

Effects of language of instruction on learning of literacy skills among pre-primary school children

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Outline

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Introduction

Objective

To investigate the relationship between the language of instruction and literacy achievement in a multilingual environment

In a multilingual environment, is there an advantage in learning literacy skills using a second language (in this case Kiswahili) over a third language (English)?



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Introduction

Literature

- Young children learn better when taught in their first language or mother tongue, MT (e.g. Begi 2014; Khan 2014; Piper et al., 2016)
- Mastering of MT promotes the acquisition of a second language (Pflepsen, 2011)
- Children who understand MT are more likely to enter the school system at the correct age, attend school regularly and stay in school (Smits et al. 2008; Thomas and Collier 2002)
- Use of MT also associate with improved learning outcomes, lower grade repetition rates and improved self-confidence (UNESCO, 2011)



Introduction

ECDE policy on language of instruction

- The Kenyan ECDE policy specifies that children below 8 years of age should be taught using the language of the catchment area (mother tongue), or using Kiswahili if they are attending schools located in multi-ethnic areas (Republic of Kenya 2006, 2012)
- However, this policy is rarely reinforced by the education authorities, nor is it followed by many early childhood education providers
- Thus, common to find preschools using English in non-English speaking areas



Method

Setting of the study: Urban informal settlements in Nairobi

Target population: PP2 learners attending APBET schools in January/February 2016

Sampling design: Randomized control trial

Sample size: 1867 PP2 pupils attending 147 APBET schools; 48.4% taught in Kiswahili and 51.6% in English



Method

Direct assessment:

- Adapted from the UNICEF/UNESCO school readiness tool (known as Monitoring Early Learning, Quality and Outcomes, or MELQO)
- Two versions of the test - English and Kiswahili
- Literacy skills assessed included letter identification, letter sounds, initial sound identification, rhymes, and listening
- 10-15 minute one-on-one session with each learner
- Learner scores on a Rasch scale; mean = 300, stdev =100



Analyses

Two-level multilevel model

□ Level-1 (Learner)

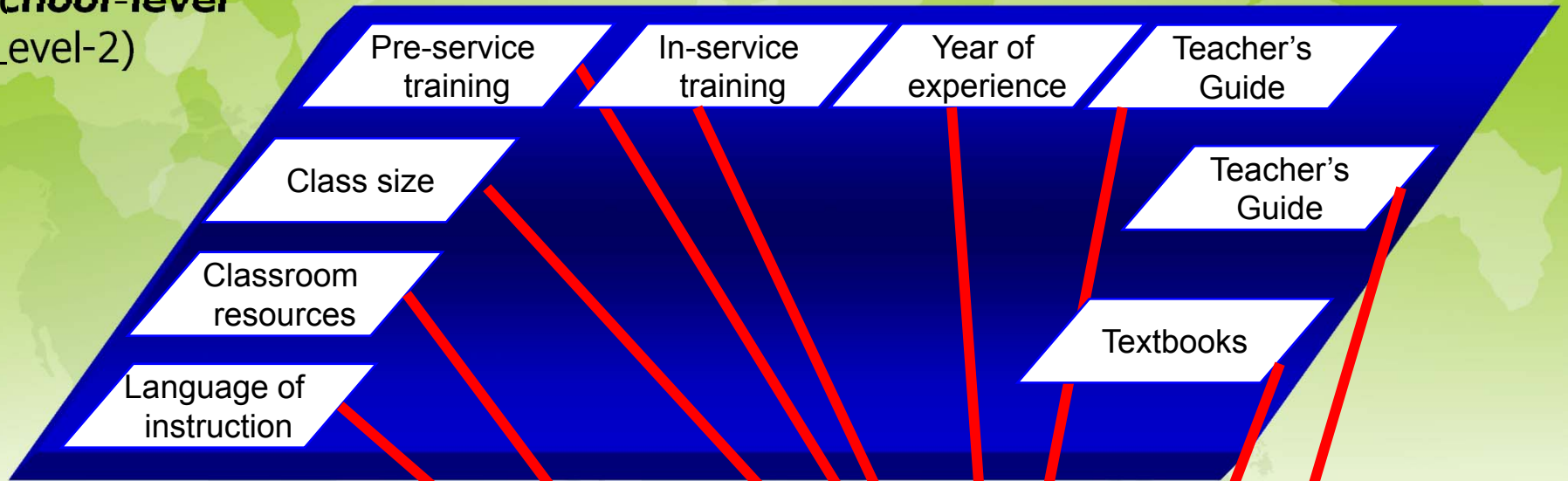
- ✓ Pupil sex

□ Level 2 (School)

