

EdTech Hub

Clear evidence, better decisions, more learning.

Expert Consultation: Radio-Based Education in the Philippines September 2020

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About the Helpdesk

The Helpdesk is the Hub's rapid response service, available to Foreign and Commonwealth Development Office (FCDO) advisers and World Bank staff in 70 low- and lower-middle-income countries (LMICs). It delivers just-in-time services to support education technology planning and decision-making. We respond to most requests in 1-15 business days. Given the rapid nature of requests, we aim to produce comprehensive and evidence-based quality outputs, while acknowledging that our work is by no means exhaustive. For more information, please visit <https://edtechhub.org/helpdesk/>.

Purpose of this document

This document was produced to support a one-hour expert consultation session with the Philippines World Bank team. The document presents overview of educational radio programming with a particular focus on quality assurance and content design.

Overview of educational radio

Educational radio has many different forms

There are three broad categories of radio-based instruction:

- 1** Classical educational radio broadcasts
The delivery of audio-based learning content that students listen to on the radio (e.g., stories and pre-recorded lectures)
- 2** Interactive radio instruction
The delivery of audio-based learning content on the radio in which presenters guide facilitators and learners through interactive activities
- 3** Interactive audio instruction
The delivery of audio-based learning content with interactive activities for listeners to complete distributed on SD cards, MP3 players and CDs

In the past, educational radio has been proven effective at supporting teacher-led learning. The effectiveness of educational radio at supporting self-directed learning is unclear.

Radio infrastructure in the Philippines

85%

Percentage of households with radio coverage (2013)

51%

Percentage of households with a radio (2017)

49%

Percentage of rural households with a radio (2017)

38%

Percentage of adolescent women who listen to the radio at least once a week (2017)

Statistics from [UNESCO](#) (2013) and [Philippines DHS Survey](#) (2017)

Data from Kenya shows that device ownership does not mean device usage for learning

62%

Percentage of Kenyan households with a radio (2020)

19%

Percentage of Kenyan students tuning into radio lessons (2020)

45%

Percentage of Kenyan households with a TV (2020)

42%

Percentage of Kenyan students tuning into educational TV (2020)

Statistics from [Uwezo](#) (2020)

Implications for radio programming

This data from Kenya does not mean that education decision makers should abandon radio programming in favour of educational television. Instead, this data emphasises the need to:

1. Set realistic expectations about the reach of any programme
2. Use quality assurance mechanisms to improve listener engagement and learning
3. Plan to engage students, teachers, and parents to close the gap between household device ownership rates and listenership rates

Designing educational radio programmes

Factors to consider when designing radio programmes

1. Distribution of costs

2. Subject selection

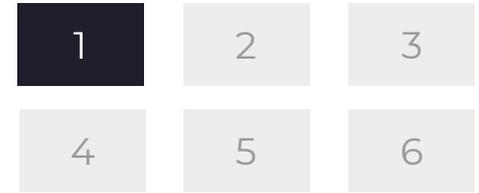
3. Quality criteria

4. Repurposing
content

5. Supporting
materials

6. Developing
iteratively

The cost distribution: QA should start early



Over a multi-year programme, radio-based education programme can have a low per-student cost.

Costs, however, are front loaded with heavy start-up costs:

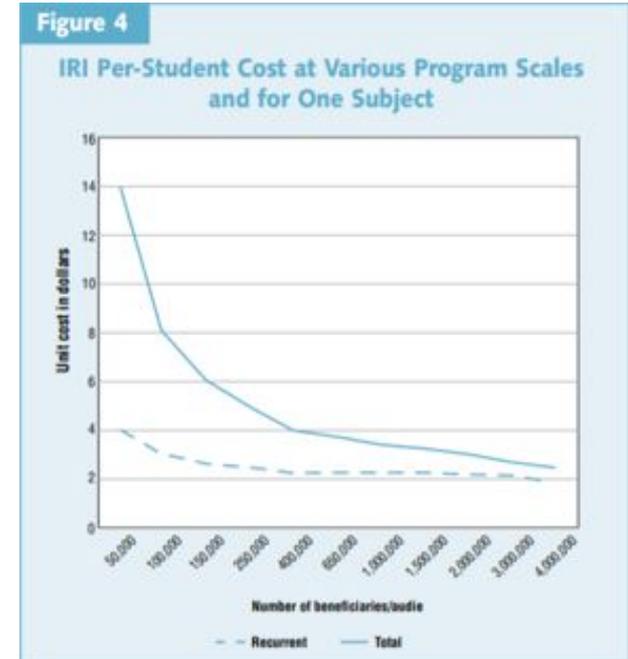
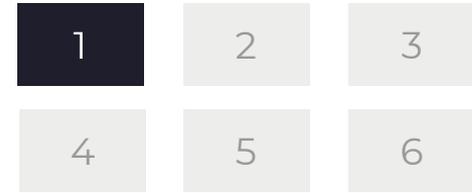
- Script and curriculum development
- Training radio presenters and curriculum specialists
- Programme production including recording
- Studio setup including the procurement of equipment

The cost distribution: QA should start early

Quality assurance needs to start early. If you find a recording does not meet standards, you should rewrite the script and re-record.

