Traditional kanga garment with mobile phone print
OVERVIEW

WHY MOBILE LEARNING?

Of the world’s total population of 6.5 billion, 90% have little or no access to most of the products and services many of us take for granted.

However, the mobile phone is a product that has become phenomenally widespread and has revolutionised life in developing regions.

Nowhere has the effect been more dramatic than in Africa. While access to a fixed landline has remained static for a decade, access to a mobile phone has soared in the past few years.

There are over 500 million mobile phone subscribers in Africa today, more than half of the continent’s population. Many of these mobile users do not have access to a computer, the internet or even electricity. Of the 110 million Africans that do use the internet, more than half do so via their mobile phone.

Moreover, the mobile phone has become a platform for a host of applications that offer new social and economic benefits to users. New services and systems are being built around this object to add value, and in just a few years, mobile applications have transformed the lives of many Africans.

Mobile learning or m-learning is an emerging field that attempts to do just that. While less established than m-health and m-banking, m-learning has a great potential for contributing to social and economic development in Africa, and this toolkit aims to offer the possibility of taking a step closer to this goal.

ABOUT THIS TOOLKIT

The mobile learning toolkit is the result of research into mobile phone use and user needs within the African context, however it has been developed for use in all developing contexts. It is intended as a “trainer’s toolkit” that can help deliver a wide range of training activities both inside and outside of the classroom.

The mobile learning toolkit is an open source resource that can be used in the delivery of all kinds of training in any context. It has been designed to be as inclusive as possible, with most of the methods requiring only low end devices (basic mobile phones with voice calling and SMS capability). In this way the toolkit can be used to deliver interactive learning experiences to participants right to the Base of the Pyramid (BoP).
Fisherman in Kenya
OVERVIEW
WHAT IS MOBILE LEARNING?

There are various definitions of mobile learning (sometimes written as m-learning or mLearning), however in the context of this toolkit mobile learning is considered to be:

the ability to develop knowledge or skills through engaging with learning materials in any environment or location

Therefore while every method in this toolkit speaks about mobile phones, the technology should be viewed as a tool able to facilitate an enhanced learning experience and not the core element.

Moreover, in the context of this toolkit, mobile learning is not about replacing face-to-face (F2F) training, but about complimenting this element and extending the learning experience beyond the classroom, for example:

// giving participants access to learning content wherever they are
// stimulating them to reflect upon, analyse and develop their opinion on core concepts
// distributing on the field tasks that could not otherwise be achieved in the classroom
// creating a more interactive and engaging experience both inside and outside of the classroom
// extending the learning experience to before and/or after a face-to-face training session
// maximising the value of face-to-face training sessions with warm-up and follow-up activities

Finally, it is important to note that mobile learning is not about forcing people to use their mobile phone. Even when methods have a more technical part, participants should be free to use any technology to achieve the task at hand. For example in some interactive tasks participants are asked to take photos on the field and send them to the trainer in advance. This does not mean that the participant must take photos using their mobile phone and send them via MMS. They are equally free to use other mobile devices, such as a camera or ‘flip cam’ and to send their photos by email if this is more convenient for them.
Dunga Fisherman cooperative in Kenya
As well as presenting a series of mobile learning methods at a general level, this toolkit has been customised for use in the delivery of a specific training programme: my.coop.

my.coop stands for managing your cooperative and aims to teach contemporary principles of managing agricultural cooperatives to people in Africa, Asia and Latin America, beginning with Africa.

It is a new initiative from the International Labour Organization (ILO) of the United Nations, which is based on a previous project called MATCOM (Material and Techniques for Cooperative Management Training) that was launched in the 1970s.

The objective of the training programme is to expose (existing and potential) managers of agricultural cooperatives to key management issues that are specific to cooperative enterprises in the agricultural sector.

The strategy for delivering this training programme is “Training of Trainers” (ToT), in order to spread information down through the pyramid to reach those who need it most. The target audience of the programme has a wide range, including NGO workers, trainers in cooperative colleges, and leaders of cooperative unions, with the goal that these participants will be empowered not only with information but also the skills and tools to deliver the material right to the BoP.

The my.coop training material covers a wide range of issues, grouped into 4 modules:

- the challenges for agricultural cooperatives
- cooperative service provision
- supply of farm inputs
- cooperative marketing

Therefore for every method in this toolkit some recommendations are made for the customisation of the method to the delivery of these 4 modules.
Masai in Kenya
Overview
How To Use This Toolkit

In this toolkit 15 methods for mobile learning are presented, all of which are designed to be carried out in combination with one or more F2F training sessions.

A general overview of each method is given, plus a step by step guide to implementing the method, and a suggestion of how the method can be used in the delivery of the my.coop training developed by the ILO.

The methods are divided into 4 categories: deliver content, assign tasks, gather feedback and provide support, as detailed below.

**Deliver Content**
1 // Seeds of inspiration
2 // Profcasts
3 // Refresher messages
4 // Newsflash

**Assign Tasks**
5 // Mobile world café
6 // Photo storytelling
7 // Mobile system mapping
8 // Mobile reporter
9 // Mobile SWOT analysis
10 // Mobile jigsaw

**Gather Feedback**
11 // Learning needs analysis
12 // SMS word cloud
13 // Live SMS poll

**Provide Support**
14 // SMS helpdesk
15 // Mobile pop quiz

These methods require some tools, for example a system for the trainer to send bulk SMS messages and collect responses or to record audio podcasts. Therefore a selection of the most relevant tools is included after the methods, although there are many others.

As each context and situation is different, it is left to the reader to decide which methods to use and the tools they feel most suitable for achieving them.

This toolkit is intended as an open source tool that can continue to be improved and added to with the feedback and collaboration of its users. As such, any feedback, comments and ideas are welcome and can be shared by email, Twitter or SMS:

email: mlearningtoolkit@gmail.com
twitter: @mlearntoolkit
SMS: +447946385199
Mobile Learning Methods

- Deliver Content
- Assign Tasks
- Gather Feedback
- Provide Support
MOBILE LEARNING METHODS

- Deliver Content
- Assign Tasks
- Gather Feedback
- Provide Support
The Seeds of Inspiration method aims to follow participants on their training journey and provide them with short messages designed to motivate, stimulate and inspire them.

Training courses tend to be very information-intense with participants facing a lot of new material to cover and understand. Therefore this method aims to offer a lighter side to the training, capturing the essence of the training subject in an emotionally engaging way.

For example, participants can be sent proverbs, quotes and trivia related to the training subject. These can be interesting, surprising, emotive or even funny messages that participants can enjoy and may want to share with friends or colleagues.

In this way the “seeds” can make it easier for participants to understand or remember complex concepts, and to spread the message of the training to others.
step by step

preparation

The trainer should firstly identify “seeds” (such as proverbs, quotes or trivia) that would be interesting to send to their participants, based on the training content and the culture of the participants.

It is a good idea for the trainer to collect these in one place, building a database that they can keep adding to and using in future iterations of the training.

implementation

Leading up to a F2F training session, participants can be sent “seeds of inspiration” by SMS in order to introduce the training subject in an easily accessible and entertaining way. For example, participants could be sent a seed every 2 days for the 2 weeks prior to the F2F session.

Then after the F2F training has been completed, lifelong learning can be promoted by periodically sending participants such messages to remind them of their training and inspire them to keep putting into practice what they learned.

“Two ants do not fail to pull one grasshopper - African proverb”
In the African context, there is a strong tradition of proverbs and sayings that encapsulate profound principles in a few words. In East Africa women traditionally wear kagias; brightly coloured garments that bear Swahili proverbs expressing everything from love messages to warnings, offers of advice and expressions of appreciation.
This method is very suitable for the participants of the my.coop training. Some examples are given below, however trainers should look for examples that relate to the culture of their specific participants.