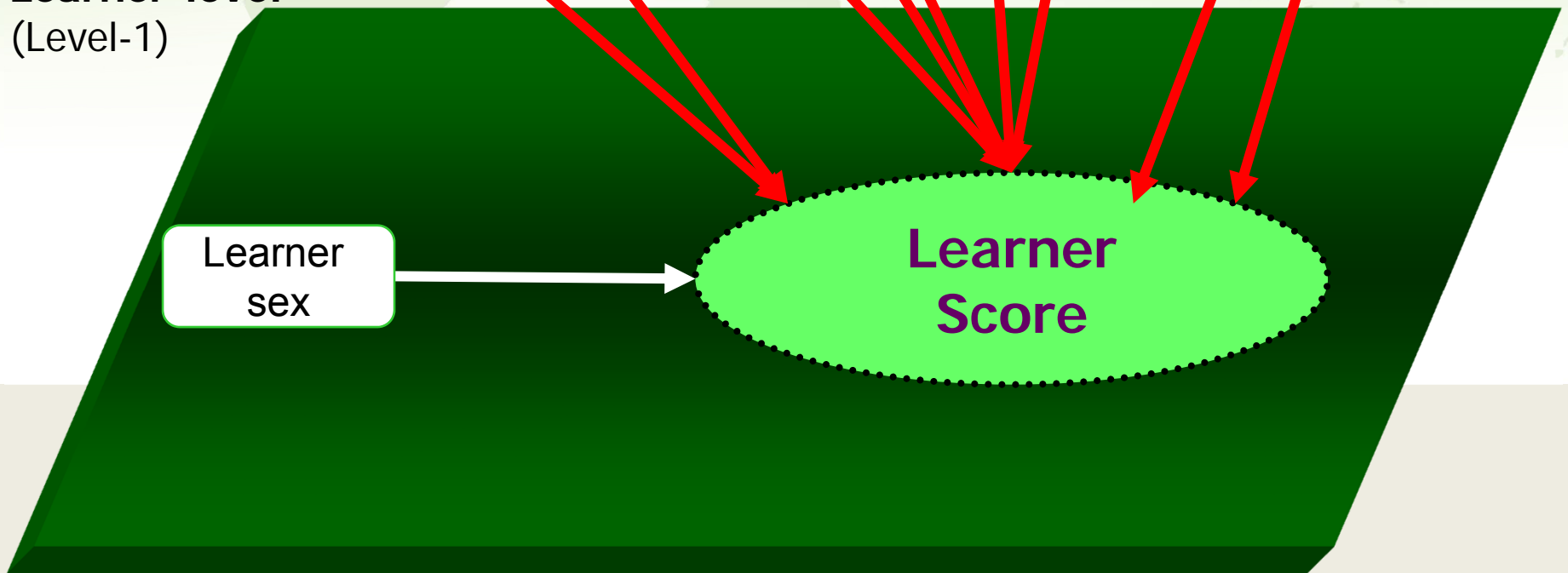
- ✓ Language of instruction
- ✓ Classroom resources
- ✓ Class size
- ✓ Pre-service training
- ✓ In-service training
- ✓ Teaching experience
- ✓ Teacher guide
- ✓ Teaching documents
- ✓ Textbooks



