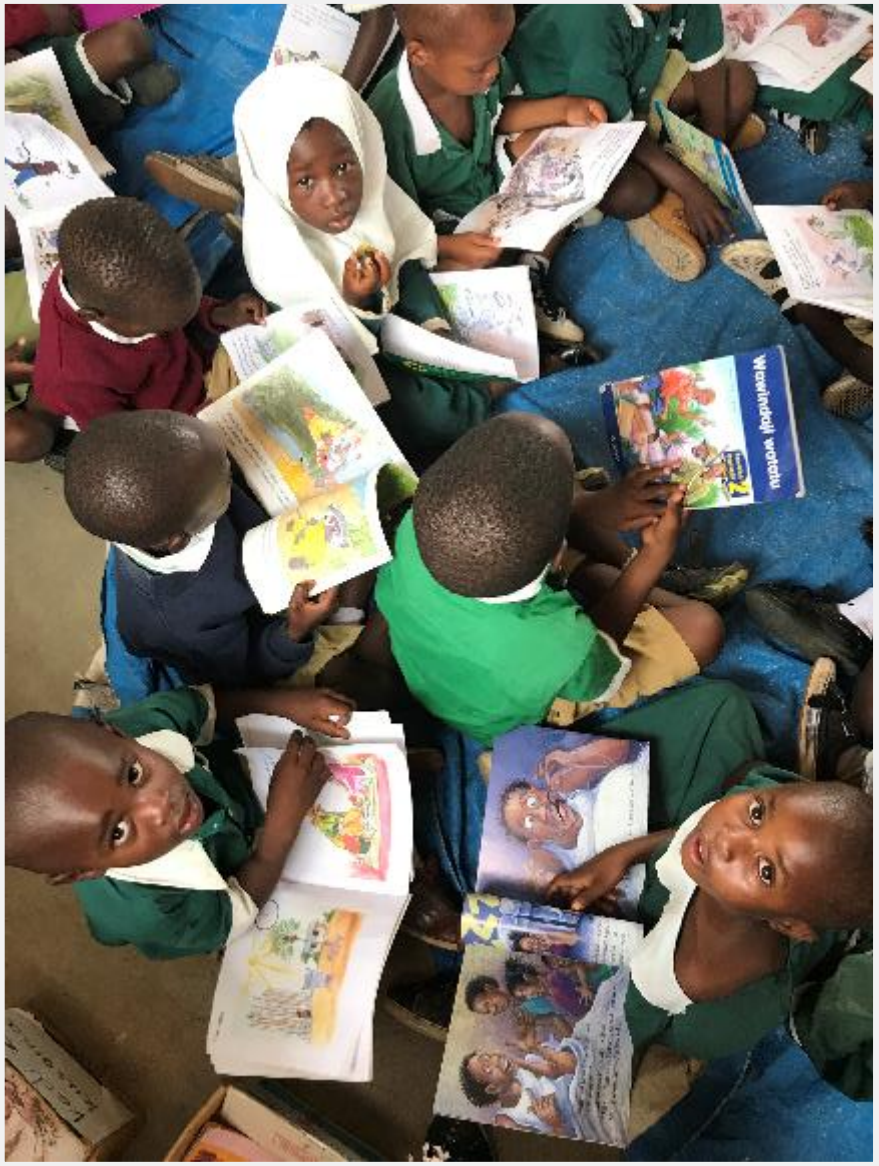
The FkW Learning Collaborative

- Aga Khan University (AKU)
- Children in Crossfire (CiC)
- Corporate Social Responsibility Africa (CSR)
- Dubai Cares
- Maarifa ni Ufunguo
- Mathematica Policy Research
- Tanzania Home Economics Association (TAHEA)
- The William and Flora Hewlett Foundation
- UNICEF Tanzania

Purpose of FkW

- Design a comprehensive package of pre-primary education interventions – that are innovative, replicable, and cost-effective – to help Tanzania achieve education goals.

- Emphasis on monitoring, evaluation, and learning to improve quality of interventions and influence national policy and planning.



The FkW Theory of Change

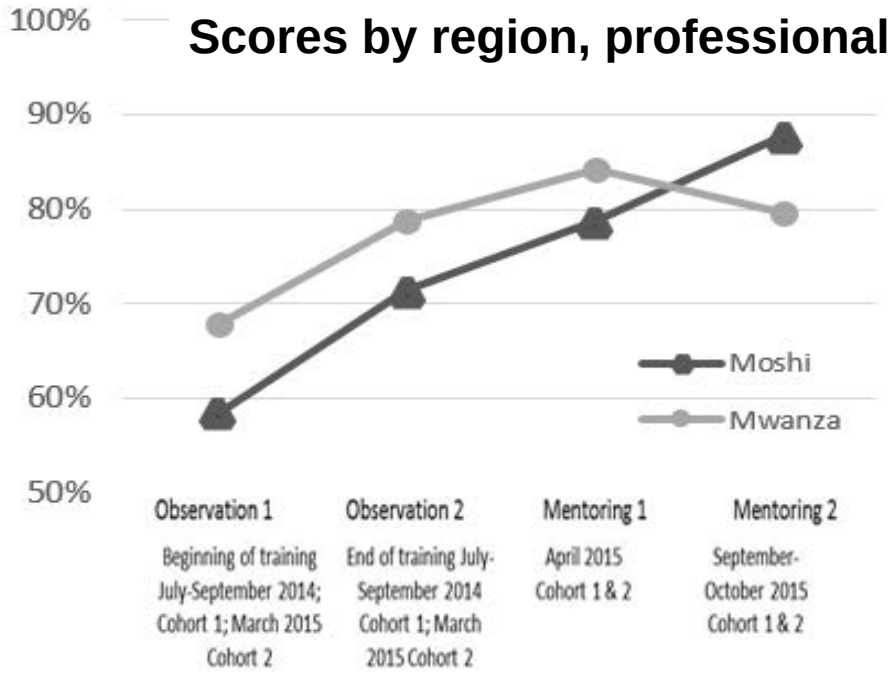
Components		Actions	Outcomes	Impact
Component 1: Two Quality-Enhanced Pre-Primary Models		Pre-primary teachers and paraprofessionals receive specialized training and professional development on pre-primary pedagogy	Children in Tanzania demonstrate improved school readiness and learning outcomes in Standard II. The Government of Tanzania has costed and proven models for equitable expansion of access to quality Pre-Primary Education in accordance with the 2014 Education and Training Policy and the national curriculum.	Tanzania builds a citizenry that is *educated, knowledgeable, skilled and proficient to contribute to national development.* (Education and Training Policy, 2014)
Model 1: quality-enhanced Pre-Primary education in primary schools	Model 2: quality-enhanced Pre-Primary education in satellite schools	Mentors and supervisors are trained to effectively support quality age-appropriate pre-primary education		
		Pre-primary classroom spaces are transformed into stimulating learning environments.		
		Parents, caregivers and families participate in parent partnership programme to promote engagement and support to children's education at home and at school.		

