

Impact Opportunities 1: Inputs or Accountability? How to improve the supply of education services?

E-Readers in Nigeria

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Dakar, Senegal
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Re-Kindle-ing Learning

E-Readers in Lagos

James Habyarimana & Shwetlena Sabarwal
(with Michael Koenig & Marito Garcia)

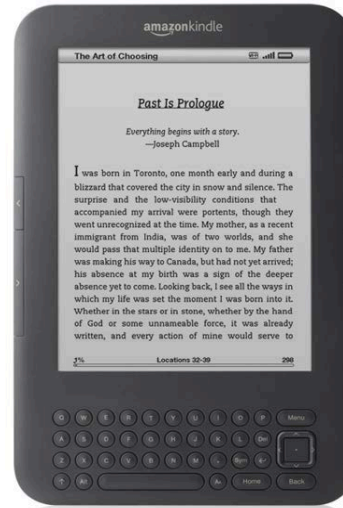
Can digital technologies
be used to improve
learning in Africa?

We test this



336

164



= \$100



T1 gets Library

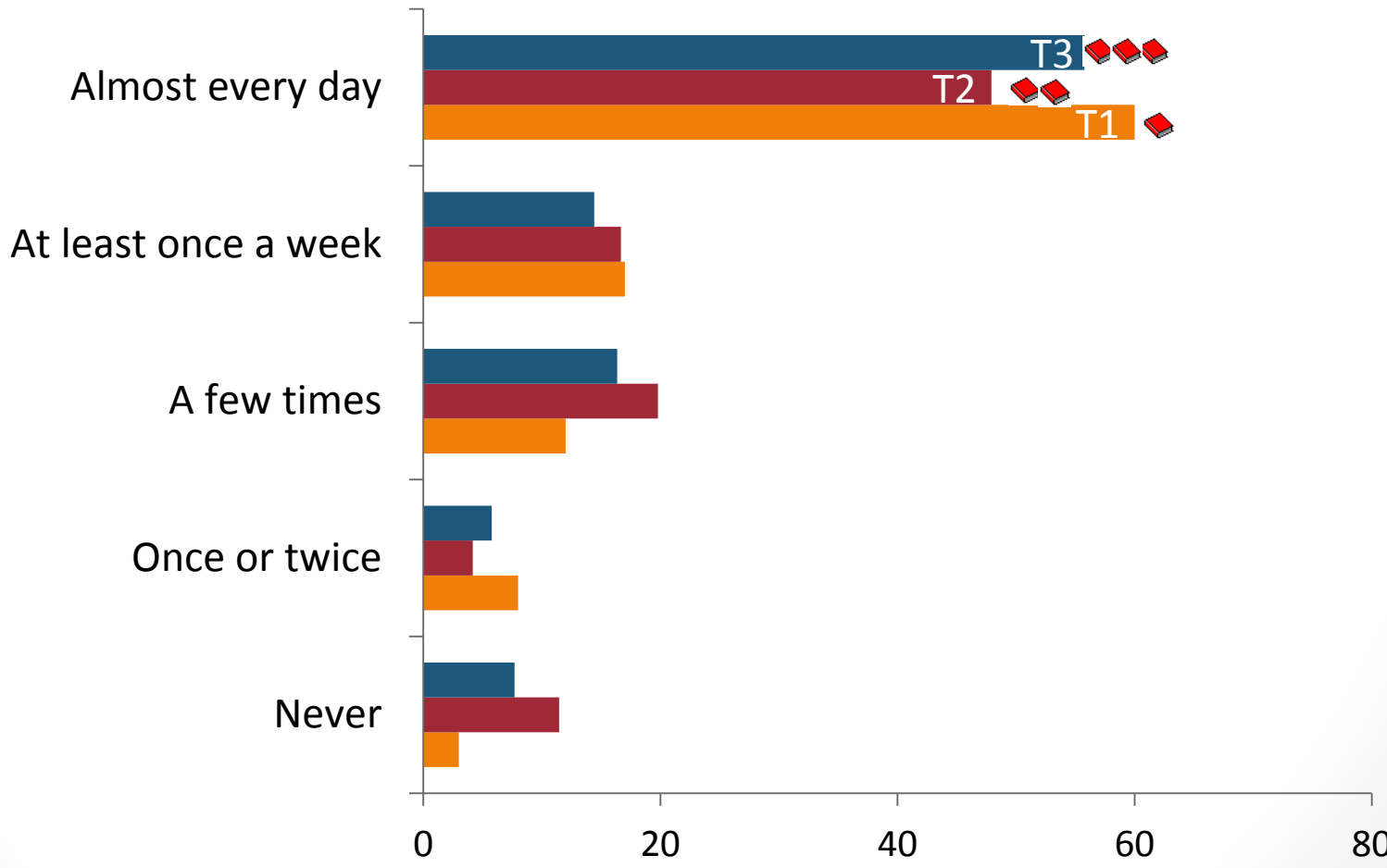
T2: Library + curriculum

T3: Library + curriculum + supplementary

500 randomly selected
Grade 8 students (13 years)

& YES, THEY CAN

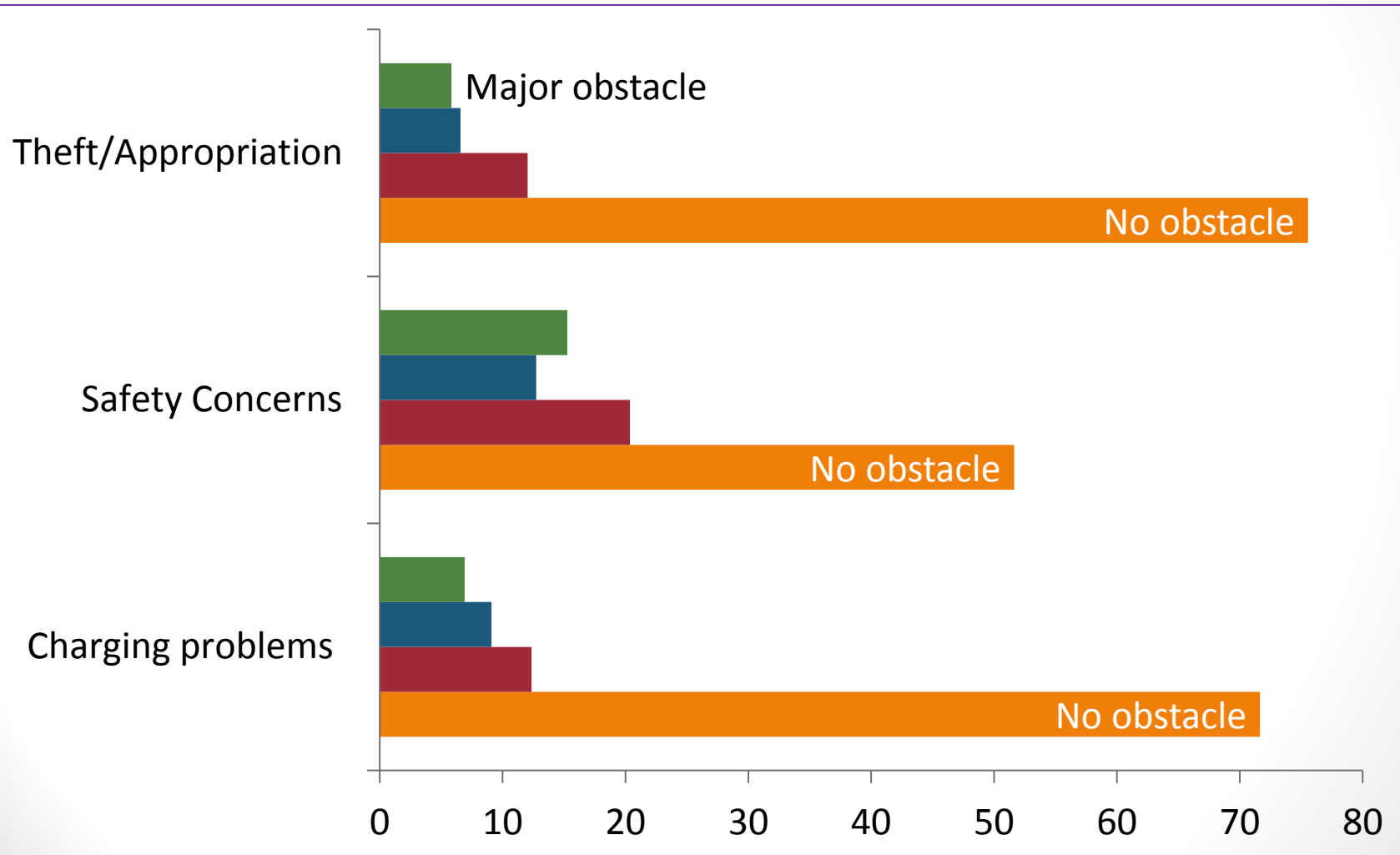
How often did you use the eReader in the last 6 mths (%)?