In the African context, there is a strong tradition of proverbs and sayings that encapsulate profound principles in a few words. Proverbs are an important part of the culture, with a strong influence in the instillment of values and beliefs. Metaphors and similes feature heavily in these proverbs, which can be a powerful medium of communicating the underlying values of cooperatives, for example:

// “Two ants do not fail to pull one grasshopper”. This proverb is popular in Kenya, Uganda and Tanzania. The meaning is quite simple: an ant attempting to capture a grasshopper for food will have difficulty, but two ants can work together to pull the grasshopper to the desired location, the implication being that this will provide them with a meal. The basic moral of this story is that unity among people is very important, which reflects the underlying principle of forming a cooperative.

// “Sticks in a bundle are unbreakable” - Kenyan Proverb

Proverbs can also help to underline the importance of education itself:

// “Knowledge is like a garden; if it is not cultivated, it cannot be harvested” - African proverb

// “The farmer who has never left his fields thinks that his farming system is the best” - Hausa proverb

Trivia can also add to the my.coop training material, for example:

// “The cooperative movement began in Europe in the 19th century, although The Shore Porters Society claims to be one of the world’s first cooperatives, established in Scotland back in 1498!”

Quotes can also provide inspiration, for example:

// “Coming together is a beginning. Keeping together is progress. Working together is success.” - Henry Ford

// “Individual commitment to a group effort - that is what makes a team work, a company work, a society work, a civilization work.” - Vince Lombardi

customisation to my.coop
A profcast is a short audio clip that participants can download to their mobile phone and listen to whenever and wherever they like.

This is a very effective tool as it allows trainers to disseminate more detailed content via mobile phones while overcoming the character limitations of SMS.

In addition, it is particularly effective for fulfilling the needs of auditory learners, and like radio, it can overcome problems of literacy.

Profcasts can be used to share different kinds of information. For example, they could include mini lessons covering course content; case studies; interviews with experts; or debates held by a panel of experts.

The most effective profcasts combine the above elements in an ‘edutainment’ style. For example profcasts could follow a ‘radio magazine’ or ‘soap opera’ style rather than a lecture.

Profcasts can be easily distributed to participants during a F2F session and once they have the mp3 files on their mobile phone, they can easily share these with peers (for example their colleagues) using Bluetooth. In this way, the training effect can be multiplied.
step by step

preparation

The trainer should firstly decide on the content they wish to include in the profcast, how long they will make the profcast, and how they wish to structure the contents. The following is a suggestion of how to structure a profcast in the style of a ‘radio magazine’ feature:

**Introduction // 1 minute**
Welcome, introduction to speaker[s], an overview of the profcast contents

**Content // 2-3 minutes**
Information about a specific topic from the course material, covering key issues

**Case Study // 2 minutes**
A specific case study that frames the theory in a real-life context

**Feedforward // 1-2 minutes**
A link to the other activities the participant should complete in relation to this topic and a link to the topic of the next profcast

**Fun finish // 1-2 minutes**
Related quote, proverb, joke, story, song or other entertaining feature to close

When the trainer has decided on their content, they should record their profcasts and save them in the mp3 format. This can be done by computer using a microphone and the open source audio recording and editing software Audacity.

Alternatively, the trainer can record profcasts directly to their mobile phone, providing that it has an audio recorder.
implementation during F2F

The easiest way for the trainer to distribute profcasts to participants during the F2F session is to transfer the mp3 files from their own mobile phone via Bluetooth. The trainer can pass the files to a couple of participants and then ask them to begin transferring the files to the others in order to save time.

Alternatively the trainer can distribute profcasts to participants from their computer by connecting their mobile phones by cable or by using the removable memory card.

The participants should be given instructions on how to use the profcasts, for example if they should listen to them in a certain order or at a particular point in time (e.g. in line with e-learning or self-study activities).

Participants’ stories can also be captured during the F2F session. The trainer can conduct a Storytelling activity and record the stories to be used as case studies in profcasts for future iterations of the training.
This is a general method that can be used to convey any part of the my.coop training. The trainer can select the topics that are most relevant for the target audience and create one or more profcasts to guide them through each topic.

In particular, the use of profcasts provides trainers with an excellent opportunity to customise the my.coop material to the particular context of their training activity.

The my.coop training package includes case studies covering a range of different types of agriculture and from various regions around the world.

However, if a trainer is teaching a group of participants all representing dairy cooperatives in Kenya, it would be more relevant to give examples more closely related to this context throughout the training. The Profcast method allows them to create an additional point of reference to tailor the standard modules in a distance-learning context.

In addition, it is worth noting that this method is very suitable for the African context, as African cultures are among the most oral in the world. Storytelling under the tree is still commonplace and speaking is still preferred to writing.
When participants complete a F2F training, it is important that afterwards they do not forget what they learned and that they go on to put the principles into practice.

However when a lot of material has been covered in a short period of time, it can be difficult for participants to remember everything.

In order to offer an additional service to participants, the trainer can send follow-up SMS “refresher” messages to remind them of key elements of the training and to motivate them to put these into practice.

This method adds value to the participants’ overall training experience at little or no cost and low time input from the trainer.
step by step

preparation
The trainer should firstly identify content that would be useful and suitable as a refresher message, and condense the content into the key points.

implementation

after F2F
Following a F2F training session, the trainer can promote lifelong learning by periodically sending participants SMS messages reminding them of key concepts from the training material.

For example, participants can be sent an SMS asking them “Do you remember...?” with reference to an element from the training, and shortly afterwards the answer can be sent, thus giving participants some time to think about the concept before providing the refresher message.
The trainer can send follow-up SMS “refresher” messages to remind them of key elements of the training and to motivate them to put these into practice.
This method can be used to remind participants of key concepts from all four modules of the my.coop training.

Some examples are given below, however trainers should look for examples that relate to the specific learning needs of their participants.

// The ILO definition of a coop: “an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically-controlled enterprise”

// The 7 coop principles (voluntary membership, democratic control, member economic participation, autonomy, education and training, cooperation among coops, concern for the community)

// The 4 tools for assessing member needs (formal survey, informal survey, focus group, interview)

// The 4 criteria for choosing a service provider (availability, affordability, accessibility, appropriateness)

// Upgrading strategies (product, process, functional and inter-sectoral upgrading)

// The Ansoff Growth matrix (market penetration, market development, product development, diversification)

// The product life cycle (introduction, growth, maturity, decline)

// The 5 P’s of the marketing mix (product, price, promotion, packaging, place)
It is important to recognise that learning cannot be isolated from the context in which it takes place. This context includes a wealth of political, economical, environmental, social and cultural factors that are all vitally important to a comprehensive learning experience.

Moreover, learning is not static: changes are going on around the world all of the time that must be taken into account. Training packages take a long time to develop and the material has a tendency to remain static, however in a connected society there are new opportunities to provide more dynamic training content.

Harnessing the technology of mobile phones gives trainers the possibility to provide updates of new developments in real time. This can provide added value to participants in any context, however it can prove to be vital for those at the Base of the Pyramid (BoP) who struggle to access information that affects them.

Newsflash SMS messages can be sent to inform participants of news stories related to their sector and asking them for their opinion, to spread relevant information and promote discussions.
Following a F2F training session, lifelong learning can be promoted by periodically sending participants SMS messages highlighting current affairs issues that have an impact on their sector.

This exchange of the latest information can also be two-way, for example participants can be asked to report back to the trainer on changing contextual factors in the field, which can then be shared with the whole network of contacts if the trainer thinks it has a value for everyone.

Additionally participants can be invited to comment on the newsflash items, sharing their opinions and debating issues with the others. This can be achieved by interaction with Twitter for example, where people can contribute (and receive notifications of contributions) either online or by SMS.

