ATTENDANCE

Lord God,

We thank you that you promise to be with us always. Thank you that your presence is with us right now. Today we give you our hearts, our minds and our lives. Come speak your words of life into our beings. We pray that you would deepen our comprehension, broaden our thinking, and transform our understanding of what we are about to study. For you are our wise counsellor, our perfect teacher and our faithful friend. AMEN

mEducation

Targeted Phone Tutoring Program

OPENING AGENDA FOR mEducation
June 10, 2025

- Preliminaries
- Pre-Training Assessment
- Overview of Youth Impact and mEducation program
- Child protection policy
- Program Overview
- Sensitization
- Baseline Levelling
- Teaching Place Value
- Teaching Math Operations

OPENING AGENDA FOR mEducation
June 11, 2025

- Survey CTO and Set up
- Practice Session
- Teaching Place Value
- Addition
- Subtraction
- Multiplication
- Division
- Post Training Assessment
- Closing and Next Step

Pre-training Assessment

Training Objectives

1. Introduce teachers to the mEducation program
2. Equip teachers with procedures, skills, tools, and application to successfully implement mEducation
3. Cultivate teamwork among teachers, DepEd and Youth Impact staff to ensure successful implementation

HOUSEKEEPING and TRAINING EXPECTATIONS

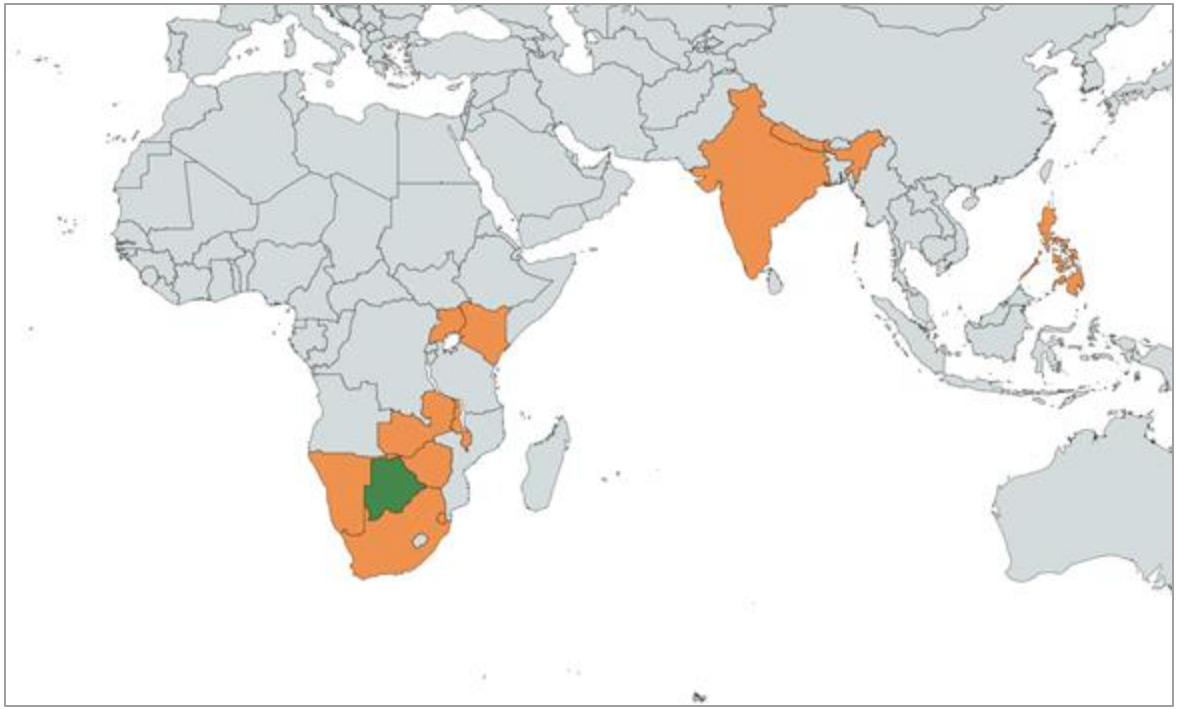
- **Please be on time**
- Please keep mic on mute unless you are speaking
- Feel free to switch on videos during registration and then you can keep them off unless you are commenting
- Pin presentation and video on your screens
- For small group practices, you will be in your school groups with your assigned lead teacher
- Share your photo and video documentation of your practice sessions in your respective group chats

HOUSEKEEPING and TRAINING EXPECTATIONS

- We will be sharing videos of small groups work for reflection and feedback session
- **Respect each other's view, let's keep a safe space for everyone!**
- **Participate actively in every session**
- **Raise clarifications and questions**
- **Share insights, reflections and feedback**
- **Dress comfortably that is appropriate for the training environment**
- **Put your cell phone on silent mode during the training**
- **Enjoy! Have fun!**

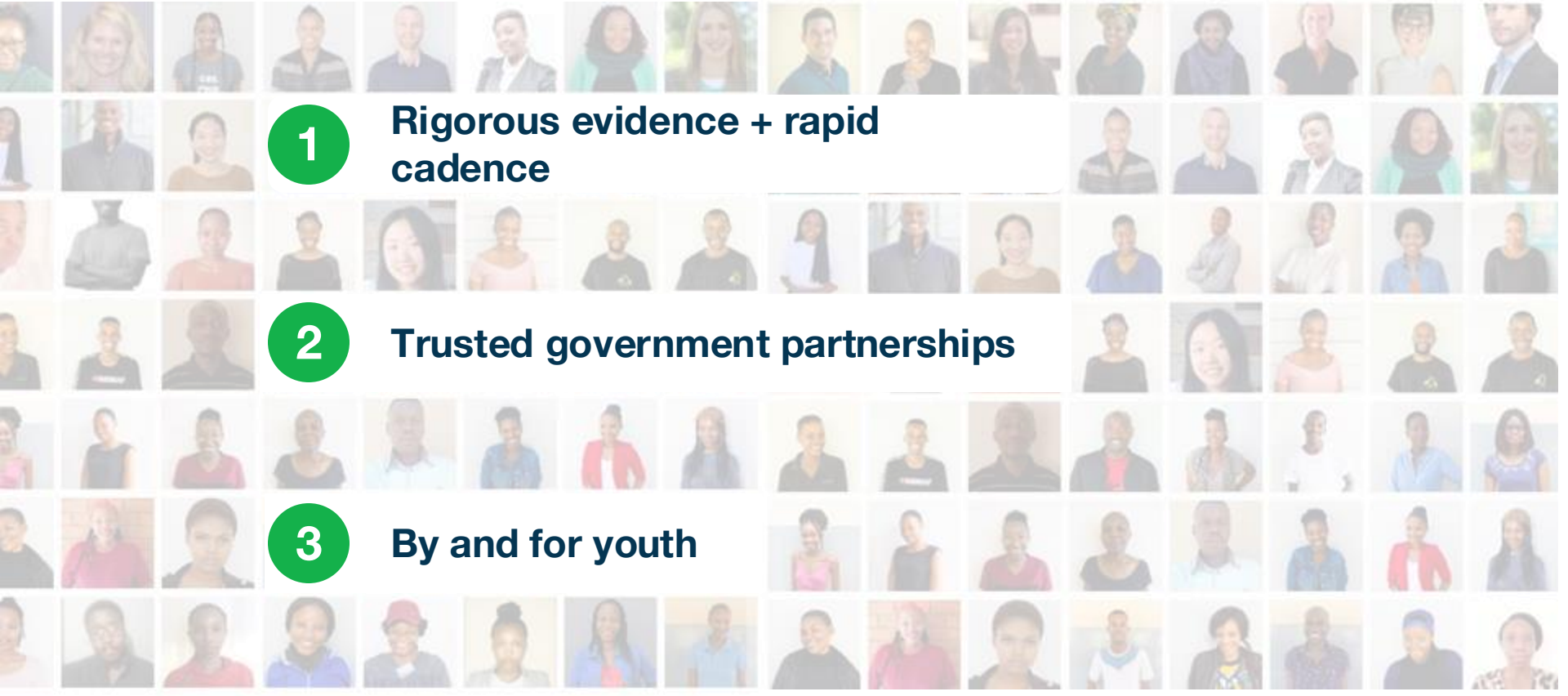
YOUTH IMPACT OVERVIEW

Youth Impact is a global NGO headquartered in Botswana



- **300,000+ youth reached, 5 million lessons delivered** with health & education programs
- Implemented in **15 countries** with partners w. Govts, NGOs, multilaterals
- **60+ rapid trials**
- **MOU with multiple governments** to scale evidence-based programs.