Note: T1 higher than T2 (at 5%)

YES, THEY CAN

Is the following an obstacle to using the eReader? (% students)



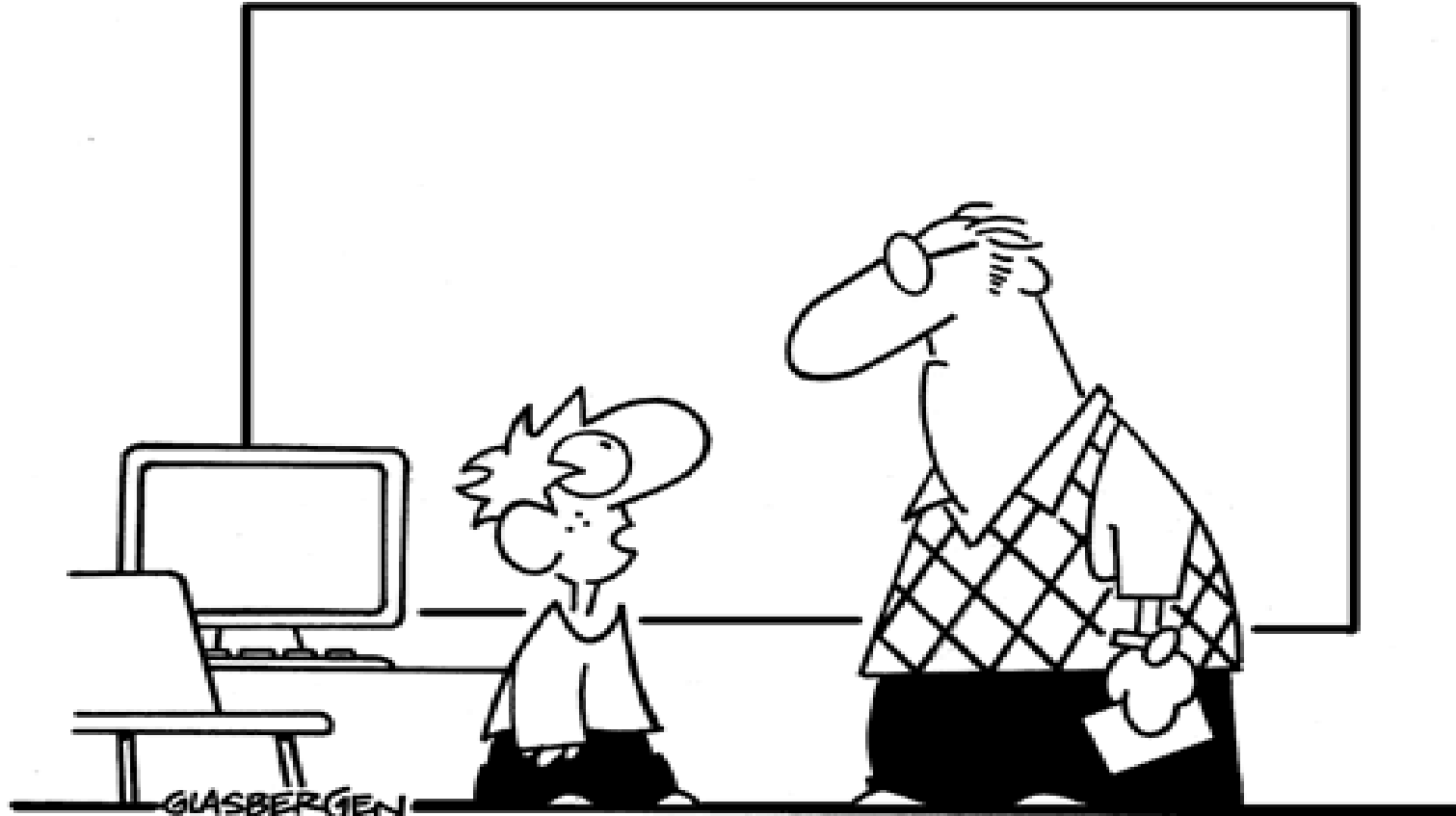
YES, THEY CAN

In Six months, sig impacts:

- On 'non-verbal' intelligence (raven's matrix) for T 2
- On reading comprehension for students with low reading outcomes at baseline for T 2

But technology is just a vehicle

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“I don’t have my homework. My dog deleted it.”