“Newsflash: ‘Crop prices to double by 2030’, warns Oxfam. What do you think?”
Newsflash messages bring real-world current events into participants’ learning experience, for example highlighting new opportunities such as fair trade
This method is particularly relevant for the participants of the my.coop training. In Module 1 there is a topic on the ‘Changing context of agricultural markets’, discussing issues such as climate change, and so it is clear that contextual factors play an important role in this sector.

The Newsflash method can be used to inform participants of the my.coop training of the following:

// News stories related to the agricultural cooperative sector

// Changes in legislation that affect agricultural cooperatives

// Upcoming events

// Funding and technical support opportunities for agricultural cooperatives

// Updates on new opportunities for agricultural cooperatives such as fair trade and organic initiatives

“Newsflash: ‘Horn of Africa suffers severe drought’ Are you affected?”
MOBILE LEARNING METHODS

- Deliver content
- Assign tasks
- Gather feedback
- Provide support
In the World Café method, open and creative dialogue is encouraged by replicating the café environment, for informal learning around the table. Each table has its own discussion theme and different rounds allow participants to rotate tables, creating a web of collective knowledge.

In this mobile adaptation of the method, participants asked to submit a “hot topic” that they would like to debate in advance, and the trainer selects the best suggestions to use as the discussion topics.

By shifting the generation of these topics from the trainer to the participants, they will have more ownership and be more engaged in the activity. As it is likely that the participants outnumber the topics to be discussed, there is still the element of selection, allowing the trainer to choose the topics that most closely relate to the training material.

Conducting this method on the first day of the F2F training session allows participants to get to know each other in a relaxed yet productive way. Inviting the participant who suggested each selected topic to be the “host” of that table also provides them with the opportunity to focus on their particular interests or goals for the training session and to connect with other participants who share their interests.

Moreover, by asking participants about the topics that they are most keen to explore, the trainer can begin to understand the participants’ needs and expectations in advance of the F2F session.
prior to the F2F training session, participants are sent an SMS asking them to think of a “hot topic” that they would like to debate during the F2F session, and to send this to the trainer by SMS or email. Participants should be encouraged to phrase their topic as a question to better facilitate discussion. They can also be encouraged to suggest more than one topic if the trainer wishes to have more options to select from.

in advance of world café activity the trainer should set up the tables, covering them with flip-charts or brown paper. A specific discussion point should be chosen for each table and clearly displayed, including the name of the participant who suggested the topic.

participants should be divided between the different tables, with the participant who suggested each topic becoming the “host” for that particular table. The ideal number of participants per table is 4 to 6, as any more will stifle the opportunities to contribute, and any less will reduce the amount of experience that is shared.

the trainer should instruct the participants to focus on key points that relate to the questions and to contribute their own thoughts and ideas regularly. They should also listen actively for interesting connections, patterns or additional questions. Participants should be constantly encouraged to take notes, doodle or create diagrams directly on the table, and the host in particular should be instructed to keep track of key ideas.

step by step

implementation

before F2F

Prior to the F2F training session, participants are sent an SMS asking them to think of a “hot topic” that they would like to debate during the F2F session, and to send this to the trainer by SMS or email. Participants should be encouraged to phrase their topic as a question to better facilitate discussion. They can also be encouraged to suggest more than one topic if the trainer wishes to have more options to select from.

during F2F

In advance of World Café activity the trainer should set up the tables, covering them with flip-charts or brown paper. A specific discussion point should be chosen for each table and clearly displayed, including the name of the participant who suggested the topic.

Participants should be divided between the different tables, with the participant who suggested each topic becoming the “host” for that particular table. The ideal number of participants per table is 4 to 6, as any more will stifle the opportunities to contribute, and any less will reduce the amount of experience that is shared.

The trainer should instruct the participants to focus on key points that relate to the questions and to contribute their own thoughts and ideas regularly. They should also listen actively for interesting connections, patterns or additional questions. Participants should be constantly encouraged to take notes, doodle or create diagrams directly on the table, and the host in particular should be instructed to keep track of key ideas.

Each round of conversation should last approximately 15 to 30 minutes. As the ‘ambassadors of meaning’, all but one of the participants (the host) moves to the next table. The host remains to provide an overview for the next group and steer them towards complementary thought processes in order to avoid repetition.

It is not necessary for all people to spend time at each table because after a few rounds (typically 2 or 3, depending on the time allocated) the session closes with a debriefing.

The host of each table should be asked to present a synthesis and key reflection points to the entire group and time should be allowed for the other participants to add interesting points or further lessons learned.

A minimum of 60 minutes and no more than 2 hours should be dedicated to the World Café activity, to ensure that the questions are thoroughly examined while avoiding boredom and repetition.

total F2F timing = 1-2 hours
Shifting the generation of discussion topics from the trainer to the participants can give them more ownership of a world café event while helping the trainer to understand their needs and expectations in advance of a face-to-face session.
customisation to my.coop

It is recommended that the specific discussion points for the Mobile World Café method are participant-generated, however it is important to ensure that the topics are linked with the training material. Therefore it is recommended to encourage participants to focus on the following aspect of the my.coop training:

Module 1 //
Basics of agricultural cooperatives

Reason
By focussing on the first module, the activity can be carried out on the first day of the F2F training session, allowing participants can get to know each other in a relaxed yet productive way.

Objective
To address the fundamental principles of agricultural cooperatives

Brief
When asking participants to submit their “hot topic” suggestions, the trainer can also send them some sample questions to inspire the participants and to help them formulate their discussion topics, for example:

// What are the reasons for setting up an agricultural cooperative?

// What are the essential conditions for success?

// How can a cooperative increase the involvement of young people and women in the running of the cooperative?

// What is the role of the government in cooperative development?
The Storytelling method is an interactive learning strategy that encourages people to analyse their personal situation and reflect on their individual training goals and outcomes, as well as learning from the stories shared by their peers.

Storytelling is a communication tool that can carry information in an interesting and engaging way. The language used is authentic (experience, not fact oriented) and it is in the narrative form that can capture and hold most people’s attention, increasing the likelihood of learning.

In this mobile adaptation of the storytelling method, individual participants are asked to prepare a story in advance that they will later share with the other participants during the F2F session.

By asking participants to prepare their story in advance, rather than spontaneously during the F2F session, they will have more time to reflect on the story they wish to tell and to gather relevant information on the field. In particular for this method participants should be asked to take photos that illustrate the story, in order to better understand their individual context and needs and create a richer storytelling experience.

This tool can also be used to capture participants’ stories and share them with others beyond the training session, e.g. by integrating the stories as case studies in future iterations of the training material or via an online community such as flickr.

PHOTO STORYTELLING

**keywords**
- interactive learning
- social interaction
- time saver
- visual learning

**stages**
- before F2F + during F2F + after F2F

**requirements**
- SMS + camera

**overview**

The Storytelling method is an interactive learning strategy that encourages people to analyse their personal situation and reflect on their individual training goals and outcomes, as well as learning from the stories shared by their peers.

Storytelling is a communication tool that can carry information in an interesting and engaging way. The language used is authentic (experience, not fact oriented) and it is in the narrative form that can capture and hold most people’s attention, increasing the likelihood of learning.