How do we do it?



1. Rigorous evidence + rapid cadence
2. Trusted government partnerships
3. By and for youth

TARGETED LEARNING APPROACHES

Targeted Learning Approaches

Group children by ability not age.

Tailor lessons to the children's level, *always*!

Make it a fun and engaging experience.

Targeted Learning Approaches

Teaching at the Right Level

mEducation

mEducation Overview

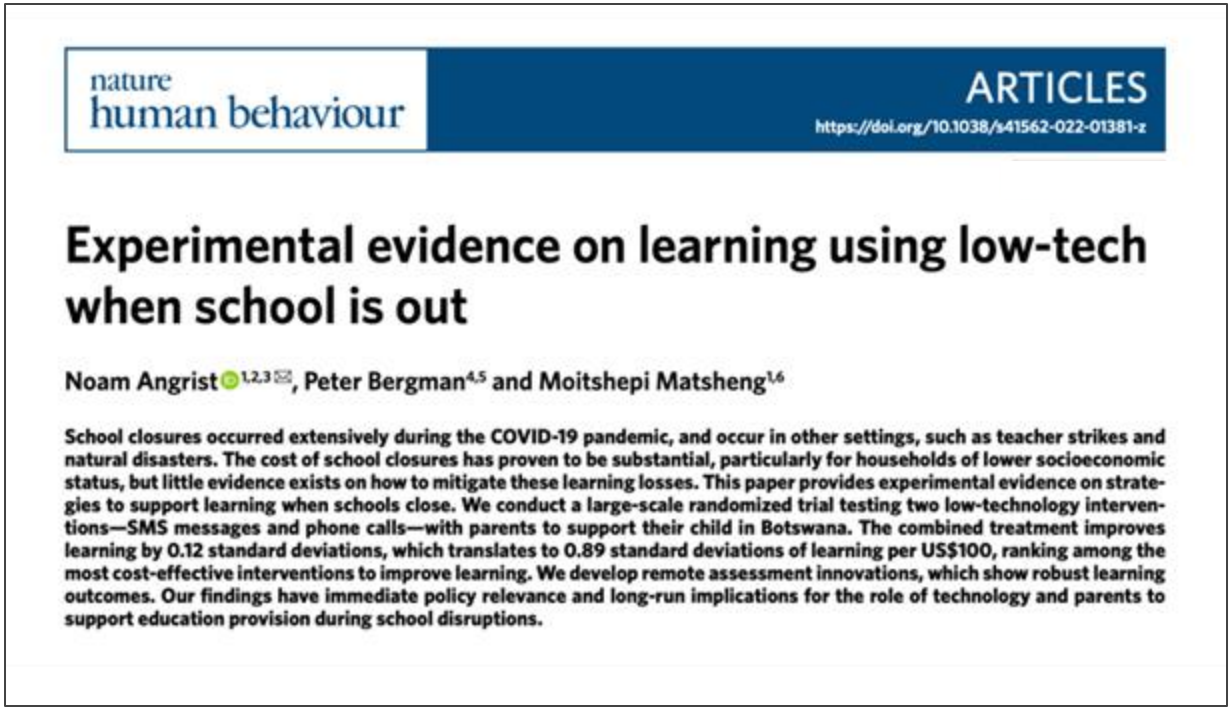
mEducation Program: Phone-based Targeted Tutoring

1 weekly text message
with practice math problems

20-minute weekly targeted tutoring
calls to learners

Botswana Trial Results: Phone-Tutoring Works!

- Youth Impact study results were **some of the first released in education since the start of the Covid pandemic.**
- Effects equal to roughly **1-year of high quality schooling per USD 100.**
- This led to an increase in interest for further evidence.



nature human behaviour

ARTICLES

https://doi.org/10.1038/s41562-022-01381-z

Experimental evidence on learning using low-tech when school is out

Noam Angrist[1,2,3], Peter Bergman[4,5] and Moitshepi Matsheng[1,6]

School closures occurred extensively during the COVID-19 pandemic, and occur in other settings, such as teacher strikes and natural disasters. The cost of school closures has proven to be substantial, particularly for households of lower socioeconomic status, but little evidence exists on how to mitigate these learning losses. This paper provides experimental evidence on strategies to support learning when schools close. We conduct a large-scale randomized trial testing two low-technology interventions—SMS messages and phone calls—with parents to support their child in Botswana. The combined treatment improves learning by 0.12 standard deviations, which translates to 0.89 standard deviations of learning per US$100, ranking among the most cost-effective interventions to improve learning. We develop remote assessment innovations, which show robust learning outcomes. Our findings have immediate policy relevance and long-run implications for the role of technology and parents to support education provision during school disruptions.

mEducation: A global evidence movement

➔ **5** global trials

*Kenya, Nepal, India, Uganda, and **Philippines***

nature human behaviour — ARTICLES

Experimental evidence on learning using low-tech when school is out

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NBER | NATIONAL BUREAU OF ECONOMIC RESEARCH

Building Resilient Education Systems: Evidence from Large-Scale Randomized Trials in Five Countries

Noam Angrist, Micheal Ainomugisha, Sai Pramod Bathena, Peter Bergman, Colin Crossley, Claire Cullen, Thato Letsomo, Moitshepi Matsheng, et al. (View all)

The 5-country replication studies were conducted over 18 months and reached over 25,000 children globally

Philippine Study

2021-2022

Participating Regions

- Regions IV-B, VI, and IX
- (5 School Division Offices in each region)