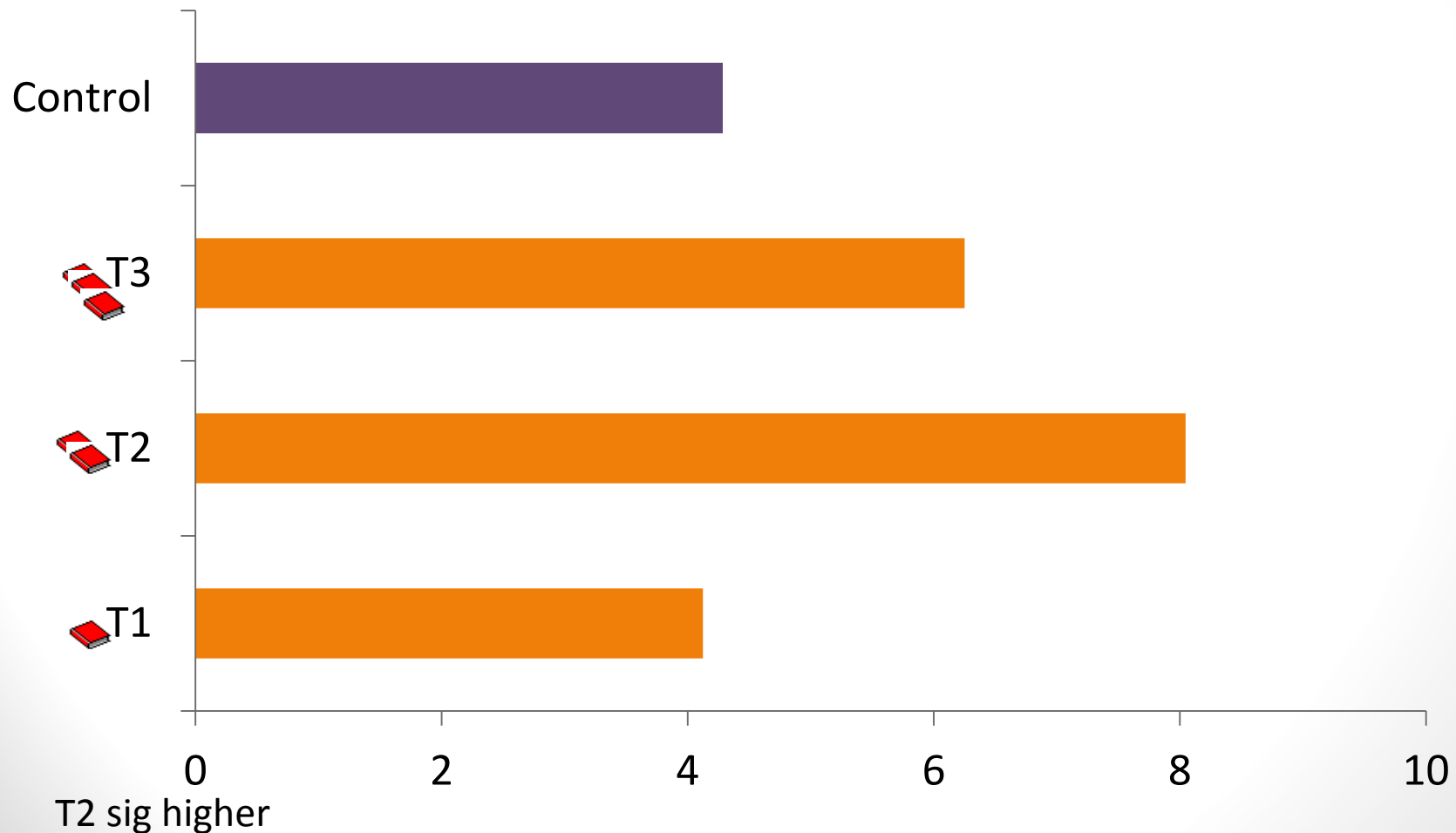
& content is king

Learning impacts confined to group with
curriculum material

... However, cool technologies can provide an advantage