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This tool can also be used to capture participants’ stories and share them with others beyond the training session, e.g. by integrating the stories as case studies in future iterations of the training material or via an online community such as flickr.
before F2F

Prior to the F2F training session, participants are sent an SMS asking them to think of a story related to their experience of the training subject and to take a series of photos that tell the story in sequence. They should also be asked to give their story a title and to make sure to include the following elements:

// Location (where the action occurred)
// Characters (showing their role)
// Objects (key artifacts that play a part)
// Challenge (problem, need or task that triggered the action)
// Action (sequence of events)
// Resolution (outcomes and lessons learned)

Over the next few days the participants should be sent further messages with hints and tips on creating a powerful story, such as:

// Include elements that evoke emotion and attract attention
// Present the story from the perspective of a single protagonist to allow others to empathise more easily
// Focus on the narrative aspects, to avoid doing the analytical work for the audience
// Avoid discussing morals or subjective perspectives

Participants should be asked to send their photos to the trainer in advance of the F2F training by MMS or email, and the trainer should print these in a standard format, e.g. A4. If participants are unable to send their photos in advance they can be asked to simply bring their mobile phone/camera with the photos to the F2F session.
step by step

implementation
during F2F
On the first day of the F2F session, trainers can transfer any remaining photos to a laptop, for example during the breaks to avoid losing time.

45-60 mins F2F
During the storytelling session participants can tell their stories to each other in small groups (6-8 people), using the printed photos or alternatively a laptop slideshow as a presentation aid. Each participant has 5 minutes maximum to tell his or her story, with the others being allowed to ask questions.

30 mins F2F
After all the stories have been shared the trainer sets up a collective debriefing to explore key issues, themes and important messages that emerged from the stories. The photo storyboards should then be placed around the room making them visible for the rest of the training.

total F2F timing = 1 hour 30 mins

after F2F
The photos could be shared among participants using an online database such as flickr.
The Photo Storytelling method is recommended for use in the following aspect of the my.coop training:

Module 1 //
What is YOUR cooperative about?

Reason
Participants may find it easier to explain their cooperative using photos, for example of their products and services. For the others it will also be easier to understand, more engaging and more enjoyable than simply listening to a story.

Objectives
// To reflect on the mission and vision of their cooperative
// To identify the dual character in their cooperative
// To explore values and principles within their cooperative

Brief
The trainer can share some guiding inspiring questions to help participants formulate their story:
// Why did you set up the cooperative?
// What is the ambition/vision of the cooperative?
// What is the unique market opportunity of your cooperative?
// What are the social orientations of your cooperative?
// How did your cooperative evolve? How did your cooperative adapt to changes?

During the collective debriefing phase the following questions could be explored:
// Which dualities did we discover in the different stories? (Discussion on the tension between social or commercial enterprises)
// Which different functions of cooperatives were present in the stories? Which services were they providing?

customisation to my.coop
The System Mapping method helps participants to understand, visualise, discuss, and improve situations in which many different actors influence outcomes.

System Mapping helps participants to ‘zoom out’ from a particular problem or situation and to understand the wider context in which it exists. This can often unearth new opportunities that they failed to see previously. Analysing their system map together with the trainer and other participants, each participant can create an action plan of how they can strengthen relationships with the other actors in the system and pursue any opportunities identified.

This activity can be difficult when isolated from the context, and so in the mobile version of the method participants are assigned a warm-up task in advance of the F2F session. By asking participants to identify and photograph the actors that they and their organisation interact with in the field, participants are stimulated to consider the system in advance of the System Mapping activity and will gain more value from the F2F stage.

Later these photos will be used to produce flashcards and used in a F2F card sorting activity to create the system map. In this way it is easier for participants to engage with the activity as they start from the real actors they are familiar with and then make the connections between them.
step by step

implementation

before F2F
Prior to the F2F training session, participants are sent an SMS asking them to think about the system of actors that exists around themselves or their organisation, and to take photos representing these actors.

Participants should be asked to give each photo a title (for example ‘My organisation’) and to send these photos with their titles to the trainer in advance of the F2F training by MMS or email. The trainer should print these in a standard format, for example 4 photos per A4 page (approx. 70mm x 50mm) and cut these out to form small cards. On the back of each card, the title of the photo should be written or printed.

Note: If participants are unable to send their photos in advance they can be asked to simply bring their mobile phone/camera with the photos to the F2F session. The trainer can collect the photos to a laptop on the first day and then print the cards for a later day of the session.

during F2F
45-60 mins F2F
The trainer should begin by explaining what a system map is and how it can add value in analysing their situation. Some example system maps should be shown and the methodology of forming the maps explained. In particular the different kinds of links between actors should be explained:

// material or product flow
// financial flow
// services and information flow

Participants should be divided into groups of 4-6 people and asked to work individually, while supporting each other when experiencing difficulty.

Each participant should be given their actor flashcards and given instructions to arrange these on a large piece of paper and draw the connections in between to form their system map.

There should also be blank cards available for actors in the system that participants do not have photos of (in this case participants can simply write the actor’s name on the card).

The benefit of using flashcards in the map formation rather than drawing the map directly onto paper is that the cards can be moved around several times until the correct configuration is reached. Thus participants are more free to experiment without the constraint of having to start all over again if they make a mistake.

When participants are happy with their arrangement they can attach the cards to a large piece of paper and draw the connections in between.
System map created during a my.coop training session

**step by step**

**implementation**

**30-45 mins F2F**
In the same groups participants should present their final system maps to each other (5 minutes each) and identify strategic opportunities within the system.

**15-30 mins F2F**
The trainer sets up a collective debriefing to explore key issues, themes and strategies that emerged from the activity. The system maps should then be placed around the room making them visible for the rest of the training.

*total F2F timing = 1 hour 30 mins - 2 hours*

**after F2F**
Photos of the maps could be shared among participants using an online database such as flickr, and the system maps could be re-made as a graphic (still using the real photos) for use in future iterations of the training material, enriching the theory with real-life examples and images.
The Mobile System Mapping method is recommended for use in the following aspect of the my.coop training:

Module 1 //
Value chain orientation

Reason
Participants may find it easier to analyse the various actors in their cooperative’s value chain by using photos that represent the real actors. For the others it will also be easier to understand, more engaging and more enjoyable than simply looking at a word-based map.

Objectives
// To map the relations agricultural cooperatives have with other actors of the cooperative environment
// To understand to concept of value chains

Brief
When introducing the activity, the trainer should explain that an agricultural cooperative does not function in isolation but is embedded in a value chain. A value chain refers to the entire system of production, processing and marketing of a particular product, from inception to the finished product. A value chain consists of a series of chain actors, linked together by flows of products, finance, information and services. An agricultural cooperative and its members are both actors and/or supporters in a value chain.

The trainer should note that the flow of product, money, services and information between these actors varies with each situation and thus should encourage participants to identify the flows in their own value chain.

When completing the mapping activity participants should also be encouraged to look for opportunities to strengthen their position within the value chain, with the trainer providing support and advice.

Example system map for an agricultural cooperative
In this method the participant becomes an on-the-field reporter, investigating a given issue in their working environment and documenting their findings.

A people-centred approach can help participants to “step back” from a given situation and view it from another perspective.

This mobile task takes advantage of the participants’ location on the field rather than in the classroom. During a F2F session, the trainer and the other participants can then help them to analyse their findings.
Prior to the F2F training session, participants are sent an SMS with instructions on how to complete this on-the-field reporting task. They should be given complete instructions on how to conduct the research; what information to gather; who to speak to; and how to document their findings. Ideally, participants should document their research with photos and audio or video recordings of interviews made (most feature phones have an audio recording feature). Alternatively, participants can simply record their findings with written notes and sketches.

Participants should be asked to send their photos, videos and audio recordings to the trainer in advance of the F2F training by MMS or email if possible. The trainer should print the photos in a standard format, for example each photo printed on an A4 piece of paper. If participants are unable to send their material in advance they can be asked to simply bring their mobile phone/camera to the F2F session.
step by step

implementation
during F2F
On the first day of the F2F session, trainers can transfer any remaining photos, videos and audio recordings to a laptop, for example during the breaks to avoid losing time.