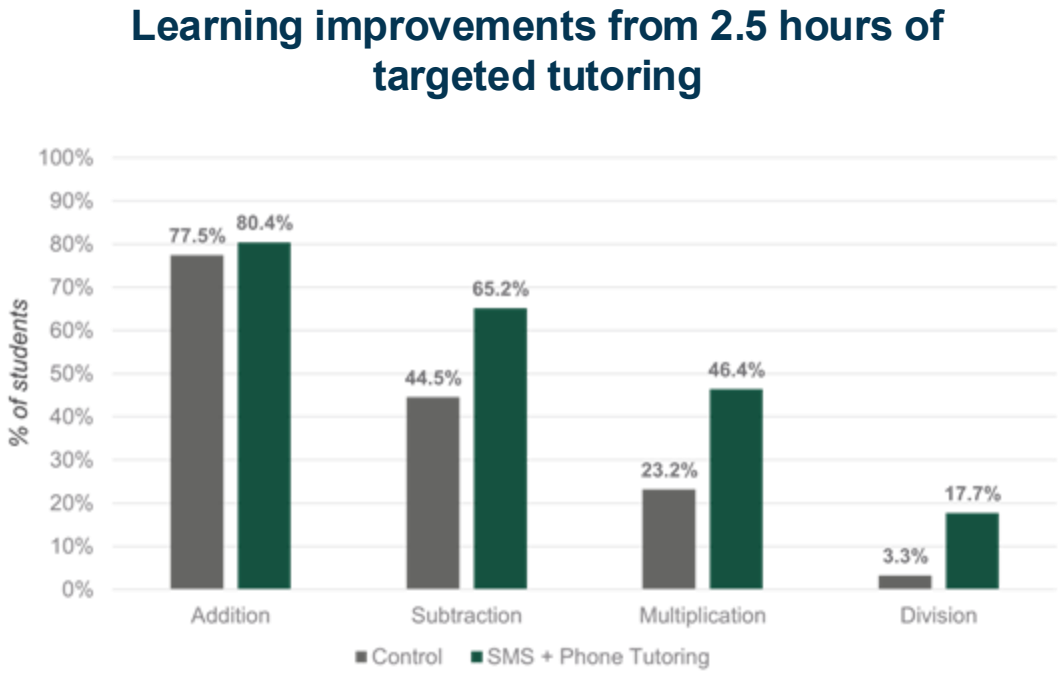
Participating Schools

- 110 schools

Participating Students

- 3,395 learners

Key findings during the 2021-2022 pilot

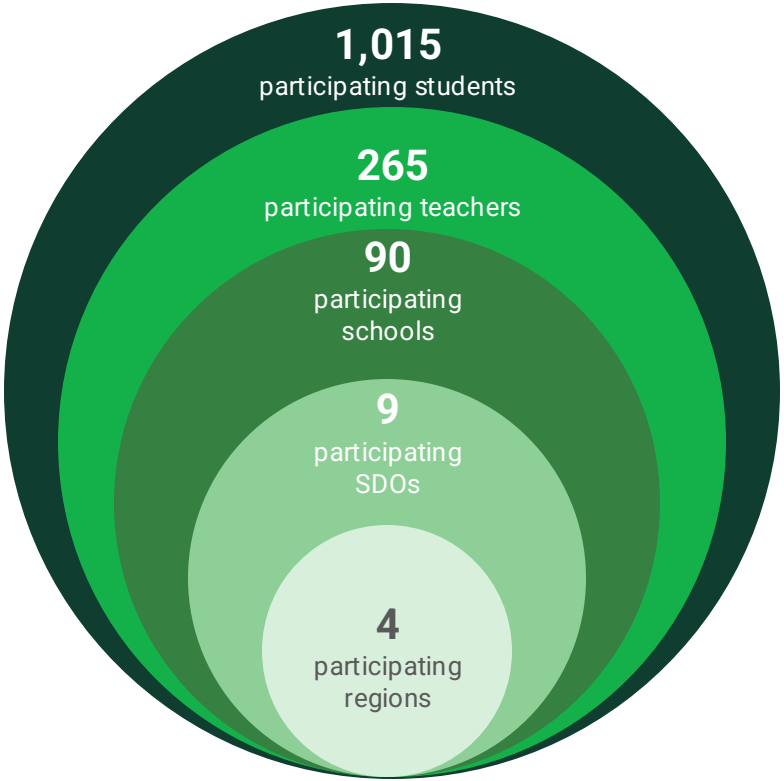


- Mastery of basic numeracy operations **improves by 15 percentage points** after just 2.5 hours of instruction.
- 15-16 hours of instruction would allow ~100% of enrolled children to master all basic operations.
- One week of mEducation can remediate students back to grade level.

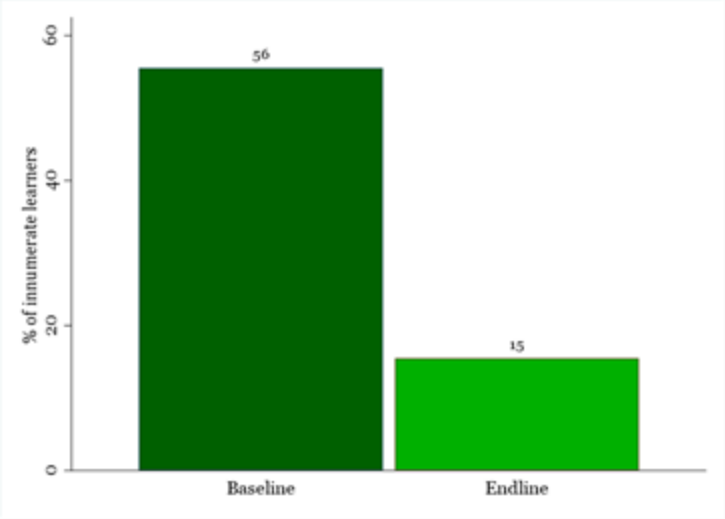
First Round of Implementation, March 2024

mEducation Scaling Partners

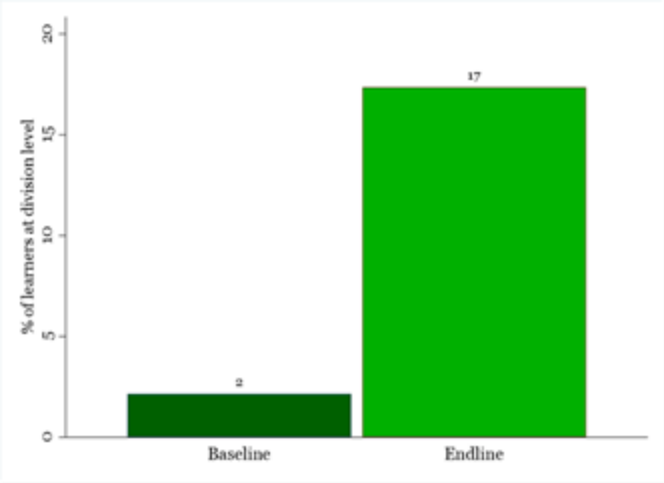
Year 1 Round 1
(March - May 2024)



Consistent results on improved numeracy (Round 1, June 2024)



The share of learners who could not solve any operation **dropped from 56% to 15%** after the program.

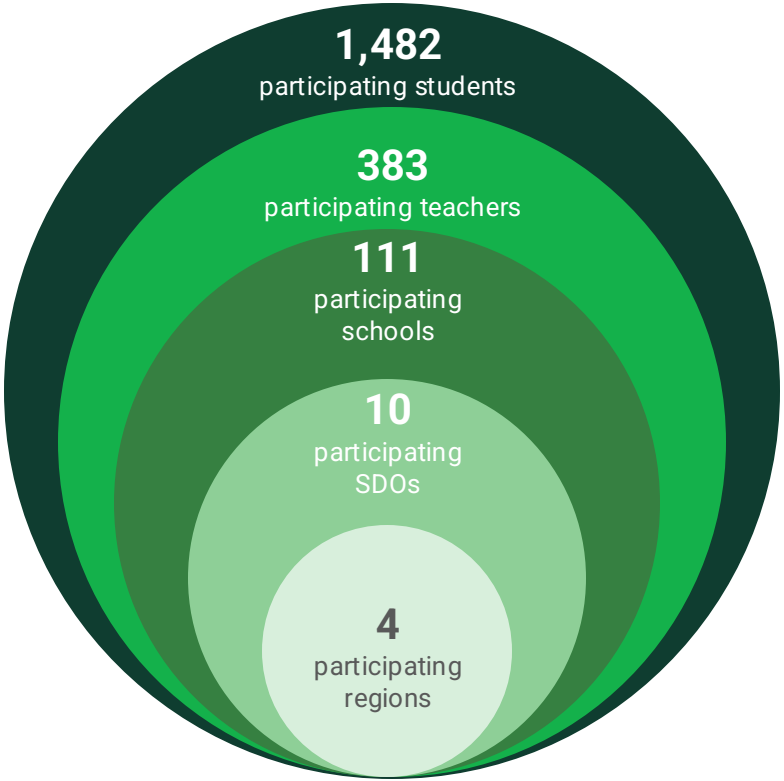


The share of students who could solve division problems **increased from 2% to 17%.**

Second Round of Implementation, November 2024

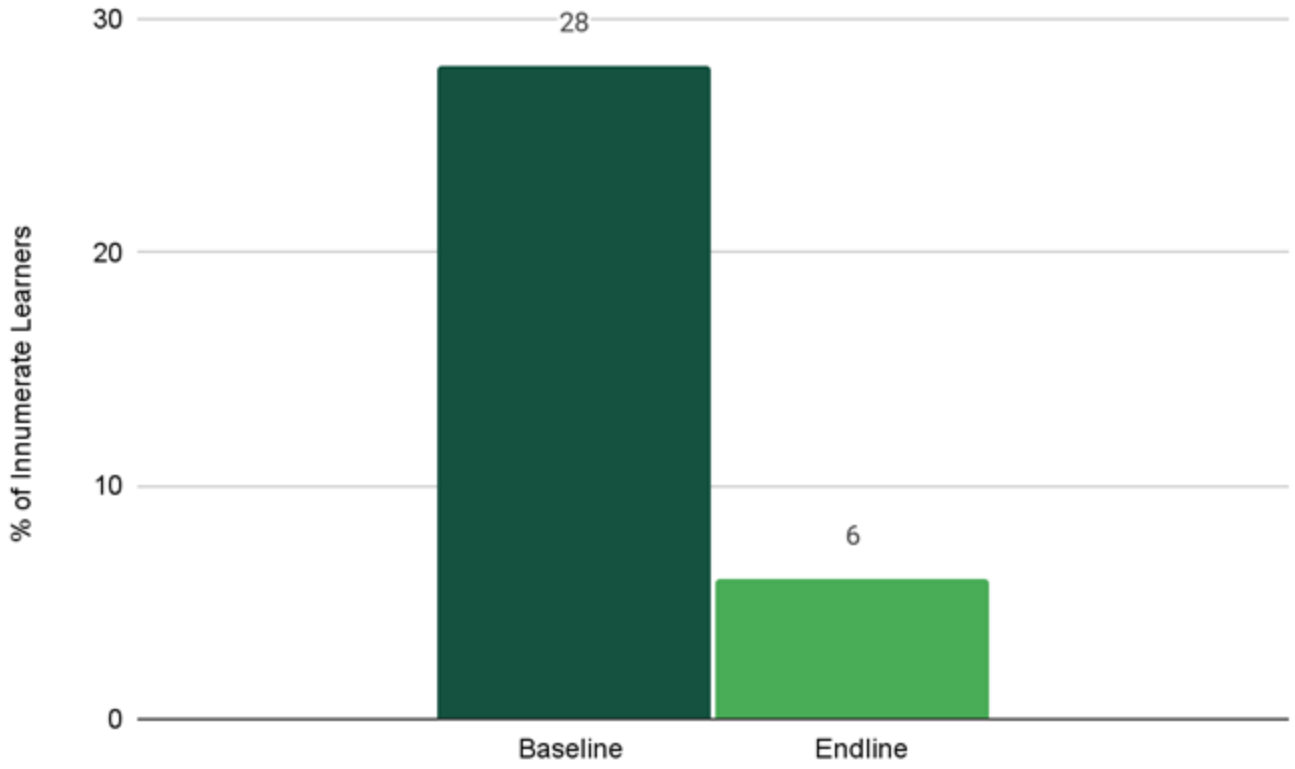
mEducation Scaling Partners

Round 2 Scale-up
(November - February 2025)