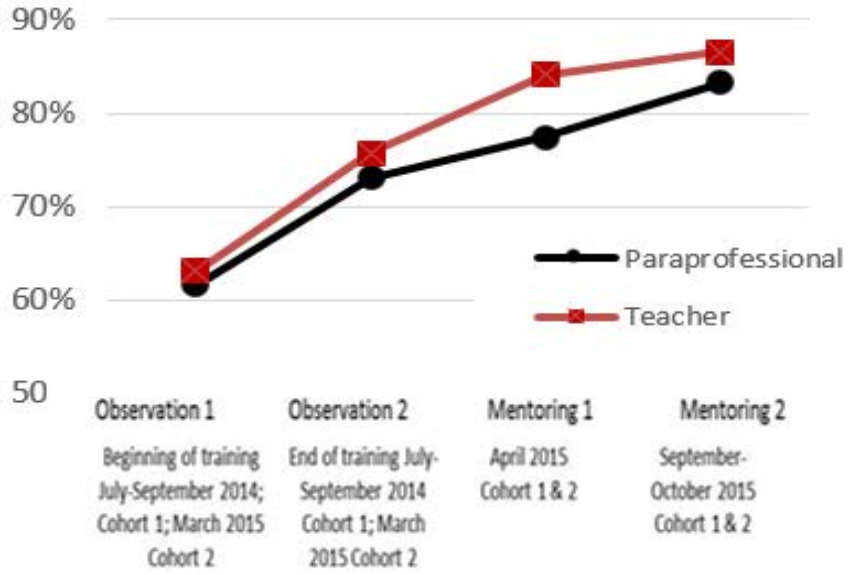
Developed and refined by the FkW Steering Committee during the program development and pilot stages from 2014-2016.

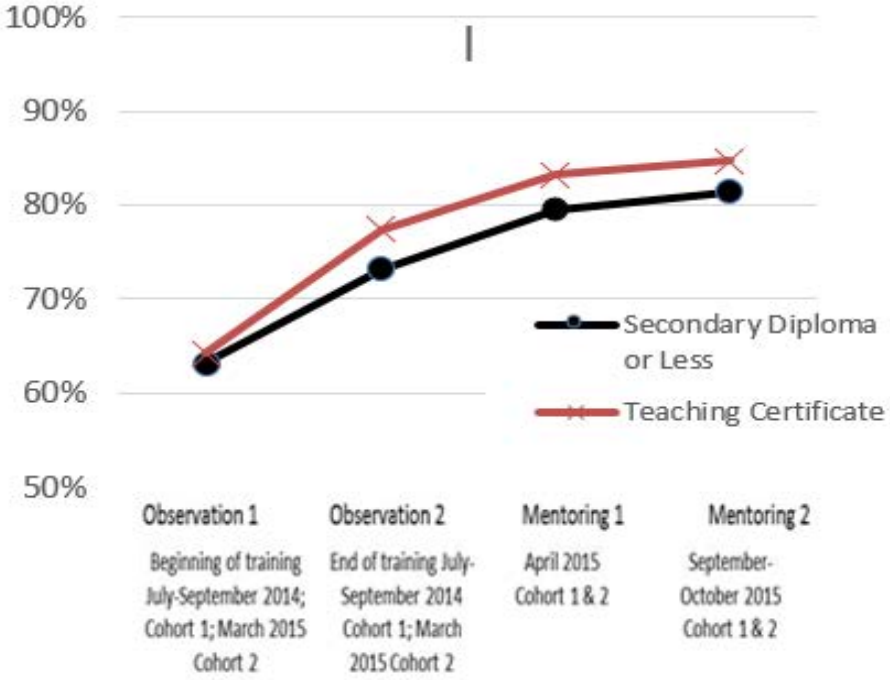
Notes: Only Component 1 is illustrated while FkW includes 4 complementary components. Model 2 is not covered in the Learning Agenda

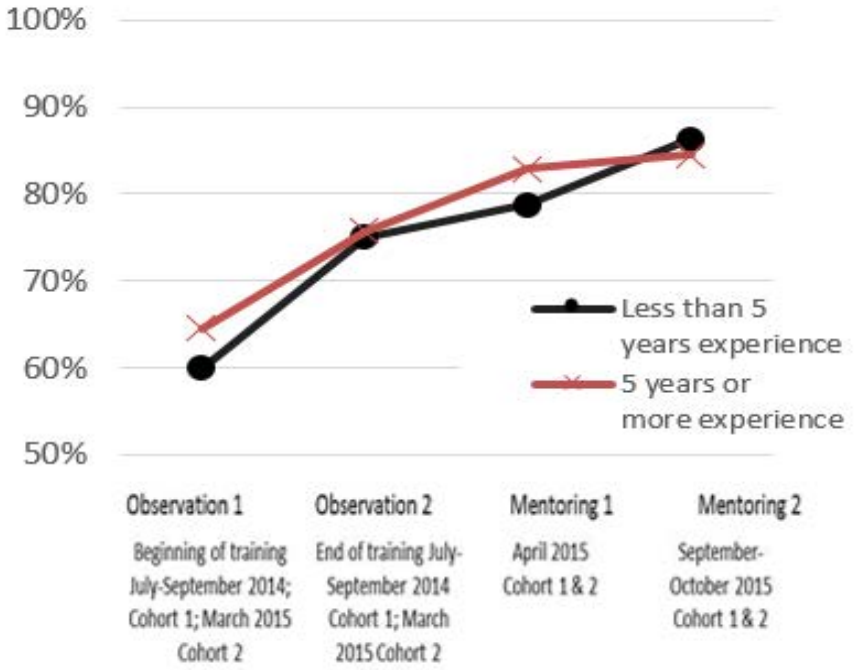
During the FkW pilot, teachers' instruction was assessed through classroom observations following training and mentoring. We found **positive changes** in teaching.

Scores by region, professional status, education, and experience







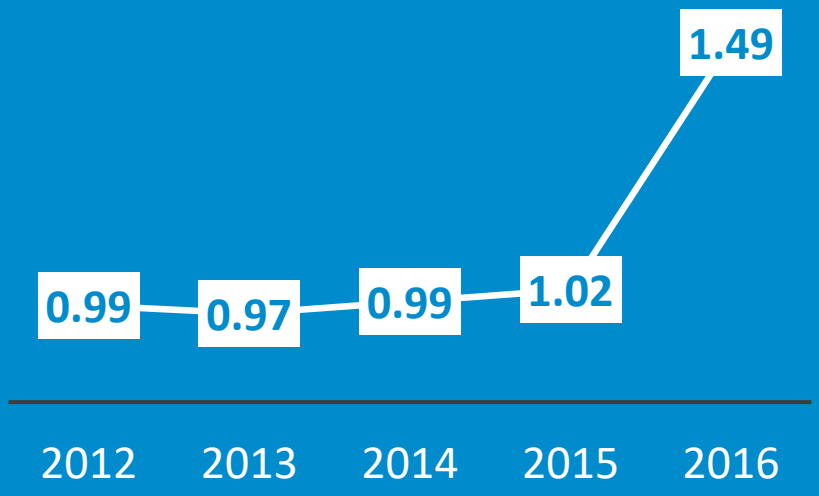


However, as the FkW pilot concluded in 2015, the Tanzanian government issued Circular 5 to instruct schools to implement **fee-free education**, removing the requirement for parents to pay fees or make contributions and thus allowing children to attend school for free.