45-60 mins F2F
During the Reporter session participants can share the results of their investigations to each other in small groups (6-8 people), using the printed photos or alternatively a laptop slideshow as a presentation aid. Each participant has 5 minutes maximum to report his or her story, with the others being allowed to ask questions. Participants should be encouraged not only to report on their findings, but to analyse the effectiveness of the methods that they used in their investigation.

30 mins F2F
After all the reports have been made, the trainer sets up a collective debriefing. In particular the advantages and disadvantages of first-hand people-centred research should be discussed and the potential for participants to use such techniques in the future for their work.

The photos should then be placed around the room making them visible for the rest of the training.

total F2F timing = 1 hour 30 mins
The Mobile Reporter method is recommended for use in the following aspect of the my.coop training:

**Module 2 // Needs assessment**

**Reason**
The topic of understanding the needs of the cooperative members and the different tools that can be used for conducting a needs assessment could seem quite abstract when carried out in the classroom, and so participants can be asked to carry out a hands-on activity beforehand to help contextualise the theory.

**Objectives**
- To learn about different tools for needs assessment of cooperative members
- To distinguish advantages and disadvantages of these needs assessment tools
- To be able to decide which needs assessment tools to use in a cooperative

**Brief**
The trainer should send SMS instructions to the participants asking them to conduct a needs assessment activity, for example:
- Create a short written survey of 5 questions and ask 5 members of your cooperative to complete it
- Conduct a focus group session of 30 mins with 5 members of your cooperative
- Carry out an 30 min interview with 1 member of your cooperative

These tasks can be divided equally among the participants, for example one third of the participants using the survey method and so on, so that they can share their experiences during the F2F session.

The trainer should also provide suggestions for the types of questions the participants can ask their members, for example:
- What are you happy about with the cooperative and why?
- What problems do you experience?
- How could the cooperative help you to overcome these problems?
- What are your aspirations for the future?

The participants should be asked to bring a copy of the questions asked and the answers received to the F2F session, and to share any photos, videos or audio recordings with the trainer in advance or at the beginning of the F2F session.

During the F2F session, participants should be divided into groups to report back on their methodology and findings. A group debriefing session should then be held with the trainer going into more detail on the tools available for needs assessment (formal survey, informal survey, focus group discussion, participant observation and interviews), specifically:
- A description of the tool
- The advantages and disadvantages of the tool
- Assessing which tool is most appropriate for assessing needs
In a SWOT analysis participants are asked to consider the strengths, weaknesses, opportunities and threats of a specific subject. This method is typically used in F2F training, with the trainer facilitating the session and filling out a SWOT diagram while participants brainstorm on the 4 elements.

In the mobile version of the method, participants are given a warm-up activity of identifying strengths, weaknesses, opportunities and threats that they feel are most important for a given subject and to send these to the trainer in advance of the F2F session. In this way participants have more time to identify these elements and to assess their relative importance.

The trainer then uses these responses to compile a SWOT diagram in advance of the F2F session. In F2F training some participants dominate the conversation leaving others unable to contribute, so the mobile approach makes the process more democratic.

In addition, in a F2F brainstorm suggestions are only made once, thus they do not reflect the opinion of the group. Collecting individual responses gives the additional opportunity of adding a “weight” to each factor to create a priority ranking in the diagram, with the most commonly raised issues at the top, provoking new insights, trends and issues for debate.

However it is important to note that the goal of this mobile method is not to replace the group brainstorm and discussion, but to facilitate and add value to it.
step by step implementation

before F2F

Prior to the F2F training session, each participant is sent an SMS asking them to think about the strengths, weaknesses, opportunities and threats in relation to the training course topic (or a particular element of the training material).

Participants can be invited to contribute the factor they feel is most important for each of these 4 categories by SMS or email and should be advised that the collated results will be shared during the F2F session. Depending on the subject of the SWOT analysis, the participants could also be invited to take photos that represent the strengths, weaknesses, opportunities and threats they have identified.

Shortly before the F2F session the trainer should create a SWOT diagram including all of the participants’ contributions (suggestions and photos if received). This can be done by hand (on a large sheet of paper) or by computer (for example using PowerPoint) and printed as a poster or individual handouts.

The most popular suggestions should be highlighted or have a higher ranking in the diagram and some blank space should be left for additional contributions that may arise during the F2F session.
step by step

implementation
during F2F
45-60 mins F2F
During the F2F session, participants are shown the SWOT diagram and each category (strengths, weaknesses, opportunities and threats) is addressed in turn (10-15 mins for each), with group discussion on the SWOT analysis contents and additional contributions being made.

The trainer should ensure that all of the key elements are included and address any questions that arise.

total F2F timing = 45-60 mins
customisation to my.coop

The Mobile SWOT Analysis method is recommended for use in the following aspect of the my.coop training:

Module 2 // How to improve the capacity of the cooperative to offer services

Reason
Participants may find it easier to identify the strengths, weaknesses, opportunities and threats related to their cooperative when they are actually there rather than in the classroom. They can also be invited to take photos of their cooperative’s services and facilities, which can help the trainer to understand their context and to identify further opportunities together.

Objective
To learn how to assess the internal capacity of cooperatives to offer services

Brief
The participants should be asked to identify the following, sending their results by SMS or email (or simply writing a list and bringing it with them to the F2F session):

// Strengths of the cooperative (related to positive internal factors) such as economic member participation, well-skilled and committed board members, warehouses, skilled staff, equipment

// Weaknesses of the cooperative (related to negative internal factors) such as inadequate finance, inadequate skilled staff, poor commitment of members, weak board of directors and inefficient internal auditing

// Opportunities (positive external factors) such as favourable government policies and institutions, existence of cooperative college, existence of secondary cooperatives, fair trade, good infrastructure, solidarity and collaboration with other social economy organisations

// Threats (negative external factors) such as unfavorable national policies, natural disasters, tribal conflicts, out-migration, political instability and poor infrastructure

These findings should then be discussed in an open group session during the F2F training, with the possibility of an individual action plan building activity afterwards.
In the Jigsaw method, individual participants are each assigned a particular topic from the course content, or ‘jigsaw piece’, and the tools to develop in-depth knowledge of that specific component. The pieces are then put together using visual materials and facilitation techniques.

It is a cooperative learning strategy that encourages people to develop their own understanding and then share knowledge with the group as a whole.

Shifting the initial individual research phase from the F2F training session to a distance activity conducted beforehand can bring a number of benefits.

It allows participants more time to research and reflect on their assigned topic, as well as maximising the time efficiency of the F2F session.

Moreover, participants can be asked to gather more tangible elements on the field to support their research, for example they could be asked to provide photographic evidence or bring physical props to enrich their presentation to the others.
step by step

preparation

The trainer should firstly prepare a list of all the possible “pieces” of the session’s subject, then select the number of pieces to include in the Mobile Jigsaw activity.

This should be based on the number of participants, so that each piece will be researched by at least 4-5 participants. For example, in a session of 20 participants, 4 jigsaw pieces (research topics) could be distributed, so that 5 participants research each topic. In this way, if some participants are not able to complete the task in advance of the F2F session, there should still be enough information gathered from the others to complete the jigsaw.

Reflection questions should be created to guide the participants through all the important learning aspects of the “piece”, including background information, context, actors and consequences.

implementation

**before F2F**

Prior to the F2F training session, each participant is sent a “jigsaw piece” by SMS, with instructions to investigate the given topic. Some potential information sources or research techniques may be suggested to guide them, as well as reflection questions to consider.

They should also be asked to prepare a short presentation of their results that they will be able to present to the other participants during the F2F session. This presentation can be informal and low-tech, for example a poster drawn by hand, ideally including some photos or illustrations that visualise the data, or with physical elements brought along to compliment their findings.