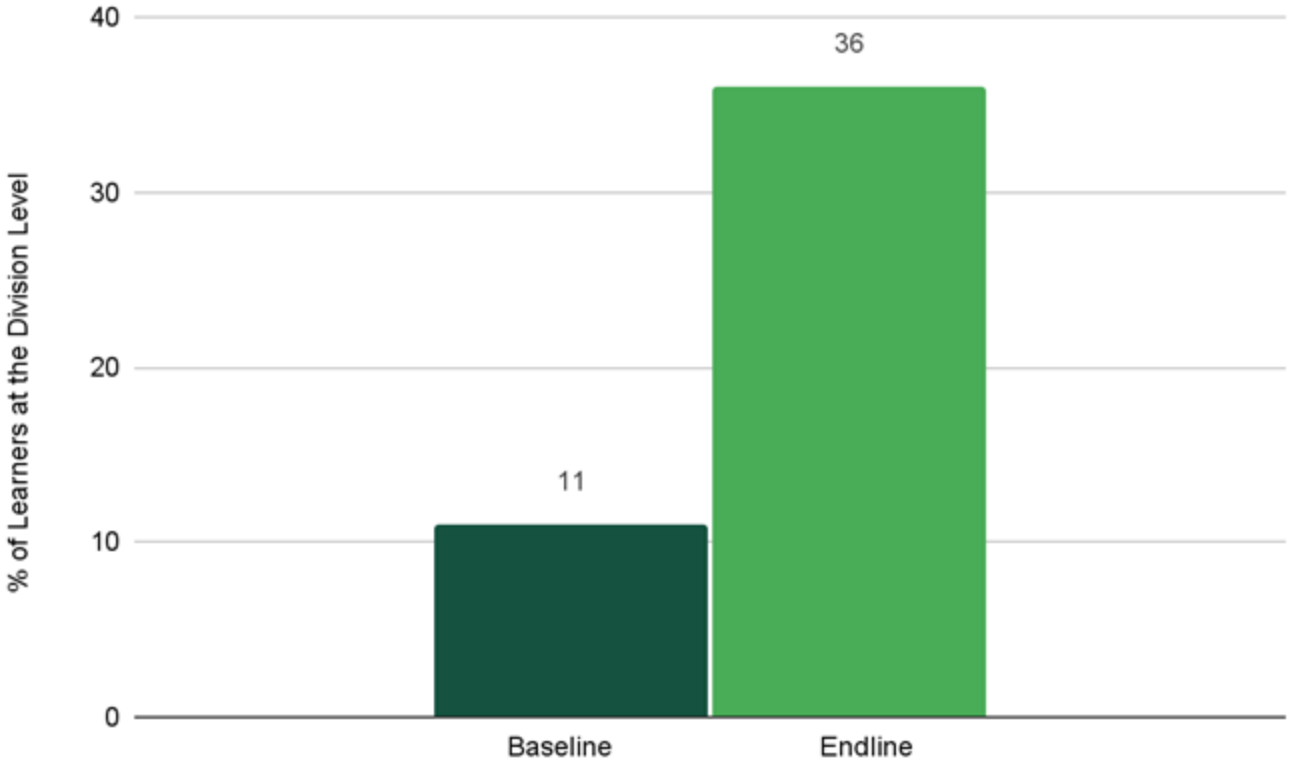
Share of Innumerate Students (Round 2, Feb 2025)

The share of innumerate students **dropped from 28% to 6%** after the program.



Share of Students Who Could Do Division (Feb 2025)

The share of students who could solve division problems **increased from 11% to 36%.**



Target Reach 2025	mEducation
Regions	5
Schools Division Offices	~15

*With IPA

Child Protection Policy

Overview

I. DepEd Child Protection Policy

DepEd Child Protection Policy

Prohibited Acts under DO 40, s. 2012

1. Child abuse;
2. Discrimination against children;
3. Child Exploitation;
4. Violence Against Children in School;
5. Corporal Punishment; and
6. Any analogous or similar acts.

***Bullying is also a prohibited act, but it is defined under DepEd Order No. 55, s. 2013

Child Abuse

refers to the maltreatment, whether habitual or not, of the child which includes Psychological, Physical, neglect deprivation of basic needs, failure to provide medical treatment, sexual abuse, and emotional maltreatment. (Sec 3(b). Republic Act 7610)

- Psychological or physical abuse, neglect, cruelty, sexual abuse, and emotional maltreatment;
- Any act by deeds or words which debases, degrades or demeans the intrinsic worth and dignity of a child as a human being;
- Unreasonable deprivation of the child's basic needs for survival; and
- Failure to immediate medical treatment.

Discrimination against children

Discrimination against children refers to any unjust or prejudicial treatment based on:

Age

Ethnicity

Sexual orientation and Gender identity

Language

Religion

Political or Other opinion

National or Social origin

(Sec. 3(J) DepEd Order 40, s. 2012)

Discrimination against children

Discrimination against children refers to any unjust or prejudicial treatment based on:

Property

Birth

Being infected or affected of Sexually Transmitted Disease

Being pregnant

(Sec. 3(J) DepEd Order 40, s. 2012)

Discrimination against children

- **Discrimination against children** refers to any unjust or prejudicial treatment based on:
  - Being a Child at Risk or Child in Conflict with the Law
  - Being a child with disability
  - Other discriminatory action.

(Sec. 3(J) *DepEd Order 40, s. 2012*)

Violence Against Children in School

- Refers to any act committed by any school personnel against a child, which results in physical, sexual, psychological harm or suffering or other abuses.

(Sec. 3(L) DepEd Order 40, s. 2012)

Violence Against Children in School

- Violence Against Children in School includes the following:
- Physical Violence
- Sexual Violence
- Psychological Violence
- Other Acts of Violence.

(Sec. 3(L) DepEd Order 40, s. 2012)

Corporal Punishment

- **Corporal Punishment** refers to any kind of punishment or penalty imposed for an alleged or actual offense.

Purpose:

discipline, training, or control,

- (Sec. 3(O) *DepEd Order 40, s. 2012)*

Corporal Punishment

- May be committed by:
- Teacher
- School administrator
- An adult
- Or any other child who has been given or has assumed authority or responsibility or punishment or discipline.

(Sec. 3(O) DepEd Order 40, s. 2012)

Corporal Punishment

- It includes physical, humiliating or degrading punishment, including, but not limited to the following:
- Blows such as, beating, kicking, hitting, slapping, or lashing, of any part of a child's body, with or without the use of an instrument such as, a cane, broom, stick, whip or belt;

Corporal Punishment

- Forcing a child to perform physically painful or damaging acts;
- Deprivation of a child's physical needs as a form of punishment;
- Deliberate exposure to fire, ice, water, smoke, sunlight, rain, pepper, alcohol, or forcing the child to swallow substances, dangerous chemicals, and other materials;

Corporal Punishment

- Tying up a child;
- Confinement, imprisonment or depriving the liberty of a child
- Verbal abuses or assaults
- Forcing a child to perform physically painful or damaging acts
- Permanent confiscation of personal property of pupils, students or learners, except when such pieces of property pose a danger to the child or to others; and
- Other analogous acts.

Scenarios

Which of the following are Child Protection Case?

Child Protection

Martin a grade four teacher throws an eraser at a learner who is noisy in the class.

Child Protection

A learner is often teased by her/his classmate for her/his dark skin and being fat.

Child Protection

Grade 5 learners desiring extension of the school vacation.

PROGRAM OVERVIEW


mobileEducation

HOW mEducation WORKS in 8-WEEKS

Sensitization and Baseline

Teacher/facilitator conducts consent and baseline assessment survey to determine the child's learning level.