**School-level
(Level-2)**



**Learner-level
(Level-1)**



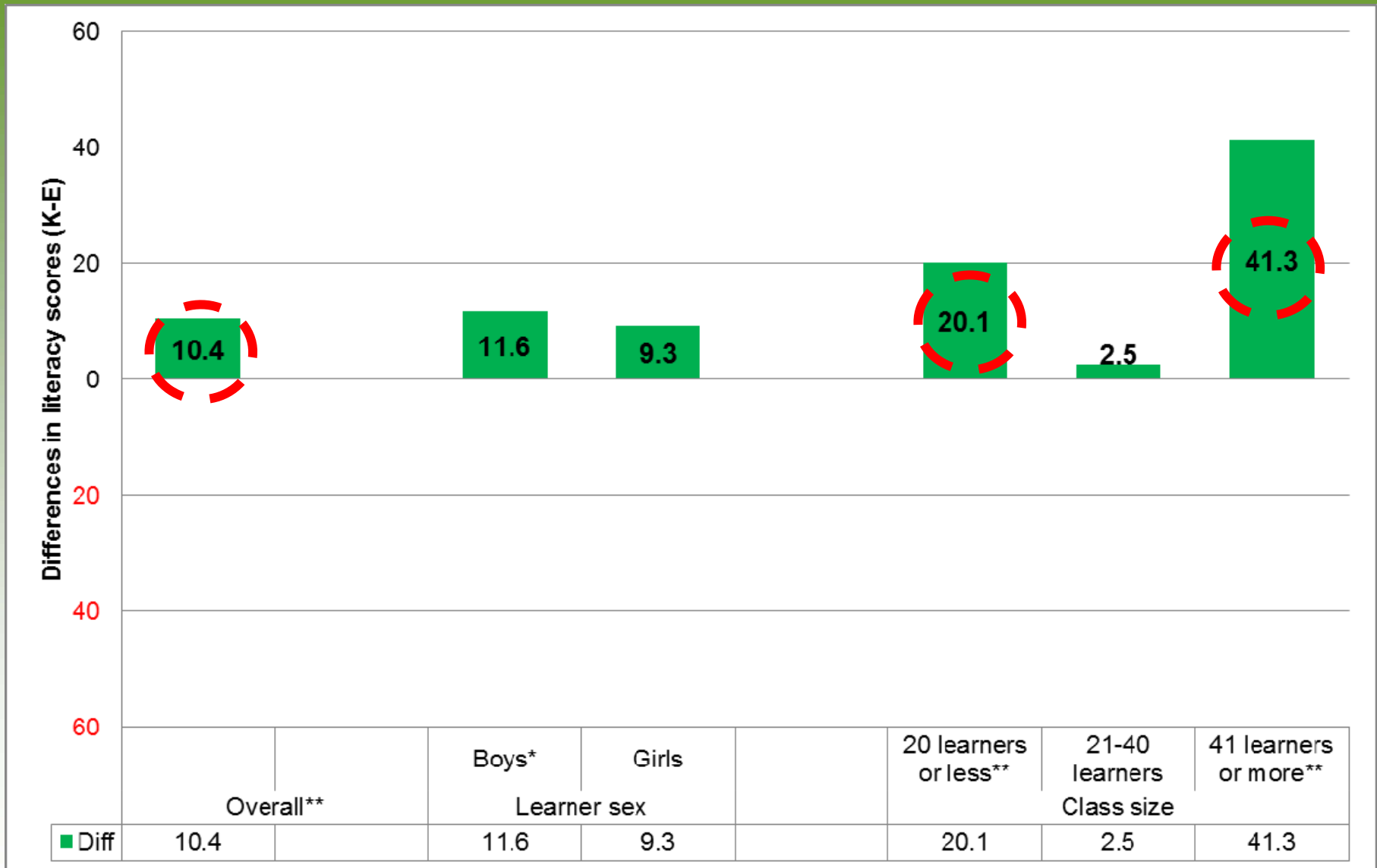
Results

- Descriptive
- Multilevel