They appear to shape student aspirations

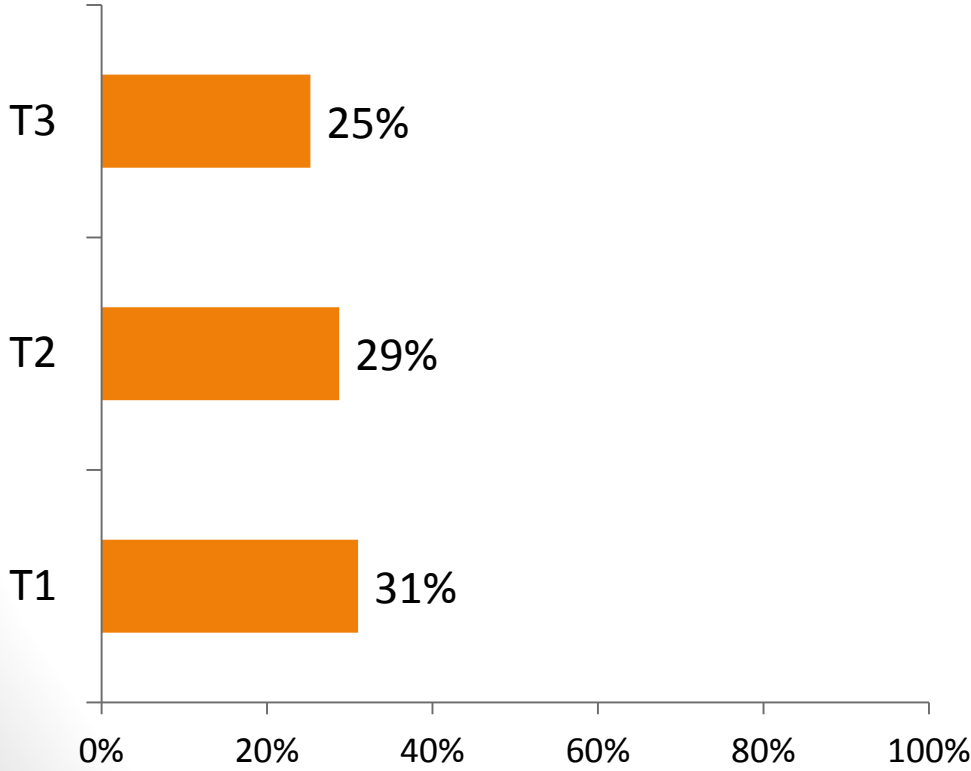
% of students with improved educational aspirations



