

Improving and Re-imagining Data Sources toward Achieving Equitable Quality Education

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SDG 4



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4.5

By 2030, **eliminate gender disparities in education and ensure equal access** to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

4.a

Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

Improving data collection and examining overlooked trends toward achieving SDG 4

1. Improving existing data sources

- School attendance via the Truancy Assessment Project

2. Harnessing the power of data from more unlikely sources to better inform education policy

- Taking a closer look at menstrual hygiene as it relates to school attendance

Why better data matters for the SDGs

Lack of reliable data hinders governments' ability to make informed decisions and enact appropriate education policy.

IMPROVING EXISTING DATA SOURCES TOWARD ACHIEVING SDG 4

Truancy Assessment Project, Telangana, south India

School attendance data collection challenges

The image shows an open school attendance register. The left page is titled "Pupils Attendance Register" and the right page is titled "పిల్లల హాజరుపట్టిక". Both pages contain a grid of names and dates with handwritten marks indicating attendance. The names are written in Telugu script. The grid consists of approximately 20 rows and 30 columns. The marks are mostly 'x' or 'y' characters, indicating presence or absence. There are some red markings and a small red circle on the right page.

- Subject to human error
- Perverse incentives
- Different definitions of chronic absenteeism

Truancy Assessment Project (TAP)

- Two major components:
 - An inexpensive and simple biometric tracking system called e-Attendance
 - A fingerprint scanner paired with a tablet running on a tracking software
 - Dedicated Education Extension Workers monitor data to identify students who are chronically absent and follow up with them at home

Study population

- 10-16 years old
- 10 schools
- Medak District, Telangana state, south India
- 6-10th grade
- ~800 participants





eAttendance:
Fingerprint scanner
and tablet



New Visitor



Edit Visitor



Reports



School Admin Nishikant Dubey(HTSC2) logged in.

Put finger on device...



Finalize Roll Call

School Machine(HTSC)
School B



All Active Students



All Visitor



Pending Today



Student Visited Today



Visitor Logged Today



Student Missed



TAP trainers working with teachers about facilitating data collection

Outcome variables

- Baseline demographic indicators entered into eAttendance system
 - Name, age, grade, contact
 - Social support system, family background
- School attendance via fingerprint scanner
- Questionnaire administered by EEWs during home visits

EEW questionnaire: Why didn't you go to school the last time?

- Had chores to do
- Had to care for family members
- School expenses
 - Books
 - Pencils/pens
 - Copy books
 - Uniforms
 - Or something else? _____
- Transportation
 - Travel costs to school too high
 - Unable to reach school because of road condition
 - Distance to school
 - Unsafe to travel to school
 - Or something else? _____
- Menstruation
- School facilities insufficient
 - Lack of toilets
 - Crowded classrooms
 - Or something else? _____
- Teacher issue
 - Teachers don't show up to school
 - Teachers are not supportive
 - Or something else? _____
- Had to fetch water
- Had to help family on the farm
- Was ill
- Parent/guardian migrated for job
- Worried about being bullied
- Didn't feel like it
- Or something else? _____

Linking the SDGs

Lack of reliable data hinders governments' ability to make informed decisions and enact appropriate education policy. To compensate, we can be employing biometric approaches that decrease room for error in the measurement of school attendance.

SDG 1.3:

Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable

HARNESSING THE POWER OF DATA FROM MORE UNLIKELY SOURCES TO BETTER INFORM EDUCATION POLICY

Menstrual hygiene management in rural Rwanda

SDG 4



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4.5

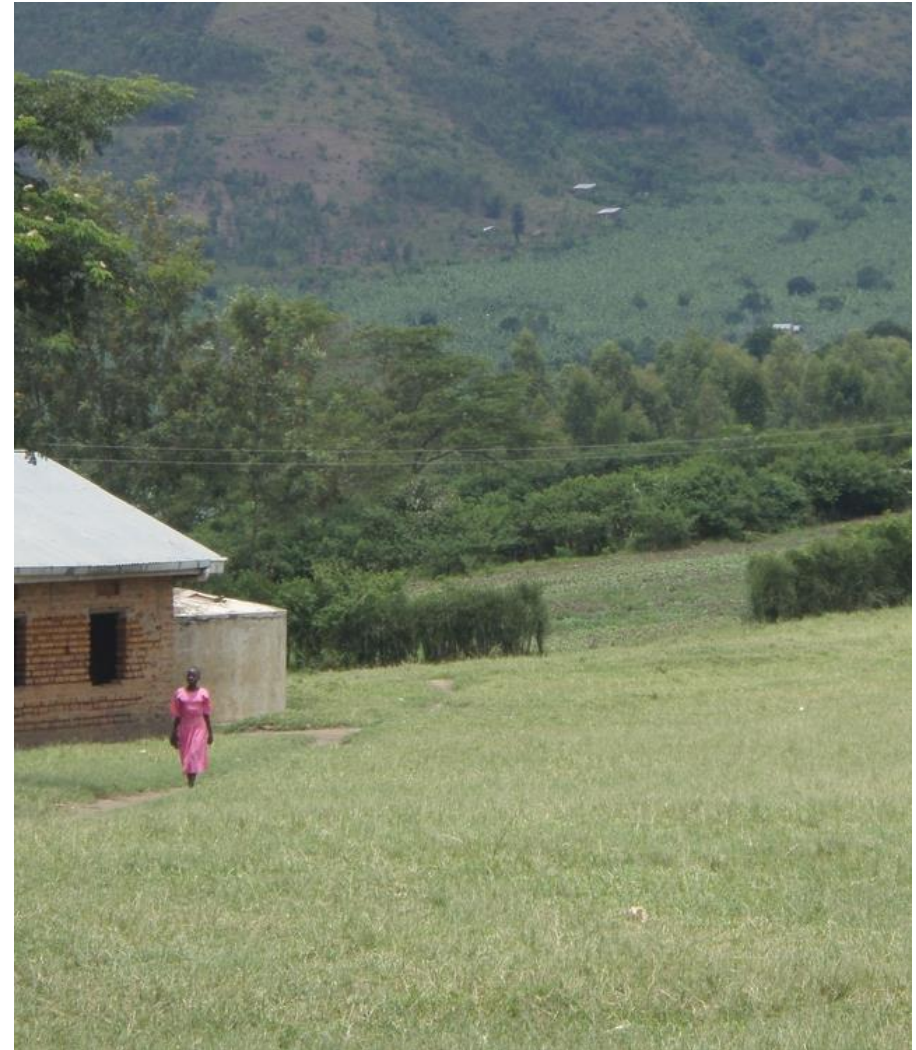
By 2030, **eliminate gender disparities in education and ensure equal access** to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