In other words, you should build quality assurance steps as early as the script writing stage.

If you have already started recording lessons, you can use this content as an opportunity to obtain feedback from learners and to improve the quality of materials that you will develop in the future.



Source: [World Bank](#) (2005)

Subject selection: focus on core writing and numerical skills



A key component of ensuring quality programme design entails choosing suitable subjects.



Prioritise the effective delivery of a simplified curriculum of core subjects and build from there



Radio-based education can support students who are learning to write as the lack of visual imagery encourages them to think about telling stories in word ([Levine and Franzel, 2015](#))



Radios may not be an effective tool to teach children to read (USAID, 2020)



Teaching mathematics via the radio can be challenging as the subject gets more complicated due to a lack of visuals and the need for expert facilitators ([Yelkpiri et al., 2011](#))

You should use radio/audio to focus on foundational writing and numeracy skills and explore how other modalities can support reading skills.

Quality criteria: build programmes that work for your context



 Structured broadcasts

Presenters should (a) give a short introduction to a concept; (b) model and apply this idea; and (c) allow listeners to test their understanding

 Interactive activities

Broadcasts should involve simple interactive activities - and especially activities that involve movement - to support active learning

 Suitably paced

Presenters should speak slowly to ensure children can follow content and incorporate mental breaks into broadcasts

 Appropriate choice of language

In marginalised communities, learners may not speak the national language and broadcasts may need to cater to the needs of other dialects such as Cebuana and Maguindanao

 Sequenced routine

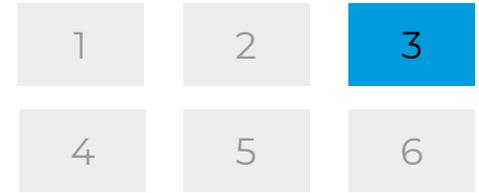
Lesson schedules should follow a regular routine to support the development of educational habits

Quality criteria: interactive lessons should include prompts for facilitators



- The support of a facilitator is key to ensuring student engagement with radio broadcasts. During the Ebola crisis, learners did not benefit from radio instruction without the support of a trusted adult or study group ([Plan International, 2016](#)).
- Radio lessons can directly invite children to complete interactive exercises. At the same time, broadcasts will need to support teachers, caregivers and siblings to prepare and lead activities for their children to complete.

Quality criteria: interactive lessons should include prompts for facilitators

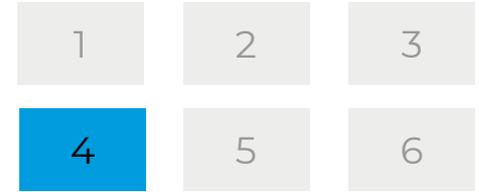


- Presenters should give facilitators clear and practical prompts on how they can facilitate their child’s learning journey.

“Hello special helper! Thank you so much for taking the time to help your child learn. You are a very important person to help during the Pretend Play time so students can copy you and learn from you. Right now, I would like for you to draw 3 circles on your child’s notebook. Please draw one small circle, one medium size circle and one big circle.” ([Rising Academies, 2020](#))

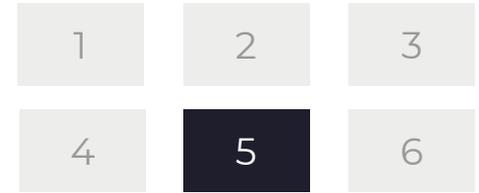
“Your special helper is going to play the game first. Special helper, we are going to pick up our first stone and move it around the big circle.” ([Rising Academies, 2020](#))

Repurposing content: adapt scripts to save time and costs

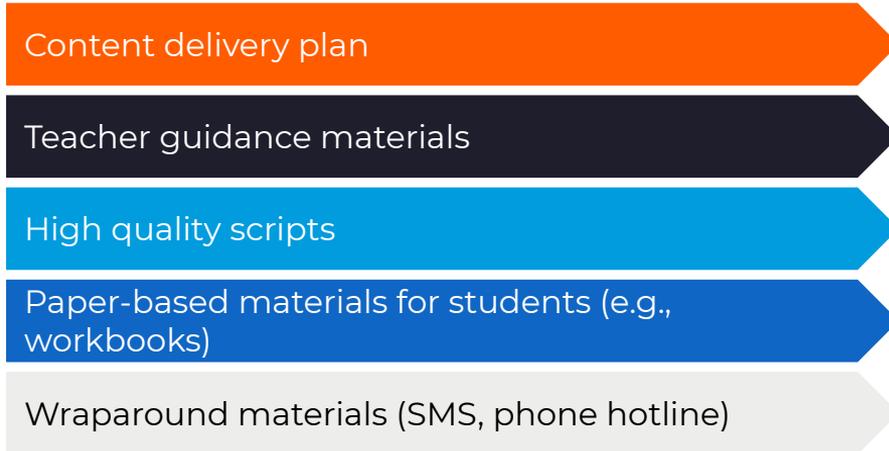


- Repurposing and adapting existing content can reduce the time and costs associated with content development and quality assurance
- Many content repositories contain scripts, teacher guidance materials and audio files that have already proven effective
- Means of adaptation include:
 - Cutting content to shorten episodes
 - Creating and recording new segments
 - Swapping out portions of an existing broadcast with new recordings
 - Translating and recording scripts in a new language
- Alternatively, you could redesign non-audio interventions for radio delivery
- If you have concerns about the quality and consistency of script writing, you can start - and trial the initiative - using repurposed material while script writers are being trained

Supporting materials: quality programming entails more than audio recordings



Effective radio education programmes require multiple components.