SMS Exercises

Parent receives weekly math exercises via SMS to practice with their child at home.

Targeted Instruction

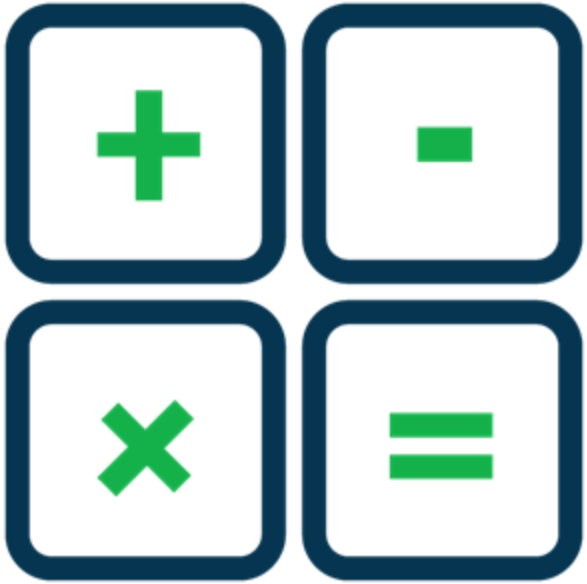
The teacher/facilitator calls the parent weekly at the agreed tutorial schedule.

For 20 minutes, the teacher/facilitator and the student discuss the math operation based on student's level. Afterwards, checkpoint will be provided to determine whether the learner understood the lesson and ready to move to the next operation

Endline Assessment

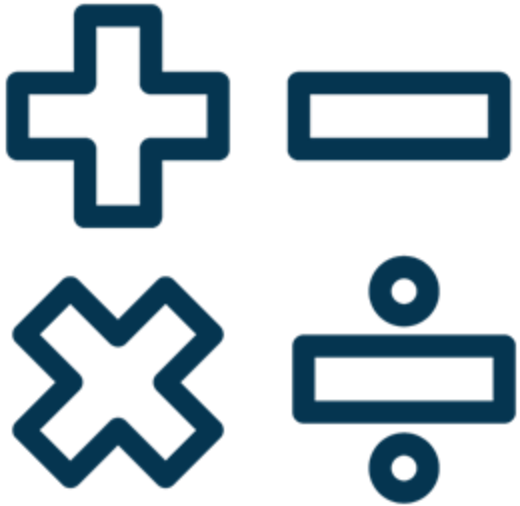
The teacher/facilitator conducts endline assessment to determine child's learning level after the program implementation

Sensitization and Baseline



Weekly SMS and Tutoring

Endline Assessment



System Support

TEACHER REGISTRATION

Teacher Registration Survey Philippines

You are at the start of a form. When ready to begin, please click the *Next* button below or to the right.

At the end, you will have the opportunity to submit your responses.

Next →

TEACHER REGISTRATION

Part I

Sensitization & Baseline Assessment

Sensitization

Participant: Parent/Caregiver/Guardian

Purpose: Inform the parent/caregiver about the mEducation program and get their consent to participate in the program

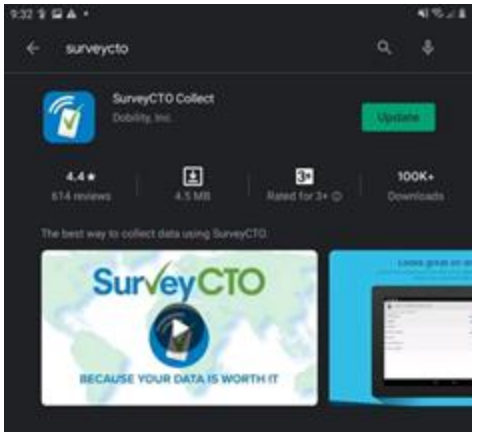
Process:

- The parent/caregiver receives the call.
- The teacher confirms the personal information of the learner.
- Confirm if the parent/caregiver agrees to participate in the program

Tools for Sensitization: What Teachers Need

Phone
(What Teachers Use)

Sensitization Script + Call List
(What Teachers Read)



Survey CTO
(What Teachers Fill-in)

Sensitization / Baseline Phone Call Protocols

Call Attempts: Before recording that a household did not answer, you must attempt calling each phone number:

- **5** A minimum of **5 times**
- **2** Over at least **2 days**
- **3** During **3 different times of day** (morning, afternoon, evening)

Call Participants: A sensitization phone call requires both **caregivers** and **learners**

When is a Survey Complete?

When the household has been successfully levelled in numeracy.

When All Call Attempts Have Been Made: Before recording that a household did not answer, you must attempt calling each phone number:

5 A minimum of **5 times** (if the call rings)

2 Over at least **2 days**

3 During **3 different times of day** (morning, afternoon, evening)

When the household has withheld consent.

Sensitization Overview

Part I: INTRO
- *2-3 Minutes*

→
- Greetings & Introductions
- State Purpose
- Confirm Participation Consent

Part II: KEY INFO
- *5-8 Minutes*

→
- Confirm Contact (Caregiver Name)
- Confirm Phone #
- Confirm Student Details
  - Name, Grade, Age, Gender

Part III: ASSESSMENT
- *10-15 Minutes*

→
- Place Value
- Operations:
  - Addition, Subtraction, Multiplication, Division, Fractions

Sensitization Overview (Cont'd)

Teacher Makes Call

Uses the Sensitization Script/SurveyTool in the Survey CTO

Teacher Enters Data

Records Data through Survey CTO

Before the Call

ASSESSMENT INSTRUCTIONS

1. Inform the caregiver that you would like the learner to work on a fun math game.
2. Ask the caregiver to place the call on loudspeaker. They may repeat questions for the learner to answer.
3. Request that the learner answer the problems on their own on a scrap paper, including their answer. Children should work alone and not copy off anyone or work together.
4. Explain that this is not an exam/test, so it's okay if the learner does not get the answers correctly
5. Record all correct responses from each learner.

Levelling

Participant: Learner

Purpose: Determine the learning level of the learner to guide the starting point of tutorial session

Process:

- After getting the consent of parent/caregiver and confirming the identity of the child, the teacher will request the parent/caregiver to ask the child to sit beside him/her.
- Ask the parent/caregiver to put the mobile phone on loudspeaker.
- Confirm if the child has pen and paper and is comfortably seated.
- Confirm if the child is willing to participate in a game.

Conducting the Learning Assessment

ASSESSMENT INSTRUCTIONS

1. The learner begins with **place value** and proceed to answering operations questions regardless of a correct response to place value.
2. The learner answers one question from each operation until they give an incorrect response.
3. The learner should answer questions within a set amount of time. If that time is exceeded, mark the child as having gotten the problem wrong:
    - **Place Value:** 30 seconds
    - **Operations:** 2 minutes

4. The assessment ends once the learner gives a wrong answer to any of the operation questions.

Maths Baseline Assessment

PV

Place Value

I have 77 apples and organize them by PLACE VALUE. How many TENS do I have?

+

Addition: 2-digit + 2-digit w/ carryover

Can you solve _____ for me? What did you get as the answer?

- *34+47 (81)*

−

Subtraction: 2-digit - 2-digit w/ borrowing

Can you solve _____ for me? What did you get as the answer?

- *83-45 (38)*

×

Multiplication: 2-digit x 1-digit w/ carryover

Can you solve _____ for me? What did you get as the answer?

- *83-45 (38)*

÷

Division: 2-digit / 1-digit w/ remainder

Can you solve _____ for me? What did you get as the answer?

- *83-45 (38)*

TIPS & TRICKS:

✓ Build rapport with the children.

✓ Make sure that caregivers and children understand that this is **not an assessment**.

✓ After each correct response, request that the child briefly explain their thought process.

✓ If it seems someone is helping, gently ask them to refrain. If someone continues to help and/or the child takes longer than the given time, mark that the child got this wrong.

Common Learning Assessment Scenarios

1. **The child says that they don't understand the question and has asked me to repeat it.**
   - ***DO NOT*** *rephrase the question, put it in different terms, or support the child in answering.*
   - ***DO*** *repeat the question verbatim. You may do this several times, or until two minutes have passed.*

2. **I'm suspicious that the child used a calculator for the learning assessment.**
   - *Ask the child to explain their answer. If they can roughly describe the operation they are being assessed for, you can mark the child as having gotten the question* ***correct****.*
   - *If the child cannot explain their answer, mark the question as* ***incorrect***

3. **The parent is helping the child during the learning assessment.**
   - *Politely ask the parents to refrain from helping the child. Explain that the purpose of the activity is to target where the child needs support.*
   - *If the parent persists in helping the child, mark the question as* ***incorrect*** *and conclude the learning assessment.*

Conducting the Learning Assessment

Sample Assessment Video

Part II

Instruction & Content Delivery

‘Thank you so much for being such a thoughtful, kind teacher. Your tutoring has made her (my child) easily understand her sums. Thanks again for your project - she loved to do this work.’