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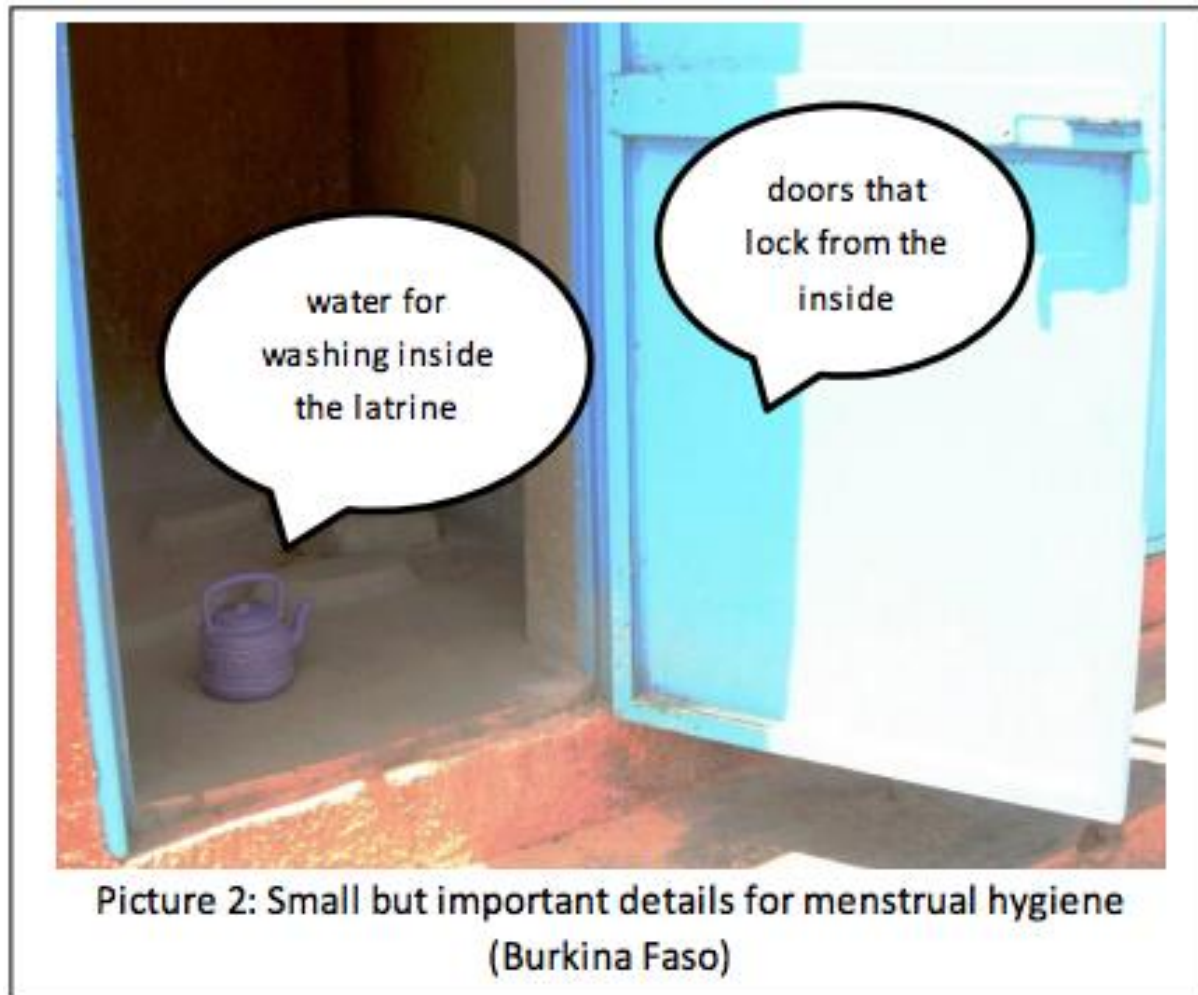
Background and need

- 1/10 school-age African girls do not attend school during menstruation. (WHO & UNICEF, 2013)
- An average of 50 school days/yr/girl are missed due to menstruation in Rwanda. (Rwanda Ministry of Education, 2014)
- In low-income settings in Africa, school attendance drops dramatically as girls become adolescents, coinciding with the onset of menstruation (Montgomery et al., 2012; WHO & UNICEF, 2013).



Source: eminyeeto.org

MHM and absenteeism: Sanitation facilities as a barrier



Source: UNICEF, 2013

MHM and
absenteeism:
Sanitation facilities
as a barrier

School toilets,
Southern
Uganda



Source:
waterjournalistsafrika.com

Study summary

This study aims to understand how gaining access to sanitary pads and/or reproductive health education affects the emotional well-being of 10-15 year old girls in rural Rwanda.

Objectives

Intervention component

1. Provide one free re-usable sanitary pad
1. Provide reproductive health education

Research component

1. Measure the effect of a reusable sanitary pad on participants' mental health
1. Measure the effect of a reproductive health curriculum on participants' understanding of key repro health issues

Study design

Four arms:

- Group A: Receives reusable pad only
- Group B: Receives reproductive health curriculum only
- Group C: Receives pad and curriculum
- Group D: Control. No intervention.