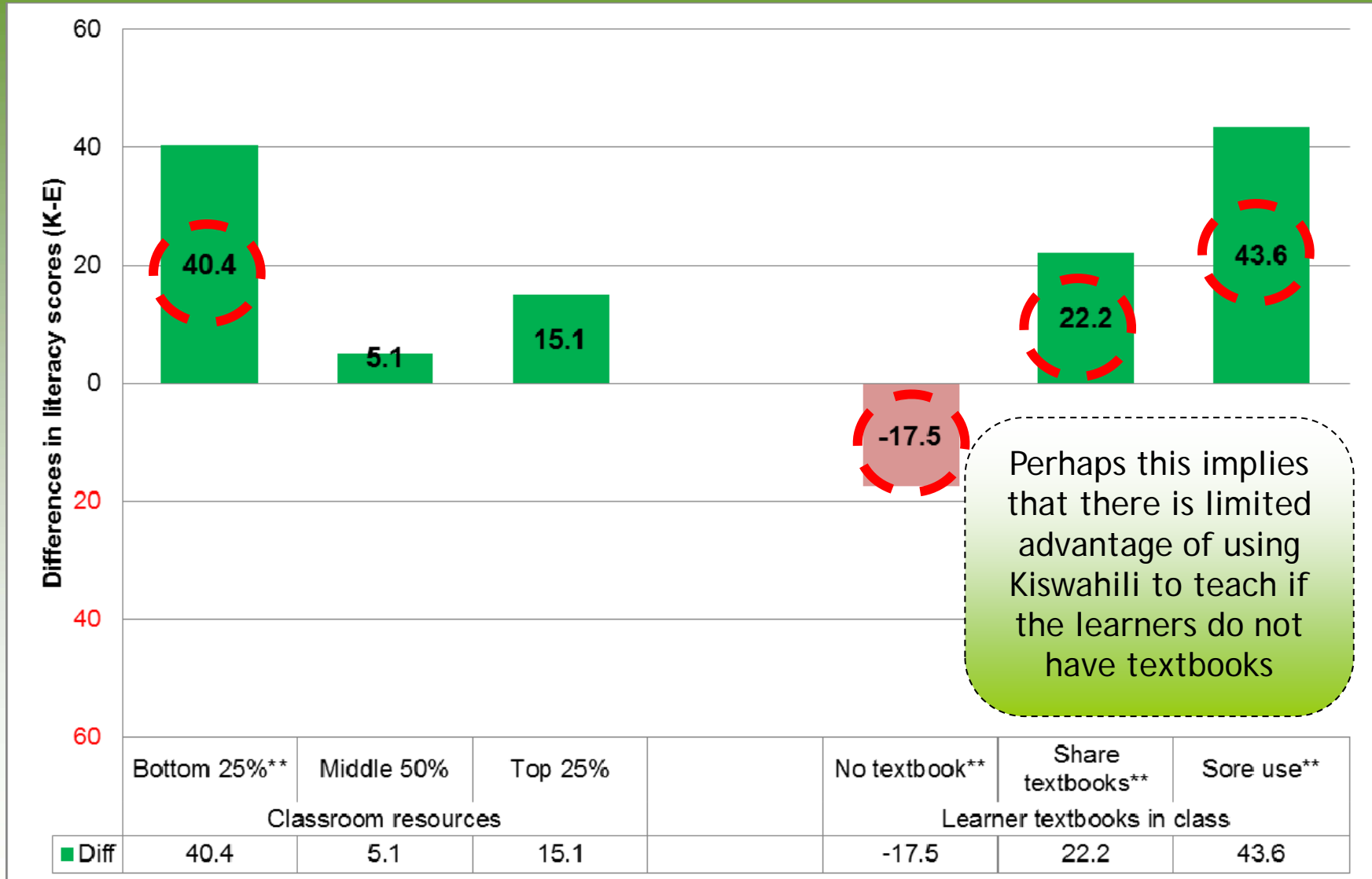
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Differences in literacy scores - KvsE