As a result of removing fees, enrollment ballooned Between 2015 and 2016

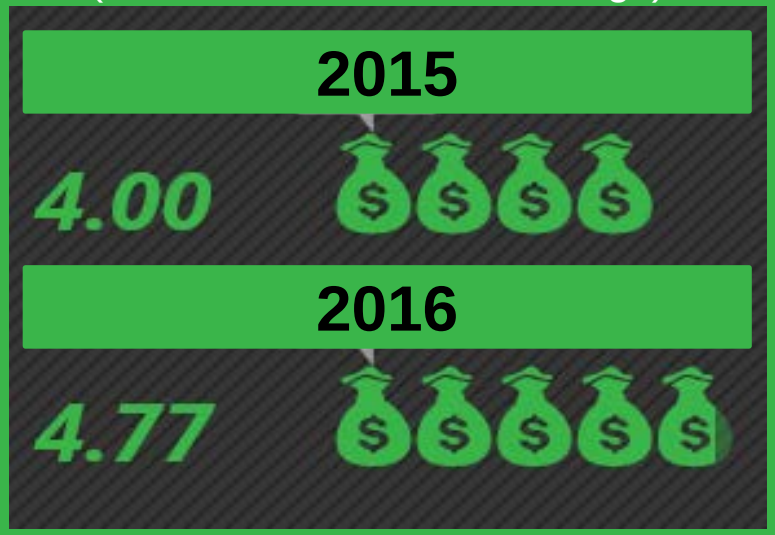
Pre-primary enrollment grew by **nearly**
50 percent

Pre-primary enrollment
in millions



Yet education spending increased by **less than**
20 percent

National education budget
(trillions of Tanzanian shillings)



SOURCES:
Tanzania President's Office and Regional Administration and Local Government 2016; UNICEF 2016; Tanzania Ministry of Finance and Planning 2016

Overcrowded classrooms with poor pupil to teacher ratio

For **1** teacher

51 students in Kilimanjaro schools

117 students in Mwanza schools

SOURCES: FkW baseline enrollment and attendance data, collected May-June 2017. n=130 (Mwanza=65; Kilimanjaro=65)

The Learning Agenda

Building on FkW's demonstrated promise, and vis-à-vis new challenges, the Learning Agenda was designed to:

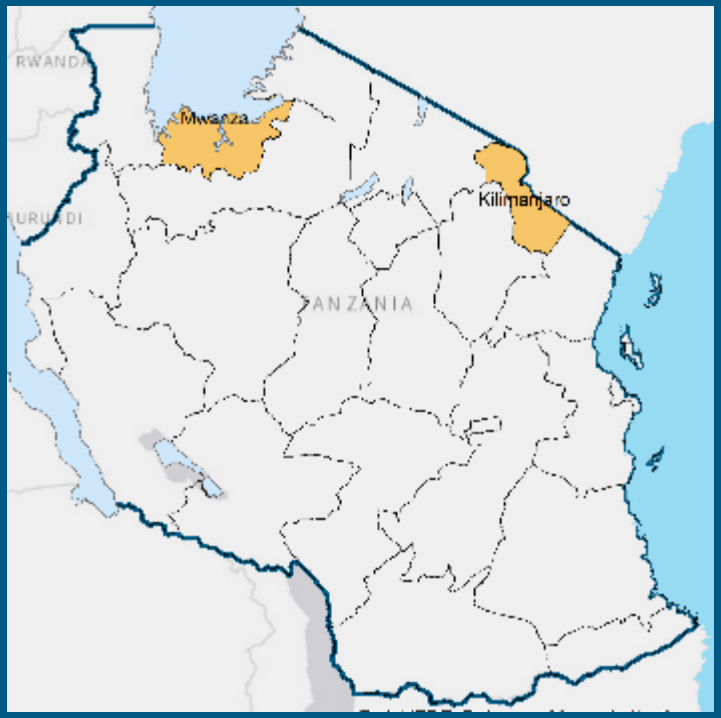
- Measure and track student enrollment and attendance
- Through classroom observations, assess FkW's impact on teaching, adaptations given overcrowding, and sustainability
- Assess students' early learning and social development using the Measuring Early Learning Quality and Outcomes (MELQO) tool.
- Understand the range of stakeholder perceptions of FkW
- Provide action-oriented recommendations to improve pre-primary quality across Tanzania in an evidence-to-action approach

Learning Agenda baseline data collection

The sample

We randomly selected and assigned schools to the intervention (*n=65) or control group (n=65) and conducted*:

- An enrollment and attendance tracking study (n=130 schools)
- Classroom observations to assess instructional practices (n=80 classrooms)
- Assessments to measure student learning using MELQO tool (n=1500 students)
- Qualitative interviews and focus group discussions (FGDs) [results in forthcoming presentation]



Note: In addition, we collected data from 20 FkW pilot schools for classroom observations, enrollment tracking, qualitative interviews and FGDs to assess FkW's sustainability. Results will be reported separately.

Evaluation timeline

2017

Ongoing dissemination (Briefs, presentations, & partner meetings)

April
Project launch

- COSTECH application,
- Design report

May-July
Assess students, observe classrooms & track enrollment

- Student assessment using MELQO
- Observe classrooms
- Collect & analyze enrollment & attendance data

Sept.-Oct.
Teachers, head teachers, parents & community

- Qualitative interviews
  - Teacher & head teacher interviews
  - FGDs: Parents, Community & SMCs

Oct.
Interviews with education sector officials

- Interviews with education officials at district, ward, and village level

Oct.-Dec.
Assess students, observe classrooms & enrollment

- Follow-up MELQO
- Observe classrooms
- Collect & analyze enrollment & attendance data

2019: end-of-project & final dissemination
Policy brief, Technical Memo, Presentation & Video

2018-2019

Ongoing dissemination (Briefs, presentations, & partner meetings)

Jan.
Costing activity

- Begin designing costing study
- Analyze costs of key components of quality preprimary education
- Meet with others working at preprimary level & discuss lessons learned

March
Teachers, head teachers, classrooms & track enrollment

- Qualitative
  - Teacher & head master interviews
  - Observe classrooms
  - Collect & analyze enrollment & attendance data

April
Interviews with education sector officials & teacher survey

- Interviews with local education officials & support staff
- Interviews with national education stakeholders
- Teacher survey (by phone)

Nov.
Classrooms, teachers, parents & community

- Observe classrooms
- Teacher survey (by phone)
- FGDs: Parents, Community & SMCs

Dec.
Teachers, head teachers, classrooms & enrollment

- Qualitative
  - Teacher & head teacher interviews
  - Observe classrooms
  - Collect & analyze enrollment & attendance data