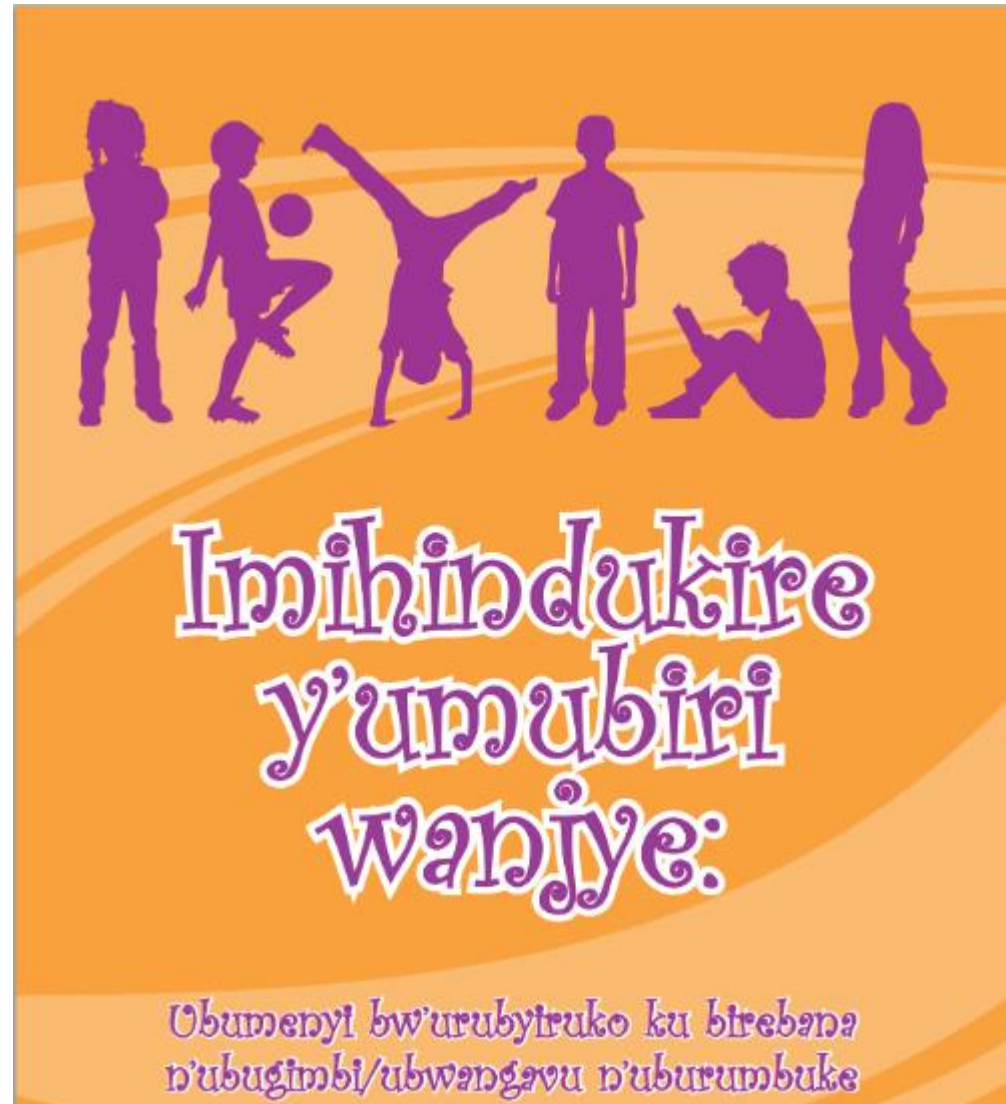
Intervention #1: Provide participants with one free reusable pad each



- 2 Pads,
- 1 Travelling bag
- 2 Insert towels (Opti

Intervention #2

Provide participants with courses about menstrual hygiene management and reproductive health