**during F2F**

**30 mins F2F**

On the first day of the F2F session, participants are divided into groups according to their assigned jigsaw piece. For example, all of the participants who researched “Topic A” will come together, as will the participants who worked on “Topic B”, and so on.

In these “expert groups” the participants will present and discuss their findings in order to reach a common and accurate understanding of the topic at hand (this will help overcome any bias in their prepared presentations). The groups should identify someone to take notes, and someone to keep the time.
step by step

implementation

This will ensure that the activity is recorded and that all questions are covered within the time limit. Based on this activity, each participant will adjust his or her presentation material accordingly to reflect their wider understanding of the topic.

30 mins F2F
New groups should then be formed, consisting of one participant from each expert group. Thus “jigsaw groups” are created, comprising one expert in Topic A, one expert in Topic B, and so on.

Within the jigsaw groups each expert should present his or her topic to the rest of the group, until all topics have been covered. In this way all of the participants gain an insight into all of the topics researched, and at the same time get to know the other course participants.

15-30 mins F2F
Finally the trainer should conduct a debriefing with the entire group, detailing the key points related to the various jigsaw pieces to ensure everything has been covered, and addressing any questions.

total F2F timing = 1 hour 30 mins
The Mobile Jigsaw method is recommended for use in the following aspect of the my.coop training:

Module 3 // Procurement of farm inputs

Reason
Not all training content is suitable for the Jigsaw method, for example abstract theory would be hard for a cooperative manager to research on the field. Procurement of farm inputs is a topic that all cooperative managers should be familiar with, and can easily research on the field, for example making a list of all the potential providers of their own cooperative’s farm inputs and analysing why they chose a particular option over the others. It is also a topic where participants can gain a lot of value from exchanging their experiences in evaluation and decision-making, for example between cooperatives that rely heavily on external suppliers and cooperatives that produce a lot of their farm inputs in-house.

Objective
To explore the challenges related to the supply of farm inputs

Brief
The following 4 ‘jigsaw pieces’ should be sent to the participants (dividing the topics equally among the participants) approximately 2 weeks before the F2F training session, in order to give them time to research their topic and prepare an informal presentation on their findings:

// Procurement levels: ‘In terms of farm inputs, what are the main considerations for deciding how much to procure? What issues arise with over- and under-stocking?’

// Potential providers: ‘Who are the different potential providers of farm inputs? What are the advantages and disadvantages of each provider?’

// Provider selection: ‘What criteria do you think must be considered when selecting a provider of farm inputs? How would you rank these in importance?’

// In-house input supply: ‘When should a cooperative take up the function of input supply? What challenges and benefits come with this decision?’
MOBILE LEARNING METHODS

- Deliver content
- Assign tasks
- Gather feedback
- Provide support
A Learning Needs Analysis is often conducted on the first day of a F2F session, however at that stage it is often too late to change the content and delivery modes of the session.

By conducting a Learning Needs Analysis in advance of a F2F session, the trainer will be able to better support the participants by designing a training course that meets their specific needs.

To assess participants’ needs trainers can conduct a short survey by SMS to establish what participants already know and their expectations of the course.

A Learning Needs Analysis will help to:

// Identify what skills and knowledge the learners already have
// Highlight skills/knowledge/competencies that need developing
// Identify clearly what students wish to achieve
// Outline and define expectations and goals

This method also helps to increase the participants’ sense of ownership and involvement in the training course.
step by step

implementation

before F2F

The trainer should send the participants an SMS asking them one or more questions regarding their training needs, for example:

// Send a list of the training topics/sub-topics and ask ‘Of these topics, what are your top 3 priorities?’

// ‘What are your expectations of the training?’

// ‘What do you hope to gain from the training?’

// ‘As a participant, how can you contribute to this course to make it an enriching experience for all?’

Participants should be sent a follow-up SMS thanking them for their contributions and advising them that their feedback will be incorporated into the development of the training session.

customisation to my.coop

This is a general method that can used before a F2F session of the my.coop training to assess the topics of agricultural cooperative management that participants are most keen to cover, and to understand their expectations and goals for the training.
At the end of any F2F training (for example a one-week session), it is important for the trainer to conduct an evaluation activity in order to assess the effectiveness of the training and to gain participant feedback.

To maximise the effectiveness of the week, it is also recommended that a shorter evaluation session or debriefing is held at the end of each training day. This allows the trainer to consider participant feedback at an earlier stage when it is still possible to make adjustments to the rest of the training delivery.

However, immediately after a full day of training, participants may be tired and find it difficult to “step back” from the day’s activities in order to reflect. Therefore this method has been created to give participants more time to reflect on the day’s events. By asking participants to send the trainer feedback by SMS, the evaluation activity can continue into the evening with participants free to make their contributions when they feel more relaxed.

By creating a word cloud of keywords from the received contributions, the trainer can begin the next day’s session with a visual tool that can serve as inspiration for the rest of the training.
At the end of the training day, a short evaluation session should be conducted by the trainer, inviting participants to share their positive and negative feedback and addressing any questions or concerns they may have.

Before concluding the session, the trainer should assign the participants an evaluation task for the evening - to send an SMS with one keyword or phrase that they feel summarises one of the following:

// The day’s mood or atmosphere
// The most important thing they learned in that day
// An aspect related to the training material, in order to test their understanding

“inspiring”
“modern”
“fun!”
step by step

implementation

15-30 mins F2F
The next morning before the participants arrive, the trainer should compile all of the keywords and phrases contributed into a visual word cloud. Alternatively the word cloud can be simply drawn by hand on a large piece of paper using different coloured pens and placed on the wall.

15 mins F2F
When the participants arrive, a short discussion of the results can be held as a start to the day of training. The word cloud should be left on display in the classroom for the rest of the training for inspiration.

total F2F timing = 1 hour - 1 hour 15 mins
The SMS Word Cloud method can be used in a general way during the my.coop training, for example to capture participants’ feedback on the training session’s mood/atmosphere or the most important things they feel they have learned. It could also be used to test their understanding or knowledge of a particular subject.
This method allows the trainer to conduct a live poll in the classroom, gathering contributions from the participants via their mobile phones and sharing the results with the group in real-time. It is a powerful method for creating a live interactive experience with participants, actively engaging them during a presentation.

Different types of activities can be facilitated by a live poll. For example it can be used as part of an evaluation activity, for conducting a quiz, or as a warm-up activity for a discussion. In this way the method can achieve different goals, such as gathering feedback from the participants, testing their level of understanding, sharing opinions and stimulating debate.

Poll Everywhere (www.polleverywhere.com) is an online tool that can be used for this method. This system gives the possibility of conducting multiple choice or “free response” polls and is free for use with up to 30 participants. More information about this can be found in the Tools section of this toolkit.

The responses to multiple choice questions will be displayed graphically (as bar graphs) while the responses to open questions will be displayed as words or phrases appearing on the screen.
step by step

preparation

The trainer should firstly decide how the live poll will be used - for example, is the goal to evaluate the training session, start a discussion or to test participants’ knowledge of a particular topic?

Secondly, the question(s) should be formulated. Remember that asking the right questions is more important than the technology. Poorly structured questions or ones that don’t focus on key concepts and reveal misunderstandings can undermine the value of a live poll. Some example question types are given below:

Application questions

These questions require participants to apply their knowledge and understanding to particular situations and contexts. Application questions often ask participants to make a decision or choice in a given scenario, connect course content to real-world situations, implement procedures or techniques, or predict the outcome of experiments or even their peers’ response to a subsequent question.

Critical thinking questions

Requiring participants to analyse relationships among multiple concepts or make evaluations based on particular criteria. Often these questions are one-best-answer questions. These questions can be very effective in preparing students to engage in class discussions about their reasons.

