

VAKA YIKO

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EVIDENCE- INFORMED POLICY MAKING TOOLKIT





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Charity No. 1106349
Company No. 04919576

ISSN: 2415-4520 Edition 2

Design: stevendickie.com/design



VakaYiko is
part of the DFID
programme
Building Capacity
to Use Research
Evidence (BCURE)

FOREWORD

The case for using evidence in policy making has been made for some time, not only in an international development context but also in other areas.

In working to improve the way evidence feeds into policy, much effort has been directed towards strengthening the way researchers, think tanks, universities and policy research institutes develop and communicate their research and trying to improve their strategies to influence policy. International donors also continue to fund research to try to find solutions to the most acute problems that cause poverty.

However, less emphasis has been put into promoting a culture of evidence-informed policy. Such a culture prioritizes building a robust evidence base for decision making, one that includes different perspectives, findings, and, many times, conflicting evidence. The promotion of evidence-informed policy making focuses on working with the 'demand' side, improving the policy-making process and strengthening policymakers' capacity to decide which evidence is useful, when and for what policy purpose.

In line with this thinking, in the DfID-funded VakaYiko project we support policymakers and their staff to access and use robust evidence in their work. We are mindful of the political environment they are embedded in, where different values, ideas and interests are at stake when making policy. We have found that this complex process could be improved by tackling three key areas:

The first area to work on is attitudes towards research and the research process. Here we focus on understanding the process of research, including different types of research, and how it can enhance informed decision making.

A second key factor is improving knowledge of a range of different types of evidence – not only research but also data, citizen evidence and experience. By combining them, staff in public institutions can create a robust evidence base for their policies. Often, this means raising awareness of the extensive support network that exists locally.

Lastly, skills are necessary for effectively searching for evidence, assessing it and communicating it to those who need to make quick and important decisions. Our approach focuses on civil service staff, such as researchers and policy analysts, who are responsible for analysing and presenting research to decision makers.

In recognition of the importance of research in development, countries around the world are prioritizing investments in science, technology and higher education as well as data and statistical quality. Now is an exciting time for us to build on this momentum by supporting our partner institutions to implement this vision.

We have developed this toolkit in collaboration with practitioners and policymakers from our partner organizations and institutions in Ghana and Zimbabwe. It is also informed by the rich insights we have gained from VakaYiko's work in other countries including South Africa, Uganda, Sudan, and Argentina. We hope it contributes to improving how staff in public institutions use evidence. We also hope that it helps to shape debate and dialogue, ultimately contributing to building supportive cultures of evidence-informed policy making.



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ACKNOWLEDGMENTS

This Toolkit has benefited from a rich breadth of insights, ideas and comments gathered through the VakaYiko Consortium's work on evidence-informed policy making. We are grateful to all those who provided comments and feedback on our drafts and pilots over a two-year period. We would like to extend our particular thanks to Ajoy Datta, Kirsty Newman, Louise Shaxson, Leandro Echt and Vanesa Weyrauch.

We would like to thank the partner institutions in Zimbabwe and Ghana who piloted this course and provided valuable insights: in Ghana, the Civil Service Training Centre and the Parliament of Ghana; and in Zimbabwe, the Ministry of Youth, Indigenisation and Economic Empowerment, the Ministry of Industry and Commerce, and the Parliament of Zimbabwe. We are grateful also to the group of advisors and many facilitators who assisted the VakaYiko team in delivering the pilots and who shared feedback with us, in particular Masimba Muziringa, Lovemore Kusekwa, Nyasha Musandu, George Amoah and Prince Kulevome, who each assisted us with several modules of the course.

Finally we would like to thank our Consortium partners in Ghana and Zimbabwe: Ghana Information for Knowledge Sharing (GINKS) and Zimbabwe Evidence Informed Policy Making Network (ZeipNET), who shared their experience and insight and without their support and hard work VakaYiko EIPM training courses were not possible.

ABOUT THE VAKAYIKO CONSORTIUM

The VakaYiko Consortium is a three-year project involving five organizations working primarily in three countries in the first phase: Ghana, Zimbabwe and South Africa. Consortium members are Ghana Information Network for Knowledge Sharing (GINKS), Zimbabwe Evidence Informed Policy Making Network (ZeipNET), the Human Science Research Council (HSRC), the Overseas Development Institute and INASP. Work in a fourth country, Uganda, started in late 2015; the Consortium members are the Institute of Parliamentary Studies (IPS) and the Department of Research Services (DRS) in the Parliament of the Republic of Uganda.

The project starts with the understanding that the routine use of research to inform policy requires at least three factors to be in place:

- individuals with the skills to access, evaluate and use research evidence;
- processes for handling research evidence in policy-making departments; and
- a wider enabling environment of engaged citizens, media and civil society.

This course addresses the first level of capacity (individual skills and knowledge). In the VakaYiko programme, course delivery and embedding was part of a range of activities targeting all levels of capacity, including public events and policy dialogues, a mentoring and learning exchange programme, and technical assistance to institutions.

CONTENTS

INTRODUCTION

6

MODULE 1

INTRODUCTION TO EVIDENCE-INFORMED POLICY MAKING 13

TOPIC 1: THE POLICY-DEVELOPMENT PROCESS	18
TOPIC 2: WHAT IS EVIDENCE, AND WHAT IS EVIDENCE-INFORMED POLICY MAKING?	23
TOPIC 3: TYPES OF EVIDENCE	27
TOPIC 4: RESEARCH EVIDENCE IN POLICY MAKING	31
MODULE 1 HANDOUTS	41

MODULE 2

A COMPLETE SEARCH STRATEGY 55

TOPIC 1: INTRODUCING THE SEARCH STRATEGY	59
TOPIC 2: UNDERSTAND THE REQUEST FOR EVIDENCE AND FAMILIARIZE YOURSELF WITH THE TOPIC	62
TOPIC 3: CHOOSE THE RIGHT TYPES OF LITERATURE	69
TOPIC 4: CHOOSE YOUR SOURCES OF EVIDENCE	73
TOPIC 5: SEARCH EFFECTIVELY ONLINE	80
MODULE 2 HANDOUTS	89

MODULE 3

ASSESSING EVIDENCE 101

TOPIC 1: AN APPROACH TO CRITICALLY ASSESSING EVIDENCE	105
TOPIC 2: ASSESSING EVIDENCE PRODUCTS	112
TOPIC 3: UNDERSTANDING RESEARCH DESIGN	118
MODULE 3 HANDOUTS	139

MODULE 4

COMMUNICATING EVIDENCE 149

TOPIC 1: KNOW YOUR AUDIENCE	153
TOPIC 2: DESIGNING EFFECTIVE MESSAGES	158
TOPIC 3: DEVELOPING EFFECTIVE WRITTEN COMMUNICATIONS	163
OPTIONAL TOPIC A: PRESENTING KEY MESSAGES TO YOUR AUDIENCE: ORAL COMMUNICATIONS	172
OPTIONAL TOPIC B: INFOGRAPHICS, MULTIMEDIA AND DATA VISUALIZATIONS	175
MODULE 4 HANDOUTS	181

INTRODUCTION



ABOUT THIS COURSE

This course is aimed at building civil servants' skills and knowledge for evidence-informed policy making (EIPM) in developing countries. It focuses on finding, evaluating and communicating evidence as well as developing practical EIPM implementation plans. In recognition of the complexity of the barriers to effective EIPM, it takes an interdisciplinary approach combining policy analysis, information literacy, research skills and communication techniques. It aims to contribute to strengthening the capacity of institutional structures and processes guiding EIPM, in particular ministerial and parliamentary research departments and policy analysis units.

The full course comprises four modules and eight to 10 days of training, which can be delivered either as one block or in a series of four workshops of two to three days each. The materials are designed to be adaptable, and the modules and activities can also be delivered individually or incorporated into other courses as needed. The course is practical and activity-based, centred around participants' own experience in the workplace, and adaptable for different sectors.

This course was piloted in 2014-2015 with the Ghana Civil Service Training Centre, the Parliament of Zimbabwe, the Zimbabwe Ministry of Industry and Commerce and the Zimbabwe Ministry of Youth.

'Evidence-informed policy is that which has considered a broad range of research evidence; evidence from citizens and other stakeholders; and evidence from practice and policy implementation, as part of a process that considers other factors such as political realities and current public debates. We do not see it as a policy that is exclusively based on research, or as being based on one set of findings. We accept that in some cases, research evidence may be considered and rejected; if rejection was based on understanding of the insights that the research offered then we would still consider any resulting policy to be evidence-informed.'

Newman, Fisher and Shaxson, 2012

WHO

IS IT FOR?

The course has been designed for, and piloted with, mid-level civil servants such as researchers, analysts, committee clerks and librarians in government agencies and parliaments in Africa. These individuals play a crucial role in providing information, analysis and recommendations to guide decision-making and support informed debate. The course, therefore, focuses primarily on the process of gathering and presenting quality evidence, rather than the process of taking decisions based on this evidence.

The materials are suitable for a mixed group of participants. They are not sector-specific, and participants in the pilots came from 18 different government institutions encompassing a wide range of sectors, from youth and social development to industry and commerce, employment, fisheries and agriculture, and energy. The materials are also suitable for a wide range of educational backgrounds and levels of experience with research. In the pilots, participants ranged from director level to interns.

FOUR GUIDING PRINCIPLES

There are four core principles which underpin this course:

1

COMPLEXITY AND CRITICAL REFLECTION

This course recognizes and values the complexity of the policy-making landscape and the role of evidence within it. It does not provide 'easy answers' or a one-size-fits-all template for EIPM. It also takes a broad view of 'evidence', without making an argument for one type of evidence over another. Rather, it facilitates reflection and discussion about the role of evidence in policy making, while building participants' skills in finding and evaluating different kinds of evidence so that they can make an informed decision about its quality and relevance for their work.

2

THE ROLE OF THE INDIVIDUAL

While recognizing and reflecting on the roles of organizational, institutional, political and other factors in EIPM, the course starts with the assumption that all participants are contributing to policy making in some way, no matter how 'small'. The course takes a learner-centred pedagogical approach which puts the learner themselves at the centre of the learning process. The materials avoid excessive jargon and academic theory, and the activities focus on practical day-to-day tasks. The action plans are geared towards actions which are achievable and realistic for each participant. In this way the course highlights the role of support staff whose contribution is often neglected in more high-level approaches to policy making.

3

NETWORKS

A key emphasis of the course is on the importance of interpersonal connections in building capacity for EIPM. This includes both the need for different departments in the information system to work together (e.g. researchers, librarians and ICT staff) as well as the need for strong external linkages, in particular those between researchers and policymakers. External speakers are, therefore, an important part of the course, and any opportunities to use the course to build connections between different parts of the system are to be encouraged.

4

PRACTICALITY

This is not an academic or theoretical course, nor is it lecture-based. It does not cover complex academic topics such as systematic reviews, randomized controlled trials or data analysis in much detail. PowerPoint presentations are minimal. In some ways it functions more as a workshop than a traditional training course, as the activities are centred on discussion and revision of 'live' work documents as well as the development of action plans for EIPM. It is, therefore, most effective when there is buy-in from participants' supervisors and a wider institutional interest or commitment to strengthening EIPM processes.

HOW

TO USE THIS TOOLKIT

This Toolkit is intended as a framework within which to deliver the course and the individual modules and topics. The detailed activities are particularly aimed at trainers who are newer to the course so that they can deliver the course with confidence. However, if, as professional trainers, you would like to adjust the sessions to better meet the learning objectives and/or needs of the learners, you are positively encouraged to do so. In adjusting the sessions, you are expected to ensure that the learning objectives are met, the key concept covered, and the four guiding principles above maintained.

STRUCTURE OF THE TOOLKIT

This Toolkit is organized in four modules, each of which takes about two days. Each module starts with an overview and is divided into topics. Each follows the same structure:

LINKS

These are provided on the overview page of each module and are designed to help the facilitator refer back to previous modules or activities (such as the needs assessment or sensitization workshop) which may have already touched on issues covered in the module.

LEARNING OBJECTIVES

What learners can expect to know and be able to do at the end of each module. The learning objectives relevant to each topic are identified at the beginning of the topic for the trainer's reference.

READ AND REFLECT

This section is for facilitators to read before delivering each topic. In most cases, it can also be photocopied and given to learners as a handout. This should usually be done after the topic has been finished, unless otherwise indicated.

REFLECTION POINTS

Questions for the facilitator and participants to reflect on when reading the Read and Reflect section. These can also serve as discussion questions.

KEY LEARNING POINT

Each topic has one key learning point. These are designed to guide the facilitator in maintaining focus during activities.

PREPARATION

Guidance for the facilitator on the necessary preparation for the topic, including printing requirements, IT equipment set-up, flipcharts etc.

RECOMMENDED ACTIVITIES

Core activities aligned with the learning objectives. Each activity describes the steps that the facilitator can follow, and indicates the estimated time. Timings have been based on a group of 25 participants; if your group is bigger or smaller, you may need to adjust this.

HANDOUTS

These are the handouts and worksheets required for participants to complete the module, corresponding to the activities.

OPTIONAL ACTIVITIES

Extension activities which build on the core activities and key concepts, providing opportunities to go into more depth on specific aspects of the course.

VIDEOS

These provide options to expand on the key learning points and core concepts. The facilitator should choose the video in advance and prepare some discussion questions.

POWERPOINT SLIDES

Also included in the handouts folder are a few PowerPoint slides to guide the delivery of each module.

FURTHER READING

These are websites, readings and videos which can be shared with participants at the end of each module and can also be used by facilitators to prepare.

GLOSSARY

A list of key terms used in the module.

REFERENCES

A list of titles used when developing the content in the Read and Reflect section.

PRACTICAL HANDBOOK

A handbook for participants containing the Read and Reflect sections. We recommend this be provided to participants after the training course has been completed.

KEY CONSIDERATIONS FOR COURSE DELIVERY

OPTIONAL ACTIVITIES AND FURTHER READING

In course pilots, facilitators found that participants often had a wide range of professional, personal and academic experience. Some activities required more or less time depending on the group, and in some cases some individuals finished activities before others. In addition, logistical issues meant that timing was sometimes unpredictable, and facilitators sometimes found themselves with extra discussion or reading time. The optional activities and further reading can help with some of these challenges.

‘SAMPLES AND READINGS’ FOLDER

This course is designed to be adaptable to specific country contexts, and experience in the pilots showed us that participants are most engaged when activities are designed around up-to-date, country-specific readings which the facilitator gathers in advance. However, we recognize that the course calls for a lot of samples, and that in some cases it may not be practical or feasible to gather such a range of documents. In many cases it is not the content of the readings which is important for the course, but the format (e.g. systematic reviews, infographics, fact sheets and policy briefs), and in such cases, samples from different contexts can also be suitable. We are, therefore, sharing the ‘document bank’ of readings and samples which we used in the pilots, containing a wide range of examples of the literature types and evidence products discussed in the course, which you may find useful. The folder can be found online at www.inasp.info/vytoolkit.

EXTERNAL SPEAKERS

A key theme of this course is the importance of building networks and dialogue between researchers and policymakers. In the pilots, the participants benefited enormously from the insights and experience shared by experts from research institutes, policy-making bodies and library consortia. It is important that the course not only advocate for these types of linkages but also embody them in its delivery. We have, therefore, identified key points throughout the course where we feel it would be particularly beneficial to invite an external speaker. Our experience has shown us that it is very important to brief the speaker well in advance, and we recommend that you also brief participants so that they can prepare questions.

‘WHAT TABLE’ AND EXIT CARDS

The ‘What Table’ and Exit Cards are simple formative assessment tools for use during the workshop. The ‘What Table’ is a short exercise conducted at the beginning and end of each module. At the beginning, learners indicate what they already know about the subject of the module and what they want to know. At the end, they indicate what they have learned. Exit Cards are small (ideally 4x6 inch; 10x15cm) cards which are handed out to learners at the end of each day, answering three short questions: What helped you learn today? What do you need further clarification on? Do you have any suggestions for the facilitator? The cards should be discussed by the facilitators/organizing team at the end of each day, and a short feedback session the following morning can provide answers to questions and issues raised.

ACTION PLANS

Our approach emphasizes the point that no matter what one's role is in the parliamentary or ministerial staff, everyone contributes in some way to policy making. This course also takes a very practical, work-based approach to EIPM – it is designed to be built around everyday situations. The action plans are an important part of the course which provide an opportunity to explore how individuals can enhance their own skills in EIPM – for example, by reaching out to new networks, creating or revising institutional processes, or simply changing the way they personally carry out their work.

We are grateful to the Ghana Civil Service Training Centre for sharing its action plan template with us, which we have adapted for use in this course. The course is designed so that participants gradually build action plans as they progress through the modules, and then finalize these at the end. We found this more effective than doing the whole plan at the end of the course. The action planning session at the end of the course could last anything from an hour to a full-day workshop, depending on the needs of the participants.

Action plans can be used in various ways. You could use them purely as a tool for individual reflection, which participants complete individually and take home with them after the course. They can also be more formalized and linked to institutional processes. In VakaYiko's pilots with the Civil Service Training Centre, where participants came from different agencies and institutions, every participant created an individual action plan which was approved by their supervisor, and the Civil Service Training Centre monitored the implementation of the plans through follow-up questionnaires. In Zimbabwe, where participants came from three institutions, each institution's Research Department created a shared action plan, and the implementation of the departmental plans was supported over a year-long period via a learning exchange and mentoring programme.

Activities listed in the action plans can vary in scope from individual skills and knowledge to wider organizational processes, depending on the profile of the participants and the needs of the partner institution. Here are some examples and ideas from our pilots:

- Meet with colleagues to brainstorm institutions from which research materials can be gathered, write to these and collect hard copies to restock the library.
- Investigate joining the National Library Consortium to gain access to research information.
- Design a draft of a client information request form.
- Develop evidence-handling procedure manuals and templates for policy briefs, policy papers, reports, minutes.
- Make a list of key online sources of relevant evidence, and share with colleagues.
- Create departmental strategies for determining evidence needs and communicating evidence.
- Invite researchers to stakeholder consultative meetings on a specific policy.
- Train other associated agencies under the institution's remit in evidence literacy.

MONITORING, EVALUATION AND LEARNING

In pilots, the effectiveness of the EIPM course was assessed using VakaYiko's Monitoring and Evaluation (M&E) Strategy.¹ The Kirkpatrick model² was used in gauging the participants' reactions and learning. The model consists of four different levels (reactions, learning, behaviour change/transfer and impact), with each level considered a necessary prerequisite to reach the next one.

The learning and reactions levels were evaluated during the training course through pre- and post-activity assessment exercises and formative assessment activities such as the 'What Table' and Exit Cards. Facilitators and course organizers were also in a good position to observe changes in learner attitudes towards research, 'light bulb moments', and ideas and learning which emerged from the sessions. In pilots, we discussed these insights via daily debrief meetings and included them in narrative reports. Behaviour-level change and transfer were evaluated after the course via follow-up on the action plans, conducted with the aid of a monitoring form.

1. Please see: www.inasp.info/uploads/filer_public/2015/02/23/eipm_training_me_strategy.pdf.

2. Kirkpatrick, D.L. (1979). Techniques for evaluating training programs. *Training and Development Journal*, 33(6): 78–92.

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MODULE 1

INTRODUCTION TO EVIDENCE-INFORMED POLICY MAKING



This trainer manual forms part of the VakaYiko Evidence-Informed Policy Making Toolkit. The Toolkit aims to support skills development and practical processes for evidence-informed policy making in public institutions in developing countries. It consists of a training course, a series of practical handbooks, and a range of informational and promotional materials.