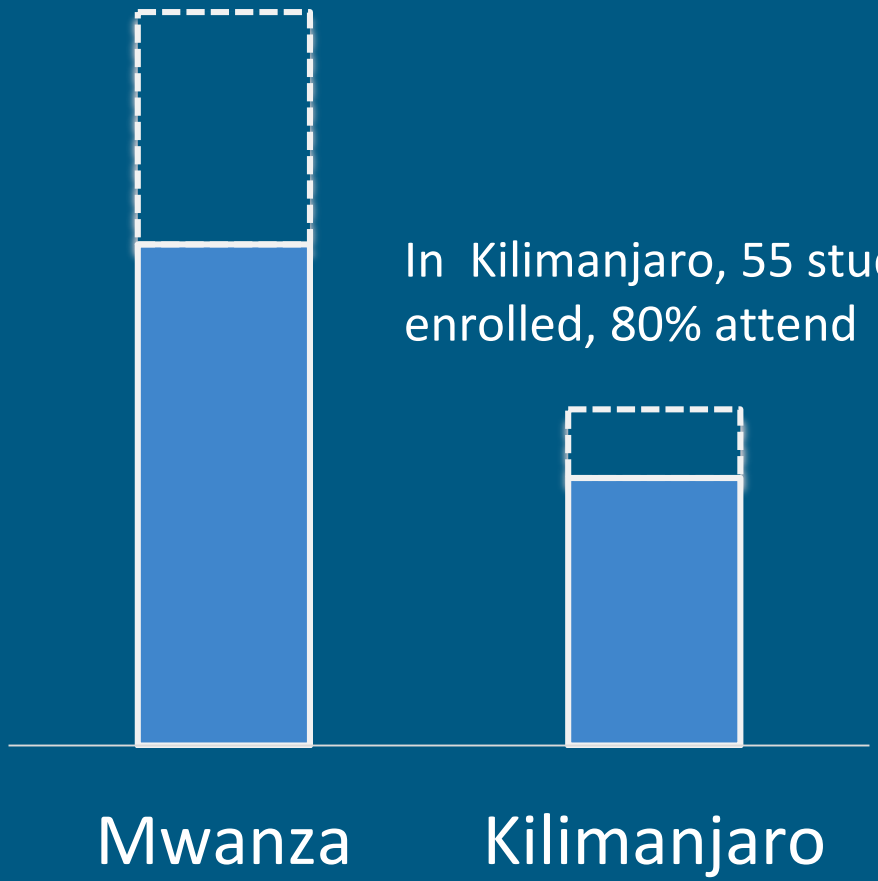
Key baseline findings

Enrollment and attendance

Enrollment and attendance patterns were similar in FkW and non-FkW schools.

In Mwanza, 120 students are enrolled, 70% attend

In Kilimanjaro, 55 students enrolled, 80% attend



Enrollment and attendance patterns were similar in FkW and non-FkW schools.

Girls account for about 50% of all students enrolled and attending.

SOURCE: FkW baseline enrollment and attendance data, collected May-June 2017. n=130 (Mwanza=65; Kilimanjaro=65)

Only 4 in 10 children enroll in primary school at the developmentally appropriate age

Age	Mwanza region		Kilimanjaro region	
	% Enrolled	% Attending	% Enrolled	% Attending
Age 3	2	3	2	2
Age 4	15	17	14	14
Age 5	**39**	**40**	**39**	**41**
Age 6	34	31	38	39
Age 7+	10	9	5	4
Total	**100**	**100**	**100**	**100**

Too young

Developmentally appropriate!

Too old (if 6 years by January)

3-4 years old	5 years old	6 years old	7 years
18 %	39 %	36 %	7 %

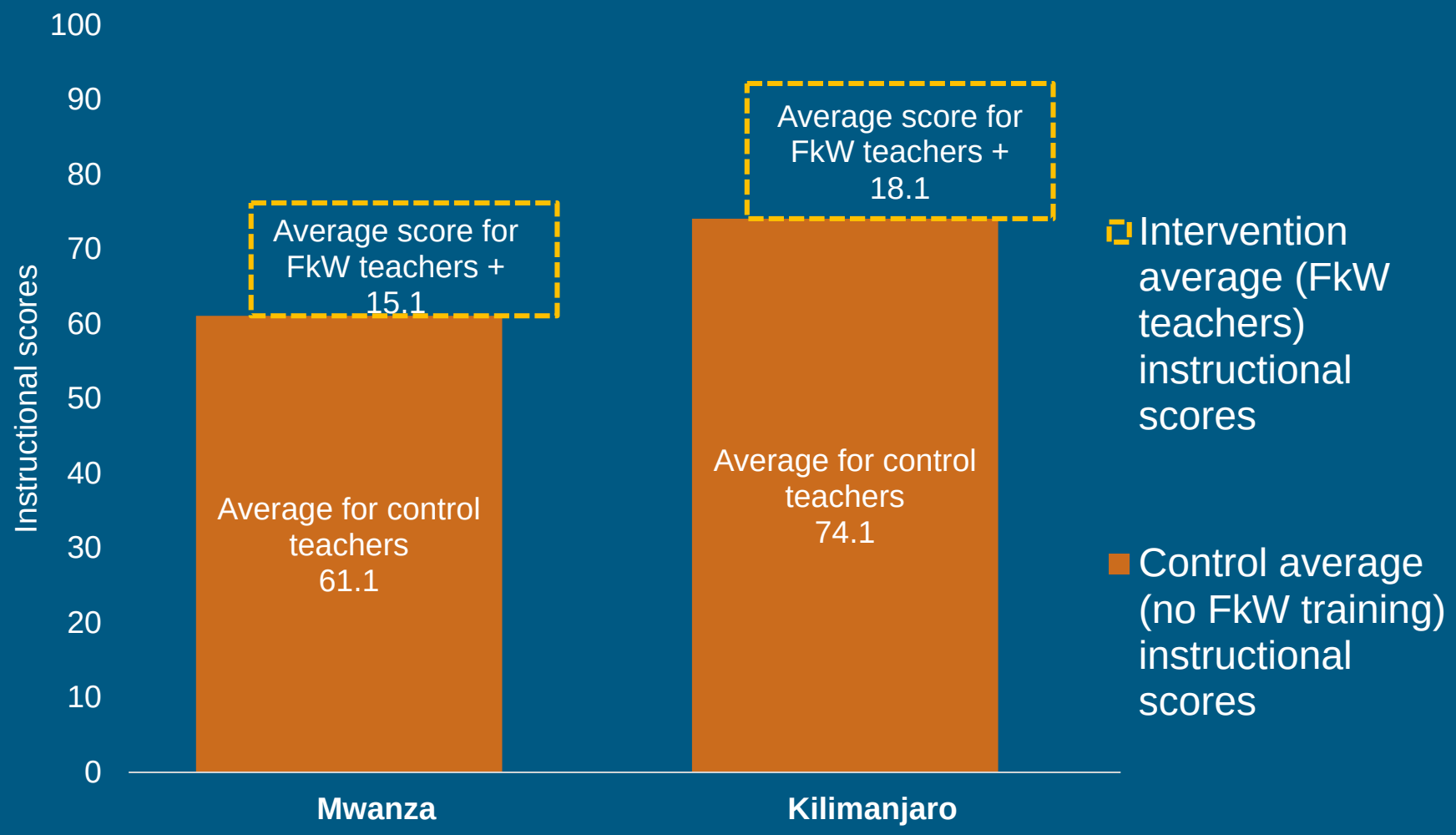
SOURCE: FkW baseline enrollment and attendance data, collected May-June 2017. n=130 (Mwanza=65; Kilimanjaro=65).