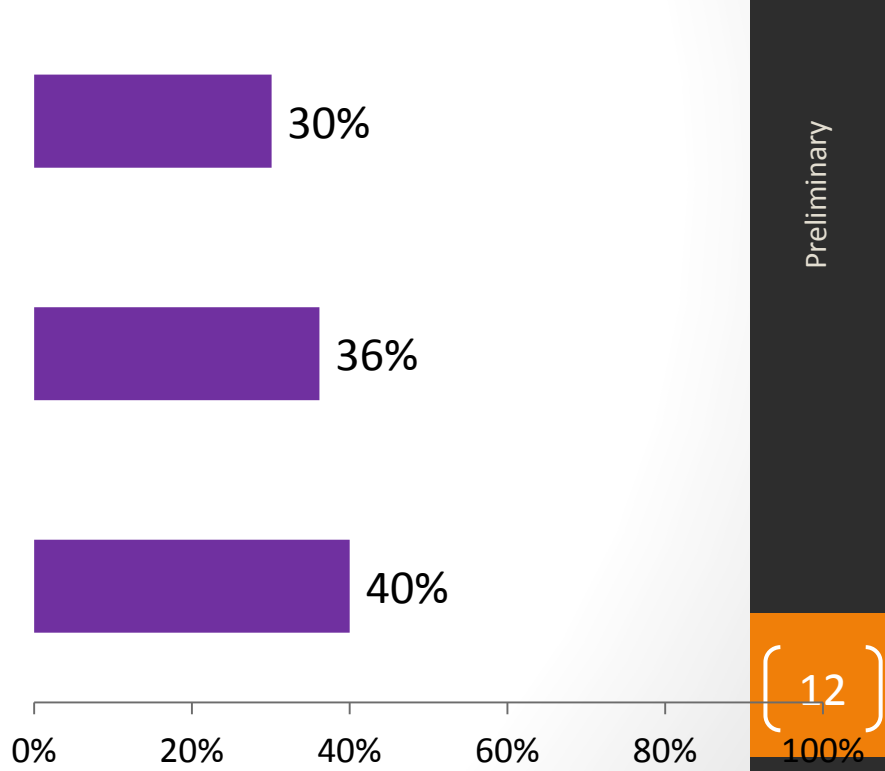
They can promote desired behavior – the *'Gadget Effect'*

What motivated you to read in the last mth?

Find the book or topic interesting



Interest in reading on the eReader*



*: T3 sig lower than T1 (at 5%)

Its time to think about
targeting students directly

AND NOT JUST THE SYSTEM

To better exploit margins on student effort

No teacher training provided but ...

