Innovations for Poverty Action

January 2025

mEducation

IMPLEMENTATION TOOLKIT

A practical guide on how to effectively run the mEducation Program to improve learning outcomes at a low-cost.

The mEducation Program

Mobile plus education equals mEducation.

The mEducation Program is a mobile phone-based intervention that uses SMS messages and structured phone calls to deliver simple and targeted math instruction to help improve foundational numeracy skills (focusing on basic math operations) of learners in Grades 3, 4, 5.

The program runs for eight (8) weeks. Every week, caregivers receive a text message containing simple math exercises and a phone call from teachers to conduct a 20-minute phone call tutorial targeted to the student's math level.

In 2021-2022, Innovations for Poverty Action (IPA), in partnership with Youth Impact, piloted the mEducation Program with the Department of Education (DepEd). Results from the randomized evaluation showed a significant 40 percent increase in math skills among Grades 3 and 4 learners. With the strong evidence that the program works, phone-based education can be used by teachers as a supplementary learning intervention for remedial education, targeting learners who need additional learning support.

Learn more about mEducation: bit.ly/mEducationph

ipa Innovations for Poverty Action

Youth Impact

In partnership with:

DepED DEPARTMENT OF EDUCATION

Acknowledgment

Innovations for Poverty Action would like to thank Youth Impact, J-PAL Innovation in Government Initiative, and Wellspring Foundation for the generous funding support in the implementation of the mEducation program. We would also like to thank the Philippines' Department of Education for their invaluable support and collaboration.

Additional details and/or support with program replication is available upon request. Please send your request via email at meducation@poverty-action.org

TABLE OF CONTENTS

OVERVIEW

Who can implement the program?

The target implementers of mEducation are the schools and local government bodies interested in adopting low-cost strategies to provide additional educational support to learners. We recommend that mobile phone instruction should be delivered by either a DepEd teacher or a teacher aide hired by the school or school division.

What are the requirements to implement?

For participating **schools:** teachers, preferably handling math, who need to remediate their learners. For participating **teachers:** access to smartphone, mobile signal, internet access, allocate time for remediating learners; SurveyCTO Collect App installed mobile phone
For participating **households:** access to any mobile phone that can receive SMS and calls, mobile signal, caregiver to supervise child during phone call tutoring

When can the program be implemented?

The mEducation program is designed in a way that it can be delivered at any time. This program may be most useful in cases where (a) learners need remedial education to master basic math operations; and (b) during emergencies and school disruptions to ensure continuity of learning.

How the mEducation program works?

Send SMS Exercises

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

Call Parent/ Caregiver

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

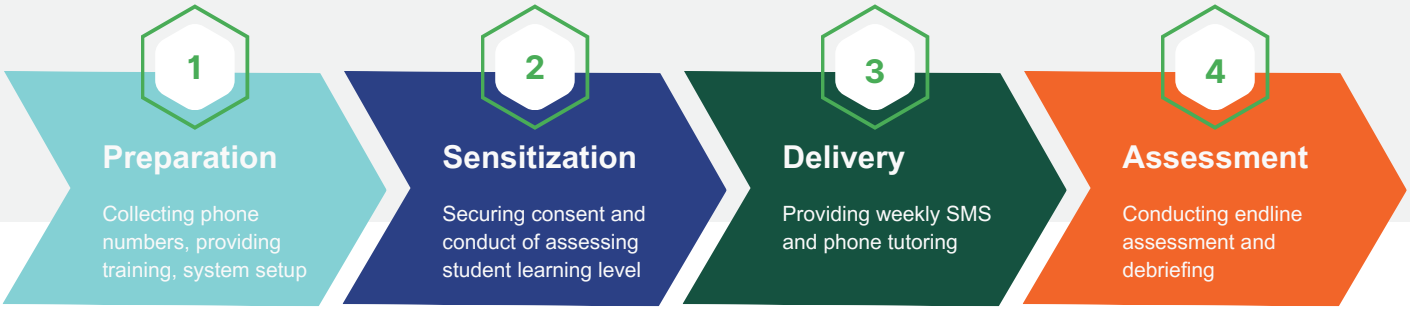
Conduct Targeted Instruction

For 20 minutes, the teacher and the student discuss the math operation that matches the student's level.

Schedule Next Call

The teacher schedules the date and time for the session next week.

KEY ACTIVITIES



Preparation

1 **Collect phone numbers:** The teacher collects contact information of learners' parents/caregivers. When applicable, prioritize learners in need of remediation in math. The list of participating learners should be submitted to respective class advisers for encoding.

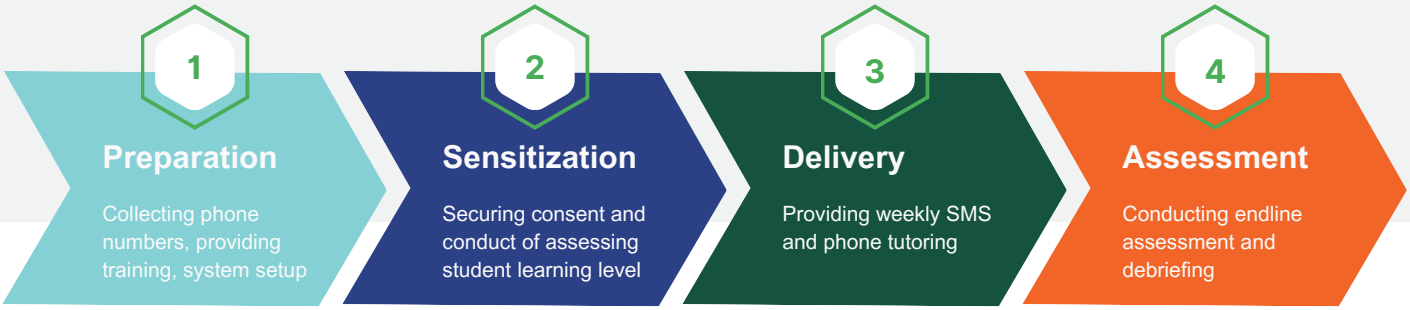
2 **Install SurveyCTO Collect app:** Using their mobile phone, the teacher should install the SurveyCTO Collect, where the call scripts, exercises, and learner details will be stored to conduct the weekly tutoring. See Section 3 on how to install SurveyCTO Collect App.