Teachers' instructional practices

FkW teachers scored higher than non-FkW teachers on most instructional practices

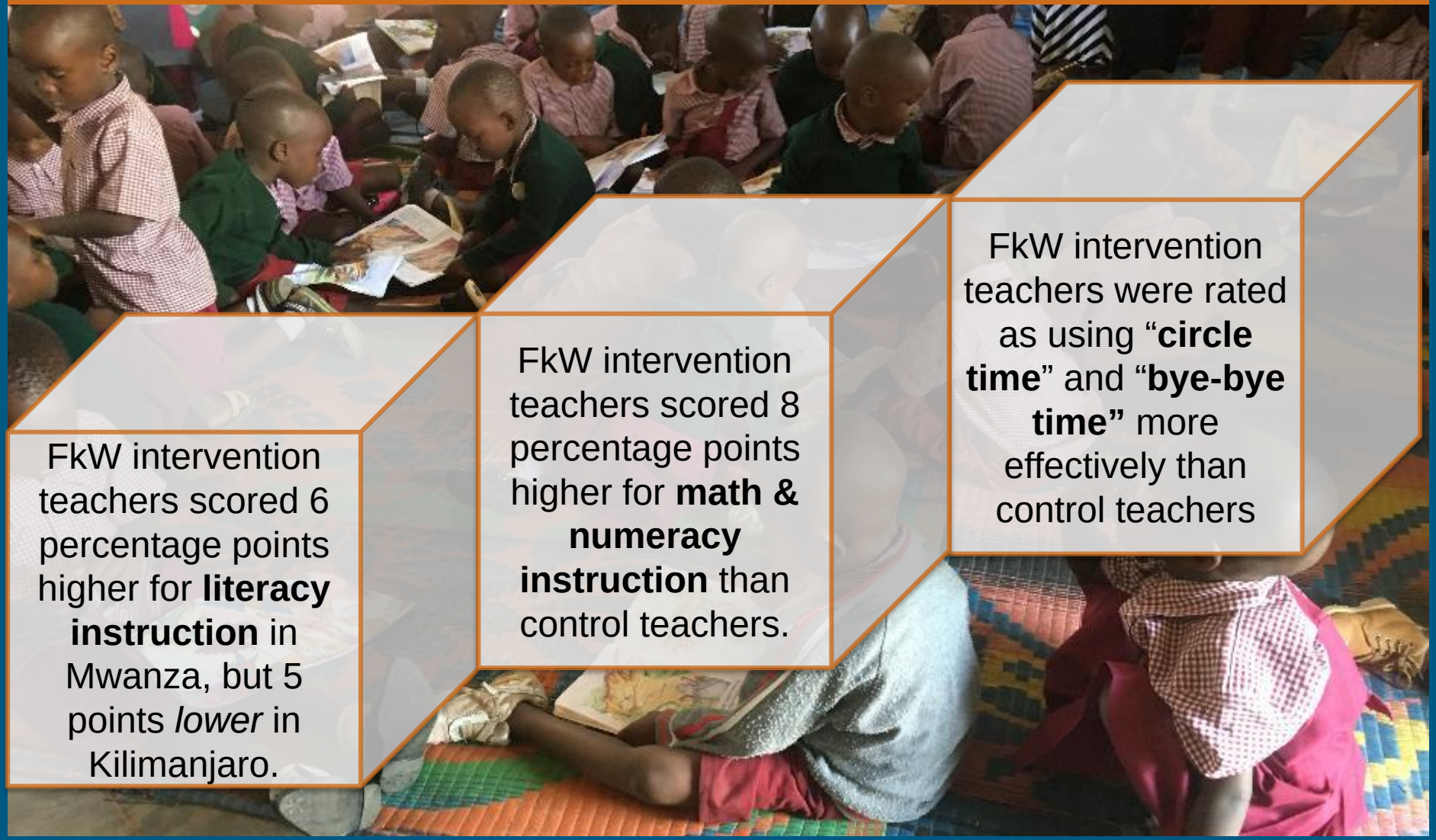
- Developing appropriate lesson plans
- Using appropriate teaching resources
- Providing clear explanations
- Doing formative checks
- Using safe, relevant learning materials
- Varying learning activities
- Using time management strategies
- Involving students in teacher-led activities
- Setting rules and expectations
- Creating an inclusive environment
- Using effective communication (voice, eye contact, movement)
- Making linkages, providing summaries
- Making learning areas accessible, age appropriate, organized
- Teacher engagement during child-led activities

The FkW impact (or effect size) on teachers' instructional scores was 15 -18 percentage points



SOURCE: FkW baseline classroom observation data, collected May-June 2017. Regression-adjusted instructional strategies and skills score. n=80 (Mwanza=40; Kilimanjaro=40). Score combines teacher scores on lesson organization, time management, the use of illustrations, explanations, and examples, formative checks, and learning materials and activities. Scores are out of 100 possible points.

Intervention teachers had higher scores than control teachers for numeracy but not for literacy instruction.



FkW intervention teachers scored 6 percentage points higher for **literacy instruction** in Mwanza, but 5 points *lower* in Kilimanjaro.

FkW intervention teachers scored 8 percentage points higher for **math & numeracy instruction** than control teachers.

FkW intervention teachers were rated as using "**circle time**" and "**bye-bye time"** more effectively than control teachers

SOURCE: FkW baseline classroom observation data, collected May-June 2017. n=80 (Mwanza=40; Kilimanjaro=40).
Literacy and numeracy instruction scores are out of 100 possible points.

FkW classrooms are child-centered learning environments. Intervention classrooms scored higher than control classrooms on the learning environment (85% vs 20% out of 100 possible points)

FkW classrooms were more likely to have a sufficient number of durable, age appropriate materials for students.

Most learning materials are made by parents using locally available, low-cost materials.

SOURCE: FkW baseline classroom observation data, collected May-June 2017. n=80 (Mwanza=40; Kilimanjaro=40).