This is the first in a four-part series of guidance notes for trainers. The complete Toolkit can be found on the INASP website here:

www.inasp.info/vytoolkit



Duration	Approx. 2 days [605–850 mins]
Aim	To introduce learners to the concept of evidence-informed policy making (EIPM), and reflect on the role of evidence in the policy-making process and learners' contribution to this.
Rationale	In this module, learners are encouraged to reflect on their own experiences and how EIPM concepts and processes are applied or not in their workplace.
Learning objectives	By the end of the module, learners will be able to: <ul style="list-style-type: none"> • clarify key concepts related to evidence and its use in policy making; • explain how policy processes unfold in complex environments with multiple competing interests and identify their own role within this process; • explain how research evidence informs policy making and what its benefits are; • identify challenges of using evidence, with the aim of overcoming them.
Key learning points	<ul style="list-style-type: none"> • The policy process is complex, multifactorial and non-linear, involving multiple stakeholders with different interests. No matter how small one's role in the civil service, all contribute to policy making. • EIPM considers different types of evidence from a broad range of sources as part of a process that also takes into account other factors such as political realities and public debates. • We identify four main types of evidence used in policy: citizen evidence, data, research evidence and practice-informed evidence. Effective EIPM should combine these different types. • Research evidence is a crucial part of the spectrum of evidence and has unique values which complement the other types of evidence. Understanding the range of factors affecting the use of research evidence makes us better positioned to exploit opportunities to use evidence and address challenges.
Establish links	Needs assessment and/or sensitization workshop/course application process.
Workshop pre-requisites	<ul style="list-style-type: none"> • Learners bring a policy document (memo, brief, report, case study, fact sheet etc.) that they have recently prepared in their work and can adapt and improve throughout the course. • Learners bring their own institutional guidelines or policies that govern how they write policy briefs, reports etc.
Resources	<ul style="list-style-type: none"> • Projector and laptop for PowerPoint (PPT) presentation. • Flipchart paper and different-coloured pens. • Sticking tape. • Small cards ('exit cards') and pads of two different-coloured sticky notes.

TOPIC 1 p.18	THE POLICY-DEVELOPMENT PROCESS	[185–265 MINS]
	ACTIVITIES:	
	M1-T1-A1 What learners know and want to know (the 'What Table')	[20–25 mins]
	M1-T1-A2 What is policy?	[25–40 mins]
	M1-T1-A3 What is the policy/decision-making process like?	[40–50 mins]
	M1-T1-A4 [Optional] External speaker presentation on the policy making process	[60–90 mins]
	M1-T1-A5 Written reflection on a policy process	[25–40 mins]
	M1-T1-A6 What learners have learnt and how they will apply it (the 'What Table')	[5–10 mins]
	M1-T1-A7 Introduction to action plans	[15–20 mins]
	HANDOUTS:	
	M1-T1-H1 Reflection on a policy process	
	M1-T1-H2 Action plan template	
TOPIC 2 p.23	WHAT IS EVIDENCE, AND WHAT IS EIPM?	[135–185 MINS]
	ACTIVITIES:	
	M1-T2-A1 What is evidence?	[20–30 mins]
	M1-T2-A2 Case studies	[40–45 mins]
	M1-T2-A3 What specific decisions can evidence help with?	[15–20 mins]
	M1-T2-A4 [Optional] External speaker presentation on the value of evidence	[60–90 mins]
	M1-T1-A5 What learners have learnt and how they will apply it (the 'What Table')	[5–10 mins]
	Optional Videos	
	HANDOUTS:	
	M1-T2-H1 What is evidence?	
	M1-T2-H2 Case studies	

TOPIC 3 p.27	TYPES OF EVIDENCE	[75–95 MINS]
	ACTIVITIES:	
	M1-T3-A1 Case studies [10–15 mins]	
	M1-T3-A2 Types of evidence – scenarios [50–60 mins]	
	M1-T3-A3 Types of evidence – policy documents [15–20 mins]	
	M1-T1-A4 What learners have learnt and how they will apply it (the ‘What Table’) [5–10 mins]	
	HANDOUTS:	
	M1-T2-H2 Case studies	
	M1-T3-H1a Scenarios – parliament	
	M1-T3-H1b Scenarios – civil servants	
TOPIC 4 p.31	RESEARCH EVIDENCE IN POLICY MAKING	[210–285 MINS]
	ACTIVITIES:	
	M1-T4-A1 How do you feel about research? [10–15 mins]	
	M1-T4-A2 Which research projects have influenced you? [5–10 mins]	
	M1-T4-A3 Benefits of using research evidence (part 1) [45–60 mins]	
	M1-T4-A4 Benefits of using research evidence (part 2) [40–50 mins]	
	M1-T4-A5 Challenges that hinder and factors that encourage the use of research evidence in policy making [50–60 mins]	
	M1-T4-A7 [Optional] External speaker presentation on the value of research [60–90 mins]	
	M1-T1-A8 What learners have learnt and how they will apply it (the ‘What Table’) [5–10 mins]	
	Optional Videos	
	HANDOUTS:	
	M1-T4-H1 Benefits research evidence (1)	
	M1-T4-H2 Benefits research evidence (2)	
Action plan and review activities (trainer to build in)	<ul style="list-style-type: none"> • Reflection on action plans (to be carried out at flashpoints suggested throughout the course) [5–10 mins] • Exit cards (to be carried out at the end of each day) [5–10 mins] • Review of Module 1 (to be carried out at the end of the Module 1) [10–15 mins] 	

Further reading

Africa Evidence Network

An online network of people (researchers, NGOs, government) with an interest in producing evidence and using it in policy making:

www.africaevidencenetwork.org

Bridging Research and Policy: Insights from 50 Case Studies

This paper gathers insights from EIPM processes all over the world and includes a useful summary of examples of EIPM at the end:

www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/180.pdf

Duncan Green on the **politics of results and evidence**:

www.oxfamblogs.org/fp2p/icymi-best-of-this-summer-book-reviews-the-politics-of-evidence

Evidence Based Policy in Development Network (EBPDN)

A global network of people who work in think tanks, NGOs, and policy research institutes from around the world.

Free to join: www.partnerplatform.org/ebpdn

Knowledge Sector Initiative

Insights on EIPM in Indonesia:

www.ksi-indonesia.org/index.php/publications/2015/08/10/14/diagnostic-studies-on-the-knowledge-sector.html

Louise Shaxson shares insights from her experience working on EIPM with the UK Department for Environment, Food and Rural Affairs: www.alliance4usefulevidence.org/persistence-pays-lessons-from-a-uk-department-on-evidence-informed-policy-making-2

A **reading list on EIPM** from Research to Action:

www.researchtoaction.org/2015/09/building-capacity-around-demand-eipm-resource-list

TOPIC 1

THE POLICY-DEVELOPMENT PROCESS

MODULE 1 LEARNING OBJECTIVES RELEVANT TO TOPIC 1

By the end of this topic learners will be able to:

- Clarify key concepts related to evidence and its use in policy making i.e. policy
- Explain how policy processes unfold in complex environments with multiple competing interests and identify their own role within this process

READ & REFLECT



WHAT IS POLICY?

Based on International Livestock Research Institute, 1995: Section 1.3.

The word 'policy' is difficult to define and has many different meanings. Webster's dictionary offers the following definitions:

- A definite course or method of action selected (by government, institution, group or individual) from among alternatives and in the light of given conditions to guide and, usually, to determine present and future decisions.
- A specific decision or set of decisions designed to carry out such a course of action.
- Such a specific decision or set of decisions together with the related actions designed to implement them.
- A projected programme consisting of desired objectives and the means to achieve them.

We use the following working definition of policy:

“A policy is a principle or a course of action adopted by an institution or individual. Policies may either aim to maintain the status quo or bring about change.”

MacDonald, 2005: 21.



LIVESTOCK POLICIES IN SUB-SAHARAN AFRICA

In sub-Saharan Africa, livestock policy may mean either a **complete package of decisions covering all aspects** of the livestock subsector, or a **particular set of decisions dealing with a single aspect**. Examples of the former are the Livestock Policy of Tanzania and the National Livestock Development Policy of Kenya. Examples of the latter are:

- Livestock-related land-tenure policies, such as the Tribal Grazing Land Policy of Botswana, or the policies and related laws covering grazing reserves in Nigeria or group ranches in Kenya.
- Pricing policies, such as those embodied in the purchase prices established by the Cold Storage Commission in Zimbabwe or the Meat Commission in Kenya.
- Disease-control policies, as for foot-and-mouth disease in Botswana, Zimbabwe and Kenya.

Source: ILRI, 1995.

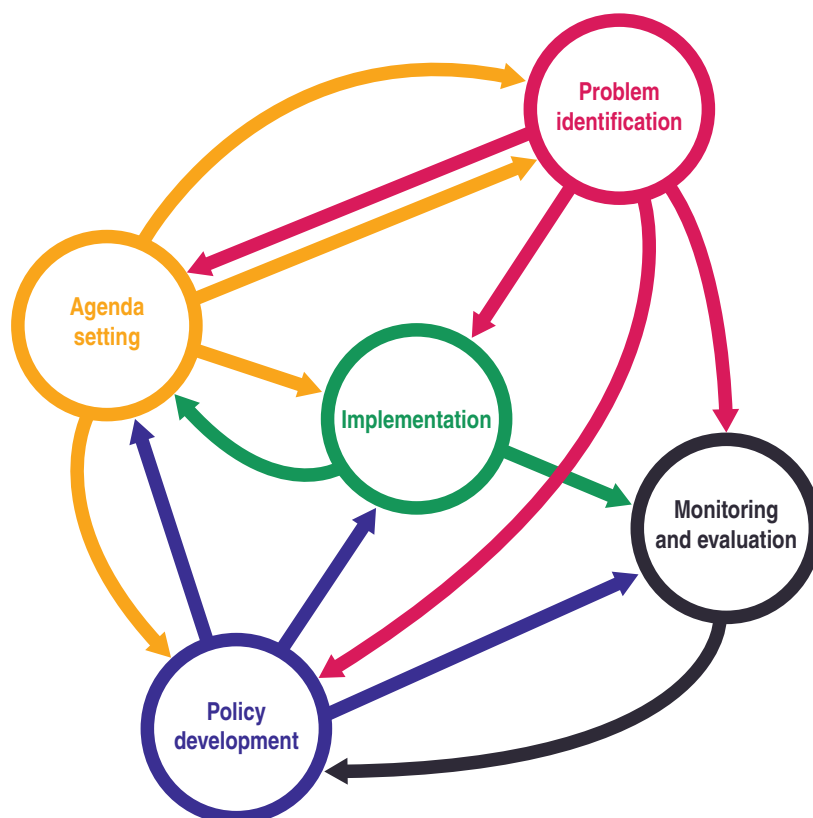
FIGURE 1
THE POLICY-DEVELOPMENT PROCESS IN THEORY



While most policy processes involve sequential stages **from agenda setting through decision-making to implementation and evaluation**, some stages take a very long time, and sometimes several stages occur simultaneously. For example, three steps of the process – agenda setting, policy formulation and decision-making – might happen simultaneously, and some steps such as consultation or monitoring may be skipped entirely. The political, social and economic contexts surrounding policy making mean that, in practice, it rarely happens according to a formal cycle.

The policy process can be defined as **complex, multifactorial and nonlinear** (Davies, 2005a).

FIGURE 2
THE POLICY-DEVELOPMENT PROCESS IN PRACTICE



WHO IS INVOLVED IN THE POLICY PROCESS?

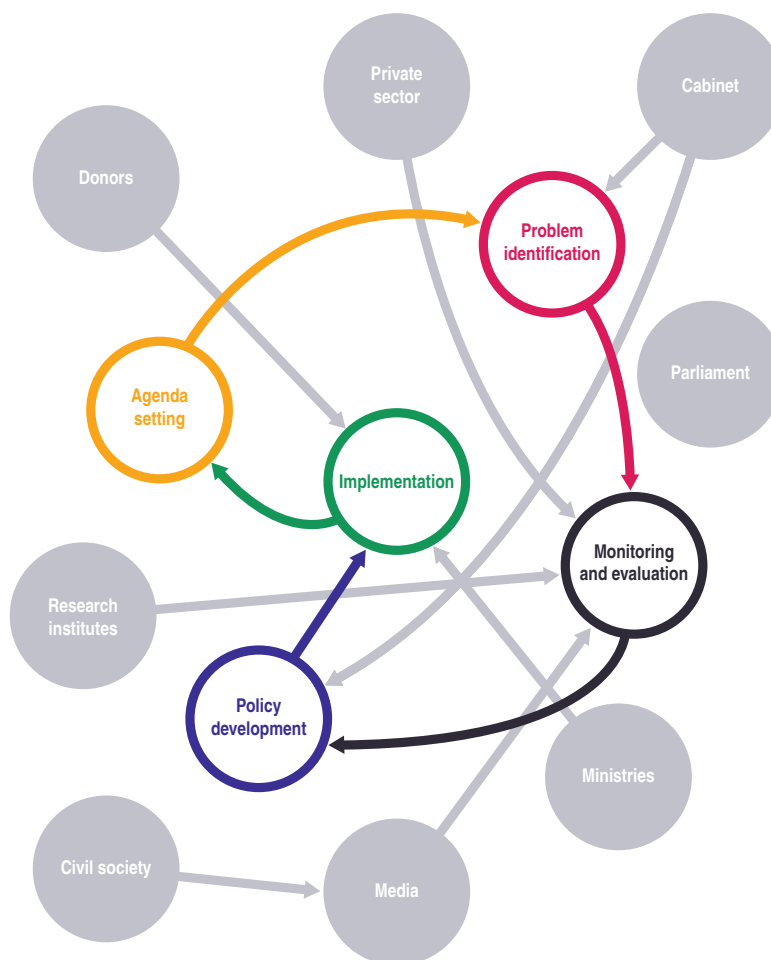
A very broad range of stakeholders are involved in the policy-making process, both formally and informally. Different parts of government are involved at different stages. For example, the cabinet would usually focus more on decision-making and agenda setting, while parliament would focus on scrutinizing the government's decisions and building legislative frameworks. Civil servants play a key role in the policy-making process, as they support decision-makers in policy formulation as well as implementing the policies they establish.

International and regional frameworks such as the European Union, United Nations and African Union, and specific initiatives such as those on climate (Rio+20) and gender (Beijing Platform for Action) also affect policy.

Other stakeholders such as the private sector, NGOs, donors, multilateral organizations, think tanks and the media influence policy development in many different ways. Some of this influence may come through formal consultative channels, but many channels of influence are unpredictable, informal and difficult to map.

Each of these different actors is pursuing their own agenda, and attempting to influence other stakeholders as well as the government. Evidence is one of the tools used by stakeholders throughout the policy-making process. Each of the stakeholders, including the government, produces and uses different types of evidence at multiple points throughout the policy-making process.

FIGURE 3
STAKEHOLDERS IN THE POLICY DEVELOPMENT PROCESS



REFLECTION POINT

In your experience, how is evidence used in policy-making processes within your sector?



KEY LEARNING POINT

The policy-development process is complex, multifactorial and non-linear, involving multiple stakeholders with different interests, who all produce and use evidence as a tool for influence throughout the process. No matter how small one's role in the civil service, all civil servants contribute to policy making.

RECOMMENDED ACTIVITIES

PREPARATION



- Write the module learning objectives on a flipchart and leave them displayed throughout so that they can be referred to at the start of each topic.
- Write up the policy definition (possible course definition) on flipchart paper ready for activity **M1-T1-A2**.
- Write up task instructions for activity **M1-T1-A3** on a flipchart.
- For optional activity **M1-T1-A4**, invite a senior policymaker or stakeholder to talk to the group about the policy-making process in the country. It is important that the speaker is **prepared carefully in advance** so that they use the same terminology and draw on content relevant to this topic.
- Print out handout **M1-T1-H1. Reflection on a policy process**, one per learner, for activity **M1-T1-A5**.
- Print out for each learner the template in **M1-T1-H2. Action plan template for Introduction to action plans**.
- Write up questions for review activity **Exit cards** on a flipchart and label exit cards (three per learner).

M1-T1-A1.

WHAT LEARNERS KNOW AND WANT TO KNOW (THE 'WHAT TABLE')

[20–25 minutes]

1. Draw a four-column table on the flipchart. Label the first column "What do I know about EIPM?", the second column "What do I want to know about EIPM?", the third column "What have I learnt about EIPM?" and the fourth column "How will I apply what I have learnt at my workplace?".
2. Ask each learner to do the same on an A4 sheet of paper and to fill out the first and the second columns: "What do I know about EIPM?" and "What do I want to know about EIPM?"
3. Ask two or three learners to share what they know and want to know about EIPM and refer them to the topics graphic on the PPT slide in annex M1ppt. Introduction and concepts – slide 3.
4. Tell learners that they will individually check their learning at the end of each topic of this module and will note down in the third column "What have I learnt about EIPM?" and the fourth column "How will I apply what I have learnt at my workplace?".

M1-T1-A2.

WHAT IS POLICY?

[25–40 minutes]

1. Explain that the word 'policy' can have many different meanings, so as a group we are going to agree on a common working definition which will be adopted for the rest of the course.
2. Put learners into groups of four or five and ask them to discuss the question "What is policy?" and agree on one definition, which they will write down on flipchart paper and display on the wall.
3. Ask the learners (in the same groups) to walk around the room, read the different definitions and put a star (on behalf of their group, not individually) next to their favourite definition and be prepared to explain their reasons why.
4. Ask each group to briefly share the definition they selected and their reasons why.
5. If necessary, reveal the policy definition on the pre-prepared flipchart, as an alternative definition and/or if there is no consensus on one favourite definition.

M1-T1-A3.

WHAT IS THE POLICY/DECISION-MAKING PROCESS LIKE?

[40–50 minutes]

1. Explain that the first step of the policy process is to acknowledge how decisions (policies) are made in learners' ministries, sectors or countries.
2. In groups of four (organized by the same sectors, ministries or country), ask learners to:
 - draw a diagram of the steps that policy/decision-making processes follow in their ministry or country; and
 - include the range of different stakeholders involved in the processes.
3. Ask each group to display their diagrams on the walls and present their work; the other groups are invited to comment and ask questions.
4. Invite learners to discuss in their groups where each of them would place themselves in their diagrams of the policy-making process.
5. Introduce and discuss the diagram of the policy cycle on the PPT slide 4 in annex **M1ppt. Introduction and concepts**.
6. Ask learners if there are any similarities/differences between the diagram on the slide and their own diagrams.

RECOMMENDED ACTIVITIES CONTINUED

M1-T1-A4. [OPTIONAL]**EXTERNAL SPEAKER
PRESENTATION ON POLICY-
MAKING PROCESS****[60–90 minutes]**

1. An invited senior policymaker or stakeholder makes a presentation to the group about the policy-making process in the country.
2. In advance of the presentation, inform the learners of the title of the presentation and ask each learner to write down one question they would like answered in the presentation.
3. After the presentation, open the floor to the learners to ask the senior policymaker any of their questions that have been left unanswered.

**M1-T1-A5.
WRITTEN REFLECTION ON
A POLICY PROCESS****[25–40 minutes]**

1. Hand out the questions in **M1-T1-H1**. **Reflection on a policy process** to each learner, introduce the task and inform the learners that they have the opportunity for individual written feedback if they so wish. For those interested in receiving written feedback, ask the learners to hand in or email their written task at the end of the day's sessions.
2. Learners read the Read & Reflect section and write down or type their answers to the five questions in the handout.

M1-T1-A6.**WHAT LEARNERS HAVE LEARNT
AND HOW THEY WILL APPLY IT
(THE 'WHAT TABLE')****[5–10 minutes]**

1. Ask each learner to make notes in the third and the fourth columns: "What have I learnt", and "How will I apply it?"
2. Tell the learners that they will be invited to share some of their reflections in small groups at the beginning of the following day.

**M1-T1-A7.
INTRODUCTION TO
ACTION PLANS****[15–20 minutes]**

1. Introduce the action plan and template using the slides in annex **M1ppt. Action plans** and handing out the template in **M1-T1-H2. Action plan template**.
2. Explain to learners that they will be gradually building the content of their action plans throughout the course and that short action-planning sessions will be included at flashpoints throughout the course (the trainer can decide at which points or follow the suggested flashpoints in the toolkit). These sessions will give them the opportunity to make notes in their notebooks (rather than the template itself) under the key headings – i.e. challenges and/or ideas to support the use of evidence in policy making and to address the challenges identified.
3. Explain that a longer action-planning session will be built in at the end of the course for learners to reflect on and consolidate their notes then transfer them into the formal action plan. There will also be time in this session to review their plans with the trainer and their peers.

EXIT CARDS**[5–10 minutes]**

1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

TOPIC 2

WHAT IS EVIDENCE, AND WHAT IS EVIDENCE- INFORMED POLICY MAKING?