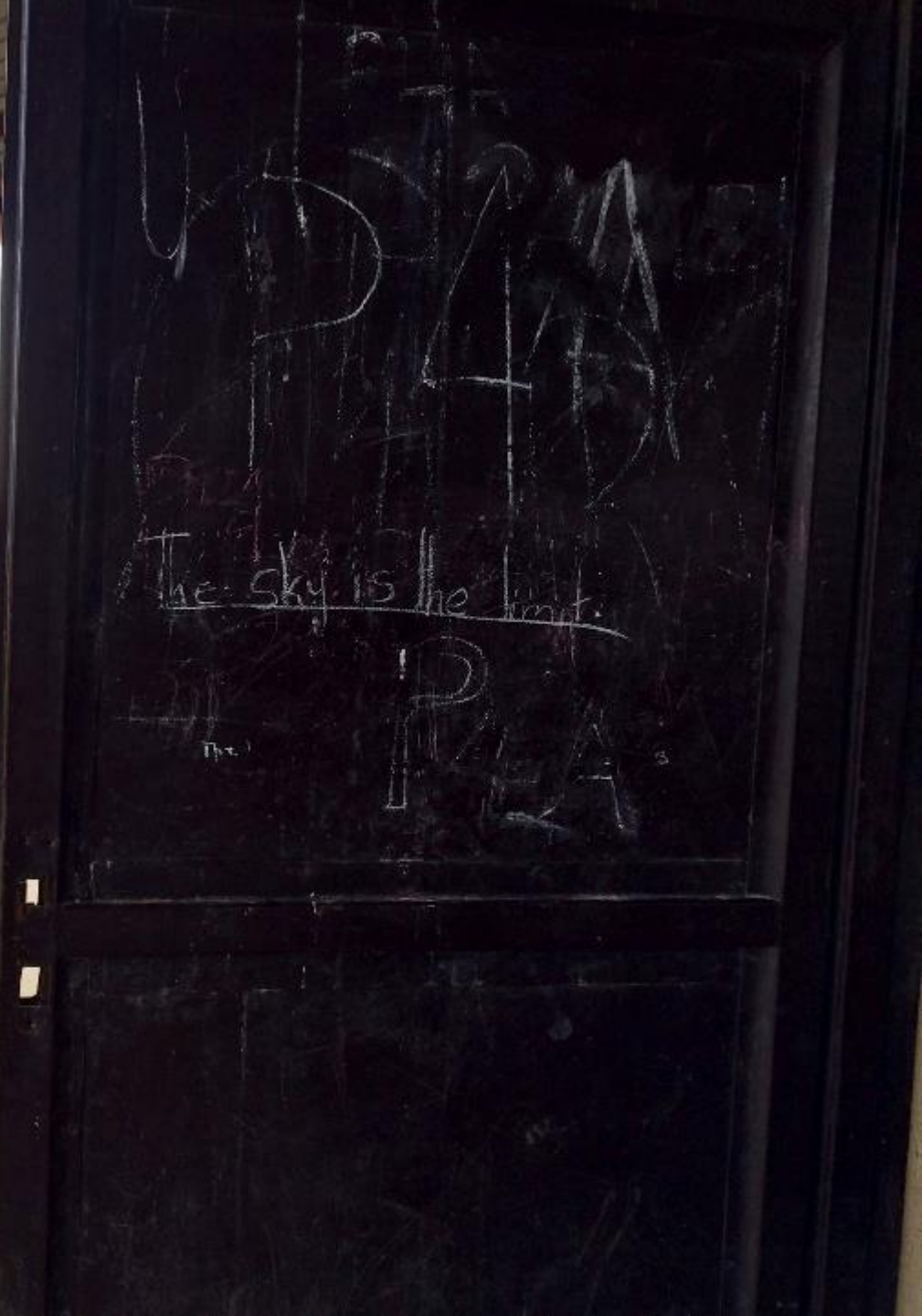


Mayange, Rwanda

200 girls



One of four intervention schools



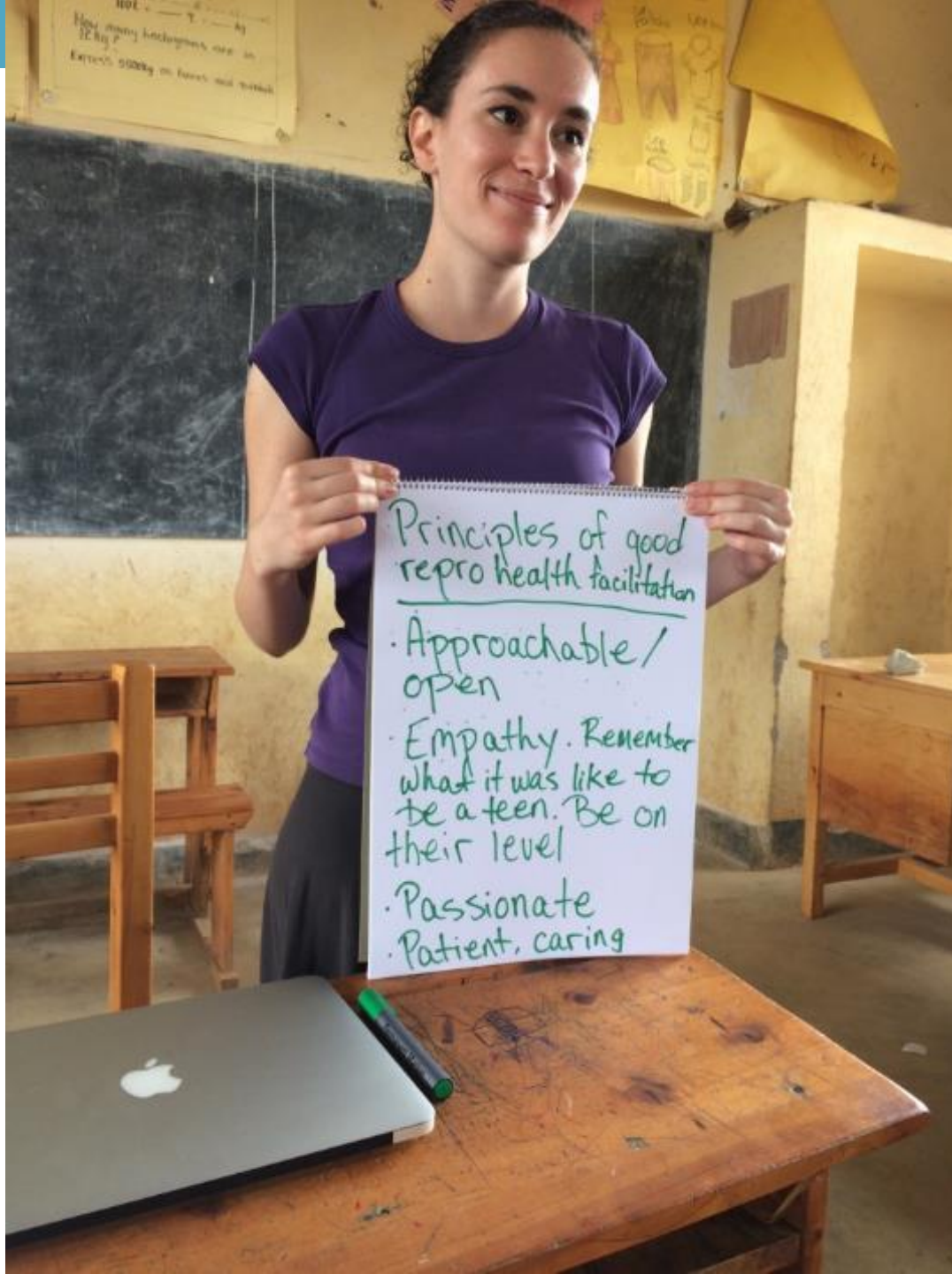
Outcome measurement

- Self-administered questionnaire about their menstruation knowledge, attitudes and behaviors
- Quizzes for those in the the curriculum intervention to measure comprehension



Best practices of data collection

- Challenges of qualitative studies
- Foster an environment in which students feel they can be free to answer genuinely



Principles of good
repro health facilitation

- Approachable / open
- Empathy. Remember what it was like to be a teen. Be on their level
- Passionate
- Patient, caring



Principles of facilitation

- Non-judgemental
- Compassionate
 - ↳ considerate of others
 - ↳ believe them
- NO PERSONAL BIAS (How?)
 - ↳ Give them space to share

Linking SDGs

- We can be measuring on a larger scale data about the link between access to menstrual hygiene resources and school attendance. Currently this is being done almost exclusively in pilot studies conducted by UN bodies or non-profits, but efforts should be scaled up and taken on by governments to make the process more streamlined and sustainable.
- Menstrual hygiene has to be looked at as a barrier to attendance and therefore it needs to be added to the list of variables measured for excellence in the education sector.
 - Incorporated into WASH standards
 - DO NOT NEGLECT MENTAL HEALTH

Contact information

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