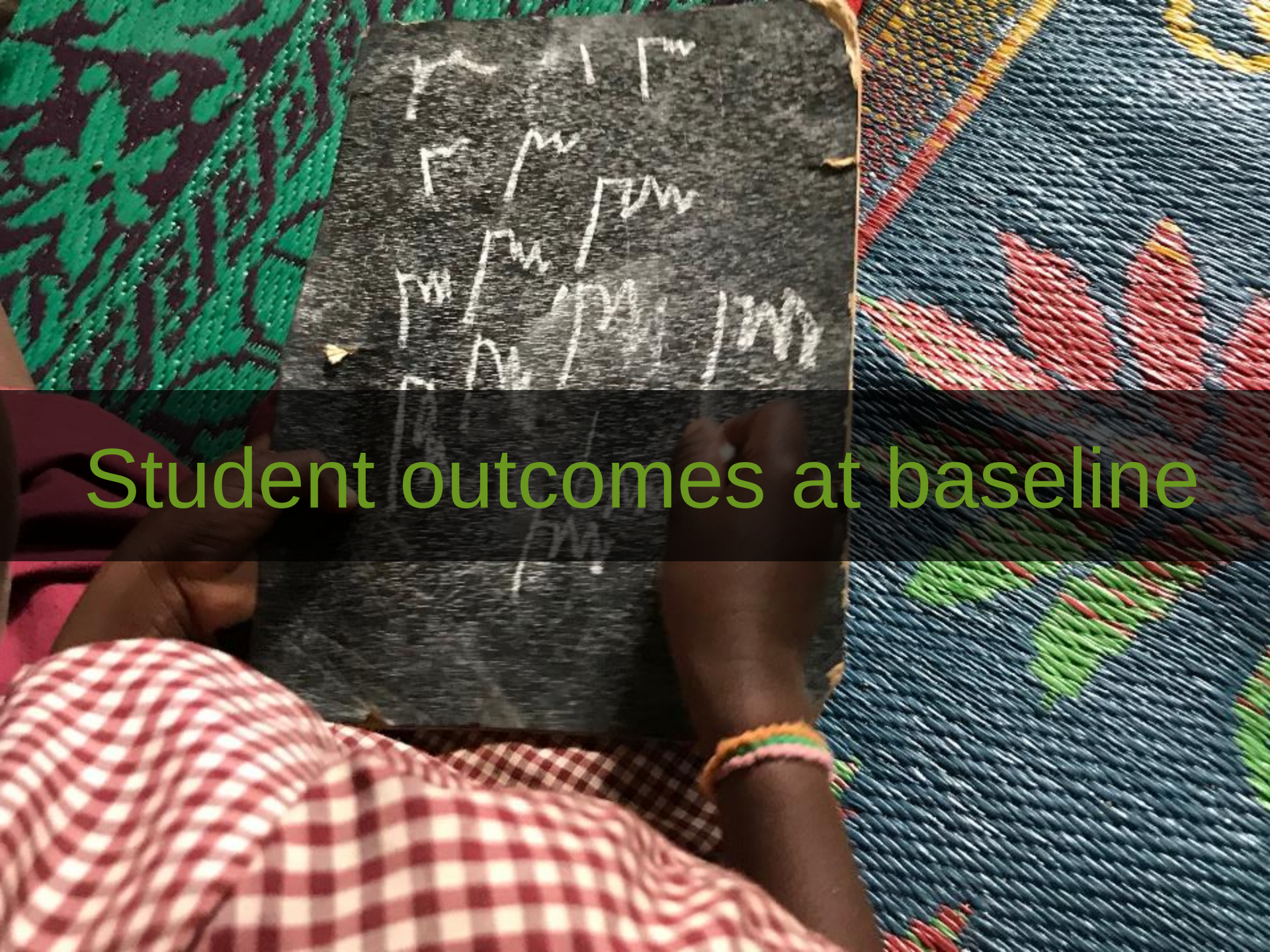
There were few school-level changes based on FkW

Outside the classroom

More FkW intervention schools provide meals than control schools but

Sanitation facilities did not improve much in FkW control schools.

SOURCE: FkW baseline classroom observation data, collected May-June 2017. n=80 (Mwanza=40; Kilimanjaro=40)



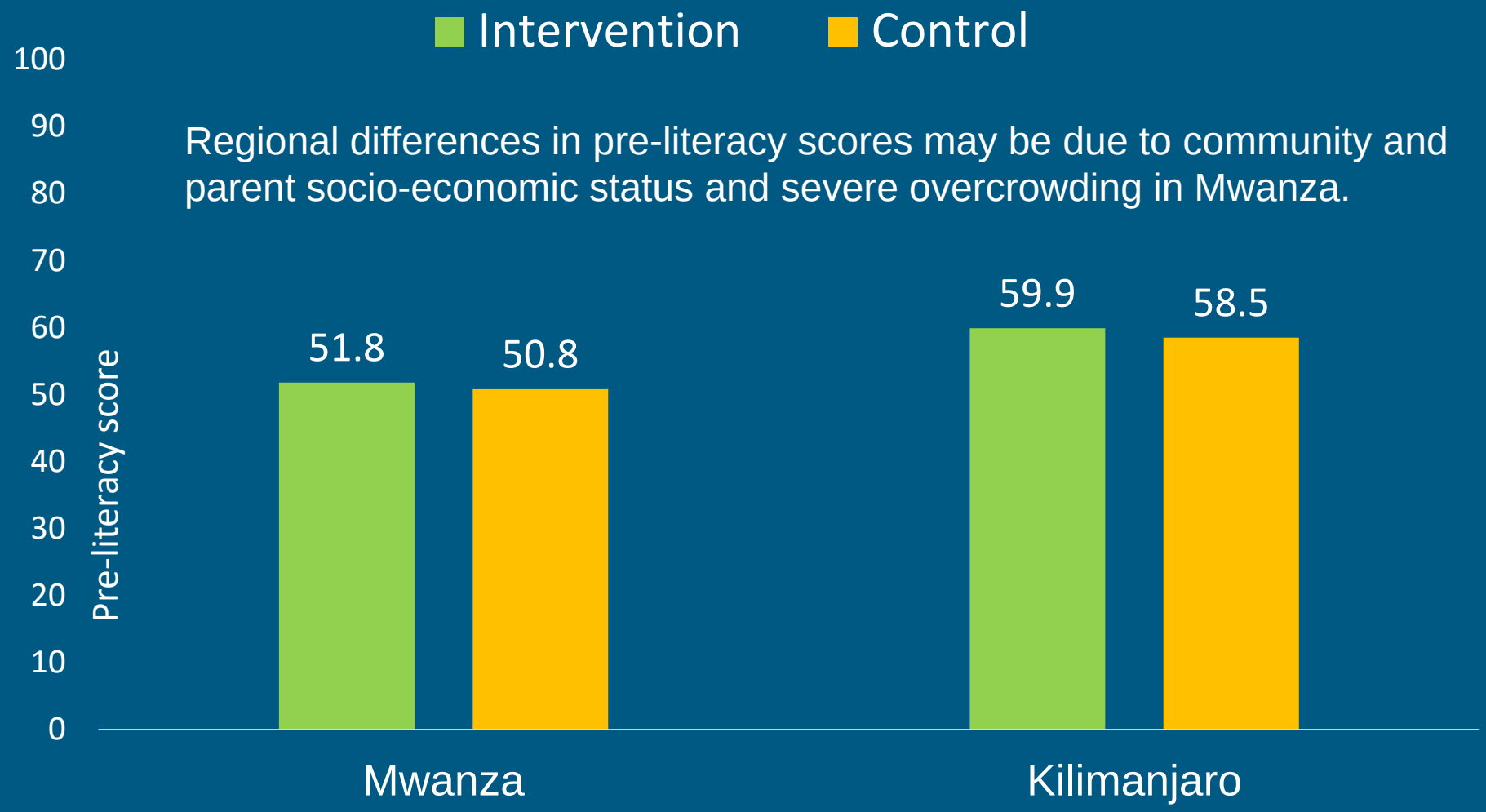
Student outcomes at baseline

Does FkW lead to improved early reading?