MODULE 1 LEARNING OBJECTIVES RELEVANT TO TOPIC 2

By the end of this topic learners will be able to:

- Clarify key concepts related to evidence and its use in policy making (i.e. evidence and EIPM)

READ & REFLECT



We have seen in Topic 1 that evidence is entangled in the complex and multifactorial policy-making process at multiple points. Evidence is produced by many different stakeholders who use it as a tool to shape their arguments.

Because of this, what we conceive of as evidence is framed by ideas, concepts and narratives, and its interpretation is not neutral. But within this web of competing interests and narratives is valuable evidence that can help to design and implement effective policies. The politicization of the policy landscape, the proliferation of evidence available and the many competing stakeholders, mean that it is important to have a systematic process for gathering, appraising and using evidence.

WHAT IS EVIDENCE FOR POLICY MAKING?

“Evidence for policy making is any information that helps policymakers make decisions and get results that are concrete, manageable and achievable.”

Shaxson, 2005.

Each of the stakeholders in the policy process has their own ideas of what evidence is, and uses their evidence as a tool to shape arguments in the policy-making process.

Policymakers' evidence	Researchers' evidence
Colloquial (narrative)	Scientific
Highly contextual	Generalizable
Policy relevant	Contribution to knowledge
Clear message or response	Caveats and qualifications
Timely	Takes as much time as needed

WHAT IS EVIDENCE-INFORMED POLICY MAKING?

'Evidence-based policy' is a term that came to prominence in the 1990s and was used in particular by health sector organizations such as the World Health Organization.

More recently, and especially in the context of discussions about the use of evidence in different sectors, there has been growing recognition of the fact that evidence is only one of a number of important factors which influence policy making. The expression 'evidence-informed policy' takes this into account. It also points to a more nuanced picture of evidence use, whereby different kinds of research with different points of view all feed into the policy-development process. This is in contrast to the idea of basing decisions on one piece of research or the concept of 'policy influence', which usually looks at once piece of research trying to make its way into policy.

While we recognize that governments may use many different forms of words to describe the use of evidence in policy making, the stimulation of informed debate and support of knowledge-based societies, we use the following definition of evidence-informed policy:

“Evidence-informed policy is that which has considered a broad range of research evidence; evidence from citizens and other stakeholders; and evidence from practice and policy implementation, as part of a process that considers other factors such as political realities and current public debates. We do not see it as a policy that is exclusively based on research, or as being based on one set of findings. We accept that in some cases, research evidence may be considered and rejected; if rejection was based on understanding of the insights that the research offered then we would still consider any resulting policy to be evidence-informed.”

Newman, Fisher and Shaxson, 2012.

“Good governance is the positive exercise of authority. It is characterized by citizen transformation and participation in governance, control of corruption, political stability, and respect for the rule of law, government effectiveness, regulatory quality and **effective knowledge management.**”

Uganda Vision 2040, 2013.

“Against the realisation that weak institutions undermine national development efforts, the government’s Transformation Agenda will aim to strengthen state institutions responsible for development planning and economic management as well as develop efficient mechanisms for citizens’ engagement in the development process. **Evidence-based public policy making** and enhancing development communication will form a major part of these initiatives.”

Ghana Shared Growth and Development Agenda II: 23.

WHY EIPM?

EIPM helps policymakers and providers of services make decisions that are informed by the best available evidence from research and evaluation and other sources. This includes decisions about:

- the nature, size and dynamics of the problem at hand, including its causes and who is most affected by it;
- policy options that might be considered to address the problem;
- effective and ineffective interventions to solve the problem;
- the likely positive and negative consequences of the proposed policy option;
- the intended and unintended consequences of the proposed policy option;
- effective and ineffective modes of delivery and implementation;
- how long the policy will have to run before positive results will be achieved;
- the resources that will be required to implement the policy;
- the costs and benefits of the proposed policy, and on whom these costs and benefits will fall; and
- the sustainability of the policy economically, socially and environmentally.



REFLECTION POINT

What other factors aside from evidence influence policy making in your country?



KEY LEARNING POINT

Evidence-informed policy making considers different types of evidence from a broad range of sources, as part of a process that also considers factors such as political realities and public debates.

RECOMMENDED ACTIVITIES

PREPARATION



- Print out **M1-T2-H1**.
What is evidence? so that there are enough for one handout per group for activity **M1-T2-A1**.
- Print out handout **M1-T2-H2**.
Case studies so that there are enough to hand out, one or two per group, for activity **M1-T2-A2** as well as enough for each learner to take away with them after activity **M1-T3-A1**.
- For *optional* activity **M1-T2-A4**, invite a speaker (ideally from the National Planning Authority or a body responsible for national development plans) to talk to the group on the value of evidence in reaching national development goals. It is important that the speaker is **prepared carefully in advance** so that they use the same terminology and draws on content relevant to this topic.
- Retrieve flipchart paper with questions for review activity **Exit cards** and label exit cards (three per learner).

M1-T2-A1.

WHAT IS EVIDENCE?

[20–30 minutes]

1. Organize learners into groups of four people.
2. Explain to learners that each group has to decide whether two statements written about evidence are true or not and explain why, using real life examples from their own experience/observations as much as possible. Distribute the handout in annex **M1-T2-H1**.
What is evidence?, one per group.
3. Encourage a debate more widely between the groups, asking learners to use real-life examples to back up their points where relevant.
4. Pull out key points from the discussion and conclude that statements in both paragraphs are true in different circumstances.

M1-T2-A2.

CASE STUDIES

[40–45 minutes]



1. Pose the question 'What is evidence-informed policy making?' to the group and invite two to three learners to explain what they understand by the term. Display the definition of EIPM on the PPT slide 8 in annex **M1ppt. Introduction and concepts**. Briefly introduce the definition and explain the difference between evidence-informed and evidence-based policy. Invite any questions of clarification from the group.
2. Put learners into groups of four or three and introduce the task (see handout in annex **M1-T2-H2. Case studies**).
3. Hand out the case studies (one or two handouts per group) and ask each group to be ready to present their answers to the wider group.
4. Invite the groups to briefly share their answers (case study by case study against the longer EIPM definition in the handout). If necessary, help the group to reach consensus and fill any gaps in reasoning.



OPTIONAL VIDEOS

Bridging research and policy making in Indonesia:
www.youtube.com/watch?v=G9IlheCvV-c

Challenges and opportunities for evidence-informed policy making in Ghana:
www.youtube.com/watch?v=XjoASxEgNu8

Challenges and opportunities for evidence-informed policy making in Zimbabwe:
www.youtube.com/watch?v=eCPd25kkXL4

Finding a meeting point between policymakers and researchers in Nigeria:
www.youtube.com/watch?v=jpaf-swSp9g

Louise Shaxson: What is Evidence-Informed Policy Making?: www.youtube.com/watch?t=104&v=LJuA6ukpmtc

RECOMMENDED ACTIVITIES CONTINUED

M1-T2-A3. WHAT SPECIFIC DECISIONS CAN EVIDENCE HELP WITH?



[15–20 minutes]

1. Ask each learner to consider and make notes on what specific decisions they think evidence can help with when revising and/or creating a new policy. Ask one to two learners for some brief examples to check their understanding of the task.
2. Once learners have reflected on the task, ask them to pair up and discuss their ideas/ specific decisions with their partner.
3. In plenary, ask each pair to present one or two of their specific decisions (make sure each pair shares new decisions and doesn't simply repeat ones that have already been said), and write them on a flipchart.
4. Display PPT slide 7 in annex **M1ppt. Introduction and concepts** and ask the learners to briefly identify any new decisions they had not thought of and/or any decisions they had identified but were not listed in the PPT.

M1-T2-A4. [OPTIONAL] EXTERNAL SPEAKER PRESENTATION ON VALUE OF EVIDENCE



[60–90 minutes]

1. An invited speaker (ideally from the National Planning Authority or a body responsible for national development plans) presents to the group on the value of evidence in reaching national development goals.
2. In advance of the presentation, inform the learners of the title of the presentation and ask each learner to write down one question they would like answered in the presentation.
3. After the presentation, open the floor to the learners to ask the senior policymaker any of their questions that have been left unanswered.

M1-T2-A5. WHAT LEARNERS HAVE LEARNT AND HOW THEY WILL APPLY IT (THE 'WHAT TABLE')

[5–10 minutes]

1. Ask each learner to make notes in the third and the fourth columns: What have I learnt, and how will I apply it?
2. Tell the learners that they will be invited to share some of their reflections in small groups at the beginning of the following day.

EXIT CARDS



[5–10 minutes]

1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

TOPIC 3

TYPES OF EVIDENCE

MODULE 1 LEARNING OBJECTIVES RELEVANT TO TOPIC 3

By the end of this topic learners will be able to:

- Clarify key concepts related to evidence and its use in policy making (i.e. different types of evidence)

READ & REFLECT



TYPES OF EVIDENCE

Material in this topic has been informed by Jones, Jones, Shaxson and Walker, 2013.

There are multiple types of evidence used for policy making, produced by different stakeholders, and there are many ways to conceptualize these. The following model divides evidence into four categories, which are interlinked and are often used simultaneously.

1. **Data.** This is information collected to be examined, considered and used to help decision-making (Cambridge English Dictionaries, 1990). Data is factual information only, without context. Many different stakeholders in the policy-making process produce different kinds of data, and there are complex debates about the process of gathering data and how to ensure quality.
 - a. **Qualitative data** describes the nature of answers (evidence) in terms of their verbal, written or other descriptive natures. It asks 'who, which, what, when, where and why?' For example, a feedback form using open-ended written answers would produce qualitative data.
 - b. **Quantitative data** is expressed in various measures and indices, and its description and analysis is done by means of statistical methods. It answers 'how many', 'to what extent' or 'how much' questions. For example, a feedback form using tick boxes would produce quantitative data.

FIGURE 4
TYPES OF EVIDENCE



2. **Research evidence.** For the purposes of our approach, we understand research evidence to be that which is **produced through a formal, comprehensive and rigorous process that uses primary and secondary literature and adheres to accepted principles of quality.** Research evidence varies according to sector (social science research is different from natural science research) but has some key common principles, including literature review, methodological rigour, a very specific question or topic, objective treatment of evidence and triangulation of results. Research papers usually combine other kinds of evidence such as data, citizen evidence and practice-informed evidence to build a deep understanding of an issue and explain context and causality. Within this definition, we include peer-reviewed academic work as well as research papers by think tanks, multilaterals and NGOs and evaluations.
3. **Practice-informed evidence is knowledge gained from experience of implementing policy and practice.** Often highly tacit in nature, it is held by individuals and organizations with long histories of tackling an issue, and has its roots in work experience and an understanding of what works and what does not in specific contexts. This type of evidence can be found in formal processes such as programme documents, monitoring and evaluation data, and formal evaluations. It can also be found in informal spaces such as in meetings, stakeholder consultations or roundtables. It is held and produced by all stakeholders involved in the policy process.
4. **Citizen (or participatory) evidence is held by citizens, both individually and collectively, drawing on their daily lives.** It is knowledge of a **place, a culture, people and their challenges**, gained through direct experience. It can be difficult for outsiders to access without considerable sensitivity, but is often brokered through representatives, such as civil society organizations or cultural or religious groups. Citizen evidence may be expressed through the democratic process itself, as well as via stakeholder consultations, social audits and community mapping or monitoring exercises. Too often, however, the actual influence of people's expressed voice is minimal or tokenistic, as some actors hold the power to frame and even marginalize it.

Each of the types of evidence has its own value and complements the others, but evidence-informed policy making would not use any of them in isolation. An over-reliance on research can lead to technocratic policy making with little citizen involvement or practical experience taken into account; citizen evidence may need to be balanced with technical research to prevent more populist approaches to policy making; and policies based solely on what has been shown to be effective may be slow to innovate (Jones, Jones, Shaxson and Walker, 2013). The result of a successful combination of research and participation is an **evidence-informed policy**.

EVIDENCE USE IN GHANA'S PARLIAMENT

"Parliament is an information intensive and information demanding institution. Therefore, acquiring, organizing, managing, distributing and preserving information is fundamental to its constitutional mandate. Parliament creates and requires information from many external sources including the government, the judiciary, civil society, experts, the media, academicians, international organizations and other legislative bodies and citizens.

To ensure that both parliament and the citizens are properly informed in today's fast evolving environment it is increasingly important to have a comprehensive approach to identifying, managing, and providing access to critical resources."

Joyce Adliene Bamford-Addo, Speaker of the Parliament of Ghana, quoted in GINKS Parliament Review



KEY LEARNING POINT

We identify four main types of evidence used in policy: citizen evidence, data, research evidence and practice-informed evidence. Effective evidence-informed policy-making should combine these different types.



REFLECTION POINT

Which kinds of evidence do you think are most used in policy making, in your experience?

Which are used least often? Why?

RECOMMENDED ACTIVITIES

PREPARATION



- Retrieve the print-outs of annex **M1-T2-H2. Case studies** for activity **M1-T3-A1** and for learners to take away with them.
- Print out the appropriate handout for the learner group in **M1-T3-H1a. Scenarios – parliament** OR in annex **M1-T3-H1b. Scenarios – civil servants**.
- Ask learners at the start of the topic to retrieve the policy-related documents they were asked to bring in before the workshop – for example, a memo, brief, report, case study or fact sheet – ready for activity **M1-T3-A3**.
- Retrieve flipchart paper with questions for review activity **Exit cards** and label exit cards (three per learner).

M1-T3-A1.

CASE STUDIES

[10–15 minutes]



1. Hand out the case studies in annex **M1-T2-H2. Case studies** to each learner and ask them in pairs or groups of three to re-read the case studies and discuss what types of evidence are being used in each case study.
2. Invite the group to briefly share their answers (case study by case study). If necessary, help the group to reach consensus and fill any gaps in reasoning.
3. Based on these examples, introduce and discuss the different types of evidence on PPT slide 6 in annex **M1ppt. Introduction and concepts**, drawing on the Read & Reflect section.

M1-T3-A2.

TYPES OF EVIDENCE – SCENARIOS

[50–60 minutes]

1. Select the appropriate scenario sheet for the learner group: **M1-T3-H1a. Scenarios – parliament** OR **M1-T3-H1b. Scenarios – civil servants**.
2. Put learners into groups of three or four people and assign each group one of the four short scenarios (1, 2, 3 or 4) listed. If possible, have a minimum of two different groups working on the same scenario.
3. Hand out the appropriate scenario sheet, one per learner, and then introduce the task. Highlight the importance of providing concrete and context-specific examples in column 1 (provide an example where possible) and allow learners the option of using the internet if they so wish. Inform learners that they will need to be ready to present their answers eventually to the wider group.
4. Once each group has completed the table for their scenario, ask them to join the other group working on the same scenario, to share their answers and to prepare one flipchart with their final agreed table to present back to the wider group.
5. Once the groups have prepared their flipcharts, ask each group to share the scenario and present their tables to plenary. Invite any questions/additional suggestions from the wider group.
6. In conclusion, refer the learners to the definition of EIPM in their handout **M1-T2-H2. Case studies** and ask them to identify which key elements of the definition were highlighted in this topic.

RECOMMENDED ACTIVITIES CONTINUED

M1-T3-A3.

TYPES OF EVIDENCE – POLICY DOCUMENTS

[15–20 minutes]

1. In pairs or groups of three, ask learners to retrieve the policy-related documents they have brought from work (e.g. memo, brief, report, case study, fact sheet).
2. Ask the learners to:
 - identify what kinds of evidence have been used in the policy documents; and
 - suggest additional concrete and context-specific types of evidence which might be missing.
3. In plenary, ask the learners for a show of hands on how many people used each of the four types of evidence. Next ask learners for a show of hands on how many people used three of the four types of evidence. Ask one or two people for some of the context-specific suggestions for additional types of evidence. Continue this exercise for two of the four and then one of the four types of evidence. Acknowledge the suggestions for additional types of evidence made by the group.

M1-T3-A4

WHAT LEARNERS HAVE LEARNT AND HOW THEY WILL APPLY IT (THE ‘WHAT TABLE’)

[5–10 minutes]

1. Ask each learner to make notes in the third and the fourth columns: “What have I learnt”, and “How will I apply it?”
2. Tell the learners that they will be invited to share some of their reflections in small groups at the beginning of the following day.

EXIT CARDS



[5–10 minutes]

1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today’s sessions and that there will be a short summary and response at the beginning of the following day’s sessions.

TOPIC 4

RESEARCH EVIDENCE IN POLICY MAKING

MODULE 1 LEARNING OBJECTIVES RELEVANT TO TOPIC 4

By the end of this topic learners will be able to:

- Explain how research evidence informs policy making and what its benefits are
- Identify challenges of using research evidence, with the aim of overcoming them

READ & REFLECT



WHAT IS RESEARCH EVIDENCE?

We understand research evidence to be that which is **produced through a formal, comprehensive and rigorous process that uses primary and secondary literature and adheres to accepted principles of quality**. Research evidence varies according to sector (social science research is different from natural science research) but does have some key common principles, including literature review, methodological rigour, a very specific question or topic, objective treatment of evidence and triangulation of results. Research papers usually combine other kinds of evidence such as data, citizen evidence and practice-informed evidence to build a deep understanding of an issue and explain context and causality. Within this definition, we include peer-reviewed academic work as well as research papers by think tanks, multilaterals and NGOs and evaluations.

We focus on how to use the best research evidence available at the time that it is needed and in the time available.

Research evidence may be lacking, incomplete, imperfect and even contradictory. But policymakers still need to make decisions, and they need the best support possible (Lavis, Oxman, Lewin and Fretheim, 2009).

It is important to distinguish between the **process** of doing research, and **research evidence**. The **process** of doing research may involve a desk review of documents, site visits, surveys or focus groups. The term '**research evidence**' refers to the final product of this research activity, and synthesizes the primary and secondary information gathered in a rigorous and formal written output.

WHAT ARE THE BENEFITS OF RESEARCH EVIDENCE?

Based on Shaxson (2005), Newman, Fisher and Shaxson (2012).

- It is methodologically robust and follows accepted international principles of rigorous enquiry.
- It rigorously, scientifically tests what we think we know and challenges perceptions.
- It has inbuilt quality controls to strengthen objectivity and reduce bias.
- It builds on existing knowledge by first looking at what we already know, then identifying a gap and building on it, unlike other forms of evidence which risk 're-inventing the wheel'.
- It answers the 'how' and the 'why' questions in more depth than other forms of evidence – establishing and distinguishing between correlation and causality.
- It systematically interprets and analyses data and other forms of evidence.
- It combines other kinds of evidence into a synthesized picture on a specific question.

'This is what science, research, technology and innovation should do: meet the people at the point of their greatest need.'

President Uhuru Kenyatta of Kenya (DFID, 2014)

DEFORESTATION IN GUINEA

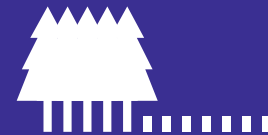
"Parts of Guinea feature patches of dense, semi-deciduous forest, which orthodox thinking has tended to view as relics of previously more extensive forest cover. The belief that this situation has resulted from farmers destroying vegetation has been dominant since the 1890s, and has been used to justify repressive measures against the inhabitants' land-use practices.

Fairhead and Leach (1996) looked at the historical evidence in relation to Kissidougou prefecture, particularly air photographs and more recently satellite pictures, from 1952 to 1992. They found that 'in many zones, the areas of forest and savanna vegetation have remained remarkably stable during the 40 year period which today's policymakers consider to have been the most degrading. Where changes are discernible these predominantly involve increases in forest area'. Landscape descriptions and maps from earlier periods 'clearly falsify assertions of a more generalized forest cover'.

The researchers further collected oral information from local inhabitants, who described how village forest islands are usually formed through human settlement and management. Observation of more recent settlements confirmed this. People value the forest islands around their villages for a variety of reasons, and habitually do a number of positive things to encourage their development.

Fairhead and Leach suggest that, rather than being half-empty, the landscape should be seen as half-full. This challenges the notion, which they trace to colonial times, of African farmers as ignorant and careless of their environment. It also challenges current policy towards farmers."

Laws, Harper, Jones and Marcus, 2013: 29 -30.