3 **Train and Practice:** With support from IPA, participating schools division offices and schools conducts a 1-2 day training with teachers on how to deliver targeted math instruction via phone. The training includes but not limited to (a) How to use the mobile app SurveyCTO Collect; (b) How to deliver targeted math instruction via phone; and (c) Familiarizing with the phone call protocols and best practices. During training, the teachers should do mock-practice sessions so teachers can get a feel for the particularities of a phone call vs. in person instruction.

4 **Assign learners to teachers:** Based on the list of learners who need remedial education, the schools assign each learner to a teacher Each teacher typically handles at most 3 to 4 learners per week. Tip: Check current teaching load of teacher and assess whether they can participate in the program. Do not give more than what they say they can handle.

5 **Set up monitoring system:** The school should assign a supervisor (ideally 1:10 tutors/teachers) who can help monitor the weekly progress and provide additional support when needed. This can be an experienced field supervisor or a coordinator at the school division level. Supervisor and teachers agree on a feedback system such as regular debriefing sessions with teachers where they can share their experience, exchange best practices, and address challenges or concerns

KEY ACTIVITIES



Sensitization

1 **Call household to invite them to participate:** The teacher contacts the caregiver to provide a brief overview about the mEducation program, informing them that (a) the program is supporting learners in Grades 3 to 5 by providing targeted instruction to help them master basic numeracy skills; (b) there will be no cost for participating in any part of this program; and (c) they will be informed whether the child has been selected to be part of the program. After getting their consent to participate, the teacher confirms the phone number to call for the tutoring sessions and preferred schedule.

2 **Assess student's learning level:** The teacher conducts a simple math assessment over the phone. Beginning with place value, the child will be assessed following the progression of difficulty: Place Value, Addition, Subtraction, Multiplication, Division. The learner progressively answers one question from each operation until they give an incorrect response which will determine their math learning level. See table on the right for guidance.

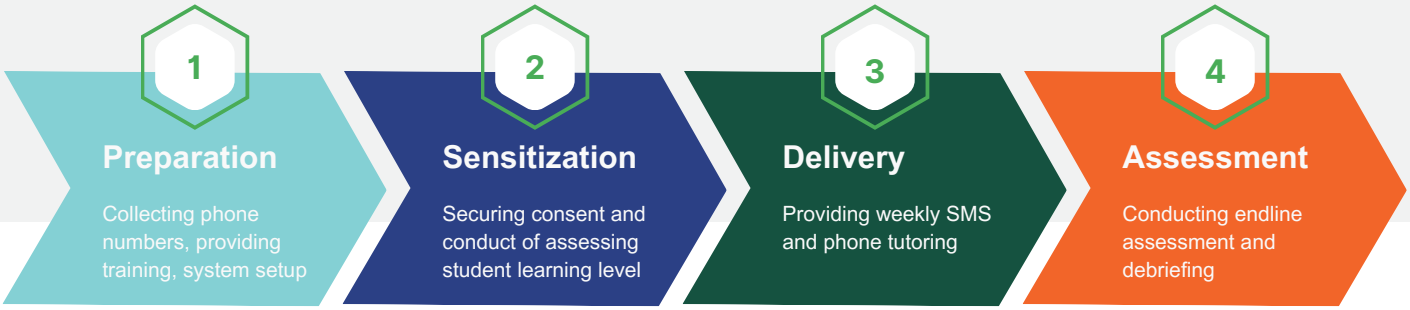
3 **Schedule phone calls:** After assessing child's learning level, the teacher speaks with the caregiver and ask their preferred time to conduct the phone call tutoring sessions.

4 **End the call:** Teacher thanks the caregiver and the child for their time. Remind caregiver of the agreed upon schedule for the phone call tutoring.

TIP & TRICKS:

- Ask parent to call the child and let them know that you'd like to play a math learning game, that this is not a test, but a method to help deliver the right level of content to their child.
- Remind the parent that they are encouraged to listen but not coach.
- Questions are arranged according to progression of difficulty: Place Value, Addition, Subtraction, Multiplication, Division.
- Give learner only 2 minutes to answer each item.

KEY ACTIVITIES



Delivery

SMS Math Exercises

1 **Set system for sending SMS:** Deliver SMS using these options (a) availing the services of a third party that can send SMS in bulk; (b) assigning an enumerator/facilitator to send the SMS.

2 **Send weekly SMS:** Deliver SMS containing math exercises to caregivers every start of the week (Monday). Note that Answering the SMS exercises is not required. The teacher will be discussing one math operation that week.