Students were tested on pre-literacy skills that predict students' reading outcomes in later grades such as:

- ✓ Vocabulary
- ✓ Letter identification
- ✓ Knowledge of letter sounds
- ✓ Listening comprehension
- ✓ Writing skills

Pre-literacy scores were similar between FkW intervention and control groups at baseline (June 2017)



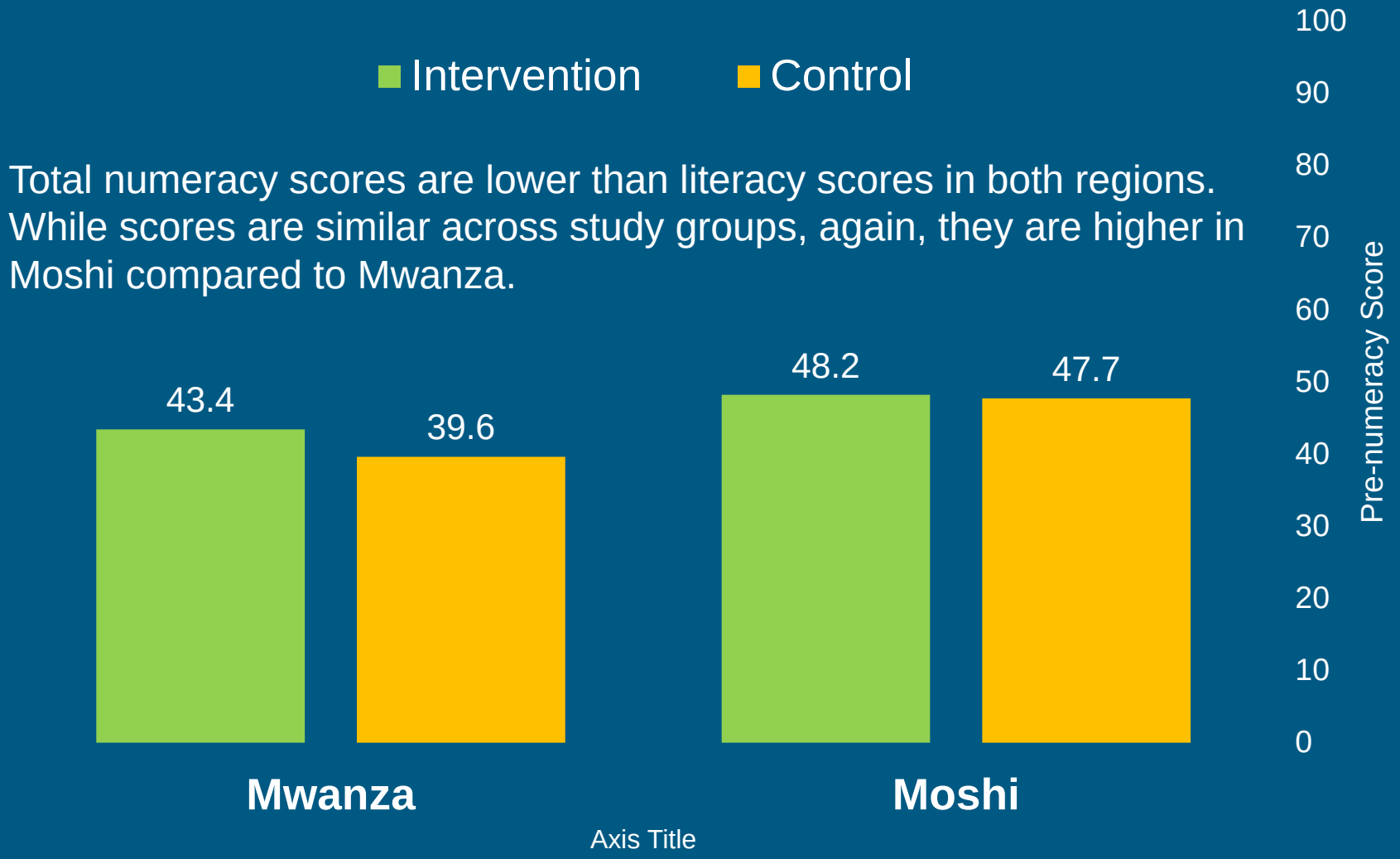
SOURCE: FkW baseline MELQO student assessment data (regression-adjusted pre-numeracy average score). n=867 (Mwanza=315; Kilimanjaro=552).
Total pre-literacy scores are based on skills including identifying letters, letter sounds, listening, vocabulary, and writing. Scores are out of 100 possible points.

Does FkW lead to improved early numeracy?

Students were tested on pre-numeracy skills that predict math outcomes in later grades, such as:

- ✓ Counting and number identification
- ✓ Addition and subtraction
- ✓ Shape identification, drawing, and manipulation
- ✓ Spatial vocabulary

Pre-numeracy scores were similar for FkW and non-FkW schools



Total numeracy scores are lower than literacy scores in both regions. While scores are similar across study groups, again, they are higher in Moshi compared to Mwanza.

SOURCE: FkW baseline MELQO student assessment data (regression-adjusted pre-numeracy average score) . n=867 (Mwanza=315; Kilimanjaro=552)
Total numeracy scores are based on skills including identifying numbers and shapes, counting, and addition. Scores are out of 100 possible points.

Does FkW lead to improved development?

Social-emotional skills include identifying and understanding feelings and emotions.

Health knowledge includes identifying body parts, nutritious foods, safety hazards, and sanitary behaviors

Executive function includes ability to follow instructions, use of working memory, and fine motor skills.

Scores for social-emotional skills, executive function, and health knowledge were similar for students in FkW and non-FkW schools.

Averages were

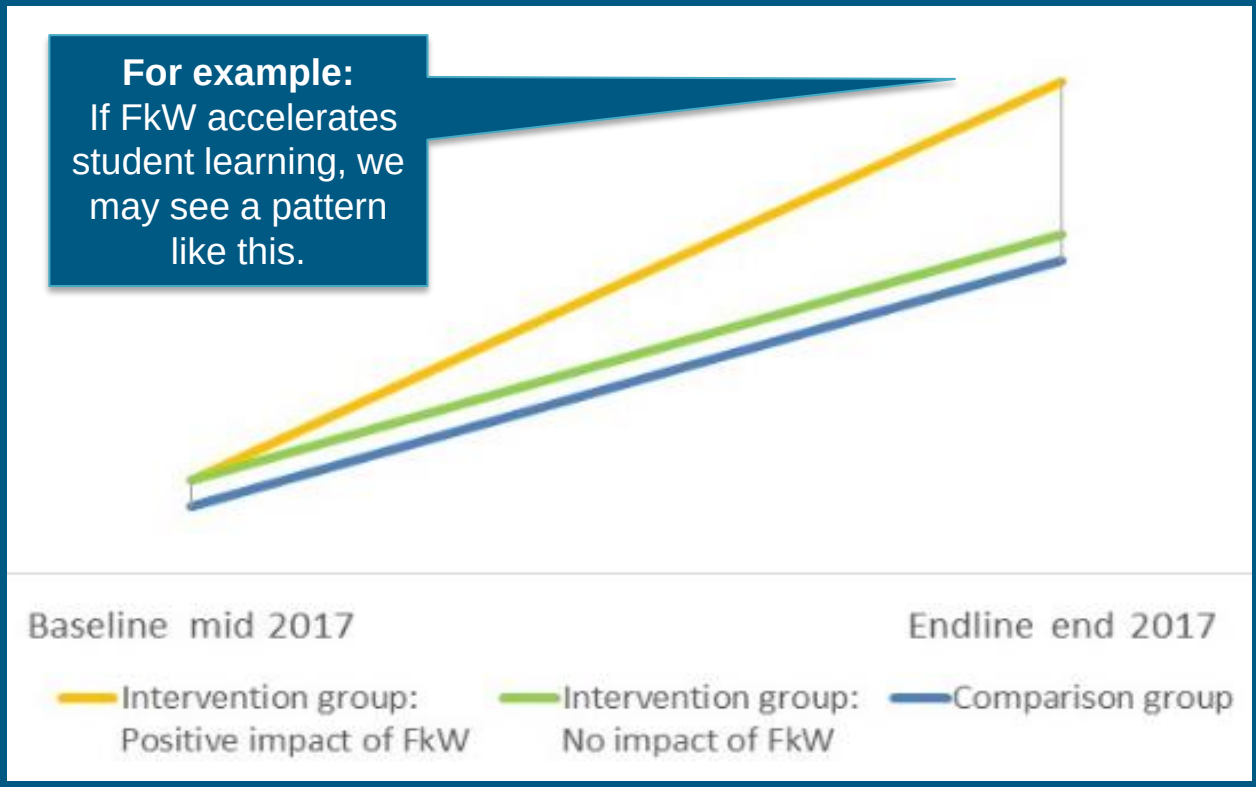
- 84 out of 100 for socio-emotional outcomes
- 70 out of 100 for health knowledge
- 15 - 60 out of 100 for summary measures of executive function.