FACTORS INVOLVED IN THE USE OF RESEARCH EVIDENCE IN THE PUBLIC SECTOR

The table on page 33 outlines some of the systemic, organizational and individual factors affecting the use of evidence in the public sector. Depending on the context, these factors may present opportunities or challenges.

"You can have the best evidence in the world, but if you put it through poor processes you won't get good evidence-informed policy making."

Louise Shaxson
<http://bit.ly/1P6Sm3s>



SYSTEMIC LEVEL

These factors are related to a certain context or environment

Factors	Enabling/constraining elements
Communication between researchers and policymakers	Researchers and policymakers often ‘speak different languages’, and have different purposes, timescales and conceptualizations of research. As the main focus of most research papers is on the design of the study and the results, many facts that most interest policymakers – such as context, implementation details and costs – are not covered in sufficient detail for policymakers to draw conclusions for their own use.
Political system	A pluralist political system favours the creation of an open market of ideas and an intense competition among the different types of knowledge, as well as a high level of scrutiny of the government. A centralized system can create a narrower market of ideas with less space for research to challenge and scrutinize policy positions and power structures. Whatever the political system, policy making is an inherently political process. Ulterior political motives, politicians’ self-interests, conflicting interests and incentives all affect whether evidence is used and if so, which evidence.
Citizens’ demand for the use of evidence	Incentives to support decisions with information weaken if citizens do not demand that their political leaders justify the decisions they make. These demands may be expressed through public consultations or via civil society groups.
Other stakeholders	Donors, international and national organizations, lobbyists/pressure groups, the private sector and research institutes all influence the use of evidence in policy making. Their relationships with decision-makers and the level of power they have to influence decision-making affects the degree to which evidence is incorporated in the public policy processes.
Habit and tradition in government	In civil service, parliament and government, there are often habitual and traditional ways of doing things. When it is asked why things are done in a certain way, the answer is “because we have always done them that way”. This gives preference to the existing frameworks to understand policy problems and can therefore favour evidence confirming the efficiency of current practices.
Timing	The unpredictable time span in which policy decisions are commonly made complicates the use of evidence in policy making. The urgency to reach a decision often hinders the possibility of resorting to new sources of information, but can also provide sudden windows of opportunity for use of evidence.
Changes in administration	Changes in administration, whether at national, sub-national or local level, can result in the new government dismissing the information produced by their predecessors. Changes can also present opportunities: the new administration may take more interest in information generation and use.
Planning	Formalized planning can limit the use of evidence in the implications of the evidence point to alterations in direction or implementation. But planning may also encourage the use of evidence (e.g. evaluations) in shaping interventions to address long-standing issues. During unplanned emergencies, such as the 2013-2015 West African Ebola epidemic, the modus operandi of government changes: some say that this is when there is no time to use evidence; you have to be a decision-maker, use judgement and expertise (Davies, 2005b). However, this need to make decisions quickly can also present opportunities for evidence use. For example, during the Ebola emergency, previously obscure anthropological research suddenly came to the fore in informing health workers’ understanding of cultural burial rites.
Sector	There are some areas of public policy that, due to their nature, are exposed to a higher use of information. This is the case in the health sector, for example, where having research on the effects of certain medications or interventions is important for defining policies. Decisions on other policy areas may be more subject to ideological, value-related considerations.
Quality of information or data	Sometimes information, whether provided by academic institutions or the state itself, is outdated or incomplete. On issues where there is incomplete or no data, policymakers will not be able to design evidence-informed interventions.

Source for pages 33-35: based on Echt and Weyrauch (2015), Leicester (1999), Dhaliwal and Tulloch (2011), Liveranni et al. (2013), Levitt (2013) and Davies (2005b).

ORGANIZATIONAL LEVEL

These are factors that can affect the use of evidence within a specific institution.

Factors	Enabling/constraining elements
Organizational culture	There are agencies that, due to tradition, the will of politicians involved or personnel characteristics, have developed a higher preference for processes that allow for more efficient information management – from its creation to its use, including its processing and communication. Hierarchies and cultures within organizations create more or less space for sharing and applying information.
Resources	Not all organizations have resources and budgetary processes that enable them to conduct/commission research projects and systematize information. This includes IT resources such as the availability of adequately maintained computers and sufficient bandwidth, statistical analysis software, storage systems etc.
Library and information services	Many government institutions do not have a library on the premises. Libraries may be under-resourced and may not have access to academic journals due to a lack of resources for subscriptions, and a lack of awareness about free, discounted or open-access resources available to them. In many cases government researchers focus primarily on online desk research, which affects the type of sources they consult and the information they use.
Knowledge management processes	The storage and circulation of information within and between institutions may not be systematic or effective. There are often delays requesting information from line ministries or statistics agencies, as well as complications when sharing information within departments. Many departments have challenges with systematizing and storing their own information and records (for instance, many areas of the State have not computerized their information), which makes it even more difficult for others to access it. And, in some cases, organizations actively conceal information for fear of it being used to assess their performance (common when talking about monitoring and assessment systems).
Turnover rate	Evidence use is influenced by the high turnover rates of civil service personnel, which public agencies are often exposed to. This can lead to the loss of valuable information, but can also be an opportunity for innovation and the flow of new ideas.

INDIVIDUAL LEVEL

Individual knowledge, skills and attitudes play a key role in the use of evidence.

Factors	Enabling/constraining elements
Leadership	Top-ranking officials, or those in a leadership position within their agencies, have significant influence over the demand for the use of evidence in policy design and monitoring.
Attitudes to research	Many officials, when consulting research sources, tend to prefer certain institutions or researchers due to their own background/experience, political leanings or other factors. Officials may have an attitude of suspicion and mistrust towards information and ideas coming from sources external to the public system.
Knowledge about research and how to access it	As officials are often under time pressure, many will refer to sources and types of research they already know, to quickly gather the necessary information. Many civil servants are discouraged by the cost of subscriptions to academic journals and are not aware of the many free or open-access resources available to them.
Skills in evaluating research evidence	It requires technical expertise, time and effort to manage conflicting evidence of different quality from a range of contexts, identifying the best evidence for a particular policy problem and applying it to that context, all within a typically very tight timeframe.
Skills in communicating research	Analysts' and researchers' skills in clearly and effectively communicating research to policymakers are an important factor in the use of evidence. If policymakers feel that the information reaching them is not relevant, too detailed or not detailed enough, they will be less likely to engage with it.
IT skills	IT skills affect the user's ability to find and apply evidence. This can include skills in searching different types of search engines and databases, storing and systematizing documents, using statistical analysis software and navigating library IT systems.
Professional experience and expertise	Like any organization, governments and the civil service are staffed by people who have professional expertise and experience in specific areas. This affects whether evidence is used (for example, in some cases experience may be seen to trump evidence) and also what evidence is used.
Personal judgement	This is what politics and good decision-making are about, and skills of good judgement are developed over time. Individual judgement is shaped by personal experience, ideology, beliefs and a host of other factors. All of these affect the use of evidence.



KEY LEARNING POINT

Research evidence is a crucial part of the spectrum of evidence and has unique values which complement the other types of evidence. Understanding the range of factors affecting the use of research evidence makes us better positioned to exploit opportunities for using evidence and to address challenges.



REFLECTION POINT

Shaxson highlights the role of processes in EIPM. What processes does evidence go through in your department?

RECOMMENDED ACTIVITIES

PREPARATION



- Print out for each learner **M1-T4-H1. Benefits of using research evidence (1)** for activity **M1-T4-A4**.
- Print out **M1-T4-H2. Benefits of using research evidence (2)**, so that there are enough for one per pair, for activity **M1-T4-A5**.
- For *optional* activity **M1-T4-A7**, invite a researcher to talk to the group on a piece of research s/he is doing and why s/he believes it can be useful for policymakers. It is important that the speaker is **prepared carefully in advance** so that s/he uses the same terminology and draws on content relevant to this topic.
- Retrieve flipchart paper with questions for review activity **Exit cards** and label exit cards (three per learner).

M1-T4-A1. [OPTIONAL]

HOW DO YOU FEEL ABOUT RESEARCH?

[10–15 minutes]

1. Organize the training room so that learners can sit in a circle in front, rather than behind desks.
2. Invite each learner to write down in their notebooks the feelings, ideas and images that emerge when they think about 'research'. Encourage them to be as honest as possible!
3. Invite each learner, with the person sitting next to them, to share their feelings, ideas and images and to discuss the following questions:
 - What do these feelings, ideas and images mean for you in thinking about how you will use the learning from this course or the manual?
 - Where do they come from, and what do you think are the reasons for this?
4. In plenary, invite learners to share any insights or conclusions which came out of their discussions and/or personal reflection.
5. Finally, ask what feelings, ideas and images come to mind when they hear the words 'enquiry' and/or 'investigation'. Invite them to consider how those feelings, ideas and images are different from or similar to what emerged when they thought about research.

M1-T4-A2.

WHICH RESEARCH PROJECTS HAVE INFLUENCED YOU?

[10–15 minutes]

1. Explain to learners that they are now going to reflect on their experiences of research within their work or life more broadly.
2. Invite each learner to answer the following two questions in their notebooks: "What specific research projects have had an influence on you, and why?" Explain to learners that they can include areas outside their immediate professional concerns and think about research that has influenced choices they make in their own life. Then they can move on to think about why this research has been able to influence them.
3. Give the learners two or three minutes to write their responses in their notebooks and then invite them to discuss their responses with the person sitting next to them.
4. In plenary, give learners the option, if they wish, to hand in their responses to the trainer to review and respond to by email or with a written note.

M1-T4-A3.

BENEFITS OF USING RESEARCH EVIDENCE (PART 1)

[45–60 minutes]

1. Organize the learners into groups of three or four, with at least one member in the group who has a research background.
2. Distribute to each learner the case study in **M1-T4-H1. Benefits of using research evidence (1)** describing the role of research in the prevention of HIV/AIDS in Zimbabwe.
3. Invite the groups to read and discuss the case study, then answer the two questions on the handout.
4. Invite each group to present their answers in plenary (make sure groups share new factors and challenges and don't simply repeat what has already been said).

RECOMMENDED ACTIVITIES CONTINUED

M1-T4-A4.

BENEFITS OF USING RESEARCH EVIDENCE (PART 2)

[40–50 minutes]

1. Put learners into pairs and distribute the handout **M1-T4-H2. Benefits of using research evidence (2)**.
2. Ask each pair to come up with at least three questions for each problem.
3. Invite two or three pairs to present their questions in plenary and discuss them with the group.
4. Display slide 9 of **M1ppt. Introduction and concepts** containing four unique values of research evidence. Discuss these with the learners, highlighting any not already covered through the discussion and providing examples and clarification of key terms where necessary.

M1-T4-A5.

CHALLENGES THAT HINDER AND FACTORS THAT ENCOURAGE THE USE OF RESEARCH EVIDENCE IN POLICY MAKING

[50–60 minutes]

1. Acknowledge that there are many factors that can encourage as well as discourage the process of using research evidence in policy making.
2. Post three sheets of flipchart paper on the walls, one for each level (systemic, organizational and individual), and ask each learner to write on two different-coloured post-it notes or pieces of paper:
 - a minimum of three challenges for using research evidence at each level (one point per post-it note); and
 - a minimum of three enabling factors for using evidence at each level (one point per post-it note).
3. Ask learners to stick each post-it note on the flipchart it belongs to and share their ideas.
4. Go through each flipchart (from systemic to individual), summarizing what was said, clustering post-its (challenges and enabling factors could be clustered around different factors e.g. organizational culture), joining these ideas with ideas that people missed, and linking them to each flipchart.
5. Highlight the factors that learners have identified through the challenges and enabling factors they have noted down on post-it notes. Draw on the table in the Read & Reflect section to fill gaps. If there are more challenges than enabling factors, highlight that in the right circumstances they can flip to become enabling factors. Provide an example, such as degree of leadership buy-in (no buy-in to full buy-in).
6. In conclusion, focus in on the individual level and highlight that many of them can be addressed and in turn used to change or at least influence factors at the organizational and, in time, systemic level.

REFLECTION ON ACTION PLANS

[5–10 minutes]



1. Display the slides again, if helpful as a reminder, in annex **M1ppt. Action plans**.
2. Invite learners to reflect on what has been covered in the course so far and write down notes under the key headings – i.e. challenges and ideas to support the use of evidence in policy making and to address the challenges identified.
3. Note that a longer session will be built in at the end of the course for learners to transfer their notes to the formal action plan. There will also be time to review their plans with the trainer and their peers.

RECOMMENDED ACTIVITIES CONTINUED

M1-T4-A7. [OPTIONAL]

EXTERNAL SPEAKER
PRESENTATION ON VALUE OF
RESEARCH

[60–90 minutes]

1. An invited researcher makes a presentation to the group on a piece of research they are doing and why they believe it can be useful for policymakers.
2. In advance of the presentation, inform the learners of the title of the presentation and ask each learner to write down one question they would like answered in the presentation.
3. After the presentation, open the floor to the learners to ask the researcher any of their questions that have been left unanswered.



OPTIONAL VIDEOS

Researchers meet policymakers to discuss GMOs in Kenya: www.scidev.net/sub-saharan-africa/gm/multimedia/embrace-gmos.html

The Multidimensional Poverty Index:
www.youtube.com/watch?t=80&v=yEULKXlOkFw

Can a free bike help girls' education in northern India?: www.youtube.com/watch?v=6nG63lSt_Ek

and follow-up here: www.youtube.com/watch?v=_4bJtCWnL2I

How science can not only predict, but mitigate the effects of, natural disasters: www.youtube.com/watch?v=cDdlaZzgWDo

M1-T4-A8.

WHAT LEARNERS HAVE LEARNT
AND HOW THEY WILL APPLY IT
(THE 'WHAT TABLE')

[5–10 minutes]

1. Ask each learner to make notes in the third and the fourth columns: "What have I learnt", and "How will I apply it?"
2. Tell the learners that they will be invited to share some of their reflections in small groups at the beginning of the following day.

REVIEW OF MODULE 1

[10–15 minutes]

EXIT CARDS



[5–10 minutes]

1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

FURTHER READING

Africa Evidence Network

An online network of people (researchers, NGOs, government) with an interest in producing evidence and using it in policy making:

www.africaevidencenetwork.org

Bridging Research and Policy: Insights from 50 Case Studies

This paper gathers insights from EIPM processes all over the world and includes a useful summary of examples of EIPM at the end: www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/180.pdf

Case Study: Online course promotes the use of knowledge and evidence in policy:

www.inasp.info/en/publications/details/198/

Case Study: Kenyan round tables support cross-sectoral climate-change work:

www.inasp.info/en/publications/details/199/

Case Study: Improving capacity for evidence-informed education policy in the Philippines:

www.inasp.info/en/publications/details/200/

Duncan Green on the **politics of results and evidence**: www.oxfamblogs.org/fp2p/icymi-best-of-this-summer-book-reviews-the-politics-of-evidence

Evidence Based Policy in Development Network (EBPDN)

A global network of people who work in think tanks, NGOs, and policy research institutes from around the world. Free to join:

www.partnerplatform.org/ebpdn

Knowledge into policy: Going beyond

'Context matters' (2016), Politics & Ideas.

www.politicsandideas.org/contextmatters

Knowledge Sector Initiative

Insights on EIPM in Indonesia:

www.ksi-indonesia.org/index.php/publications/2015/08/10/14/diagnostic-studies-on-the-knowledge-sector.html

Louise Shaxson shares insights from her experience working on EIPM with the UK Department for Environment, Food and Rural Affairs: www.alliance4usefulevidence.org/persistence-pays-lessons-from-a-uk-department-on-evidence-informed-policy-making-2

A reading list on EIPM from Research to Action: www.researchtoaction.org/2015/09/building-capacity-around-demand-eipm-resource-list

GLOSSARY

Citizen evidence

knowledge of a place, a culture, people and their challenges, gained through direct experience.

Correlation

the association between two variables such that when one changes, the other changes too. Correlation does not prove causality.

Causality

a causal relationship between two or more factors in which one factor directly explains the other.

Data

information collected to be examined, considered and used to help decision-making.

Evidence-informed policy

'that which has considered a broad range of research evidence; evidence from citizens and other stakeholders; and evidence from practice and policy implementation, as part of a process that considers other factors such as political realities and current public debates' (Newman, Fisher and Shaxson, 2012).

Narratives

a representation of a particular situation or process in such a way as to reflect or conform to an overarching set of aims or values. For example, a coalition carefully constructed narrative about its sensitivity to recession victims (Oxford Dictionaries, 2014).

Policy

'a principle or a course of action adopted by an institution or individual. Policies may either aim to maintain the status quo or bring about change' (United Nations, 2005: 21).

Practice-informed evidence

knowledge gained from experience of implementing policy and practice.

Systematic review

an evaluation and synthesis of the results of the best available research on a specific question. Procedures are explicitly defined in advance, studies included are screened for quality, and the process is formally peer reviewed in order to ensure that the exercise is transparent and can be replicated (The Campbell Collaboration).

Tokenistic

the practice of making only a symbolic effort to do a particular thing, especially by recruiting a small number of people from under-represented groups to give the appearance of sexual or racial equality within a workforce. For example, the use of female supporting characters is mere tokenism (Oxford Dictionaries, 2014).

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MODULE 1

HANDOUTS



REFLECTION ON A POLICY/ DECISION-MAKING PROCESS

Think of a policy/decision-making process you have been involved in or heard of recently and write your answers to the following questions:

1. What steps did the process follow, and in roughly what sequence?
2. What were the strengths of this process? (identify three)
3. What were the weaknesses? (identify three)
4. Which stakeholders were involved?
5. What evidence was used?

ACTION PLAN TEMPLATE¹

1. Participant's profile

Participant's name	
Position	
Division, institution	
Email	
Phone	

2. Team profile

Name	Position	Delegation

3. Describe challenges you face at your workplace which affect your ability to access, assess and communicate evidence to inform decision-making.

1. This template is based on the form used by the Ghana Civil Service Training Centre: www.cstc.gov.gh

4. List specific action points which you will take over the next four months to support the use of evidence in policy making and/or address the challenges above.

Action points	Indicators

5. Outline your action plan implementation schedule using the Gantt chart.

Week Activities	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

WHAT IS EVIDENCE?

Decide whether these statements are true or false, and explain why, using real-life examples from your own experiences/observations as much as possible.

Statement A

Evidence is essential stuff. It is objective. It answers questions and helps us to solve problems. It helps us to predict. It puts decisions on the right track. Evidence makes sure that decisions are safer. Evidence can turn guesswork into certainty. Evidence tells us what works. It explains why people think and act as they do. It alerts us to likely consequences and implications. It shows us where and when to intervene. We have robust methods for using evidence. Evidence is information; information is abundant. It is the most reliable basis for making policy. Evidence is the most reliable basis for improving practice. There has never been a better time for getting hold of evidence. (Levitt, 2013)

Statement B

Evidence is dangerous stuff. Used unscrupulously it can do harm. It is easily misinterpreted and misrepresented. It is often inconclusive. Evidence is often insufficient or unsuitable for our needs. We will act on it even when it is inadequate or contradictory or biased. We ignore or explain away evidence that doesn't suit our prejudices. We may not spot where evidence has flaws. It can conceal rather than reveal, confuse rather than clarify. It can exaggerate or understate what is actually known. It can confuse us. Evidence can be manipulated politically. We can be persuaded to accept false correlations. A forceful advocate can distort what the evidence actually says. (Levitt, 2013)

CASE STUDIES

Read the definition of evidence-informed policy below and the five case studies in the handout, then discuss and answer the two questions

‘Evidence-informed policy is that which has considered a broad range of research evidence; evidence from citizens and other stakeholders; and evidence from practice and policy implementation, as part of a process that considers other factors such as political realities and current public debates. We do not see it as a policy that is exclusively based on research, or as being based on one set of findings. We accept that in some cases, research evidence may be considered and rejected; if rejection was based on understanding of the insights that the research offered then we would still consider any resulting policy to be evidence-informed.’

(Newman, Fisher and Shaxson, 2012)

1. Which of the following case studies are examples of evidence-informed policy, and which are not?
2. What are the specific reasons for your answer?