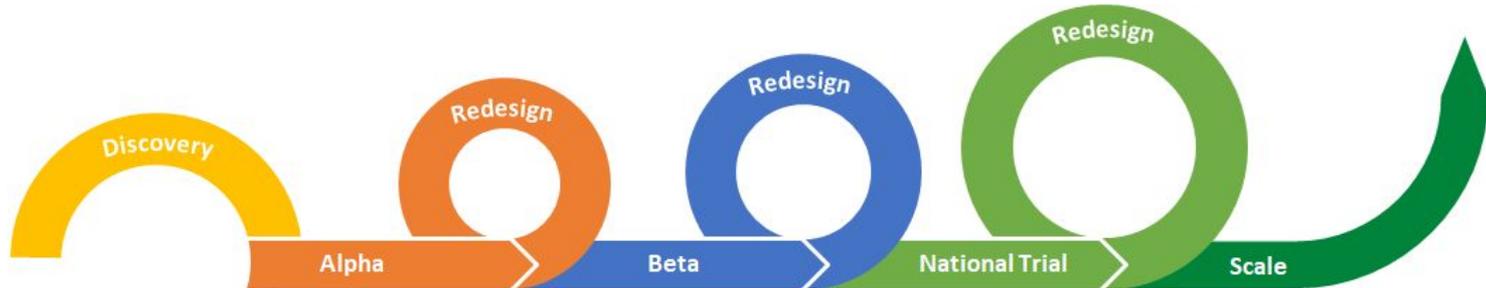


This work will require a heavy intellectual lift at the start of programme development. Your programme should accommodate each of these features. From a quality assurance perspective, this early work provides an entry point to ensure material meets your minimum standards.

Develop iteratively: start small, think big, learn always

1	2	3
4	5	6

In situations where the needs of students and teachers are uncertain, you should (a) start small; (b) trial; (c) assess and learn; (d) adapt and redesign; and, (e) build out. An example of this model is found below.



If you are unsure of what quality audio content looks like in your context, you should avoid developing content for many months and years. Instead, you may want to start with a smaller set of content to learn how students and teachers engage with audio programming.

You can use feedback to refine and improve your programme before developing new materials.

Getting starting on educational radio programming: Q&A

Questions and answers

What existing content can education providers adapt and repurpose?

Education providers should look for content available on a Creative Commons licence.

The [Global Digital Library for Radio](#) has a range of materials including scripts, content delivery plans and teacher guides available on a [CC-BY-NC-SA](#) licence. Under this licence, you are free to share and adapt materials as long as you credit the creator, use materials for non-commercial purposes and distribute amended content on the same licence.

[Rising Academies](#) has a range of scripts and recordings available under a [CC-BY-NC](#) licence. Under this licence, you are free to share and adapt materials as long as you credit the creator and use materials for non-commercial purposes.

Questions and answers

What should we do if learners in our target region speak multiple languages?

Radio-based education programmes make significant demands on the listening skills of listeners. In the absence of a common language among learners, we suggest the following options:

- Identify the most common language that learners speak and record broadcasts in this language
- Identify the most common language that facilitators speak as they may be able to translate and mediate audio content
- Deliver core lesson content in the national language of instruction with the introductory and concluding sections in different local dialects

Questions and answers

How can we supplement a radio-based education programme with other materials?

1. **Wraparound SMS materials** can be used to (a) remind facilitators and learners of broadcast schedules; (b) send facilitators suggestions on low-cost learning exercises; (c) share lesson recaps and supplementary questions; and, (d) conduct formative assessment
2. A **telephone hotline** can be used to allow facilitators and learners to ask questions without the need for an internet connection
3. A panel of educational and psychological experts can receive questions from listeners on the phone and provide answers live on air (i.e., **live radio-based panel discussions**)
4. **Paper-based materials** (e.g., worksheets, textbooks and lesson guides) can support facilitators and learners to follow broadcasts and engage in interactive activities

Further reading and references

EdTech Hub resources on radio

Damani, K., & Mitchell, J. (2020). *Rapid Evidence Review: Radio* (EdTech Hub Rapid Evidence Review).

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McBurnie, C. (2020b, April 23). The role of interactive radio instruction in the coronavirus (COVID-19) education response. *The EdTech Hub*.

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Content repositories with materials for educational radio programming

Global Digital Library on Radio

(<https://qdlradio.org/>)

A content repository with radio scripts, teacher guides and content delivery plans from past programmes in 14 countries

Rising on Air Web Portal

(<https://www.risingacademies.com/rising-onair>)

A content repository with scripts, audio recordings, radio-based teacher professional development materials and SMS templates

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