Targeted Tutoring via Phone

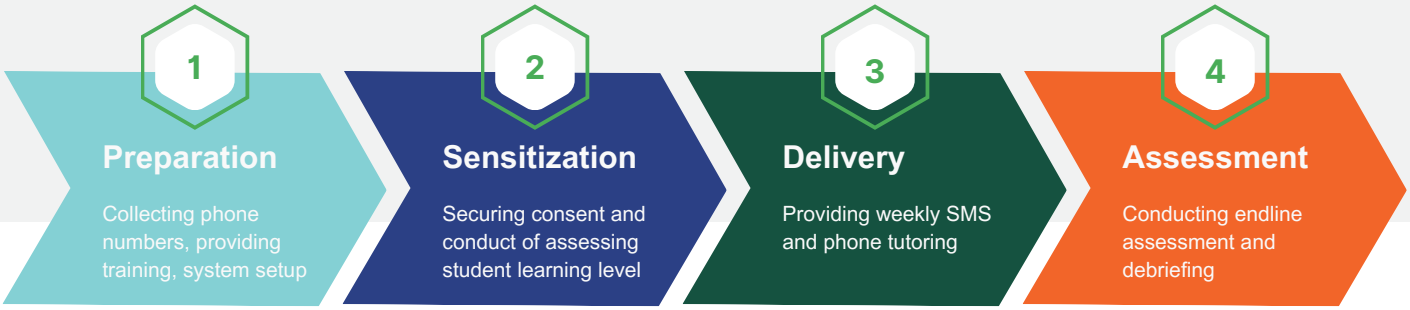
3 **Call caregiver:** Teacher calls the caregiver during the agreed phone tutoring schedule. Confirm if child is with the caregiver before proceeding with the call. If not available, find another time when both caregiver (or any adult) and child are available.

4 **Calibrate content delivery:** Check (a) whether the parent and/or learner have engaged with SMS content and (b) questions that parents and/or learner might have while attempting the SMS content. Calibrate instruction based on findings.

5 **Prepare the child:** Teacher asks caregiver to call the child and let them know that you'd like to play a math learning game and not a quiz/test. Teacher asks caregiver to put the phone on loudspeaker and reminds them that they are encouraged to listen but not coach. Teacher asks child to have a pencil and paper ready. Teacher should have a watch or clock nearby to be aware of the time spent in the math tutoring part of the call.

6 **Deliver targeted math instruction:** Teacher conducts the 20-minute phone tutoring, focusing only on one operation based on the child's learning level. There are two parts in delivering targeted math instruction to the learner:

KEY ACTIVITIES



Delivery

PART 1: WALKTHROUGH DEMONSTRATION (5-10 MINUTES)

- Teacher provides a step-by-step process of understanding and answering the math problem. Focus on 2-3 key concepts that are necessary for understanding the operation.

PART 2: CHECK-IN QUESTION (2-3 MINUTES)

- To check whether the learner understood the basics of solving the math operation, give a "problem of the day" **check-in question.** Give learner **2 minutes** to respond. If they cannot, assume that they need further practice with the operation in following week.
- Ask learner to answer out loud so the teacher can listen and check whether the learner was able properly explain how to solve the problem. Take note of the result of the check-in question for assessment later.

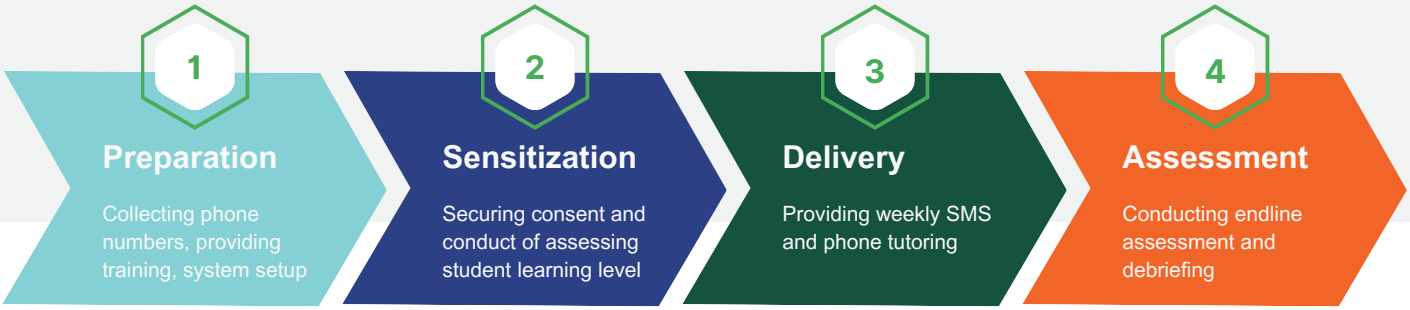
7 **End the call:** Teacher asks the learner or caregiver if they have any question about the lesson for the day. Teacher informs the parent that they will be calling again next week on the agreed upon schedule. Thank the parent and end the call.

8 **Assess child's learning level:** Based on the math tutoring, assess if the child can proceed to the next math operation or if they need to practice the same operation in the next call (a) Correct answer and correct explanation: may proceed with next higher operation; (b) Correct answer but wrong explanation: retain learner on the same math level until he/she masters the operation; or (c) Wrong answer: learner needs more guidance on math operation.

TIP & TRICKS:

- Keep calls SIMPLE. Make sure learners can understand what you are asking them to do. Have them repeat after you and/or ask if they understand the problems.
- Don't rush through content! It is OK if a learner spends 2-3 weeks learning a single operation.
- Give affirmation to encourage learner in solving the math questions.

KEY ACTIVITIES



Assessment

1. **Call caregiver:** Teacher calls the caregiver to conduct a simple endline assessment with the child. Inform caregiver that the results will not affect their child's class standing. Confirm if child is with the caregiver before proceeding with the call. If not available, find another time when both caregiver (or any adult) and child are available.