A. CASE STUDY: BANNING OF IMPORTED ‘GENETICALLY MODIFIED CHICKENS’ IN ZIMBABWE

The media and other influencers have shaped a policy discourse regarding Genetically Modified Foods particularly imported chickens. This has resulted in government banning importation of these chickens into Zimbabwe because they are deemed unhealthy. The media and other public opinion leaders have influenced policymakers and the public to believe that imported chickens from countries like Brazil and South Africa are genetically modified when the fact is that they have only benefitted from a natural process of selecting and crossbreeding birds with the most desirable qualities.

The scientific fact that is missed by the media and these other policy influencers is that these chickens are not genetically modified per se but are fed from genetically modified feed. Since more than 80 percent of the corn and soybeans grown in these countries where the chickens are imported from are raised from genetically modified seeds, almost all corn and soybean used in conventional livestock and poultry production is genetically modified. Values and interest to protect local markets influenced the discourse and the policy. Also, the debate has also used the values of natural foods like the free range fowls as opposed to broilers in order to drive the policy in that direction.

(ZeipNET, 2014)

B. CASE STUDY: THE NATIONAL AGEING POLICY IN GHANA

In 2012 the Government of Ghana's Ministry of Health (MoH) requested support from the World Health Organization (WHO) to revise and improve its existing National Ageing Policy. Priority health problems were identified through the use of epidemiologic evidence, review of policy documents, site visits, and interviews with key informants. The Ghana Health Service (GHS) with support from the WHO then organised a policy dialogue to discuss the problems identified. Participants included representatives from key ministries, the GHS, the WHO, teaching hospitals, professional bodies and HelpAge Ghana. A group of policymakers, experts, and the WHO then developed policy briefs for each problem with recommended actions to take. These were presented at a strategic planning retreat of the GHS and key policy recommendations on ageing were incorporated into the five-year plan.

(Araujo de Carvalho, 2015)

C. CASE STUDY: HEALTH CARE REFORMS IN TANZANIA

In Tanzania, the use of operational demographic surveillance data was crucial to ongoing efforts to improve health care delivery. District Health Management Teams in two districts worked with the Tanzania Essential Health Interventions Project to increase the efficiency of district health systems by ensuring that funds were allocated more proportionately for major local causes of death and disability. Following the introduction of evidence-based planning, child mortality in the two districts fell by over 40% in 5 years, and death rates for men and women between 15 and 60 years old declined by 18%.

(Newman, 2014)

D. CASE STUDY: SCHOOLS FOR NOMADS IN SOMALILAND

In Somaliland, agencies did not seek out and use relevant research on groups suffering a crisis. This failure to read ethnography in the immediate post-conflict phase on Somaliland led agencies to build schools in pastoral nomadic communities that would normally move continuously with their herds to water sources. These schools created a focal point for settlement, but by bringing people together they rendered them more vulnerable to attack, and provided a target for grenades.

(Laws et al., 2013)

E. CASE STUDY: THE SOUTH AFRICAN CHILDREN'S BUDGET

In South Africa, the Budget Information Service and the Youth Development Trust completed a study analysing government spending on children. This study:

- monitored the link between government policies and expenditures intended to benefit children;
- tracked government spending on children in key socio-economic sectors;
- provided recommendations for improved socio-economic delivery to children; and
- suggested indicators to monitor shifts in spending to children.

It also provided key technical analysis and support on government spending on children in South Africa to the government and civil society. The information in the study has been used by civil society organisations in their policy campaigns, and by the government in its 1997 South African Government Report to the United Nations Committee on the Rights of the Child.

(Laws et al., 2013)

TYPES OF EVIDENCE: SCENARIOS – PARLIAMENT

1. Read and discuss the short scenario assigned to you.
2. Refer to the table and complete columns 2–4 for each type of evidence listed in column 1.

Parliament

Group 1

You have been asked by the Parliament Portfolio Committee on health to prepare a detailed background paper on how best the government can immediately respond to emerging health demands following the first reported genuine case of Ebola.

Group 2

During a question and answer session in Parliament, one MP questions the impact of the Indigenization Act on foreign direct investment, and an information request to this effect ends up on your desk as a researcher.

Group 3

You work in the Research Department of the Parliament of Zimbabwe and have been requested to prepare a report on social welfare reforms in Zimbabwe since 1980.

Group 4

The Clerk of Parliament wants information on the effects of parliamentary reforms in sub-Saharan Africa and has asked for reference information to enable him to prepare his presentation for a forthcoming conference.

Type of evidence	Provide a concrete and context-specific example of the type of evidence that you would use	Why have you chosen it?	How do you access this evidence?
Data (e.g. statistics)			
Research (e.g. academic papers, government papers, formal evaluations etc.)			
Practice-informed evidence (e.g. your own experience or other people's experience, day-to-day M&E)			
Citizen evidence (surveys, interviews with citizens)			

TYPES OF EVIDENCE: SCENARIOS – CIVIL SERVANTS

1. Read and discuss the short scenario assigned to your group.
2. Refer to the table and complete columns 2–4 for each type of evidence listed in column 1.

Civil Servants

Group 1

You have been asked by the head of your department to prepare a detailed background paper on how best the government can immediately respond to emerging health demands following the first reported genuine case of Ebola.

Group 2

During a question and answer session, one civil servant questions the impact of the Ghana Poverty Reduction Strategy on employment policies, and an information request to this effect ends up on your desk as a researcher.

Group 3

You work in a research department and have been requested to prepare a report on agricultural reforms in Ghana since the 1980s.

Group 4

Your supervisor wants information on the effects of civil service reform in sub-Saharan Africa and has asked for reference information to enable him to prepare his presentation for a forthcoming conference.

Type of evidence	Provide a concrete and context-specific example of the type of evidence that you would use	Why have you chosen it?	How do you access this evidence?
Data (e.g. statistics)			
Research (e.g. academic papers, government papers, formal evaluations etc.)			
Practice-informed evidence (e.g. your own experience or other people's experience, day-to-day M&E)			
Citizen evidence (surveys, interviews with citizens)			

BENEFITS OF USING RESEARCH EVIDENCE (1)

Read the case study, then discuss the two questions below:

1. What were the key factors that contributed towards the Zimbabwean government's adoption in 2009 of male circumcision as one of its HIV prevention strategies?
2. Identify one social, economic or development challenge facing your country, region or province etc. and discuss why you would use research evidence to address this challenge, and what kind.

CASE STUDY: HIV/AIDS PREVENTION – MALE CIRCUMCISION IN ZIMBABWE

Sub-Saharan Africa remains the part of the world most affected by HIV and AIDS. Zimbabwe was hit hard in the early years of the pandemic, but has made progress in reducing AIDS-related deaths and the HIV prevalence rate from as high as 24% in 1999 to the current 13% of the total population. Randomised control trials carried out in South Africa, Uganda, Kenya and Zimbabwe showed that medical male circumcision has a protective effect of 60% against HIV transmission. The University of Zimbabwe Research Support Centre which was involved in the research evidence, lobbied the Ministry of Health and Child Care. The Ministry examined the evidence and accepted it. The Zimbabwean Government in 2009 then adopted male circumcision as one of the comprehensive HIV prevention strategies. The programme, through the Ministry of Health and Child Care and its partners, has in 2013 successfully circumcised 90,000 men. Various strategies to ensure safe male circumcision services have been employed, which include training doctors, nurses and supporting team members to offer this much needed service.

(Montano and Danuta, 2014)

BENEFITS OF USING RESEARCH EVIDENCE (2)

Discuss and write down at least three questions for each problem that you would ask a researcher, to ensure you have a clear understanding of the issue.

1. There are high rates of HIV transmission in your country.

Your questions:

2. Exports of tobacco have declined in the last decade.

Your questions:

3. Young people are struggling to get into the workforce once they finish university.

Your questions:

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MODULE 2

**A COMPLETE
SEARCH STRATEGY**



This trainer manual forms part of the VakaYiko Evidence-Informed Policy Making Toolkit. The Toolkit aims to support skills development and practical processes for evidence-informed policy making in public institutions in developing countries. It consists of a training course, a series of practical handbooks, and a range of informational and promotional materials.

This is the second in a four-part series of guidance notes for trainers. The complete Toolkit can be found on the INASP website here:

www.inasp.info/vytoolkit



Duration	Approx. 2 days [700–950 minutes]
Aim	To strengthen learners' existing search techniques by exposing them to new sources of information and ways of searching.
Rationale	In this module, learners are engaged in group activities and encouraged to select and apply effective search strategies in their workplace. Therefore, the learners will be able to develop a robust search strategy specific to their policy area which allows them to find the information they need.
Learning objectives	<p>By the end of the module, learners will be able to:</p> <ul style="list-style-type: none"> • differentiate between elements of a search strategy and critically reflect on the way they are currently searching; • use a search strategy systematically when looking for information in the workplace; • identify, contrast and compare various types of literature; • select the literature and evidence products that are relevant to carrying out various work-related tasks; • expand their knowledge of online and open-access sources; • use the right terms and key words when searching, and apply this to their own research.
Key learning points	<ul style="list-style-type: none"> • A search strategy is important because it provides a systematic way to navigate large amounts of information. Skilful use of a search strategy will save you time and ensure that the information you gather presents a balanced picture of an issue. • Understanding the request for information, quickly and strategically familiarizing yourself with the topic and using your network are important initial stages of a search strategy. These can save you time later on and help you find the most relevant information quickly. • There are many different types of literature and evidence products. Understanding the differences between them will help you make an informed decision about which are the most useful for your search. • Your search is likely to make use of both internal and external sources of information. Having a good knowledge of the range of external sources of information available to you online can help you choose appropriate sources for the products and types of evidence you are looking for. • Searching effectively using Boolean operators and filtering techniques will save you time and ensure you find the most relevant evidence products for your search.
Establish links	<ul style="list-style-type: none"> • In Module 1 we talked about the importance of using different types of evidence, not just relying on one type. This module builds on this by showing learners where and how to find different types of evidence. • Needs Assessment and 'What Table' – they have often asked specifically for new sources of information and searching online.
Resources	<ul style="list-style-type: none"> • Projector and laptop for PowerPoint • Flipchart paper and different-coloured marker pens • Flipchart holders • Sticking tape • Small cards (exit cards) and post-it notes • INASP country fact sheet and/or webpage

TOPIC 1 p.59	INTRODUCING THE SEARCH STRATEGY ACTIVITIES:	[110–130 MINS]
	M2-T1-A1 Steps of a search strategy [50–60 mins]	
	M2-T1-A1 [Alternative] Steps of your search strategy [60–70 mins]	
TOPIC 2 p.62	UNDERSTAND THE REQUEST FOR INFORMATION AND FAMILIARIZE YOURSELF WITH THE TOPIC ACTIVITIES:	[210–290 MINS]
	M2-T2-A1 Clarity of information requests [10–15 mins]	
	M2-T2-A2 Gaining a general understanding of a topic [15–25 mins]	
	M2-T2-A3 What is the request? [30–40 mins]	
	M2-T2-A4 [Optional] Criteria for information requests [20–30 mins]	
	M2-T2-A5 Building a contextual understanding of a topic [85–120 mins]	
	M2-T2-A6 Mapping your network [50–60 mins]	
	HANDOUTS:	
	M2-T2-H1 What is the request?	
	M2-T2-H2 Putting your issue in context	
	M2-T2-H3 Putting your issue in context (table)	
	M2-T2-H4 Using new sources (table)	
TOPIC 3 p.69	CHOOSE THE RIGHT TYPES OF LITERATURE ACTIVITIES:	[135–170 MINS]
	M2-T3-A1 Making sense of the terms [30–40 mins]	
	M2-T3-A2 Hands on different types of literature [60–70 mins]	
	M2-T3-A3 Use of evidence products at the workplace [45–60 mins]	
	HANDOUTS:	
	M2-T3-H1 Terms and definitions	
	M2-T3-H2 What evidence products?	
	M2-T2-H4 Using new sources of information (table)	
TOPIC 4 p.73	CHOOSE YOUR SOURCES OF EVIDENCE ACTIVITIES:	[150–220 MINS]
	M2-T4-A1 What are my sources of evidence? [40–60 mins]	
	M2-T4-A2 [Optional] External speaker presentation on sources of evidence [60–90 mins]	
	M2-T4-A3 Exploring online sources [50–70 mins]	
	HANDOUTS:	
	M2-T4-H1 Sources of evidence	
	M2-T2-H4 Using new sources of information (table)	
TOPIC 5 p.80	SEARCH EFFECTIVELY ONLINE ACTIVITIES:	[95–130 MINS]
	M2-T5-A1 Initial search on work-related topics [5–10 mins]	
	M2-T5-A2 Using Boolean operators [50–70 mins]	
	M2-T5-A3 Review of what has been found [40–50 mins]	
	HANDOUTS:	
	M2-T2-H4 Using new sources of information (table)	

Action plan and review activities (Trainer to build in)

- **Reflection on action plans** (to be carried out at flashpoints suggested throughout the course) [5–10 mins]
- **Exit cards** (to be carried out at the end of each day) [5–10 mins]
- **Review of Module 1**
(To be carried out at the end of the Module 1) [10–15 mins]

Further reading

For more information about using open-access resources and what is available to you in your country:

www.inasp.info/en/training-resources/e-resources/access-support/series-help-documents-access-and-use-online-research-literature

INASP (2016). Online Sources of Evidence for Policy Researchers in Africa:

www.inasp.info/uploads/filer_public/c7/77/c777cc83-e909-4a58-8691-d7997ed67c64/online_sources_of_evidence_for_policy_researchers_in_africa.pdf

'Availability Does Not Equal Access', Anne Powell on the Scholarly Kitchen Blog:

<http://scholarlykitchen.sspnet.org/2015/05/21/guest-post-inasps-anne-powell-on-availability-does-not-equal-access>

Sample diagram of the peer review system of Elsevier (one of the world's leading academic publishers):

www.elsevier.com/reviewers/what-is-peer-review

Evidence Gap Maps from 3ie:

www.3ieimpact.org/evaluation/evidence-gap-maps

TOPIC 1

INTRODUCING THE SEARCH STRATEGY

MODULE 2 LEARNING OBJECTIVES RELEVANT TO TOPIC 1

By the end of this topic learners will be able to:

- Differentiate between elements of a search strategy and critically reflect on the way they are currently searching

READ & REFLECT



Information is all around us – from social media announcements on your phone, to emails you read at work or television you watch at home. The world of research is no different, and open access is helping to make more and more empirical evidence freely available. There is an enormous amount of high-quality evidence accessible for free on the internet on policy-relevant issues in developing contexts, and this is growing all the time.

In addition to government sources, donors, regional bodies, multilateral organizations, consultancies, think tanks, NGOs and university research centres are all constantly producing information aimed at informing policy.

A good search strategy will help you to find the information you really need, quickly and efficiently. Search strategies follow key steps, and anyone can improve their search strategy by understanding and implementing these steps. Given that we all operate in an imperfect world with time and other constraints, it is even more important to follow a systematic process. Following a series of simple steps should enable you to develop policies and make decisions that are informed by impartial, objective and robust searches of the evidence available.

Developing a search strategy is an iterative process: one attempt will rarely produce the final strategy. Strategies are usually built up from a series of test searches and discussions of the results of those searches among peers and colleagues. In the modules that follow, we'll explore each of the steps in detail.

WHY HAVE A SEARCH STRATEGY?

- Avoids re-inventing the wheel by enabling you to see what is already out there
- Reduces your personal bias by following a standard procedure, rather than relying solely on what you know
- Saves you time by providing a clear plan
- Helps you source information in a responsible and transparent way
- Builds a clear contextual framework to ensure relevancy and avoid missing major factors

FIGURE 1
STEPS OF A SEARCH STRATEGY



Source: DFID, 2014.



KEY LEARNING POINT

A search strategy is important because it provides a systematic way to navigate large amounts of information. Skilful use of a search strategy will save you time and ensure that the information you gather presents a balanced and comprehensive picture of an issue.



REFLECTION POINT

What kind of search strategy do you currently use?

Is there anything you are missing out, or anything additional that you do?

RECOMMENDED ACTIVITIES

PREPARATION



- Write learning objectives for the module on a flipchart and leave displayed throughout the module so that it can be referred to at the start of each topic.
- Prepare and print out the six different steps of the search strategy so that there is one set per group for activity **M2-T1-A1**. Cut the steps up so that they are ready to be ordered by the groups.

M2-T1-A1.

STEPS OF A SEARCH STRATEGY

[50–60 minutes]

1. Organize the learners into groups of three or four and distribute six cards to each group (each card with one step of the search strategy on it).
2. Ask learners to work together to put the steps in order, sticking the cards onto a flipchart to form a diagram of a search strategy.
3. Invite learners to use marker pens to add red stars at the 'blocking points' – i.e. points during the process at which they may experience delays and/or difficulties.
4. Once they have completed the task, ask each group to present their strategy and 'blocking points' to the wider group. Allow time for discussion.
5. Distribute a handout with the search strategy diagram from Read & Reflect (or use the diagram on slide 4 in annex **M2ppt. Introduction and concepts**) and allow time for discussion about: a) how/whether the learners follow these steps in their workplace; and b) any additional steps the learners carry out, considering their own experiences of undertaking searches. Explain that the headings in this diagram will be used as a framework to explore the different stages of a search strategy in more depth throughout Module 2.

M2-T1-A1. [ALTERNATIVE]

STEPS OF YOUR SEARCH STRATEGY

[60–70 minutes]

1. If learners are very familiar with the different steps of a search strategy, an alternative to the activity above is to ask each group to build its own search strategy, writing each step on one post-it note and sequencing them on flipchart paper.
2. Ask the groups to use marker pens to add red stars at the 'blocking points' – i.e. points during the process at which they may experience delays and/or difficulties.
3. Once they have completed the task, ask each group to present its strategy and 'blocking points' to the wider group.
4. Allow time for discussion. If necessary, prompting questions could include: a) identifying areas of commonality and points of difference; and b) deciding on their favourite search strategy and their reasons why.
5. Distribute a handout with the search strategy diagram from Read & Reflect (or use the diagram on slide 4 in annex **M2ppt. Introduction and concepts**) and allow time for learners to individually reflect on any areas of commonality or points of difference. Explain that the headings in this diagram will be used as a framework to explore the different stages of a search strategy in more depth throughout Module 2.

TOPIC 2

UNDERSTAND THE REQUEST FOR EVIDENCE AND FAMILIARIZE YOURSELF WITH THE TOPIC

MODULE 2 LEARNING OBJECTIVES RELEVANT TO TOPIC 2

By the end of this topic learners will be able to:

- Use a search strategy systematically when looking for information in the workplace

READ & REFLECT



In this topic we cover the first three steps of the search strategy: understanding the request, familiarizing yourself with the topic, and expanding your networks.



- What exactly are you being asked to find out, and why?
- What format should the information be in?
- What is the timeframe?

Before finding any evidence, you need to make sure you understand the request and its purpose. You need to be very clear about what questions you are answering, otherwise, the issue becomes too broad (or too narrow), and it is difficult to solve the problem or gather meaningful information about it. There is a big difference between answering a 'what' question and answering a 'why' or 'how' question, and it is best to be clear about this as early as possible to avoid wasting time and energy later on.

It is also important to understand the purpose of the request. Are you being asked to provide a simple snapshot of a topic (e.g. what is the prevalence of X issue), or are you also being asked to gather evidence about why the issue exists and/or how it could be addressed? And what format should this information be in – is it a speech or an internal document? Is the purpose to provide background information, to persuade someone of a specific course of action or to provide various options for intervention?

Different questions may require different types of information. Without a clear and specific question (or set of questions) that you are trying to answer, it will be impossible to decide what sources and types of information you need, what is relevant and what is not.

2

Familiarize
yourself with
the topic

- What are the key concepts and terminology?
- What are the latest debates and key issues related to this topic?
- Who are the most significant stakeholders?

If the issue you are being asked about is new to you, then you will need to start by familiarizing yourself with it. Searching the internet for your topic and reading newspapers, articles or blogs about it will provide a quick general understanding. Online media can:

- help you understand the language associated with a topic and identify useful search terms to use later;
- provide you with references which might be useful sources; and
- give you an idea of what the public opinion is related to a topic and where key debates lie.