SOURCE: FkW baseline MELQO student assessment data (regression-adjusted scores) . n=867 (Mwanza=315; Kilimanjaro=552)

Understanding MELQO results: An exmple

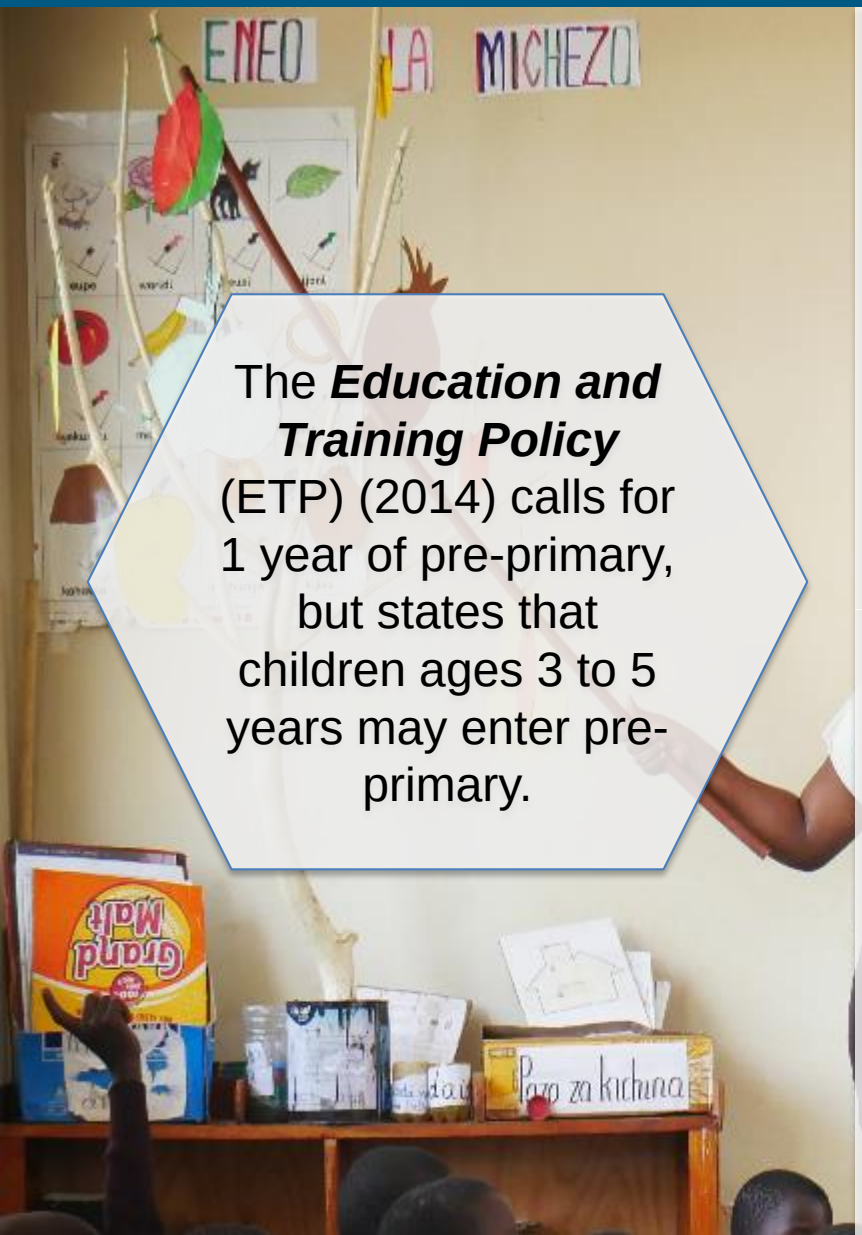
- MELQO student assessment findings are ‘baseline’.
- Students scored similarly at baseline = baseline equivalency
- If intervention and control group differences emerge by endline, we can attribute them to FkW

NOTE: The Learning Agenda was designed to contribute to stakeholder learning in many areas. We may not have a large enough sample to detect true differences in students scores.



Policy recommendations to date

Recommendations:
Target pre-primary to 5-year-olds



The ***Education and Training Policy*** (ETP) (2014) calls for 1 year of pre-primary, but states that children ages 3 to 5 years may enter pre-primary.

► Given:

- The potential returns to pre-primary education;
- Children have different age-based developmental needs;
- The national curriculum was designed for 5-year-olds; and
- Severe overcrowding and a wide-age range in pre-primary classrooms;

► We recommend:

- Target pre-primary education to 5-year-olds with specified enrollment dates.
- Clarify at the national, regional, district, and local levels children 6+ years should proceed to standard 1.
- Further develop early learning and care options for children younger than age 5.

Recommendations: Recognize potential of paraprofessional teachers

Paraprofessionals include individuals with secondary education, teaching experience, and teacher training, as well as individuals with lower qualifications.

► Given:

- The severe teacher shortage leading to overcrowded classrooms and reduced quality instruction
- The length of time required to build a cadre of certified teachers
- The fact that paraprofessionals demonstrate high quality instruction

► We recommend:

- Defining a mechanism to formalize status and remuneration of experienced paraprofessionals to help reduce the teacher shortage in pre-primary classrooms until professional teachers are available.
- Increase the number of providers offering certified pre-service and in-service training on pre-primary education.

Next steps

Next steps

- Continue qualitative analysis
- Analyze new MELQO, classroom observation, enrollment data
- Distill policy and programmatic recommendations from data to develop additional dissemination products
- Communicate learning to stakeholders across Tanzania

Fursa kwa Watoto Partnership

Children in Crossfire
GIVING CHILDREN THE CHANCE TO CHOOSE

دبي العطاء
Dubai Cares

unicef

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KNOWLEDGE IS THE KEY

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