2. **Prepare the child:** Teacher asks caregiver to call the child and let them know that you'd like to play a math learning game and not a quiz/test. Teacher asks caregiver to put the phone on loudspeaker and reminds them that they are encouraged to listen but not coach. Teacher asks child to have a pencil and paper ready. Teacher should have a watch or clock nearby to be aware of the time spent in the math tutoring part of the call.

3. **Conduct endline assessment:** The teacher conducts a simple math assessment over the phone. The child will be assessed following the progression of difficulty: Addition, Subtraction, Multiplication, Division. The learner progressively answers one question from each operation until they give an incorrect response which will determine their math learning level.

4. **End the call:** Teacher thanks the caregiver and the child for their time.

SYSTEMS & PROTOCOLS

All mEducation weekly phone call scripts and exercises are programmed in SurveyCTO, an electronic data collection platform that allows real time monitoring of survey output. Learners' math learning outcomes and other data including attendance and phone call duration are automatically stored in the encrypted server of SurveyCTO. Monitoring data (e.g., weekly completion rate, math operation discussed) stored in the platform is generated into an excel tracker as part of the monitoring system.

Installing Survey CTO Collect

Installing Survey CTO Collect App

For android phone users: Open the Google Play app. Search for SurveyCTO Collect. Download to install the app on your phone

For iOS/Apple phone users: Open the App Store app. Search for SurveyCTO Collect. Download to install the app on your phone

Setting up the workspace

After installing the app, open the SurveyCTO Collect app and kindly follow these steps:

1. Click the sidebar menu on the upper left corner and select "Add new workspace"
2. Input the required information to log in

Workspace name: ipameducation
Server name: ipameducation
Username: [registered email address]
Password: mEducdeped@2024

Image from SurveyCTO

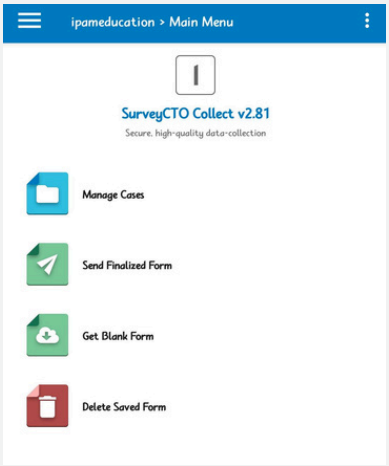
SYSTEMS & PROTOCOLS

All mEducation weekly phone call scripts and exercises are programmed in SurveyCTO, an electronic data collection platform that allows real time monitoring of survey output. Learners' math learning outcomes and other data including attendance and phone call duration are automatically stored in the encrypted server of SurveyCTO. Monitoring data (e.g., weekly completion rate, math operation discussed) stored in the platform is generated into an excel tracker as part of our monitoring system.

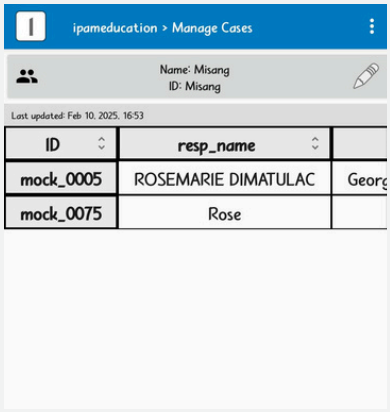
Making calls using SurveyCTO

Making a call

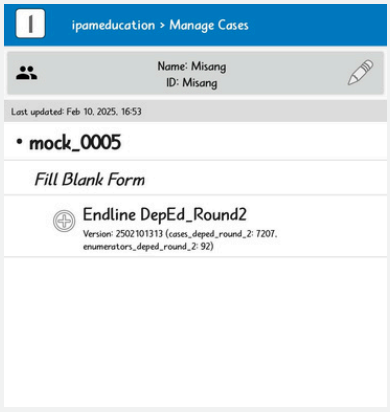
1. Click "Manage Cases"



2. Click "Refresh" and then select a case

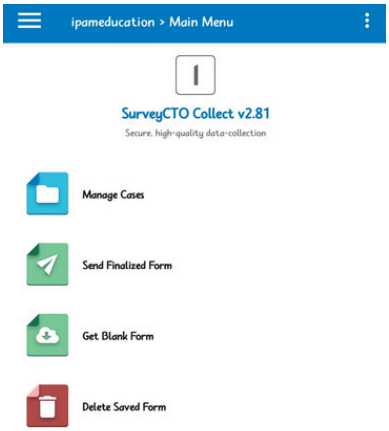


3. Select the correct form

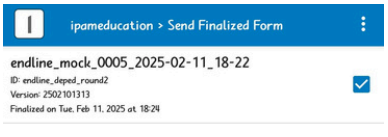


Submitting a form

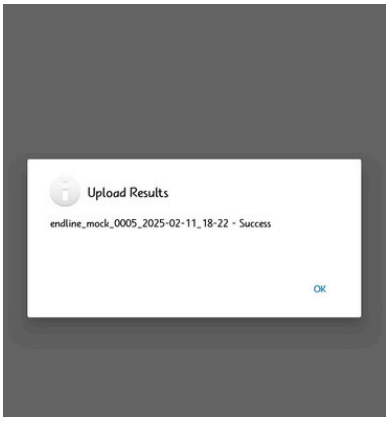
1. Select "Send Finalized Form" (#)



2. Toggle all unsent forms and click "Send Selected"



3. Wait for all forms to be uploaded



SYSTEMS & PROTOCOLS

All mEducation weekly phone call scripts and exercises are programmed in SurveyCTO, an electronic data collection platform that allows real time monitoring of survey output. Learners' math learning outcomes and other data including attendance and phone call duration are automatically stored in the encrypted server of SurveyCTO. Monitoring data (e.g., weekly completion rate, math operation discussed) stored in the platform is generated into an excel tracker as part of our monitoring system.