It is important to remember, however, that such sources may not always be reliable or scientifically accurate, so you should use them for general familiarization purposes only and not as your main information source.

“Perhaps you are not sure that research is the right approach to the problem you hope to address. Research is not the only way of investigating a question, and it may not be the most useful one. At times, a much simpler investigation is all that is required, more like what a journalist might do to gain a greater understanding of an issue...”

Laws, Harper, Jones and Marcus, 2013: 17.



ORGANIC VS. NON-ORGANIC FOOD

‘Many people are debating whether organic food is more nutritious than nonorganic food. The discussion is interesting because common sense would seem to suggest that organic is better. Many might think that using less pesticides and chemical fertilizers would be better for people’s health. But organic food is a lot more expensive, so getting the right information is important for helping consumers decide whether they want to invest more in this type of food.

To become familiar with the topic, consumers might read an article published on Harvard’s Health Blog (Watson, 2012). This will help them to understand the basics: what does organic mean, what does conventional mean and what are the different pesticides used by both. It also provides information about the huge market around organic food and had a first snapshot of why people buy organic.

Although this article was published in a source that consumers might trust (Harvard’s blog), they might want more information. Consumers might seek out an expert – such as a nutritionist – who could point them towards some useful evidence products: A systematic review (Smith-Spangler and Brandeau, 2012), a guide (Environmental Working Group, 2014) on what is the safest food and a few articles in newspapers (Martin and Severson, 2008) that discussed the topic.’

PUTTING YOUR ISSUE IN CONTEXT

To help guide your familiarization process, you can think about trying to build a contextual framework around your issue to understand how it fits into regional and international frameworks and discussions.

This helps you develop a broad understanding of the topic and become familiar with the key stakeholders, language and debates, ensuring that you do not miss any crucial parts of the puzzle. It can also lead you to more specific evidence products that you can consult later on in your search.

FIGURE 1
PUTTING YOUR ISSUE IN CONTEXT

Level	Example: gender equality in Ghana
National overview	<p>Ghana's Fourth Progress Report on the Implementation of the African and Beijing Platform of Action and Review Report for Beijing +20 (Ministry of Gender, Children & Social Protection, June 2014): www.unwomen.org/~media/headquarters/attachments/sections/csw/59/national_reviews/ghana_review_beijing20.ashx</p> <p>Data from national sources: Ghana Statistical Services Gender Page: www.statsghana.gov.gh/gender.html</p> <p>Data from international sources: World Bank Ghana Gender Page: http://datatopics.worldbank.org/gender/country/ghana</p>
Regional framework	<p>Media article on progress towards an ECOWAS Gender Policy: http://news.ecowas.int/presseshow.php?nb=014&lang=en&annee=2015</p>
Continental framework	<p>African Union Gender Policy: www.un.org/en/africa/osaa/pdf/au/gender_policy_2009.pdf</p>
Global frameworks	<p>UN Women: www.unwomen.org (see also MDG reports, UNDP Human Development indicators etc.)</p>
Donors who have funded the issue	<p>Germany is one of the biggest donors on gender. See the GIZ Gender Knowledge Platform: www.gender-in-german-development.net See also the African Development Bank gender pages: www.afdb.org/en/topics-and-sectors/sectors/gender</p>
NGOs working on the issue	<p>Gender Studies & Human Rights Documentation Centre: www.gendercentreghana.org Forum for African Women Educationalists (FAWE): www.fawe.org</p>
Research institutes working on the issue	<p>Centre for Gender Studies and Advocacy, University of Ghana: http://197.255.124.90/cegensa CODESRIA Gender Institute: www.codesria.org/spip.php?rubrique25 UN Research Institute for Social Development (UN-RISD) research theme on gender: www.unrisd.org/80256B3C005BB128/(httpThemes)/F440B51FFF83692880257914005D7881?OpenDocument</p>
Media and blogs	<p>Ghanaian Minister for Gender, Children & Social Protection receives award for advocacy in gender equality: www.allafrica.com/stories/201503251840.html 'Everybody Should be a Feminist' by Nana Darkoa Sekyiamah: www.bloggingghana.org/everybody-should-be-a-feminist-by-nana-darkoa-sekyiamah</p>
Conferences and events	<p>The 2nd Ghana Feminist Forum: a Personal Perspective: www.africanfeministforum.com/the-2nd-ghana-feminist-forum-a-personal-perspective Global Commission on the Status of Women: www.unwomen.org/en/csw</p>

3

Use your network

- Who can you contact to point you towards the best sources, outline key concepts and update you on the latest debates?
- Can you get connected to any of the key stakeholders?

Once you have an idea of what the topic is about and you are familiar with its language, you can approach your trusted network to ask for more information. A good network consists of many different kinds of experts, including academic experts (e.g. a professor), information experts (e.g. librarians) and practical or technical experts (e.g. someone working in implementation). Networks can be virtual as well as in-person.

- Do you have internal or external contacts that are usually well informed and you contact often to request information?
- Do you have any personal relationships that help you find reliable information or provide trustworthy advice?
- Do you need to consider expanding your network in this topic, perhaps approaching a new organization or contact?

Networks can help point out what the best sources of evidence are on the issue, who else is discussing it, and what the current situation is regarding the issue. Building and using a strong network will enable you to make use of existing expertise in your country from universities, think tanks, civil society groups and multilateral organizations. You should keep using your network throughout the search process.



REFLECTION POINT

Think of an occasion when you have had to quickly deepen your understanding of a specific topic. What were the first steps you took? Why?



KEY LEARNING POINT

Understanding the request for information, quickly and strategically familiarizing yourself with the topic, and using your network are important initial stages of a search strategy. These can save you time later on and help you find the most relevant information quickly.

RECOMMENDED ACTIVITIES

PREPARATION



- Write or print out four or five different examples of information requests which vary in degrees of clarity (one per card) for activity **M2-T2-A1**. Examples could include: a) prepare a brochure for investors; b) write a proposal for the development of agro-based clusters in your country; c) write a brief about cultural diversity and human rights in Africa, Caribbean, Pacific and EU countries; d) indicate the number of child-headed households in your country and a description of what programmes are supporting them.
- Set up the links, projector and screen for activity **M2-T2-A2**.
- Print out handout **M2-T2-H1. What is the request?** so that there are enough to hand out one per group for activity **M2-T2-A3**.
- Print out for each learner the handouts in **M2-T2-H2. Putting your issue in context** and **M2-T2-H3. Putting your issue in context (table)** for activity **M2-T2-A5**.
- Prepare your own network map, as an example to illustrate the task for activity **M2-T2-A6**.
- Print out the table in **M2-T2-H4. Using new sources of information (table)** for each learner for activity **M2-T2-A6**.
- Write up questions for review activity **Exit cards** on a flipchart and label exit cards (three per learner).

M2-T2-A1.

CLARITY OF INFORMATION REQUESTS

[10–15 minutes]

1. Place four or five pre-prepared information requests on the wall around the training room.
2. Ask learners to quickly move around the room and read all the requests.
3. Once they have read them, ask each learner to choose and stand next to the request they think has the clearest purpose.
4. Ask one or two learners from each selection to explain the reasons for their choice and how the request could be improved.
5. For any requests that have not been discussed, ask learners to give their opinion on the clarity of purpose and what improvements could be made, if any.

M2-T2-A2.

GAINING A GENERAL UNDERSTANDING OF A TOPIC

[15–25 minutes]

1. Explain to learners that you are trying to gain a general understanding of the benefits of organic vs. non-organic food.
2. Ask the learners to consider the following two questions: a) why do you think I chose the sources mentioned to gain an initial understanding of the topic?; and b) where could I deepen my understanding of the topic?
3. Read out the contents of the box 'Organic vs. non-organic food', describing the experience of familiarizing oneself with the topic. Using a projector and screen, click on the different links as you mention them so that the learners can see the sources. Do not project the actual contents of the box on the screen.
4. Invite learners to share their answers and consider what implications this has for when they carry out their own search strategies.

M2-T2-A3.

WHAT IS THE REQUEST?

[30–40 minutes]

1. Organize learners into groups of four and introduce the task (see handout in **M2-T2-H1. What is the request?**).
2. Hand out the scenarios (one handout per group) and ask each group to be ready to share their answers with the wider group
3. Invite the groups who selected Case A to briefly share their answers, encouraging the groups to compare and contrast their answers and then do the same for the groups that selected Case B.

M2-T2-A4. [OPTIONAL]**CRITERIA FOR
INFORMATION
REQUESTS****[20–30 minutes]**

1. Organize learners into groups of four and ask them to agree and note down shared criteria for information requests that would help make their work more effective (i.e. clarity, measurability, context, timeframe, geographical area, target population etc.). Give a maximum of two examples if learners are unclear as to what is being asked of them.
2. Ask learners to count themselves from one to four, and group themselves against their assigned number.
3. In the newly formed groups, ask learners to share their criteria with the rest of the group and in turn take notes on what is shared.
4. Finally, ask learners to return to their original groups of four, share the ideas they gathered from the other learners and produce one final checklist for display in the training room.

M2-T2-A5.**BUILDING A CONTEXTUAL
UNDERSTANDING OF A TOPIC****[85–120 minutes]**

1. Introduce the activity by first explaining that to help guide the familiarization process around a particular issue, you can build a contextual framework around that issue to understand how it fits into wider frameworks and discussions. Elicit from learners four or five suggestions for the different levels of frameworks and discussions to consider when building the context around a particular issue. Provide an example if necessary. [5–10 mins]
2. In pairs, distribute a handout with **M2-T2-H2. Putting your issue in context**. Ask the pairs to read it and reflect on the following questions: a) what do you think is the rationale for choosing these levels?; and b) are there any levels which you think are missing? Debrief quickly asking two or three pairs for their suggestions. [10–15 mins]
3. Ask each learner to write down the work-related subject of the policy document they brought to the workshop OR a work-related topic they are working on, and write it down clearly on a piece of paper (plus their initials). [5 mins]
4. Ask the learners to move around the room and find a partner with a topic that is relatively unfamiliar to them (or at least not the same as the topic s/he wrote down). Ask them to swap their pieces of paper with their partner. [5–10 mins]
5. Distribute the blank table in handout **M2-T2-H3. Putting your issue in context (table)** to each learner. Ask them to work alone, using a computer and the examples in the handout distributed earlier, and select one or two online sources for at least five of the nine different levels in the table. Ask learners to focus on online sources which will help develop a broad understanding of their partner's topic and familiarity with the key stakeholders, language and debates. [30–40 mins]
6. Ask each learner to sit with their partner and swap the table they have completed for their partner's topic. Ask them to take it in turns to:
 - show the online sources they identified for the five levels selected;
 - provide reasons for choosing these sources; and
 - provide feedback on whether the information gathered by their partner is sufficient to gain a broad picture of the topic and whether there are any key missing sources. [15–20 mins]
7. In plenary, ask three or four pairs to share just one or two things they found particularly useful and/or one or two things that were a surprise or new to them. [15–20 mins]
8. In case of internet connection failure, as **an alternative to steps 5–7**:
 - A. In groups of four ask learners to share the online sources they have accessed in their workplaces and group them according to the levels introduced in the handout **M2-T2-H2. Putting your issue in context**. Ask the learners to also discuss their reasons for accessing these sources and where learners feel there are existing gaps in information that they would like to fill. [20–30 mins]
 - B. In plenary, ask each group to share one or two examples of sources they identified, the reasons they access them, at what level they placed them and one information gap that was identified. [40–50 mins]

RECOMMENDED ACTIVITIES CONTINUED

M2-T2-A6.

MAPPING YOUR NETWORK

[50–60 minutes]

1. Explain that once you have an idea of what the topic is about and you are familiar with its language, you can approach your trusted network to ask for more information.
2. Explain that a useful exercise for learners is to map out their current network of contacts, thinking about the range of experts they know, whether the relationships are virtual or in-person, internal or external to their institution and whether personal or professional.
3. Ask each learner to complete a network map putting her/himself in the centre and drawing lines radiating outwards to the different contacts they have in their current network. Ask learners to label the contacts either by organization or, if a specific person, by profession and area of expertise/knowledge. The shorter the line, the closer the relationship; and the thicker the line, the better informed the contact is. The trainer can use their own network map as an example to illustrate this, if necessary.
4. Tell learners that they have about 15 minutes to complete their maps and then will be asked to share what they are comfortable with in a pair or group of three.
5. Put learners in pairs or groups of three to briefly talk through their network maps. Then ask them to discuss the following questions:
 - Which of your contacts do you often request information from, and why?
 - Which of your contacts help you find reliable information or provide trustworthy advice?
 - Looking at your partner's network map, what ideas do you have for making their network stronger or expanding it to help them access a wider range of sources of evidence?
6. In plenary, invite three or four pairs to share one answer to each of the three questions above. Ask learners at what steps they should use their network when carrying out a search strategy.
7. Hand out handout **M2-T2-H4. Using new sources of information (table)** to each learner and invite them to write down their ideas in column three of the table. Inform the learners that they will be working on this table again throughout this module.

EXIT CARDS



[5–10 minutes]

1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

TOPIC 3

CHOOSE THE RIGHT TYPES OF LITERATURE

MODULE 2 LEARNING OBJECTIVES RELEVANT TO TOPIC 3

By the end of this topic learners will be able to:

- Identify, contrast and compare various types of literature
- Select the literature and evidence products that are relevant to carrying out various work-related tasks

READ & REFLECT



- Which types of literature do you need to answer your question?
- Primary or secondary?
- Published literature or grey literature?
- Single study or body of evidence?

Your initial exploration will lead you to different types of literature. To build a balanced picture of your issue, you'll need to understand which are most suitable for your topic. You should never rely solely on one source or type, and will need to ensure that you select from a range of different types and sources.

There are many different ways to categorize types of literature, and the categorizations often overlap.

Understanding the different types and products available will help you make an informed decision about what is most useful for your search. Here are some of the key distinctions it is important to understand.

IN THIS COURSE WE DISTINGUISH BETWEEN:

Types of evidence (as seen in Module 1) – the type of evidence used in the literature (e.g. data, citizen evidence, practice-informed evidence and research). Note that each type of literature makes use of at least one type of evidence, usually several.

Sources of evidence – where you go to find the evidence (e.g. World Bank website, library).

Types of literature – the category of literature you find (e.g. peer review, grey literature). Note that many sources of evidence contain many different literature types, and that each of these literature types may use more than one type of evidence.

Evidence product – the physical product you are handling (e.g. journal article, report, book, speech, video interview etc.). Each type of literature will produce many different evidence products. We'll look at these in more detail in Module 3.

PRIMARY OR SECONDARY?

- **Primary literature** consists of original documents that contain raw material or first-hand information. This includes *evidence products* such as results of experiments and statistical data, as well as responses from surveys, feedback forms and interviews.
- **Secondary literature** contains information that is written about a primary source, such as interpretations of and discussions about existing primary sources. This includes *evidence products* such as journal articles that evaluate someone else's research, literature reviews or newspaper articles (DFID, 2014).

PUBLISHED LITERATURE OR GREY LITERATURE?

- **Published literature** refers to that which is disseminated via the commercial publishing industry. This includes *evidence products* such as books and journal articles but would not include documents which are published informally (e.g. a report published by an NGO on its website).
- **Grey literature** is a very broad category which refers to documents produced by government, academics, businesses, NGOs and other institutions in formats not controlled by the commercial publishing industry. This includes *evidence products* such as working papers, government papers, programme reports, conference proceedings, media articles and unpublished academic papers such as dissertations.

IS IT PEER REVIEWED?

- **Peer review** is what characterizes formal academic research. Academics usually publish their work in primary research papers/articles. If an article is peer reviewed, it means it has been read, checked and authenticated (reviewed) by independent, third-party academics (peers) as part of a formal quality assurance procedure. There are several different kinds of peer review such as single blind, double blind and open review. Peer review is usually used only for one *evidence product*, academic articles, which are often collated into scholarly journals. While academic books also go through a rigorous editing and review process, this is not the same as a peer review process.

SINGLE STUDY OR BODY OF EVIDENCE?

- A **single study** is a type of *evidence product* that presents scientific results from one piece of research. No matter how rigorous or scientific individual studies are, they are unlikely to provide a sufficient evidence base on which to make cost-effective decisions.
- A **body of evidence** is an *evidence product* that collates and reviews multiple studies. As a practitioner, this can help you address policy or organizational problems by producing a reliable knowledge base by accumulating findings from a range of studies (DFID, 2014). Systematic reviews and literature reviews are examples of bodies of evidence.



KEY LEARNING POINT

There are many different types of literature and evidence products. Understanding the differences between them will help you make an informed decision about which are the most useful for your search.



REFLECTION POINT

Which types of literature do you use most often? Why?

RECOMMENDED ACTIVITIES

PREPARATION



- Print out annex **M2-T3-H1. Terms and definitions** on card so that there is one set per group for activity **M2-T3-A1**. Cut the terms and definitions up so that they are ready to be matched by the groups.
- Prepare two flipcharts and split each into quarters with a marker pen for activity **M2-T3-A1**. Write one information request at the top of each quarter, as listed below:
 - What is the current prevalence of HIV among young men and women in your country?
 - Has HIV prevalence among young people in your country been rising or falling since the current government came to power?
 - Why is HIV prevalence rising or falling in a particular region of your country?
 - Why is HIV prevalence lower in one city than in another?
 - How is HIV being spread among young people in your country?
 - How do young people in your country feel about the HIV-related services currently available to them?
 - What are the most effective ways (best practices) to stop the spread of HIV among young people?
- Print out the different samples of literature types for activity **M2-T3-A2**. Ensure that the documents are printed in their complete form, can be clearly read, that there are three or four different samples of literature types per group and that there is a good spread of different literature types for each group.
- Print out for each learner handout **M2-T3-H2. Which evidence products?** for activity **M2-T3-A3**.
- Retrieve flipchart paper with questions for review activity **Exit cards** and label exit cards (three per learner).

M2-T3-A1.

MAKING SENSE OF THE TERMS

[30–40 minutes]

1. Organize learners into groups of three or four people and hand out one set of pre-prepared terms and definition cards per group in annex **M2-T3-H1. Terms and definitions**.
2. Ask groups to match quickly the terms with the definitions and display them on their work tables.
3. Invite the groups to go through the terms and definitions in plenary. Encourage learners to brainstorm additional characteristics of each literature and evidence term and think of some correct and incorrect examples (e.g. an example other people may mistake as being applicable to the term but is in fact not).
4. Pin up on the wall or on flipchart holders the two pre-prepared flipcharts with the questions on the spread of HIV among young people. Then ask each group to consider which different literature types and evidence products would be useful in answering each of the seven questions on the flipcharts.
5. Explain that once they have agreed the literature types and evidence products useful for each question, they should write them down – one per post-it note/piece of card – and be ready to place them under the relevant question on the flipcharts.
6. Ask one or two group representatives to come up to the flipcharts and place their post-it notes/pieces of card under each question and cluster them into groups (on a rolling basis).
7. Once learners have finished, in plenary review all the clustered post-it notes and check with the learners any contributions that are unclear and/or link any contributions to the terms explored earlier – for example, if a learner has written down 'UNICEF Report', ask which of the terms (likely to be more than one) would it be appropriate to class it under (e.g. grey literature). Review and acknowledge any contributions related to research evidence, ask learners for which of the questions they think research evidence would be particularly helpful and invite them to explain their reasons why.

RECOMMENDED ACTIVITIES CONTINUED

M2-T3-A2.

HANDS ON DIFFERENT TYPES OF LITERATURE

[60–70 minutes]

1. Ask learners to work in groups of three or four, and distribute three or four different samples of literature types per group. Note the preparation section for this activity.
2. Invite the groups to read three types of literature and answer the following questions:
 - What is the source and author?
 - What type of literature is it, and what are the key characteristics that identify it as this type?
 - What types of evidence (data, citizen evidence etc.) does it use?
3. Invite the groups to discuss in plenary and comment/add to other groups' contributions.

M2-T3-A3.