Caregiver, India ConnectEd Program

THE CORE INTERVENTION: What is mEducation?

1x simple SMS per week

+

20-minute instructional phone call to children & caregivers

Weekly Math Exercise

Participant: Parent/caregiver and learner

Purpose: Provide additional math exercises to parent/caregiver and learner to reinforce application of tutored math operations

Process:

- Weekly SMS will be sent to parent/caregiver
- The parent/caregiver and the learner have the option to answer the practice problems or not
- Check during the tutorial session if the parent/caregiver and the learner did the math exercise

One-on-One Tutorial

Participant: Parent/caregiver and learner

Purpose: Help the child learn math operations based on their assessed learning level

Process:

- The parent/caregiver will receive the call.
- Confirm if the child is available for one-on-one tutorial
- Afterwards request the parent/caregiver to ask the child to sit beside him/her.
- Ask the parent/caregiver to put the mobile phone on loudspeaker.
- Confirm if the child has pen and paper and is comfortably seated.
- Confirm if the child is willing to participate in a game.

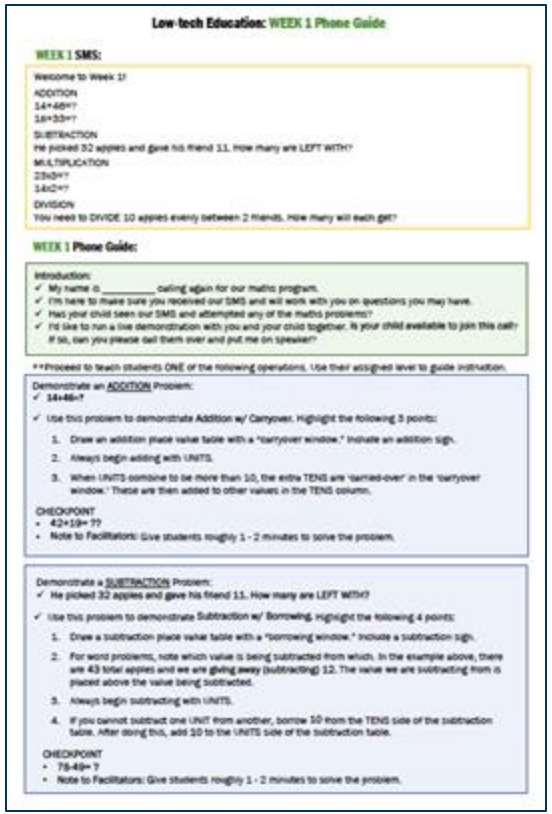
What is Included in Content Delivery?

A Simple SMS w/ Sample Math Problems

Weekly 20-minute Tutoring Calls

Monitoring Survey

What will Teachers be using to Deliver Content?



Low-tech Education: WEEK 1 Phone Guide

WEEK 1 SMS:

Welcome to Week 1!
ADDITION
14+46=?
18+33=?
SUBTRACTION
He picked 32 apples and gave his friend 11. How many are LEFT WITH?
MULTIPLICATION
23x3=?
14x2=?
DIVISION
You need to DIVIDE 10 apples evenly between 2 friends. How many will each get?

WEEK 1 Phone Guide:

Introduction:
- ✓ My name is _____ calling again for our maths program.
- ✓ I'm here to make sure you received our SMS and will work with you on questions you may have.
- ✓ Has your child seen our SMS and attempted any of the maths problems?
- ✓ I'd like to run a live demonstration with you and your child together. Is your child available to join this call? If so, can you please call them over and put me on speaker?

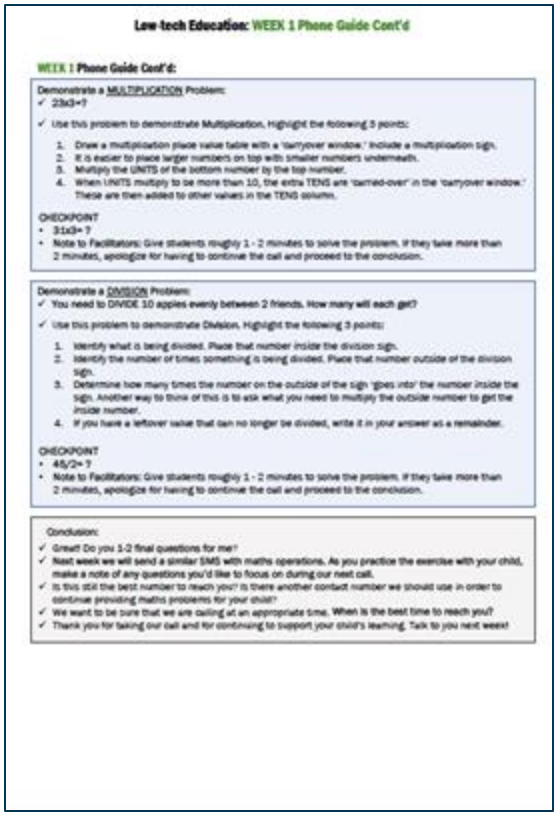
**Proceed to teach students ONE of the following operations. Use their assigned level to guide instruction.

Demonstrate an ADDITION Problem:
- ✓ 14+46=?
- ✓ Use this problem to demonstrate Addition w/ Carryover. Highlight the following 3 points:
  1. Draw an addition place value table with a "carryover window." Include an addition sign.
  2. Always begin adding with UNITS.
  3. When UNITS combine to be more than 10, the extra TENS are 'carried-over' in the 'carryover window.' These are then added to other values in the TENS column.

CHECKPOINT
- 42+19= ??
- Note to Facilitators: Give students roughly 1 - 2 minutes to solve the problem.

Demonstrate a SUBTRACTION Problem:
- ✓ He picked 32 apples and gave his friend 11. How many are LEFT WITH?
- ✓ Use this problem to demonstrate Subtraction w/ Borrowing. Highlight the following 4 points:
  1. Draw a subtraction place value table with a "borrowing window." Include a subtraction sign.
  2. For word problems, note which value is being subtracted from which. In the example above, there are 43 total apples and we are giving away (subtracting) 12. The value we are subtracting from is placed above the value being subtracted.
  3. Always begin subtracting with UNITS.
  4. If you cannot subtract one UNIT from another, borrow 10 from the TENS side of the subtraction table. After doing this, add 10 to the UNITS side of the subtraction table.

CHECKPOINT
- 78-49= ?
- Note to Facilitators: Give students roughly 1 - 2 minutes to solve the problem.



Low-tech Education: WEEK 1 Phone Guide Cont'd

WEEK 1 Phone Guide Cont'd:

Demonstrate a MULTIPLICATION Problem:
- ✓ 23x3=?
- ✓ Use this problem to demonstrate Multiplication. Highlight the following 5 points:
  1. Draw a multiplication place value table with a 'carryover window.' Include a multiplication sign.
  2. It is easier to place larger numbers on top with smaller numbers underneath.
  3. Multiply the UNITS of the bottom number by the top number.
  4. When UNITS multiply to be more than 10, the extra TENS are 'carried-over' in the 'carryover window.' These are then added to other values in the TENS column.

CHECKPOINT
- 31x3= ?
- Note to Facilitators: Give students roughly 1 - 2 minutes to solve the problem. If they take more than 2 minutes, apologize for having to continue the call and proceed to the conclusion.

Demonstrate a DIVISION Problem:
- ✓ You need to DIVIDE 10 apples evenly between 2 friends. How many will each get?
- ✓ Use this problem to demonstrate Division. Highlight the following 3 points:
  1. Identify what is being divided. Place that number inside the division sign.
  2. Identify the number of times something is being divided. Place that number outside of the division sign.
  3. Determine how many times the number on the outside of the sign 'goes into' the number inside the sign. Another way to think of this is to ask what you need to multiply the outside number to get the inside number.
  4. If you have a leftover value that can no longer be divided, write it in your answer as a remainder.

CHECKPOINT
- 45/2= ?
- Note to Facilitators: Give students roughly 1 - 2 minutes to solve the problem. If they take more than 2 minutes, apologize for having to continue the call and proceed to the conclusion.