Call Protocols and Best Practices

Reaching households via phone

- Before recording that a household did not answer, try calling each phone number: (a) a minimum of 5 times; (b) over at least 2 different days; and (c) at 3 different times of the day (morning, afternoon, evening).
- Teachers may also send a SMS to remind the parent that we are calling them for the weekly math tutoring program.

Conducting assessments via phone

- Ask caregiver to place the phone on speaker mode to communicate with the learner. Caregiver should be present during the call but should not be coaching the child
- Begin with place value and proceed to operations regardless of a correct response. Let the learner progressively answer one question from each operation until they give an incorrect response.
- Standardized time allocation for math questions. The following times are recommended:
  - Place Value: 30 seconds
  - Basic Operations: 2 minutes
- If time allocations are exceeded, mark the child as having gotten the problem wrong:
- Make sure that caregivers and children understand that this is not an assessment. They should answer questions to the best of their ability.
- After answering the problem, request that the child briefly explain their thought process. This will ensure that the child hasn't received assistance from a caregiver and/or used a calculator.
- If it seems someone is helping, gently ask them to refrain. If someone continues to help and/or the child takes longer than the allocated time, mark that the child got this wrong.

MONITORING STRATEGIES

Guidance for Schools

1 Assign supervisors or facilitators

- The school (or school division) should designate supervisors or facilitators who can provide support to teachers/tutors.
- Ideally, one supervisor should handle around 5-10 teachers.
- Main tasks of the supervisor is to regularly check the monitoring tracker, follow-up on teachers' progress, and address concerns from teachers, (as much as possible)

2 Setup monitoring trackers

- Create a monitoring sheet that can track teachers' weekly progress. This can be done via Google Spreadsheets.
- The tracker should contain at least the following information:
- Teacher name
- Weekly completion rate (completed, refused, unreached)
- Weekly progress on math operations and check-in question results

3 Regularly check progress

- Do mid-week check-ins with teachers to see how they are doing with the phone call tutorial
- In the mid-week, reach out to teachers who have not reached at least half of their weekly phone call target.

4 Conduct debriefing sessions

- Set a schedule for weekly debriefing sessions with the teachers.
- The debriefing sessions will allow teachers to share their experience, what worked and did not work, and discuss strategies on how to address challenges.

ANNEX

Weekly SMS Content

Week 1

+ 14+46=?
18+33=?

− He picked 32 apples and gave his friend 13. How many is he LEFT WITH? 46-18=?

× 19x2=?
27x3=?

÷ You need to DIVIDE 11 apples evenly between 2 friends. How many will each get? 95/4=?

Week 2

+ 15+38=?
48+13=?

− You have PhP53 and spend PhP35 on lunch. How much are you LEFT WITH? 97-49=?

× 15x5=?
18x4=?

÷ A rope is 45m long. How many 2m pieces can it be divided into? 77/5=?

Week 3

+ 46+24=?
35+15=?

− You have 50 seeds and plant 39 of them. How many are you LEFT WITH? 70-48=?

× 14x5=?
15x2=?

÷ He divides PhP65 equally between 8 friends. How much does each friend get? 68/7=?

Week 4

+ 17+23=?
58+12=?

− He picked 40 apples and gave his friend 15. How many are LEFT OVER? 60-26=?

× 35x2=?
15x4=?

÷ Lorato has PhP56 and shares it equally with 7 friends. How much will each get? 36/6=?

ANNEX

Weekly SMS Content

Week 5

+ 22+18=?
57+24=?

− You have PHP 62 and spend PhP58 on dinner. How much are you LEFT WITH? 78 - 49=?

× 12x6=?
17x4=?

÷ A rope is 95m long. How many 3m pieces can it be divided into? 53/2=?

Week 6

+ 62+18=?
47+37=?

− 76 - 19 =? You have PhP52 and spend PhP36 on snacks. How much are you LEFT WITH?

× 17x4=?
15x6=?

÷ 36/7=? A tree is 92m tall. How many 5m pieces can it be cut into?

Week 7

+ 34+28=?
58+37=?

− You have PHP 78 and spend PhP29 on lunch. How much are you LEFT WITH? 55-28=?

× 18x3=?
17x4=?

÷ A tree is 83m tall. How many 6m pieces can it be cut into? 99/2=?

Week 8

+ 15+38=?
43+27=?

− You have PhP28 and spend PhP19 on eggs. How much are you LEFT WITH?

× 17X5=?
27x3=?

÷ 26/7=? A rope is 67m long. How many 4m pieces can it be cut into?

ANNEX

Phone Call Exercises

WEEK 1

Addition

- 18+33=?
- (OPTIONAL): I pick 27 bananas today and will pick up 15 bananas tomorrow. How many do I have IN TOTAL?
- Check-in question: 42+19= ?

Subtraction

- He picked 32 apples and gave his friend 13. How many is he LEFT WITH?
- (OPTIONAL): 46 - 18 = ?
- Check-in: 78-49= ?

Multiplication

- A pencil costs PhP6 each and you bought 14 pencils. How much is the total cost of all the pencils you bought?
- (OPTIONAL): 19x2=
- Check-in: 24x3=?