Monitoring questions

These are questions designed to provide instructors with information about how their participants are approaching the learning process in their courses, e.g. did they read the information and documents prior to attending the course?

Repeated questions

These are questions before and after to track if the participant made learning progress or changed perspective.

Experiment questions

Live polls can also be used to collect data from participants for classroom experiments.

When the questions are ready, the trainer should then create the poll on the Poll Everywhere website and practise using the tool in advance of the F2F session.
implementation

during F2F

The trainer should begin the live poll by explaining to participants that they are about to be asked some questions and that responses can be given by SMS.

Participants should be asked to take out their mobile phones and they should be given information on the costs of sending the SMS responses (the cost of an international SMS for prepaid subscribers).

The trainer should then initiate the poll from the Poll Everywhere website and invite participants to send their responses by SMS. The results will appear live and should be shown to participants on the trainer’s computer screen or by overhead projector if available.

A short debriefing of the results should be held or a link should be made to the next activity, for example a longer discussion.

WHICH IS THE CORRECT DEFINITION?

A
B
C
D
The Live SMS Poll method can be used in a general way during the my.coop training, for example to capture participants’ feedback on the training session’s mood/atmosphere or the most important things they feel they have learned. It could also be used to test their understanding or knowledge of a particular subject, and in this case the method is recommended for use in the following aspect of the my.coop training:

Module 4 // Specialised markets

Reason
This part of the my.coop training is one of the most contemporary, reflecting recent changes in the agricultural cooperative sector. Therefore it is an important topic to include in the training and one that participants may be less familiar with. It may be hard for trainers to anticipate the level of knowledge that participants will have in this area and so to begin a session on this topic, it would be ideal to conduct a live SMS poll to gauge the level of understanding in the room and to start the discussion.

Objectives
// To understand market segmentation and specialised markets

// To learn about Rainforest Alliance, organic and fair trade certification schemes

Brief
A combination of one or more multiple choice and free response questions would be most effective. These can be used to test knowledge or to understand opinions. Some examples are given on the right.

Multiple choice questions
// ‘Which is the correct definition of ‘fair trade’?’

// ‘Which of the following is NOT one of the fair trade certification criteria?’

// ‘How many years of pesticide-free farming does it take for a farm to qualify as organic?’

// ‘Does your coop have Rainforest Alliance, organic or fair trade certification?’ - with answers such as ‘Yes, my coop has one or more of these certifications’, ‘No, but my coop is thinking of applying for one or more of these certifications’, ‘No, my coop has not considered applying for any of these certifications’

// ‘What kind of certification do you think would best match your coop?’

Free response questions
// ‘What is ‘fair trade’?’

// ‘What is ‘organic’ agriculture?’

To assess the knowledge and understanding that participants over the course of the training, the ‘repeated question’ technique could be used, i.e. asking participants one or more of the above questions at the beginning of the week and then asking them the same question(s) at the end of the week to see if their understanding has improved or if their perspective has changed.
MOBILE LEARNING METHODS

- Deliver content
- Assign tasks
- Gather feedback
- Provide support
During a F2F session there is plenty of opportunity for participants to share their doubts and raise any queries that they have, however this becomes more difficult during a distance learning experience, especially one that is not facilitated by an e-learning environment.

Moreover, even those participants who are able to take part in an e-learning phase of a blended course may not have consistent access to a computer, the internet, or electricity.

Therefore it can be of great value to participants to be able to simply ask specific questions and receive answers by SMS during a period of self-study at a distance.

The trainer, a group of trainers or even other participants could then address the queries, providing answers or examples that may help with their understanding.

Popular queries can help trainers to understand the areas of their training that are not clear and thus improve their material iteratively, and they could also forward on key Q&As to the whole group of participants when a common doubt is identified.
step by step

implementation

before + after F2F
The trainer should make participants aware of the possibility to ask questions by SMS, giving them instructions on which number to contact and the expected turnaround for receiving replies (for example within 48 hours).

customisation to my.coop

This is a general method that can be offered to participants of the my.coop training where there are resources available for responding to queries.
In order to support participants in their ongoing learning following a F2F session, the trainer can conduct Mobile Pop Quizzes to test their understanding of concepts.

These quizzes can be conducted informally in a fun way, with questions sent to participants without prior warning and giving them the option to participate or not. Alternatively the quizzes can be scheduled and with mandatory participation, giving the participant time to prepare and with a formal assessment. Multiple choice or open questions can be used depending on the concepts that the trainer wishes to test.

Providing participants feedback on their performance in quizzes can help them to manage their programme of self-study, knowing when they are ready to move on to the next topic and which topics they need to spend more time studying.

Analysing the results of the quizzes can also help trainers to understand the areas of their training that are not clear and thus improve their material iteratively. They could also forward on clarifications of ‘problem topics’ to the whole group of participants when a common misunderstanding is identified.
step by step

preparation

The trainer should firstly identify the topics that they wish to assess and decide whether to use multiple choice or open questions.

Note that multiple choice questions with possible ‘A’, ‘B’ or ‘C’ answers allow participants to give several answers in one SMS. for example ‘B, B, A, C, A’.

implementation

after F2F

The trainer should send participants questions by SMS, giving them instructions on how to send their responses and the expected turnaround for receiving their results (for example within 48 hours).

When providing students with their results, care should be taken to offer motivation and feedback.

Where correct answers provided, students should be congratulated and more information can be given regarding the answer if desired, for example:

// ’Well done! A is the correct answer. Did you also know that...’

// ’Congratulations! Your answers were 100% correct. You’re ready to proceed to the next chapter of the training.’

On the other hand, if participants give a wrong answer, they should be informed of the correct answer with an explanation.

// ’Thanks for taking part in the quiz! The correct answer was in fact A, because...’

// ’Thanks for taking part in the quiz! Your score was 40%. Keep studying this chapter for now and you’ll have another chance to complete the quiz later.’

customisation to my.coop

This is a general method that can be offered to participants of the my.coop training where there are resources available for sending questions and responding to the answers received.
MOBILE LEARNING
TOOLS

- SMS SYSTEMS
- AUDACITY
- POLL EVERYWHERE
**TOOL 1**

**TWITTER**

<table>
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<tr>
<td>methods</td>
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<td>website</td>
<td><a href="http://www.twitter.com">www.twitter.com</a></td>
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</tbody>
</table>

**overview**

Twitter is a free social networking and microblogging service that enables its users to send and receive messages called “tweets”.

This service can be accessed via the internet (using either a computer or mobile phone) or via SMS.

Tweets are text-based messages of up to 140 characters, which are displayed on the user’s profile page. These can be private (viewable only to selected people approved by the user) or public (available for the whole world to see on the Twitter website). The people who subscribe to a user’s tweets are called their “followers”, and the user can also “follow” others to receive their messages.

Twitter currently has approximately 200 million users around the world, although it is not currently used to a wide extent in developing contexts. However, the service can be accessed using only SMS and has the potential to provide a number of benefits to mobile phone subscribers even at the BoP.

A key feature of Twitter is that if User A “follows” User B, they can subscribe to receive all of their tweets by SMS, which is completely free.

This feature can be used in the context of mobile learning, in order to set up a low-cost SMS system that facilitates two-way communication between a trainer and learners.
step by step

preparation
The trainer should firstly register as a member of Twitter. This can be done on the Twitter website or by SMS.

Note: Twitter SMS is currently supported in 80 countries worldwide, but it is not available in all countries. In addition, Twitter SMS is only supported by certain service providers. These service providers have different numbers (“short codes”) that users should text in order to use the service. A list of supported service providers by country and their associated short codes can be found on the Twitter website in the ‘Twitter via SMS’ section of the Help Center.

The most common Twitter short code is 40404, and so this number will be used in the following step by step guide, however it is important to check the Twitter website to find the short code for each country.