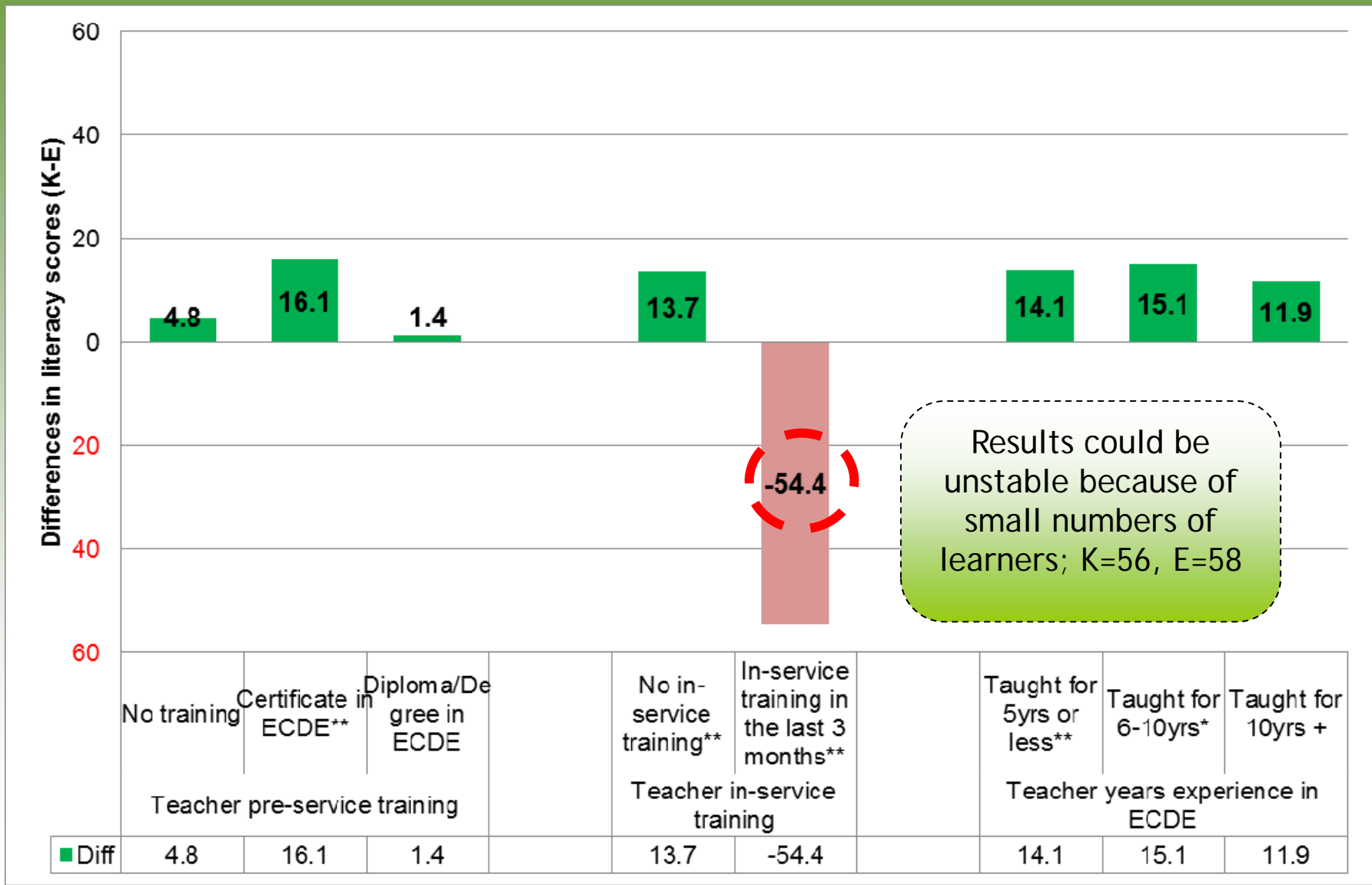


Learners taught using in Kiswahili did better

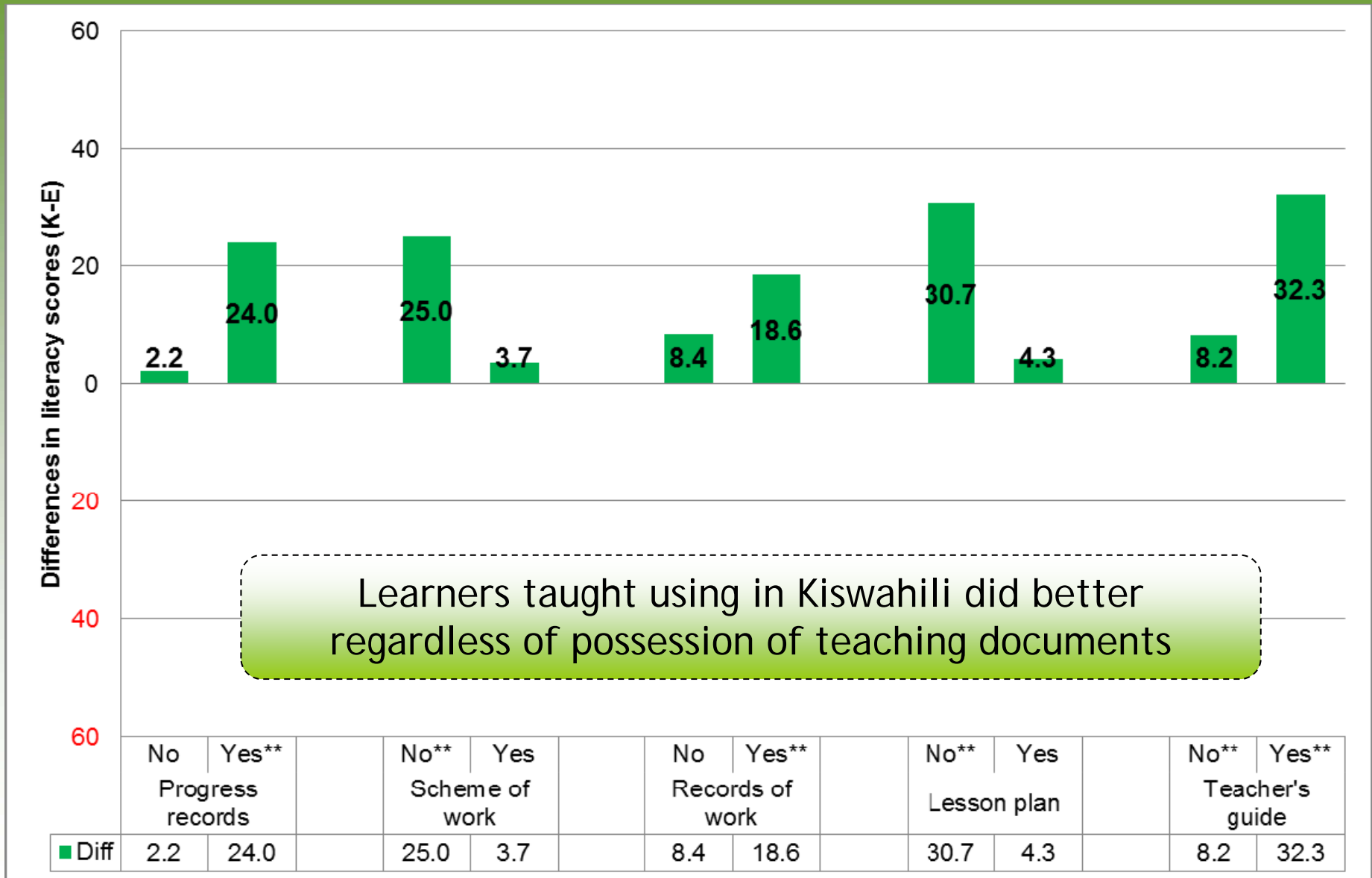
Differences in literacy scores - KvsE



Differences in literacy scores - KvsE



Differences in literacy scores - KvsE



Multilevel analysis

	Coefficient	SE	P-value	
Grand mean	277.97	7.62	0.000010	
Level-2				
Language of instruction is Kiswahili	20.05	9.01	0.027717	**
Classroom resources	2.68	4.41	0.544194	
Class size	0.09	0.35	0.799876	
Teacher pre-service qualification	7.35	10.80	0.497652	
Teacher in-service training	37.15	22.90	0.106888	
Teacher years of teaching ECDE	1.63	0.80	0.043984	**
Teacher has teacher's guide	2.89	12.32	0.814560	
Teaching has teaching documents	18.66	9.09	0.042074	**
Textbook-learner ratio	6.39	10.98	0.562195	
Level-1				
Learner sex (0=Boy; 1=Girl)	7.85	3.66	0.032243	**

Learners taught using in Kiswahili outperformed those taught using English by about 0.20 SD units.

So what ...

- ❑ Teach ECDE learners in low resource environment (such as in APBET schools) in a language they are familiar with - in this case Kiswahili
- ❑ Encourage compliance to the current policy on Lol → campaign should target
 - ✓ Preschool education providers
 - ✓ Parents
 - ✓ Primary schools



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