Division

- You need to DIVIDE 11 apples evenly between 2 friends. How many will each get?
- (OPTIONAL): 79/13= ?
- Check-in: 45/2= ?

WEEK 2

Addition

- I pick 15 bananas today and 38 tomorrow. How many do I have IN TOTAL?
- (OPTIONAL): 14+46=?
- Check-in: 34 + 28 = ?

Subtraction

- 97-49=?
- (OPTIONAL): You have PhP53 and spend PhP35 on lunch. How much are you LEFT WITH?
- Check-in: 48 - 29 = ?

Multiplication

- 15x5=?
- (OPTIONAL): A pencil costs PhP8 each and you bought 12 pencils. How much is the total cost of all the pencils you bought?
- Check-in: 12 x 6= ?

Division

- 43/7=?
- (OPTIONAL): A rope is 45m long. How many 2m pieces can it be divided into?
- Check-in: 68/5 = ?

WEEK 3

Addition

- 46+24=?
- (OPTIONAL): You are given PhP32 today and will be given PhP28 next week. How much will you be given IN TOTAL?
- Check-in: 58+17= ?

Subtraction

- You have 50 seeds and plant 39 of them. How many seeds are you LEFT WITH?
- (OPTIONAL): 70-48=?
- Check-in: 28-19= ?

Multiplication

- A box contains 14 erasers and you were given 5 boxes. How many erasers were you given in total?
- (OPTIONAL): 36 x 2 = ?
- Check-in: 15x3=?

Division

- He divides PhP65 equally between 8 friends. How much does each friend get?
- (OPTIONAL): 50/12 = ?
- Check-in: 72/7 = ?

ANNEX

Phone Call Exercises

WEEK 4

- You are given PhP17 today and will be given PhP23 next week. How much will you be given IN TOTAL?
- (OPTIONAL) 46 + 46 = ?
- Check-in: 62+29= ?

- 76 – 27 = ?
- (OPTIONAL) He picked 40 apples and gave his friend 15. How many are LEFT OVER?
- Check-in: 37-18= ?

- 35x2=?
- (OPTIONAL) A box contains 19 erasers and you were given 4 boxes. How many erasers were you given in total = ?
- Check-in: 12x6=?

- 79/13= ?
- (OPTIONAL): Lorato has PhP56 and shares it equally with 7 friends. How much will each get?
- Check-in: 43/2 = ?

- Jose buys 3 biscuits for PhP4 each and Ana buys 4 cookies for PhP5 each. How much do Jose and Ana spend altogether?
- Check-in: Jepoy buys 7 oranges for PhP6 each and Isha buys 5 bananas for PhP2 each. How much do Jepoy and Isha spend altogether?

WEEK 5

- 22+18=?
- (OPTIONAL) You bought 32 blue pens and 29 black pens. How many pens do you have IN TOTAL = ?
- Check-in: 35+27= ?

- You have PhP62 and spend PhP58 on dinner. How much are you LEFT WITH?
- (OPTIONAL) 71 – 17 = ?
- Check-in: 48-19= ?

- You bought 12 donuts at PhP6 each. How much did you spend in total?
- (OPTIONAL) 28 x 3 = ?
- Check-in: 18x2=?

- A rope is 95m long. How many 3m pieces can it be divided into?
- (OPTIONAL) 87/27= ?
- Check-in: 82/7 = ?

- A 10m rope is cut into pieces that are 2m each. A second rope is 12m long and is cut into pieces that are 4m each. How many pieces are there in total?
- Check-in: A 48m rope is cut into pieces that are 4m each. A second rope is 78m long and is cut into pieces that are 6m each. How many pieces are there in total?

WEEK 6

- You bought 34 black pens and 28 blue pens. How many pens do you have in TOTAL=?
- (OPTIONAL) 23 + 57 =?
- Check-in: 49+11= ?

- 81 – 26 = ?
- (OPTIONAL) You have PhP78 and spend PhP29 on lunch. How much are you LEFT WITH?
- Check-in: 72-39= ?

- 18x3=?
- (OPTIONAL) You bought 16 donuts at PhP5 each. How much did you spend in total?
- Check-in: 38x2=?

- 64/19= ?
- (OPTIONAL) A log is 83m tall. How many 6m pieces can it be cut into?
- Check-in: 52/5 = ?

- Anne received PhP35 from her sister and PhP49 from her brother. She spent PhP57 to buy a burger. How much does she have left?
- Check-in: Noel was given PhP26 for Christmas and PhP67 for his birthday. He spent PhP45 to buy donuts. How much does he have left?

ANNEX

Phone Call Exercises

WEEK 7

- 62+18=?
- (OPTIONAL) You picked 28 roses yesterday and 54 roses today. What is the total number of roses you picked = ?
- Check-in: 12+19= ?

- You have PhP52 and spend PhP36 on snacks. How much are you LEFT WITH?
- (OPTIONAL) 53 – 27 = ?
- Check-in: 52-18= ?

- You gave your 4 friends 17 candies each. How many candies did you give away in total?
- (OPTIONAL) 23 x 4= ?
- Check-in: 13x4=?

- A log is 92m tall. How many 5m pieces can it be cut into?
- (OPTIONAL) 73/11= ?
- Check-in: 62/7 = ?

- Bananas cost PhP3 each and oranges cost PhP2 each. If you buy 7 bananas and 10 oranges, how much will you spend all together?
- Check-in: Bananas cost PhP2 each and mangoes cost PhP5 each. If you buy 9 bananas and 13 mangoes, how much will you spend all together?