USE OF EVIDENCE PRODUCTS AT WORKPLACE

[45–60 minutes]

1. Organize learners into groups of four and hand out one **M2-T3-H2. Which evidence products?** worksheet per learner.
2. Invite the groups to choose and discuss two types of evidence products (one internal and one external) they usually use in their workplace. Ask each learner to fill out the table and be ready to share their answers.
3. Ask learners to count themselves from one to four or five (each group should have no more than five learners, so adapt the counting as necessary) and group themselves against their assigned number.
4. In the newly formed groups, ask learners to share the contents of their tables with the rest of the group and in turn take notes on what is shared.
5. Ask learners to return to their original groups and share what they learnt in the other groups.
6. In plenary, invite three or four groups to share a maximum of two new things they learnt from the other groups.
7. Ask learners to now refer back to **M2-T2-H4. Using new sources of information (table)**, and invite them to write down their ideas in column two of the table.

EXIT CARDS

[5–10 minutes]



1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

TOPIC 4

CHOOSE YOUR SOURCES OF EVIDENCE

MODULE 2 LEARNING OBJECTIVES RELEVANT TO TOPIC 4

By the end of this topic learners will be able to:

- Select and draw on a wide range of sources of information
- Expand their knowledge of online and open-access sources

READ & REFLECT



- What is the best way to find the literature you need?
- Can you find what you need online?
- Do you have access to a library?

WHERE IS THE EXISTING EVIDENCE BASE?

Once you have familiarized yourself with your topic, you should have a sense of the main sources of information about that topic. One of the most important questions you will need to ask yourself is whether the information you need is available from internal (government) sources or whether you need to consult external sources such as civil society organizations, multilateral bodies and research institutes.

Internal sources are public-sector agencies which generate information and data (e.g. statistics agencies, ministries and departments)

External sources are those outside the public sector which both analyse data emanating from the public sector and produce their own information and research (e.g. universities, think tanks, civil society organizations, international organizations)

You may decide that internal sources are best placed to provide some types of evidence, whereas external sources are better positioned to provide other types. Internal and external sources of evidence are not mutually exclusive, and in many cases you may decide that you need to use both to find a balanced spread of types of evidence (data, citizen evidence, practice-informed evidence and research).

“The state’s ability to generate information is unmatched by any other evidence source. In all public sector agencies and levels there is a level of circulating information impossible to be generated by any external actors. However, the state generally uses much less than what it produces. Its huge production capacity is not matched by the capacity of its personnel to use it in decision making.”

Echt, 2015.

FIGURE 3
SOURCES OF EVIDENCE



WHEN YOU THINK ABOUT THE SOURCES, THINK ABOUT:

People

- There is probably someone in your network who helps you with certain issues or topics.
- Do you have internal or external contacts that are usually well informed and you contact often to request information?
- Do you have any personal relationships that help you find reliable information or that you trust their advice?
- Does your department have good (or bad) relationships with universities, policy research institutes or think tanks?

Experience

- Do you usually rely on your experience and previous practice and use it as a source?
- What about the experience of others?

internet and databases

- Do you have a 'go-to' place to get information on the web?
- Which website do you consult most often?

Other government departments

- Which other government departments are useful to get information?
- Does somebody in your institution or other institutions carry out programme evaluations?

USE YOUR NATIONAL LIBRARY CONSORTIUM



INASP works with publishers to enable affordable and sustainable access to online resources for developing countries in Africa, Asia and Latin America.

National library consortia select appropriate resources for their research needs and budgets. In a process mediated by INASP, publishers then provide discounted (sometimes free) access through their own platforms. Resources are offered on a country-level licence to eligible institutions, including:

- universities;
- not-for-profit research institutions and centres;
- teaching hospitals;
- professional training schools and institutes;
- NGOs and CSOs;
- parliamentary libraries; and
- government ministries, offices and agencies.

To gain access, these institutions need to be members of the consortium. Membership of the consortium provides on average a 97% discount to thousands of subscription-based resources, including academic journals and the World Bank, IMF and OECD online libraries.

Each national consortium makes an annual selection from the resources available to them – this is based on the needs of their research community, collection development decisions and the budget available. If your institution has a library, you can also directly access free databases such as JSTOR's African Access Initiative or the Research4Life package. If your institution doesn't have a library, you can still benefit from the Consortium. You don't have to be a librarian to register your institution as a member of your national library consortium.

To find out what is available in your country and/or to join your national library consortium, find your country page on the INASP website: www.inasp.info/en/network/country.

ONLINE SOURCES OF EVIDENCE

Many policymakers find that evidence from external sources is difficult to access. But over the past two decades, the amount of information freely available on policy-relevant issues in low- and middle-income countries has vastly increased.

This is in large part thanks to the open access movement, formalized in the early 2000s through a series of statements made at global summits, and expanded over the next several years across the global research community.

In parallel, organizations such as INASP have been negotiating directly with publishers to win waived or reduced subscription fees on behalf of library consortia in Africa, Asia and Latin America, resulting in thousands of journals becoming freely available to researchers across the globe.

Along with the increase in access, the rapid growth of the monitoring and evaluation sector led to an explosion in the number of evaluations commissioned on development projects at all levels, and the consequent rapid growth of a rich body of practice-informed evidence available on the internet. Meanwhile, think tanks and research centres around the world run large-scale international research programmes on issues such as poverty, trade, gender, infrastructure, climate change, health and education. Hundreds of donors, from multilateral bodies to private foundations, produce a steady stream of reports, as do civil society organizations, consultancies and monitoring bodies. A commitment to transparency and recognition of the need for information sharing within the aid world has led to even greater efforts to make all these documents freely available online. All major multilateral organizations, donors and international NGOs now have e-libraries or publications sections on their websites.

Contrary to popular belief, and thanks to the efforts of many organizations around the world, much progress has been made in access to information for use in research in developing countries. Now one of the main barriers is a lack of awareness of what is available and how to use it. Many people are unaware of the plethora of different initiatives which exist, or of how to navigate all the different databases and websites available.

Here are some examples of online sources of evidence to get you started. A more extensive list can be found in the **Online sources of evidence for policy researchers in Africa** booklet.

A more extensive list can be found in the **Online sources of evidence for policy researchers in Africa** booklet.

www.inasp.info/vytoolkit

EXTERNAL SOURCES OF EVIDENCE ONLINE

ACADEMIC PEER-REVIEWED LITERATURE

African Journals Online (AJOL) is the world's largest online collection of African-published, peer-reviewed scholarly journals:
www.ajol.info/index.php/index/browse/alpha/index.

The Campbell Collaboration Library of Systematic Reviews is the peer-reviewed online monograph series of systematic reviews prepared under the editorial control of the Campbell Collaboration. Campbell systematic reviews follow structured guidelines and standards for summarizing the international research evidence on the effects of interventions in crime and justice, education, international development and social welfare: www.campbellcollaboration.org/lib.

The International Initiative for Impact Evaluation (3ie) funds impact evaluations and systematic reviews to generate evidence on what works in public policy in developing countries. See its systematic review database (international development, broad topics): www.3ieimpact.org/evidence/systematic-reviews.

Open Science Directory contains about 13, 000 scientific journals and aims to enhance access to open-access/special-access collections by creating direct links to the journals: www.opensciencedirectory.net.

Research 4 Life is a partnership of the WHO, FAO, UNEP, WIPO, Cornell and Yale Universities and the International Association of Scientific, Technical & Medical Publishers. African government offices are eligible for free registration. Research4Life consists of the following organizations:

- **AGORA: Access to Global Online Research in Agriculture**, run by FAO, covers more than 3000 journals in agriculture and related biological, environmental and social sciences:
www.fao.org/agora/en.
- **ARDI Research for Development & Innovation** currently provides access to around 20,000 journals, books and reference works from 17 publishers for 117 developing countries and territories:
www.wipo.int/ardi/en.
- **HINARI Access to Research in Health**, set up by WHO together with major publishers, is one of the world's largest collections of biomedical and health literature. Up to 13,000 journals (in 30 different languages), 29,000 e-books and 70 other information resources are now available to health institutions in more than 100 countries:
www.who.int/hinari/en.
- **OARE Research in Environment** provides access to up to 5710 peer-reviewed journals and 1119 online books, as well as other information resources:
www.unep.org/oare.

Social Science Research Network includes almost 60,000 social science articles for searching, with almost 40,000 available to download. It includes focused networks in specific disciplines, including politics and economics:
www.ssrn.com/en.

If you want to find something on the internet, you go to a search engine, as they contain **everything** that is available online, right? Wrong! Search engines only cover a **proportion** of what is available online; a lot of information is **hidden** or **invisible** to them. For example, some databases of research literature or library catalogues will not appear in search engine results, especially if they require a subscription or password to get access.

GREY LITERATURE

African Economic Research Consortium produces economic policy research. Most publications are policy-relevant research papers, policy briefs and working papers: www.aercafrica.org.

Africa Portal Library is an online library collection of over 4,000 books, journals and digital documents related to African policy issues. The entire repository is open access: www.africaportal.org/library.

Eldis provides free access to relevant, up-to-date and diverse research on international development issues. Content comes from over 7,500 development partners. It includes useful 'Research Guides' to key topics as well as links to related literature: www.eldis.org.

Evidence on Demand is an international development information hub, providing access to quality-assured resources relating to climate and the environment, infrastructure and livelihoods. It includes peer-reviewed Topic Guides containing an overview of the subject, a list of current best reads, plus pointers to where you can get further information: www.evidenceondemand.info/homepage.aspx.

Research Papers in Economics is a decentralized bibliographic database of working papers, journal articles, books, book chapters and software components. It contains over 200,000 fully searchable economics articles, with about half of the listed articles available to download: www.repec.org.

UN Research Institute for Social Development is an autonomous research institute within the UN system that undertakes multidisciplinary research and policy analysis on the social dimensions of contemporary development issues. Publications and multimedia resources are available on the website: www.unrisd.org.

World Bank Open Knowledge Repository is the World Bank's official open-access repository for its research outputs and knowledge products: <https://openknowledge.worldbank.org>.



KEY LEARNING POINT

Your search is likely to make use of both internal and external sources of information. Having a good knowledge of the range of external sources of information available to you online can help you choose appropriate sources to find the products and types of evidence you are looking for.

RECOMMENDED ACTIVITIES

PREPARATION



- Print out for each learner the table in handout **M2-T4-H1. Sources of evidence** for activity **M2-T4-A1**.
- For *optional* activity **M2-T4-A2**, invite a representative of the relevant national library consortium (consult the INASP website to find their details) to give a presentation to the group based on content in the Read & Reflect section. It is important that the speaker is **prepared carefully in advance** so that they uses the same terminology and draws on content relevant to this topic.
- Identify two or three different search engines that most learners are not familiar with, which can be demonstrated to learners in activity **M2-T4-A3**.
- Prepare screenshots for your two or three examples of search engines, showing how to search for a topic in the different databases and the range of information that comes up, in case of internet failure for activity **M2-T4-A3**.
- Print out for each learner the **Online sources of evidence for policy researchers in Africa** booklet for activity **M2-T4-A3**.
- Retrieve flipchart paper with questions for review activity **Exit cards** and label exit cards (three per learner)

M2-T4-A1.

WHAT ARE MY SOURCES OF EVIDENCE?

[40–60 minutes]

1. Hand out the table in **M2-T4-H1. Sources of evidence** and briefly explain the task, providing one example. Put up PPT slide 5 in **M2ppt. Introduction and concepts** as an aide to learners.
2. Ask each learner to complete the table and then find three or four other people with whom to discuss the contents of their tables.
3. Invite each group to provide feedback on their tables, writing their contributions on a flipchart or on a computer using a projector.
4. Elicit in plenary: a) what the most common and least popular sources listed are, and why; and b) what the most common challenges cited are, and how they are being or not being addressed.

M2-T4-A2. [OPTIONAL]



EXTERNAL SPEAKER PRESENTATION ON SOURCES OF EVIDENCE

[60–90 minutes]

1. An invited representative of the relevant national library consortium makes a presentation to the group based on Read & Reflect.
2. In advance of the presentation, inform the learners of the title of the presentation and ask each learner to write down one question they would like answered in the presentation.
3. After the presentation, open the floor to the learners to ask the representative any of their questions that have been left unanswered.

M2-T4-A3.

EXPLORING ONLINE SOURCES

[50–70 minutes]

1. Demonstrate to learners two or three examples of using different search engines (identified in advance). Choose ones you think/know the learners are not familiar with. In case of internet failure, use screenshots to demonstrate searching for a topic and the range of information that comes up.
2. Organize the learners into groups of three or four and distribute the **Online sources of evidence for policy researchers in Africa** booklet (one per learner). Ask each group to investigate one of the unfamiliar databases from the list and report back to the others on how it works (through demonstration and verbal explanation).
3. To conclude, ask learners to refer back to **M2-T2-H4. Using new sources of information (table)** and invite them to write down their ideas in column one of the table.

REFLECTION ON ACTION PLANS



[5–10 mins]

1. Display the slides again, if helpful as a reminder, in annex **M1ppt. Action plans**.
2. Invite learners to reflect on what has been covered in the course so far and write down notes under the key headings – i.e. challenges and ideas to support the use of evidence in policy making and to address the challenges identified.
3. Note that a longer session will be built in at the end of the course for learners to transfer their notes into the formal action plan. There will also be time to review their plans with the trainer and their peers.

EXIT CARDS



[5–10 minutes]

1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

TOPIC 5

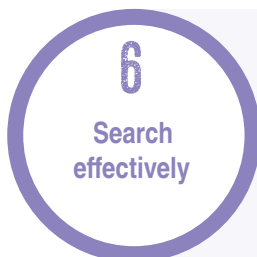
SEARCH EFFECTIVELY ONLINE

MODULE 2 LEARNING OBJECTIVES RELEVANT TO TOPIC 5

By the end of this topic learners will be able to:

- Use the right terms and key words when searching, and apply this to their own research
- Select the literature and evidence products that are relevant to carrying out various work-related tasks

READ & REFLECT



- How can you search quickly and effectively to find what you need?
- Which key words and search terms should you use?
- How can you filter your results into a manageable list?

Now that you have found your databases, you need to know how to search them efficiently for relevant information. The first time you try searching for your topic, you might not find any results. Usually this doesn't mean there is no evidence on your topic, but that you may not be using the right search terms. Or alternatively, you might find far too many results. Using careful search terms will help you target your search towards a more manageable number of relevant pieces of evidence.

STEP 1: KEY WORDS

Write a list of words or phrases that capture related terms to the topic. Let's take HIV as an example.

- **Categories:** words which describe a group of which your topic is a member – for example, 'health', 'disease', 'virus' etc.
- **Subtopics:** words which subdivide the topic – for example, 'sexual education', 'treatment', 'prevention' etc.
- **Synonyms:** words with the same (or similar) meaning – for example, 'human immunodeficiency virus', 'AIDS' etc.
- **Related terms:** words related to the topic – for example, 'immune system', 'infection', 'sexually transmitted disease' etc.

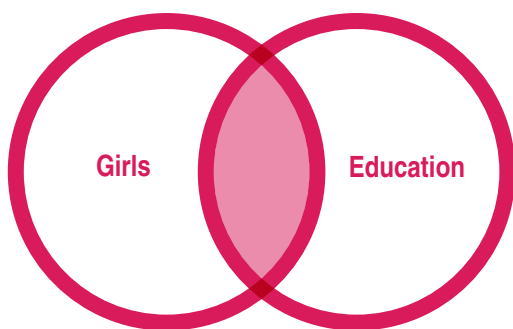
You can narrow the search by providing additional details – for example, affected population, youth, children, adults.

STEP 2: SEARCH TERMS

- Boolean operators are AND, OR and NOT.
- They are used to combine search terms when doing research.
- You can also use brackets to combine Boolean searches.
- You can use inverted commas to find phrases.
- Finally, you can use truncation to find related words.

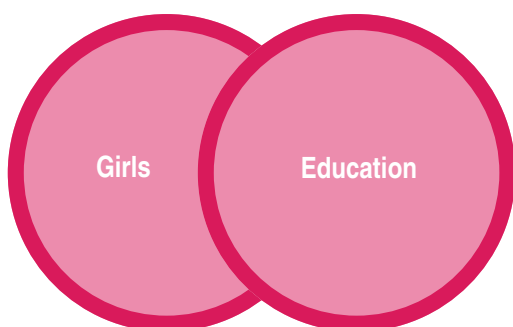
SEARCH REFINEMENTS

Venn diagram of AND



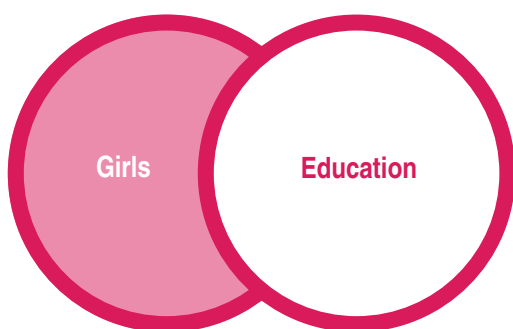
- Using the operator AND between keywords will limit the results of a search because all the keywords have to be present for an item to be retrieved.
- If you enter two words without a Boolean operator, most search engines assume you mean AND.
- For example, if you search for 'Trade commodities', the results you get will be the same as if you search for 'trade AND commodities'.

Venn diagram of OR



- Using the OR operator results in either or both of your search terms appearing in your results.
- Using the OR operator will result in a larger number of retrieved items and, therefore, expands the search.
- Typically, search engines automatically use OR to combine all terms in a search string.

Venn diagram of NOT



- NOT helps to limit your search because it takes out a category of undesirable results.
- NOT thus narrows or limits a search by excluding the keyword immediately following it.
- In some search engines (including Google) you use a minus sign before a word, instead of NOT.
- For example, to search for information on Iraq NOT war in Google you would use 'Iraq -war'.

Phrases

- If you want to search for a specific phrase you can use inverted commas: "..."
- For example, to search for 'cell phone' you can use "cell phone".

Truncation

- Use * to 'truncate' or shorten a word so that you find related words.
- For example, 'hosp*' would find hospital, hospitals, hospitalization, hospitality etc.
- Be aware that truncating too early in a word may find irrelevant terms.

An example of a template you can use:

Operator	Description	Example
	uses a keyword or idea	Education
	uses a phrase, question or string of ideas	Girls Education
AND	includes both words	Girls AND Education
OR	includes either word	Girls OR Education AND Girls Education
NOT	excludes this word	Equality NOT Education AND Girls Education
*	wildcard, includes plurals and close matches	Gender*
" "	looks for whole phrases together by inserting quotations	"impacts of gender equality on girls education"
use lower case letters	upper case can limit your search	"girls education"
title	to find the word in the title of the page	title: girls

DFID, 2014.

There are three other factors you can use to refine your search:

- **Dates:** is the evidence you are looking for from a specific time period?
- **Geography:** are you looking for evidence from a specific country or region?
- **Synonyms:** have you considered other terms that have similar meaning to the ones you are using (e.g. gender-based violence, domestic violence, sexual violence, violence against women)?

STEP 3: SEARCH

The next step is to open the relevant databases in an internet browser. Enter the words or phrases in the search bar and/or the Boolean operators and click the appropriate icon to begin the search. Note that many databases are different, though most will include some kind of guidance on how to use their search function. It's a good idea to read this before you start.

STEP 4: FILTER

Even after refining your search using Boolean operators, you are likely to have more information than you have time to read through. Therefore, before you critically appraise your search results in detail, it is important that you can 'screen' them to ensure that the evidence you scrutinize fully is only the most relevant.

You can use categories to organize your results by their relevance (you can organize piles of 'in', 'out', 'maybe') and ask yourself the following questions to filter: "What country is the study from?" "When was the study done?"

Don't just review by title; look through the abstract of a study to make sure that the studies you gathered inform the question you are trying to answer.

TIPS FOR REVIEWING

- Be clear about the requirements you set during your search. This will help you to be ruthless in discarding things.
- Try to avoid having to read things in full. Look at the title, abstract and/or summary, keywords and descriptors.
- If you are evaluating a large body of material, learn to skim read and/or scan information to get a quick indication of what it is about.

STEP 5: REVIEW WHAT YOU HAVE FOUND

The following questions might help you make sure you haven't missed important evidence:

1. Do you have any systematic reviews? Start by using them, since they cover a broad body of evidence.
2. Make sure you have scanned grey literature products that have a problem-solving approach, such as policy briefs, white papers or working papers.
3. Have you included studies written in your region or country?
4. Have you included a mix of internal and external evidence?
5. Do you have a range of products covering the four evidence areas (data, citizen evidence, research evidence, practice-informed evidence)?
6. Have you included perspectives from key stakeholders and current debates you identified at the familiarization stage of your search?