% of students who use the eReader

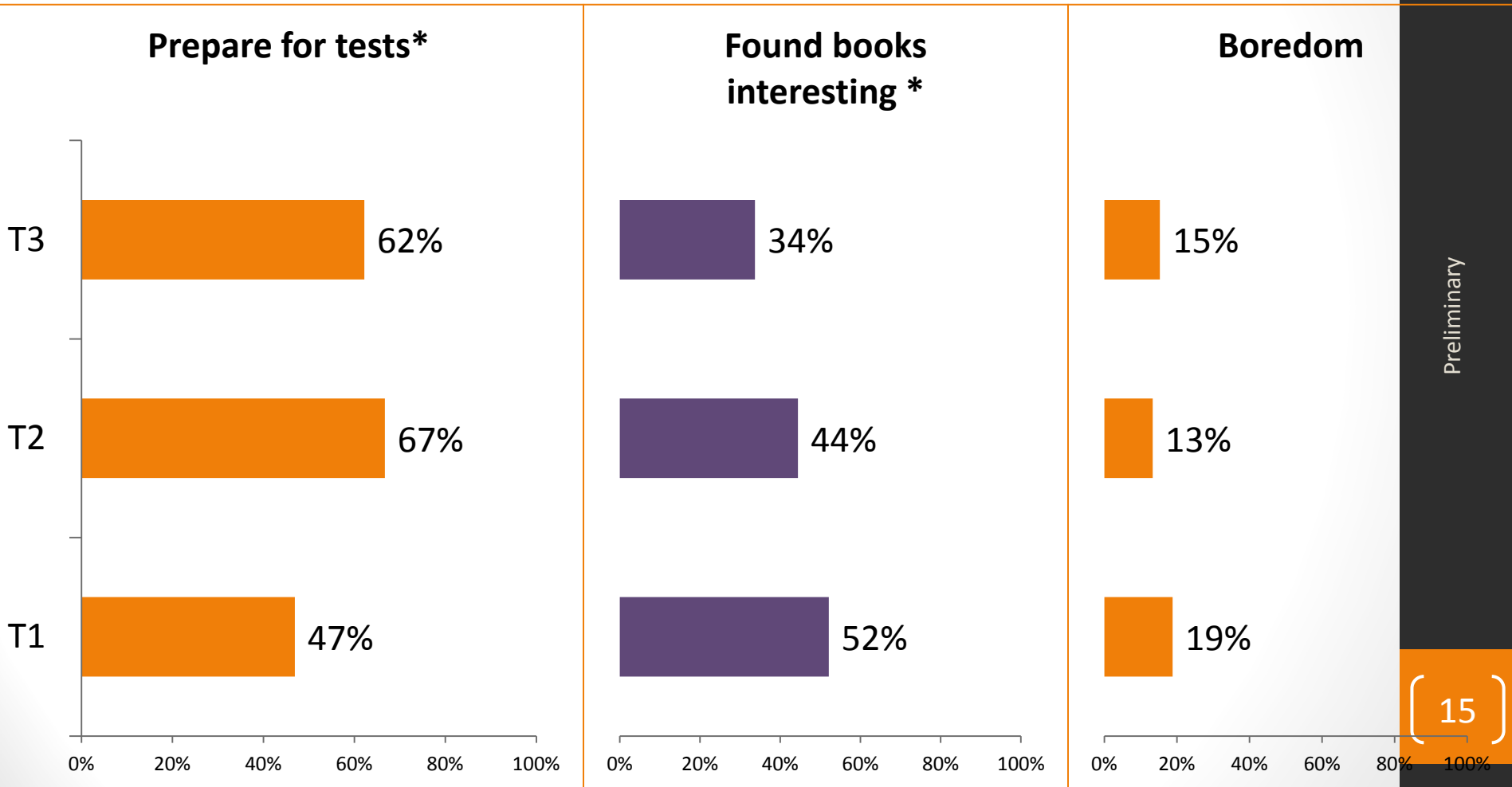
Less than
once a week
29%



At least once
a week
71%

& this does not imply only recreational use

What motivated you to use the eReader in the last mth



*: T1 diff (at 5%)

So the idea is ...

We can leverage digital technology for education in urban Africa

For learning impacts:

- Content is key
- Student interest/effort is a dimension on which margins exist

Results are promising &:

- Prices are ↓
- Ecosystem is ↔



Opportunities for:

- Student-centered learning approaches
 - Teaching what the system can't or won't
 - Impacting student effort/aspirations
 - Possibilities for remedial instruction
- Need to test:
 - variety of content +
 - diagnostics and feedback