Therefore, if a trainer wishes to use Twitter SMS as their mobile learning SMS system, the first things to check are:
1 // Is Twitter supported in that country?
2 // Which service providers are supported?

Implementation
The next thing to do is to set up the SMS system. This can be used to send participants SMS messages in bulk and collect replies from them also via SMS.

It is recommended that the Twitter SMS system is set up during a F2F session so that the trainer can support the participants in the process.

The system should be set up as follows:
1 // Ask participants which mobile service providers they use, and check if these are supported by Twitter SMS. Note that some participants may have more than one sim card, so ask them if they are able to use a supported service provider during the training period if possible. Participants should be informed of the Twitter SMS “short code” for their service provider and encouraged to save this number as a contact in their phonebook. For this step by step guide the number 40404 is used as an example.

2 // Get all of the participants to register as Twitter users. It is free to do this online, or by SMS each message is charged at their local rate. The registration process requires 3-5 SMS messages to complete.

To register by SMS, participants just need to send the word START to 40404 and then follow the instructions sent to them. They will need to choose a unique username.
3 // Get all participants to follow the trainer’s Twitter account.

**Option 1 (online follow)** – Participant accesses the trainer’s profile (for example by visiting [http://twitter.com/mycooptrainer](http://twitter.com/mycooptrainer), with “mycooptrainer” being replaced by the trainer’s chosen username) and clicks ‘follow’. Then they should click the mobile phone icon right next to the ‘follow’ button. This allows them to subscribe to SMS notifications for all tweets made by the trainer.

**Option 2 (SMS follow)** – If the participant registered for Twitter by SMS in the previous step, they can now follow the trainer’s account by sending an SMS with the phrase [FOLLOW MYCOOPTRAINER](http://twitter.com/mycooptrainer) to 40404.

4 // The trainer should then follow all of the participants.

If they have internet access this is very simple, they just have to log in to Twitter, access their list of followers, and click ‘follow’ for each of them (also clicking the mobile phone icon to receive SMS notifications if they want).

This can also be done by SMS, by texting [FOLLOW + USERNAME](http://twitter.com/mycooptrainer) of each participant.

The system should now be set up.

**Now the trainer can write one tweet (for free online or for the cost of one SMS) and all of the participants will free receive SMS notifications of the messages.**

Participants can also send tweets themselves by SMS in reply, with the trainer being able to view these replies via Twitter.

**Private messages**

As well as the functionality to send bulk messages, the trainer can also easily send a private message to one participant. To do this online, the trainer should go to the participant’s profile and use the “direct message” option. Private messages can also be sent by SMS, by constructing the message with [M + USERNAME + MESSAGE](http://twitter.com/mycooptrainer), for example [M MYCOOPTRAINER HELLO](http://twitter.com/mycooptrainer HELLO).
scenario of use

1. Trainer registers as a Twitter user

2. Trainer introduces Twitter during training and asks participants to join
Participants create Twitter accounts and follow the trainer by SMS

Trainer launches the SMS Word Cloud activity during evaluation session
scenario of use

That evening, the participants each send a tweet by SMS with a word that they feel summarises the day’s training.

Trainer logs in to Twitter to view the responses sent by participants.
Trainer creates a word cloud from the responses and launches the next day’s training with a discussion on the results.

After the training session has finished, the trainer follows up with a tweet.

Dear Coop Managers...
scenario of use

DEAR COOP MANAGERS,
MY.COOP QUOTE OF THE DAY:
“TWO ANTS DO NOT FAIL TO PULL ONE GRASSHOPPER”
HOW IS YOUR ACTION PLAN GOING?

Participants receive the trainer’s tweet as an SMS message, with a “seed of inspiration” and an evaluation question
2-way communication allows the trainer to learn from the participants, offer ongoing support and better respond to their needs.
FrontlineSMS is award-winning free, open source software that turns a laptop and a mobile phone (or alternatively a GSM modem) into a central communications hub. Once installed, the program enables users to send and receive text messages with groups of people.

It does not require an internet connection, therefore it is a very useful tool for use on the field, where connectivity issues are commonly experienced.

In order to use FrontlineSMS, the trainer should attach a mobile phone (with a SIM card inside) to their laptop and the SMS messages will be sent from the number of the mobile phone. Every SMS sent with the software will be charged at the standard rate of the service provider.

An added benefit of FrontlineSMS is that it stores all phone numbers and records all incoming and outgoing messages. All of this data lives on the user’s own computer, not on servers controlled by someone else.

Messages can be sent to individuals or large groups, and replies can be made individually.

It is easy to install and requires little or no training to use, and it can be used anywhere in the world simply by switching the SIM card.
applications

Aside from its potential for mobile learning, FrontlineSMS has been used for a wide range of non-profit activities:

// In Aceh, UNDP and Mercy Corps use the software to send market prices and other agricultural data to rural coffee farmers.

// In Mongolia it is used to distribute weather information to farmers who have no internet or TV access.

// In Iraq it is being used by the country’s first independent news agency - Aswat al Iraq - to disseminate news to eight countries. It was used by bloggers during the 2007 Pakistani state of emergency to get news safely out of the country, and in the October 2008 Azerbaijani elections it helped mobilise the youth vote.

// It has been used to monitor elections in the Philippines, Afghanistan and Nigeria.

// FrontlineSMS:Medic uses the software to gather health data and assist in patient follow-up. Community health workers use FrontlineSMS:Medic to transmit information about symptoms and follow up with patients much more quickly and efficiently (by sending an SMS rather than driving long distances over bad roads).

step by step

A detailed step by step guide is available on the FrontlineSMS website, where the software can also be freely downloaded.
AUDACITY

audio recording and editing software
computer + microphone
2
http://audacity.sourceforge.net

Audacity is free, open source software for recording and editing sounds. It is available for Mac OS X, Microsoft Windows, GNU/Linux, and other operating systems.

Audacity is easy to use and can be used to:

// Record live audio.

// Convert tapes and records into digital recordings or CDs.

// Edit Ogg Vorbis, MP3, WAV or AIFF sound files.

// Cut, copy, splice or mix sounds together.

// Change the speed or pitch of a recording.

Therefore it is a useful and easily accessible tool for trainers who wish to record their own “profcasts” as described in Method 2.
A detailed online manual is available on the Audacity website, where the software can also be freely downloaded.
Poll Everywhere offers the possibility of conducting live interactive polls using mobile phones.

Poll Everywhere replaces expensive proprietary audience response hardware with standard web technology. It can be used to gather live responses in any venue: conferences, presentations, classrooms - anywhere. It can also help to raise money by letting people pledge via text messaging.

The tool is free to use for audiences of up to 30 people and paid plans are available for larger groups.

It works internationally with texting, web, or Twitter (including Twitter SMS). Participants who send a normal SMS response may have to pay for an international SMS, while Twitter-registered participants can respond to the poll by sending a "tweet" at the cost of a local SMS.
The trainer should access the Poll Everywhere website in advance to set up the poll(s) and download them as PowerPoint presentations.

Note: Poll Everywhere is not available in all countries. In addition, it is only supported by certain service providers. These service providers have different numbers that users should text in order to use the service. A list of supported service providers by country and their associated phone numbers can be found on the Poll Everywhere website in the ‘SMS Text Messaging’ section of the Help & FAQ.

When the trainer is ready to start the poll, the PowerPoint presentation should be opened and participants invited to begin sending their responses (by standard SMS or Twitter SMS), with the results being viewable instantly.
Mobile Learning Toolkit
1st edition, July 2011

This toolkit is intended as an open source tool that can continue to be improved and added to with the feedback and collaboration of its users. As such, any feedback, comments and ideas are welcome and can be shared by email, Twitter or SMS:

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