WEEK 8

- You picked 43 roses yesterday and 27 roses today. What is the total number of roses you picked=?
- (OPTIONAL) 56 + 17 = ?
- Check-in: 52+39= ?

- 91 – 69 = ?
- (OPTIONAL) You have PhP28 and spend PhP19 on eggs. How much are you LEFT WITH?
- Check-in: 54-38= ?

- 27x3=?
- (OPTIONAL) You gave your 12 friends 7 candies each. How many candies did you give away in total?
- Check-in: 12x6= ?

- 47/13= ?
- (OPTIONAL) A rope is 67m long. How many 4m pieces can it be cut into?
- Check-in: 73/4= ?

- A mother has 23 cookies. She gives her 2 daughters 3 cookies each. She gives her 4 sons 2 cookies each. How many cookies does the mother have left?
- Check-in: A mother has 32 cookies. She gives her four daughters 3 cookies each. She gives her 5 sons 1 cookie each. How many cookies does the mother have left?

ANNEX

Sample Phone Call Script

Introduction

- Good morning/afternoon! I'm Teacher {name} of {school},
- I'm calling for our math learning program.
- Did you receive a text message from us with a set of math problems?
- If NO: That's okay! We will send the text message again after this call.
- Has your child been able to practice any of the problems in the text message?
- If NO: Don't worry we will practice the exercises with your child during this call.

Preparing for targeted instruction

- Are you with {student's name} right now? We would like to speak with {student's name} to play a math learning game.
  - If **NO**: ask when would be the best time to call back when parent is with the student
- Can you please:
  - have a pencil and paper ready,
  - call {student's name} over,
  - and put me on speaker?
  - *Remind the parent that they are encouraged to listen but not coach*
- Hi {student name} how are you? This is Teacher {name}. I will be your teacher for this learning program. I would like to ask you to play some learning games with me. Are you ready?

Delivering targeted instruction: Addition

- Determine current math level of student and deliver the appropriate targeted math instruction:
- Demonstrate ADDITION problem: 18 + 33 = ?
- Highlight the following points:
  - Draw an addition place value table. Include an addition sign.
  - Always begin adding with the ONES place.
  - When ONES 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.
- CHECK-IN question: 42 + 19 = ?
- Note to teacher: Give students 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.
- Could you please explain to me how you solved it?
- Note to teacher: Check if the child was able to explain correctly. Provide affirmation and approval throughout the process. Thoroughly explain the solution to the exercise.

ANNEX

Sample Phone Call Script

Delivering targeted instruction: Subtraction

- Demonstrate SUBTRACTION problem: He picked 32 apples and gave his friend 13. How many is he LEFT WITH?
- Highlight the following points:
  - Draw a subtraction place value table. Include a subtraction sign.
  - For word problems, note which value is being subtracted from which. The value we are subtracting from is placed above the value being subtracted.
  - Always begin subtracting in the ONES PLACE.
  - 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 ONES PLACE side of the subtraction table
- CHECK-IN question: 78 - 49 = ?
  - *Note to teacher: Give students 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.*
- Could you please explain to me how you solved it?
  - *Note to teacher: Check if the child was able to explain correctly. Provide affirmation and approval throughout the process. Thoroughly explain the solution to the exercise.*

Delivering targeted instruction: Multiplication

- Demonstrate MULTIPLICATION problem: 19 x 2 = ?
- Highlight the following points:
  - Draw a multiplication place value table with a ‘carryover window.’ Include a multiplication sign.
  - It is easier to place larger numbers on top with smaller numbers underneath.
  - Multiply the digit in the ONES place of the bottom number by the top number.
  - When the ONES digit 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.
- CHECK-IN question: 24 x 3 = ?
  - *Note to teacher: Give students 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.*
- Could you please explain to me how you solved it?
  - *Note to teacher: Check if the child was able to explain correctly. Provide affirmation and approval throughout the process. Thoroughly explain the solution to the exercise.*

ANNEX

Sample Phone Call Script

Delivering targeted instruction: Division

- Demonstrate DIVISION problem: You need to DIVIDE 11 apples evenly between 2 friends. How many will each get?
- Highlight the following points:
  - Identify what is being divided. Place that number inside the division sign.
  - Identify the number of times something is being divided. Place that number outside of the division sign.
  - 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.
  - If you have a leftover value that can no longer be divided, write it in your answer as a remainder.
- CHECK-IN question: 45 / 2 = ?
  - Note to teacher: Give students 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.
- Could you please explain to me how you solved it?
  - Note to teacher: Check if the child was able to explain correctly. Provide affirmation and approval throughout the process. Thoroughly explain the solution to the exercise.

Ending the Call

- Good job, {student’s name}. Do you 1 or 2 questions for me?
- If no more questions, ask to speak with the parent/guardian
- Hi {parent’s name}, thank you for allowing us to contact you and your child. We will be calling you again next week.
- May we call you around this time next week? If no, when is the best time to call next week?
- Should I call back using this same number?
- Thanks again for taking our call and for continuing to support your child’s learning. Have a good day!

Teacher’s Assessment

- Report math check-in result.
- Based on your assessment, has the student mastered the operation discussed?
- Assess if child can proceed to next operation or needs more practice next week.
- If needs more practice, you may retain student at the same math operation or bring student back to one operation level below.