Conclusion:
- ✓ Great! Do you 1-2 final questions for me?
- ✓ Next week we will send a similar SMS with maths operations. As you practice the exercise with your child, make a note of any questions you'd like to focus on during our next call.
- ✓ Is this still the best number to reach you? Is there another contact number we should use in order to continue providing maths problems for your child?
- ✓ We want to be sure that we are calling at an appropriate time. When is the best time to reach you?
- ✓ Thank you for taking our call and for continuing to support your child's learning. Talk to you next week!

- Content is not assigned by grade or age - all students have an opportunity to learn the same material.
- The learner receives tutoring in **one operation** per week.
- Tutoring involves no more than 2-3 total maths questions per session.
- **SIMPLE** is always **BETTER!**

Introduction to SMS Content

Week 1	Multi-Level (SMS-Only)
	Welcome to Week 1! ADDITION 14+46=? 18+33=? SUBTRACTION He picked 32 apples and gave his friend 11. How many are LEFT WITH? MULTIPLICATION 23x3=? 14x2=? DIVISION You need to DIVIDE 10 apples evenly between 2 friends. How many will each get?

- Every household will receive **1x SMS per week**
- If possible, the SMS should be delivered 1 day before calling begins. This allows time for caregivers to receive the SMS and practice with their children
- Solving the math practice is optional for the caregiver and the learner
- All operations are featured on each SMS, ensuring that all learners are receiving maths problems at their level.
- Maths content alternates between numeric and word problems.
- Teachers do not need to review SMS content before making calls (all relevant information is in the Calling Guidelines)

Introduction Phone Calls - Week 1 of implementation

A Phone Call in THREE PARTS:

1. **Introduction**
   - Identify yourself & remind caregivers of the program
   - Ask if children are available to practice maths - if so, please find a paper and pencil/pen

1. **Maths Content Delivery**
   - Content delivery based on student level. **Teachers should teach <u>one operation ONLY</u> in each phone call.**

1. **Conclusion**
   - Final thoughts & questions
   - Information on the following week's call

1. Introduction to the Phone Call

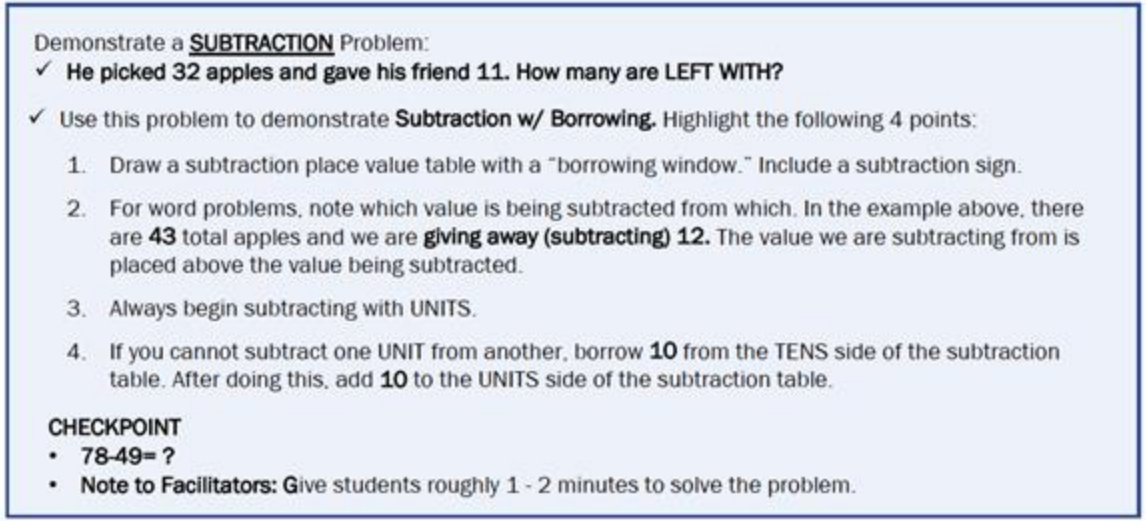
Introduction:

- ✓ My name is _____ calling again for our maths program.
- ✓ I'm here to make sure you received our SMS and will work with you on questions you may have.
- ✓ Has your child seen our SMS and attempted any of the maths problems?
- ✓ I'd like to run a live demonstration with you and your child together. **Is your child available to join this call**? If so, can you please call them over and put me on speaker?

Notes:

- Especially in the first few weeks, it will be important to remind caregivers of who you are any why you are calling.
- You may need to re-explain the program to caregivers.
- Make a note of whether the household has received the weekly SMS.

2. Maths Content Delivery



Notes:

- The teacher guides students through a **3-4 step process** to solve the problem.
- Before moving to the conclusion, teachers ask the learner a 'checkpoint' problem. The learner response to the checkpoint will inform teachers where they should begin instruction in the following week.

CHECKPOINT

- An individual activity that learners do on their own
- Should directly relate to the objective of the day or the operation covered during the tutorial
- It is done every end of the session
- Children who want to use materials are free to use it (if materials were used that day)

3. Conclusion

Conclusion:

- ✓ Great! Do you **1-2 final questions for me**?
- ✓ **Next week we will send a similar SMS with maths operations. As you practice the exercise with your child, make a note of any questions you'd like to focus on during our next call.**
- ✓ Is this still the best number to reach you? Is there another contact number we should use in order to continue providing maths problems for your child?
- ✓ We want to be sure that we are calling at an appropriate time. **When is the best time to reach you?**
- ✓ Thank you for taking our call and for continuing to support your child's learning. Talk to you next week!

Notes:

- Teachers ask parents if they have any final questions.
- Teachers ask about the best time to contact households in the following week.

Addition

Demonstrate an **ADDITION** Problem:

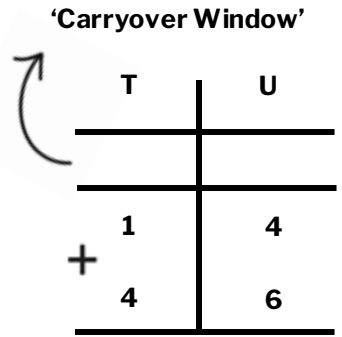
✓ **14+46=?**

✓ Use this problem to demonstrate **Addition w/ Carryover.** Highlight the following 3 points**:**

1. Draw an addition place value table with a "carryover window." Include an addition sign.
2. Always begin adding with UNITS.
3. When UNITS combine to be more than 10, the extra TENS are 'carried-over' in the 'carryover window.' These are then added to other values in the TENS column.

CHECKPOINT

- **42+19= ??**
- **Note to Facilitators:** Give students roughly 1 - 2 minutes to solve the problem.



Addition Steps:

1. Carryover window
2. Begin by adding UNITS
3. Teaching Carryover

Subtraction

Demonstrate a **SUBTRACTION** Problem:

✓ **He picked 32 apples and gave his friend 11. How many are LEFT WITH?**

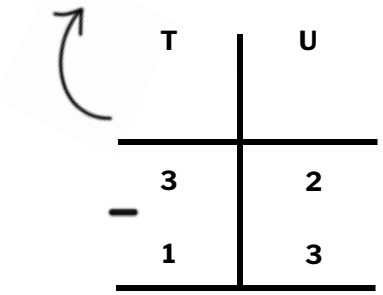
✓ Use this problem to demonstrate **Subtraction w/ Borrowing.** Highlight the following 4 points:

1. Draw a subtraction place value table with a "borrowing window." Include a subtraction sign.
2. For word problems, note which value is being subtracted from which. In the example above, there are **43** total apples and we are **giving away (subtracting) 12.** The value we are subtracting from is placed above the value being subtracted.
3. Always begin subtracting with UNITS.
4. If you cannot subtract one UNIT from another, borrow **10** from the TENS side of the subtraction table. After doing this, add **10** to the UNITS side of the subtraction table.

CHECKPOINT

- **78-49= ?**
- **Note to Facilitators: G**ive students roughly 1 - 2 minutes to solve the problem.

'Borrowing Window'



Subtraction Steps

1. Borrowing window
2. Begin by subtracting UNITS
3. Teaching Borrowing

Multiplication

Demonstrate a MULTIPLICATION Problem:

✓ **23x3=?**

✓ Use this problem to demonstrate **Multiplication.** Highlight the following 3 points**:**

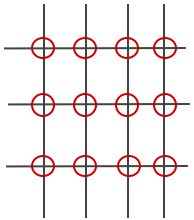
1. Draw a multiplication place value table with a 'carryover window.' Include a multiplication sign.
2. It is easier to place larger numbers on top with smaller numbers underneath.
3. Multiply the **UNITS** of the bottom number by the top number.
4. When UNITS multiply to be more than 10, the extra TENS are 'carried-over' in the 'carryover window.' These are then added to other values in the TENS column.

CHECKPOINT

- **31x3= ?**
- **Note to Facilitators:** Give students roughly 1 - 2 minutes to solve the problem. If they take more than 2 minutes, apologize for having to continue the call and proceed to the conclusion.

Multiplication Ladder:

- 4x3



Multiplication Steps:

1. Multiplication table
2. Larger numbers on top, smaller numbers underneath
3. Begin by multiplying UNITS
4. Teaching carryover

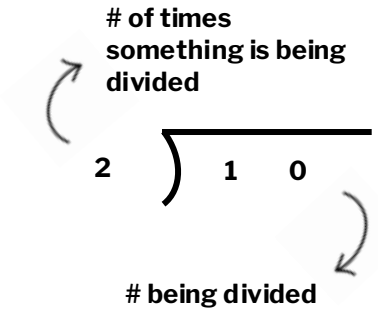
Division

Demonstrate a DIVISION Problem:

- ✓ **You need to DIVIDE 10 apples evenly between 2 friends. How many will each get?**
- ✓ Use this problem to demonstrate **Division.** Highlight the following 3 points:
  1. Identify what is being divided. Place that number *inside* the division sign.
  2. Identify the number of times something is being divided. Place that number *outside* of the division sign.
  3. Determine how many times the number on the *outside* of the sign 'goes into' the number *inside* the sign. Another way to think of this is to ask what you need to multiply the *outside* number to get the *inside* number.
  4. If you have a leftover value that can no longer be divided, write it in your answer as a **remainder.**

CHECKPOINT

- **45/2= ?**
- **Note to Facilitators:** Give students roughly 1 - 2 minutes to solve the problem. If they take more than 2 minutes, apologize for having to continue the call and proceed to the conclusion.



Division Steps:

1. Identify the number being divided
2. Identify the number of times something is being divided
3. Teaching division
4. Teaching remainder

Reminder: Phone Calling Protocols

Call Attempts:

- Before recording that a household did not answer, you must attempt calling each phone number:
  - a minimum of **5 times** &
  - over at least different **2 days** &
  - at **3 different times of the day** (morning, afternoon, evening).

Content Delivery:

- Give instruction to learners on **ONE OPERATION PER WEEK.**
- Make sure to ask learners a ‘checkpoint’ question at the end of each call - this will inform the following week of targeted instruction
- Don’t worry if you need to spend 2-3 weeks on the same operation. Even helping a student to learn one new maths operation is a win!
- Help learners feel calm during the phone call. Let them know that it is alright to sometimes give wrong answers - we are learning!

Tips & Tricks

General Calling Tips

1. Refer to the established **CALLING PROTOCOLS** for guidance on how to make calls
2. During Weeks 1-3 of the intervention, teachers must remind parents about who they are and what the program is trying to achieve

Maths Content Tips

1. Keep calls **SIMPLE** - only teach one operation per week
2. Make sure students can **understand what you are asking them to do**. Have them repeat after you and/or ask if they understand the problems
3. Don't rush through content - its **OKAY** if students spend 2-3 weeks learning a single operation

Once teachers feel comfortable with the rapport they've built with households, we encourage them to take ownership of the calls - they should feel encouraged to bring their personality to each week of instruction

Calling Sample 1

Video Link

Calling Sample 2

Endline Assessment: Learner

Participant: mEducation learner

Purpose: Assess the learning level of the child

Process:

- After getting program feedback from parent/caregiver and confirming the identity of the child, the teacher will request the parent/caregiver to ask the child to sit beside him/her.
- Ask the parent/caregiver to put the mobile phone on loudspeaker.
- Confirm if the child has pen and paper and is comfortably seated.
- Confirm if the child is willing to participate in a game.

Endline Assessment: Parent

Participant: mEducation parent/caregiver

Purpose: Assess the program implementation

Process:

- Teacher will ask questions to parent/caregiver to confirm actual involvement in the program and the interest to participate again
- Assess the engagement of parent to learning activities of the learner beyond the tutoring sessions.

SurveyCTO Overview

Survey CTO Collect

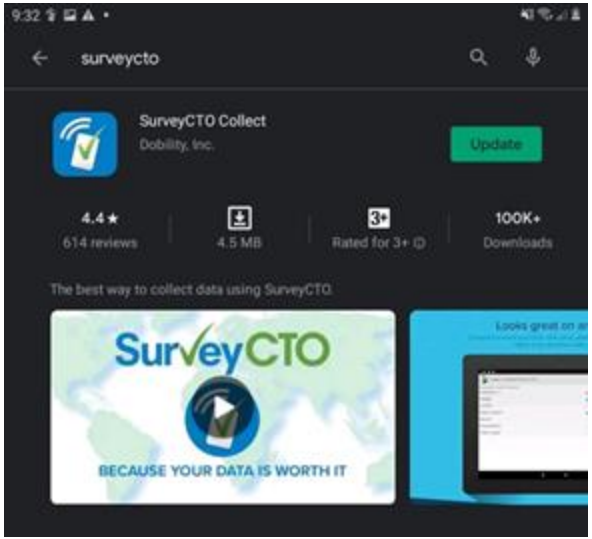
Electronic data collection platform

Real time monitoring of survey output

- Integrate CALLING respondents and encoding survey answers in one single program – calling respondents is hassle-free!

Download SurveyCTO Collect mobile app

- Go to Play Store (for android devices) or App Store (for IOS devices)
- Search and download SurveyCTO
- Open the app



- All explained in this video, too.

Forms in SurveyCTO

1. Register Students
(used once at the start)

- Student enrolment in the program

2. Sensitization
(used once at the start)

- Parent's consent
- Caregiver name
- Student demographics
- Levelling questions (place value, addition, subtraction, multiplication, division) to determine highest level mastered
- Best time to call for weekly tutoring

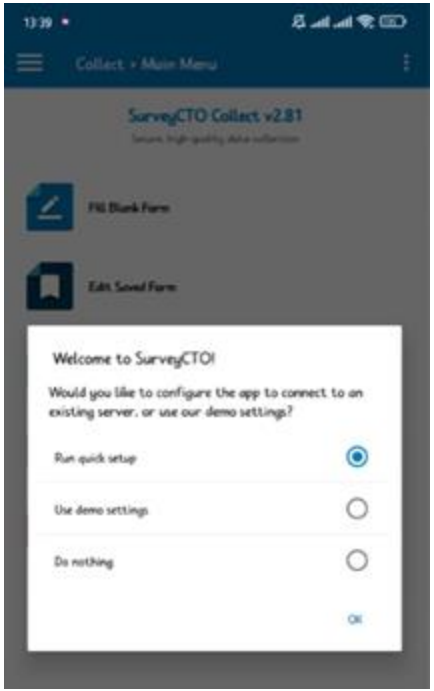
3. Implementation
(once twice a week, Weeks 1-8)

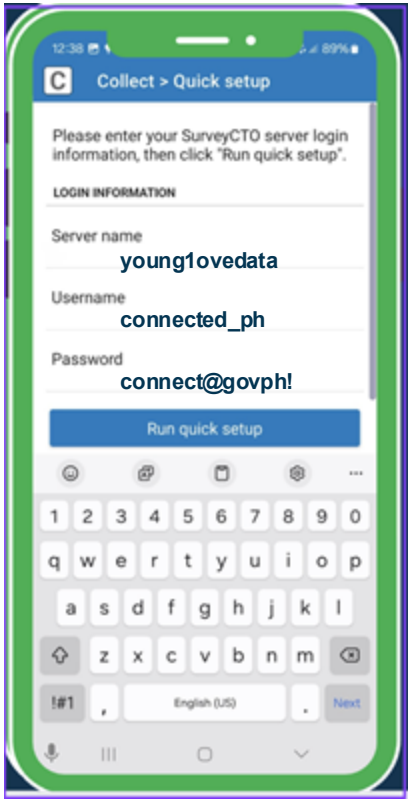
- Receive weekly SMS math problems
- Practice math problems
- Targeted tutoring
- Check-in question/ assessment
- Confirm of schedule of call for the succeeding weeks

4. Endline
(used once at the end)

- Implemented after the 8-week phone tutoring
- Levelling questions (place value, addition, subtraction, multiplication, division) to determine highest level mastered after the intervention

Setting up SurveyCTO account





To follow along, open **SurveyCTO Collect**, select *Quick setup*, and enter the following information:

Workspace name: mEducation Philippines
Server name: young1ovedata
Username: connected_ph
Password: connect@govph!

Make sure you are connected to Wi-Fi or mobile data.

Thank you