ANNEX

Sample Monitoring Sheet

Weekly Completion Rate

		W1		W2	
Student Count	Teachers Count	Completed	Completion Rate	Completed	Completion Rate
56	14	28	50.00%	49	87.50%
188	49	164	87.23%	176	93.62%
60	15	40	66.67%	51	85.00%
90	27	36	40.00%	67	74.44%
73	19	46	63.01%	69	94.52%
24	7	13	54.17%	14	58.33%
225	60	100	44.44%	195	86.67%
76	18	70	92.11%	76	100.00%
675	171	369	54.67%	562	83.26%
8	3	2	25.00%	8	100.00%
1475	**383**	**868**	**58.85%**	**1267**	**85.90%**

Weekly Progress

	Week 1		Week 2		Week 3	
Operation discussed	Freq	Percent	Freq	Percent	Freq	Percent
Addition	581	89.25%	387	48.25%	143	17.31%
Subtraction	21	3.23%	358	44.64%	379	45.88%
Multiplication	34	5.22%	37	4.61%	251	30.39%
Division	7	1.08%	13	1.62%	33	4.00%
Mixed operations	8	1.23%	7	0.87%	20	2.42%
Total	**651**	**100.00%**	**802**	**100.00%**	**826**	**100.00%**

	Week 1		Week 2		Week 3	
Check-in question	Freq	Percent	Freq	Percent	Freq	Percent
Correct answer and correct exp	538	83.67%	644	81.52%	636	78.52%
Correct answer but wrong expla	49	7.62%	69	8.73%	74	9.14%
Wrong answer	56	8.71%	77	9.75%	100	12.35%
Total	**643**	**100.00%**	**790**	**100.00%**	**810**	**100.00%**

ANNEX

Frequently Asked Questions

Guidelines in troubleshooting common concerns encountered during Baseline/ Endline Assessment, and Weekly Phone Tutoring

Log In Error/ Server Requires Authentication

- Always check first if device is connected to internet. Make sure to have a strong internet connection.
- Check if the log-in credentials was typed in correctly.

Cases not loading in Manage Cases

- Always verify if the gadget is connected to the internet. Make sure you have a robust internet connection.
- If it's still loading, you can try using mobile data if you're linked to wifi, and vice versa.
- If you still have trouble connecting, exit the app, remove it from Recent Apps Used, turn off Wi-Fi or mobile data, and restart your device.

Poor Signal Reception

- Ask the respondent to seek for a location in their home with a stronger signal.
- Message the respondent at least an hour before the arranged time to remind them of your tutoring session with their child, and get settled at the location with a strong signal.
- If the respondent prefers Messenger since that is the only method they can hear well, utilize just VOICE CALL, not VIDEO CALL, if the other alternatives are not viable.

Adding New Number

- Go to Manage Cases, select the case you will add new numbers with, scroll until you reach “Was the respondent reached?”, choose Answered by someone else”, then “ There is a better number to reach *respondent’s name* -- UPDATE CONTACT”. You will input after the new phone number here, then mark finalized form and submit. Make sure to Get Blank Form after then check if the new number was recorded. Make sure to submit the form!
- If the new number was not recorded, record in Concern Sheet the caseid and the new number.

No Contact Number, No Cases in Manage Cases, or Wrong spelling of Respondent/ Learner’s name

- Inform your assigned FC. FCs will then input this on concern sheet.
- For the wrong spelling of the name, include the correct spelling of the name

ANNEX

Frequently Asked Questions

Guidelines in troubleshooting common concerns encountered during Baseline/ Endline Assessment, and Weekly Phone Tutoring

Completed interview but recorded as Reschedule

- Check if the case was successfully submitted in SCTO
  - Check in Send/Received Now if there is a number beside ⬆⬇at the upper right of the Home page. If there's a number, click
  - Check in Send Finalized Form if there are forms saved there, if there is toggle all then Send Selected. Make sure this page will be empty.
- Check the 'data' tab in the tracker the latest submitted form
  - Create a Filter View
  - Filter the caseid that you are looking for
  - Go to the last row to check
    - Submission date
    - Start/End time
- There is a possibility that the Rescheduled form was submitted after the Completed Form.
- Make sure to send ALL rescheduled forms first before finalizing the completed form, or send all forms every after it was finalized so it won't be pile up.

Encoding emojis, and Ñ/ñ

- Never encode any emoticons,emoji, and Ñ/ñ. The form won't send if these were encoded.

Not Reflected Completed Cases

- Possible reason why this happens is that no complete form was submitted to check:
  - Check if the case was successfully submitted in SCTO
    - Check in Send/Received Now if there is a number beside ⬆⬇ at the upper right of the Home page. If there's a number, click .
    - Check in Send Finalized Form if there are forms saved there, if there is toggle all then Send Selected. Make sure this page will be empty.
  - Check the 'data' tab in the tracker the latest submitted form
    - Create a Filter View
    - Filter the caseid that you are looking for
    - Go to the last row to check
      - Submission date
      - Start/End time

ANNEX

Frequently Asked Questions

Guidelines in troubleshooting common concerns encountered during Baseline/ Endline Assessment, and Weekly Phone Tutoring

Guardian is no longer with the learner

- Ask if they have contact with the new guardian of the learner, then call that number
- Ask the teacher if they have other contact number that you can reach them

Listed guardian is a minor

- Ask for an adult. As much as possible, the guardian must be the parents or a family member within the same household and at least 18 years old.

Respondent wants to change learner's guardian

- As long as the parent/guardian consent to it and replacement is in legal age or adult.

Teacher/Learner is sick

- Reschedule the call to the time that teacher/learner already recovered.

Duplicate Caseid/ respondent

- Report immediately to FC. If already completed, do not call anymore, and do not submit any form.

CONTACT US AT:

meducation@poverty-action.org