Once you have finished gathering evidence, you can consult your trusted network again or the experts on the topics, to make sure you have not left anything important out of your search.

WHO IS LEFT OUT?

A comprehensive search strategy should include evidence that explores the experience of the population as a whole, not just the majority. Evidence which looks only at the majority population can conceal widespread poverty and exclusion of marginalised groups.

For example, in Kenya, the national average for teacher/pupil ratio at pre-primary level is 1:28. However, disaggregated data shows that this ratio is 1:104 for people from the ethnic minority Turkana group. In this case, research evidence could help identify correlation and causation, providing you with greater insight as to why this ratio disparity exists. Citizen evidence derived from Turkana people could provide first-hand insights into their experience of this disparity, and practice-informed evidence could inform you about how previous policies have attempted to (or failed to) address this issue.

Without solid evidence, the main barriers that minorities and indigenous peoples confront can easily remain unaddressed. Acknowledging the special realities of minorities and indigenous peoples through evidence that reveals issues of discrimination and inequality can help to ensure that policies are responsive to their needs.

Adapted from Minority Rights Group, 2015.



KEY LEARNING POINT

Searching effectively using Boolean operators and filtering techniques will save you time and ensure you find the most relevant evidence products for your search.



REFLECTION POINT

How do you currently search for information online? Which strategies have you found useful and less useful for finding relevant information online? In what ways can you improve your future searches?

RECOMMENDED ACTIVITIES

PREPARATION



- IT skills are required for Topic 5, as it is likely that the trainer will need to provide some learners with additional IT support when using databases and searching online.
- Prepare a PPT presentation for activity **M2-T5-A2** based on steps 1–2 in the Read & Reflect section.
- Prepare a flipchart or PPT slide with the six questions listed under **Step 5. Review what you have found** from the Read & Reflect section.
- Retrieve flipchart paper with questions for review activity **Exit cards** and label exit cards (three per learner)

M2-T5-A1.

INITIAL SEARCH ON WORK-RELATED TOPICS

[5–10 minutes]

1. Ask learners to refer back to the subject of their policy document or the work-related topic they have been working on during the workshop so far.
2. Invite each learner, using a computer, to have an initial search on one of the online databases for pieces of evidence/documents related to their topic, then ask them to note down how many results they get in their notebooks for safekeeping.

M2-T5-A2.

USING BOOLEAN OPERATORS

[50–70 minutes]

1. Give a short presentation on using Boolean operators, using a pre-prepared PPT based on the Read & Reflect section.
2. Invite each learner, using a computer, to now compile a list of relevant pieces of evidence/documents on their work-related topic, from at least one peer review/academic site and one grey literature site, using all the Boolean operators described in the presentation.
3. Ask them to write down the different pieces of evidence/documents and any new sources in columns two and one, respectively, of their table in annex **M2-T2-H4. Using new sources of information (table)**. Display the Boolean operators table on slide 6 in **M2ppt. Introduction and concepts** as an *aide-mémoire* for learners during the activity.
4. Invite the learners, in pairs, to share their thoughts and discuss the following questions: a) how did the Boolean operators facilitate my search?; b) how did they make the search effective?; and c) what challenges did I encounter?
5. In plenary, ask for feedback on the challenges that were encountered and elicit potential ways of addressing those challenges from the wider group.

M2-T5-A3.**REVIEW OF WHAT HAS BEEN FOUND****[40–50 minutes]**

1. Ask learners to return to their tables with the notes they made on the pieces of evidence/documents and sources for their work-related topic.
2. Invite learners to review their lists of pieces of evidence/documents and sources using the six questions listed under **Step 5. Review what you have found** from the Read & Reflect section. Ask them to add to and/or change their notes where necessary. Tell learners that they need to keep their notes on the pieces of evidence/documents and sources, as they will need these notes for later activities in Module 4.
3. Invite learners, in plenary, to share the additions or changes they made to their notes, and why, following the review.

REVIEW OF MODULE 2**[10–15 mins]****EXIT CARDS****[5–10 minutes]**

1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

FURTHER READING

Identifying and using online research literature: a guide for policymakers (INASP):
www.inasp.info/en/training-resources/e-resources/access-support/identifying-and-using-online-research-literature-guide-policy-makers

‘Availability Does Not Equal Access’, Anne Powell on the Scholarly Kitchen Blog:
<http://scholarlykitchen.sspnet.org/2015/05/21/guest-post-inasps-anne-powell-on-availability-does-not-equal-access>

Sample diagram of the peer review system of Elsevier (one of the world’s leading academic publishers):
www.elsevier.com/reviewers/what-is-peer-review

Leaflet on information about INASP’s provision to access to research information:
www.inasp.info/en/publications/details/209

Evidence Gap Maps from 3ie:
www.3ieimpact.org/evaluation/evidence-gap-maps

COURSES

Search Skills for Researchers

course downloadable at: www.inasp.info/en/training-resources/courses/127

Accessing Information in Developing Countries

course downloadable at: www.inasp.info/en/training-resources/courses/16

Online health information,

access and use course: www.inasp.info/en/training-resources/courses/66

Science on the internet Tutorial:

www.inasp.info/en/training-resources/courses/84

GLOSSARY

Body of evidence

an evidence product that collates and reviews multiple studies. Systematic reviews and literature reviews are examples of bodies of evidence.

Boolean operators

used to connect and define the relationship between your search terms. When searching electronic databases, you can use Boolean operators to either narrow or broaden your record sets. The three Boolean operators are AND, OR and NOT.

Grey literature

documents produced by government, academics, businesses, NGOs and other institutions in formats not controlled by the commercial publishing industry. This includes evidence products such as working papers, government papers, programme reports, conference proceedings, media articles and unpublished academic papers such as dissertations.

Impact evaluation

an assessment of the changes that can be attributed to a particular intervention, such as a project, programme or policy – both the intended ones and, ideally, the unintended ones.

Literature review

an evaluative report which includes the current knowledge about a topic, including substantive findings, as well as theoretical and methodological contributions.

Open access

unrestricted online access to scholarly research. No registration is needed (INASP).

Peer review

what characterizes formal academic research. Academics usually publish their work in primary research papers/articles. If an article is peer reviewed, it means it has been read, checked and authenticated (reviewed) by independent, third-party academics (peers) as part of a formal quality assurance procedure. There are several different kinds of peer review such as single blind, double blind and open review. Peer review is usually used only for one evidence product, academic articles, which are often collated into scholarly journals. While academic books also go through a rigorous editing and review process, this is not the same as a peer review process.

Published literature

that which is disseminated via the commercial publishing industry. This includes evidence products such as books and journal articles but would not include documents which are published informally (e.g. a report published by an NGO on its website).

Policy brief

a short paper (usually three to four pages) that covers a specific issue and is aimed at policymakers. Typical briefs have four main functions: to explain and convey the importance of an issue or outline a problem; to present solutions and policy recommendations; to provide evidence to support the reasoning behind those recommendations; and to point the reader to additional resources on the issue.

Primary literature

original documents that contain raw material or first-hand information. This includes evidence products such as results of experiments and statistical data, as well as responses from surveys, feedback forms and interviews.

Qualitative methods and data

the nature of answers (evidence) in terms of their verbal, written or other descriptive natures. It asks question such as 'who?', 'which?', 'what?', 'when?', 'where?' and 'why?' Qualitative research belongs to a family of approaches concerned with collecting in-depth data about human social experiences and contexts (Laws, Harper, Jones and Marcus, 2013).

Quantitative methods and data

asks questions such as 'how many?', 'to what extent?' or 'how much?' using counting and other computation. Quantitative research is concerned with the collection of data in the form of various measures and indices, and its description and analysis by means of statistical methods (Laws, Harper, Jones and Marcus, 2013).

Secondary literature

information that is written about a primary source, such as interpretations of and discussions about existing primary sources. This includes evidence products such as journal articles that evaluate someone else's research, literature reviews or newspaper articles (DFID, 2014).

Single study

a type of evidence product that presents scientific results from one piece of research.

Systematic review

the use of transparent procedures to find, evaluate and synthesize the results of relevant research. Procedures are explicitly defined in advance, to ensure that the exercise is transparent and can be replicated. This practice is also designed to minimize bias. Studies included in a review are screened for quality, so that the findings of a large number of studies can be combined. Peer review is a key part of the process; qualified independent researchers control the author's methods and results (The Campbell Collaboration).

Truncation

the ability in a search to enter the first part of a keyword, insert a symbol (usually *) and accept any variant spellings or word endings, from the occurrence of the symbol forward (UC Berkeley, 2012).

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Smith-Spangler, C. and Brandeau, M.L. (2012). *Are Organic Foods Safer or Healthier Than Conventional Alternatives?* Philadelphia, PA: American College of Physicians.

The Campbell Collaboration (n.d.). What is a systematic review? Retrieved 30 May 2016 from: www.campbellcollaboration.org/what_is_a_systematic_review.

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Watson, S. (2012). Organic food no more nutritious than conventionally grown food, *Harvard Health Blog*, 5 September 2012. Retrieved 30 May 2016 from: www.health.harvard.edu/blog/organic-food-no-more-nutritious-than-conventionally-grown-food-201209055264.

MODULE 2

HANDOUTS



WHAT IS THE REQUEST?

Choose the scenario that best resembles your job task:

CASE A:

You work in a government institution and have been given a few hours to prepare a brief report about a problem, options to address it and implementation considerations. All that you have been told is that the issue is around road safety.

CASE B:

You have been asked by your head of department to write a short report about public housing in the capital to help him/her prepare for an international conference. You have a couple of days to get the report ready.

Read the scenario and answer the questions.

Questions:

1. What would you do to ensure you have a clear understanding of this request?
2. What type of evidence will you need? Give examples of each type:
 - a. Data:
 - b. Research evidence:
 - c. Citizen evidence:
 - d. Practice-informed evidence:

PUTTING YOUR ISSUE IN CONTEXT

Level	Example: gender equality in Ghana
National overview	Ghana's Fourth Progress Report on the Implementation of the African and Beijing Platform of Action and Review Report for Beijing +20 (Ministry of Gender): www.unwomen.org/~media/headquarters/attachments/sections/csw/59/national_reviews/ghana_review_beijing20.ashx
Data	National sources: Ghana Statistical Services Gender Page: www.statsghana.gov.gh/gender.html International sources: World Bank Ghana Gender Page: http://datatopics.worldbank.org/gender/country/ghana
Regional framework	Media article on progress towards an ECOWAS Gender Policy: http://elombah.com/index.php/reports/29377-ecowas-gender-ministers-adopt-draft-on-gender-equality
Continental framework	African Union Gender Policy: http://wgd.au.int/en/content/african-union-gender-policy
Global frameworks	UN Women: www.unwomen.org
Donors who have funded the issue	Germany is one of the biggest donors on gender. See the GIZ Gender Knowledge Platform: www.gender-in-german-development.net See also the African Development Bank's gender pages: www.afdb.org/en/topics-and-sectors/sectors/gender
NGOs working on the issue	Gender Studies & Human Rights Documentation Centre: www.gendercentreghana.org Forum for African Women Educationalists (FAWE): www.fawe.org
Think tanks researching the issue	African Gender Institute: www.agi.ac.za UN Research Institute for Social Development (UN-RISD) gender research: www.unrisd.org/80256B3C005BB128/(httpThemes)/F440B51FFF83692880257914005D7881?OpenDocument
Media and blogs	Ghanaian Minister for Gender, Children & Social Protection receives award for advocacy in gender equality: www.allafrica.com/stories/201503251840.html 'Everybody Should be a Feminist' by Nana Darkoa Sekyiamah: www.bloggingghana.org/everybody-should-be-a-feminist-by-nana-darkoa-sekyiamah
Conferences and events	The 2nd Ghana Feminist Forum: a Personal Perspective: www.africanfeministforum.com/the-2nd-ghana-feminist-forum-a-personal-perspective Global Commission on the Status of Women: www.unwomen.org/en/csw

PUTTING YOUR ISSUE IN CONTEXT (TABLE)

Level	
National overview	
Regional framework	
Continental framework	
Global frameworks	
Donors who have funded the issue	
NGOs working on the issue	
Research institutes working on the issue	
Media and blogs	
Conferences and events	
Conferences and events	

USING NEW SOURCES OF INFORMATION, TYPES OF EVIDENCE AND CONTACTS IN MY WORK

	1. Sources	2. Types of evidence	3. Network (contacts to talk to)
A. What I consulted (before the workshop)			

	1. Sources	2. Types of evidence	3. Network (contacts to talk to)
B. Others I can consult (with a specific example)			

	1. Sources	2. Types of evidence	3. Network (contacts to talk to)
C. How I will go about searching for those listed in B)			

TERMS AND DEFINITIONS

Systematic review	Uses transparent procedures to find, evaluate and synthesize the results of relevant research. Procedures are explicitly defined in advance, to ensure that the exercise is transparent and can be replicated. This practice is also designed to minimize bias. Studies included are screened for quality, so that the findings of a large number of studies can be combined. Peer review is a key part of the process; qualified independent researchers control the author's methods and results.
Impact evaluation	Assesses changes in the well-being of individuals, households, communities or firms that can be attributed to a particular project, programme or policy. The central question is what would have happened to those receiving the intervention if they had not in fact received the programme.
Policy brief	A short paper (usually three to four pages) that covers a specific issue and is aimed at policymakers. Typically has four main functions: to explain and convey the importance of an issue or outline a problem; to present solutions and policy recommendations; to provide evidence to support the reasoning behind those recommendations; and to point the reader to additional resources on the issue.
Annotated bibliography	A list of citations to books, articles and documents. Each citation is followed by a brief (usually about 150 words) descriptive and evaluative paragraph. The purpose of this is to inform the reader of the relevance, accuracy and quality of the sources cited.
Primary literature	Original documents that contain raw material or first-hand information. This includes evidence products such as results of experiments and statistical data, as well as responses from surveys, feedback forms and interviews.
Secondary literature	Contains information that is written about a primary source, such as interpretations of and discussions about existing primary sources. This includes evidence products such as journal articles that evaluate someone else's research, literature reviews or newspaper articles.
Peer review	A process of reading, checking and authenticating research papers by independent, third-party academics as part of a formal quality assurance procedure.
Grey literature	Documents produced by government, academics, businesses, NGOs and other institutions in formats not controlled by the commercial publishing industry.
Qualitative data	Describes the nature of answers (evidence) in terms of their verbal, written or other descriptive natures. Asks 'who, which, what, when, where and why'. This type of research belongs to a family of approaches concerned with collecting in-depth data about human social experiences and contexts.
Quantitative data	Asks 'how many', 'to what extent' or 'how much', using counting and other computation. This type of research is concerned with the collection of data in the form of various measures and indices, and its description and analysis by means of statistical methods. (Research for Development)

Citizen evidence	Knowledge that is held by citizens, both individually and collectively, drawing on their daily lives. It is knowledge of a place, a culture, people and their challenges, gained through direct experience.
Practice-informed evidence	Knowledge gained from experience of implementing policy and practice. Often highly tacit in nature, it is held by individuals and organizations with long histories of tackling an issue, and has its roots in work experience and an understanding of what works and what does not in specific contexts.
Research evidence	Evidence which is produced through a formal, comprehensive and rigorous process which uses primary and secondary literature and adheres to accepted principles of quality.
Published literature	Literature which is disseminated via the commercial publishing industry. This includes evidence products such as books and journal articles, but would not include documents which are published informally (e.g. a report published by an NGO on its website).
Single study	A type of evidence product that presents scientific results from one piece of research.
Body of evidence	Evidence products that collate and review multiple studies.

WHAT EVIDENCE PRODUCTS DO I USE AT MY WORKPLACE?

Choose two evidence products (one internal and one external) you currently use in your work and fill out the table below.

	Internal	External
What product is it?		
Type of literature		
Who produced it?		
When was it produced?		
Benefits of evidence product		
Downsides of evidence product		

SOURCES OF EVIDENCE

Complete the table below.

Internal information is data existing or generated by public-sector agencies, stored information systems or available in organizational documents.

External information comprises those pieces of information produced by players external to public-sector agencies: universities (public or private), independent researchers, think tanks, civil society organizations and international organizations, among others.

What specific sources of evidence do I go to?	Why do I choose this source of evidence?	How do I approach the source?	What challenges do I expect to meet when addressing the source?
Internal:			
External:			

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MODULE 3

ASSESSING
EVIDENCE



This trainer manual forms part of the VakaYiko Evidence-Informed Policy Making Toolkit. The Toolkit aims to support skills development and practical processes for evidence-informed policy making in public institutions in developing countries. It consists of a training course, a series of practical handbooks, and a range of informational and promotional materials.

This is the third in a four-part series of guidance notes for trainers. The complete Toolkit can be found on the INASP website here:

www.inasp.info/vytoolkit



Duration	Approx. 2 days and 3 hours [845–1,130 minutes]
Aim	To strengthen skills in critically appraising evidence for policy making.
Rationale	In this module, learners analyse and critically assess information from different sources.
Learning objectives	<p>By the end of the module, learners will be able to:</p> <ul style="list-style-type: none"> • judge the reliability and credibility of information found online, and apply this to their own work situations; • apply basic ways of appraising information (source, relevance, bias and quality); • compare and contrast the strengths and weaknesses of common evidence products; • assess a wide range of evidence products using checklists; • differentiate the elements of research design and use their understanding of these elements to help address quality.
Key learning points	<ul style="list-style-type: none"> • Four key considerations for assessing evidence for policy making are: source, objectivity, quality and relevance. • Each piece of evidence has different biases, strengths and weaknesses. There is no one 'perfect' product, so it is important to combine many different products to achieve a balanced view. • Understanding the basic elements of research design will help you assess the relevance and usefulness of different pieces of research for your topic.
Establish links	<ul style="list-style-type: none"> • Learners will work on critically assessing the evidence products they found in Module 2. • The various types of evidence and literature are still relevant here, as each type has different strengths and weaknesses.
Resources	<ul style="list-style-type: none"> • Projector and laptop for PowerPoint • Flipchart paper and different-coloured marker pens • Flipchart holders • Sticking tape • Small cards (exit cards) and post-it notes • Blank A4 paper

TOPIC 1 p.105	AN APPROACH TO CRITICALLY ASSESSING EVIDENCE [120–155 MINS]
	ACTIVITIES:
	M3-T1-A1 How to separate fact from fiction online [40–50 mins]
	M3-T1-A2 [Optional] How to fact check: tips and advice [30–40 mins]
	M3-T1-A3 Questions to critically assess evidence [50–65 mins]
	HANDOUTS:
	M3-T1-H1 Questions to critically assess evidence
	VIDEOS:
	M3-T1-V1 How to separate fact and fiction online
TOPIC 2 p.112	ASSESSING EVIDENCE PRODUCTS [265–355 MINS]
	ACTIVITIES:
	M3-T2-A1 Assessing maternal mortality rates [40–45 mins]
	M3-T2-A2 Pros and cons of different evidence products [45–50 mins]
	M3-T2-A3 Pros and cons of work-related evidence products [40–50 mins]
	M3-T2-A4 Critically assessing different evidence products [140–210 mins]
	HANDOUTS:
	M3-T2-H1 Assessing common evidence products
	M3-T2-H2 Critically assessing different evidence products
TOPIC 3 p.118	UNDERSTANDING RESEARCH DESIGN [460–620 MINS]
	ACTIVITIES:
	M3-T3-A1 Experiences of empirical research [20–30 mins]
	M3-T3-A2 Research abstracts [40–50 mins]
	M3-T3-A3 [Optional] What is a clear and focused research question? [30–40 mins]
	M3-T3-A4 Categorizing research designs [80–100 mins]
	M3-T3-A5 Correlation does not imply causality! [40–50 mins]
	M3-T3-A6 Reviewing a research study design [40–60 mins]
	M3-T3-A7 Twenty tips for interpreting scientific claims [50–60 mins]
	M3-T3-A8 [Optional] Population and sample [50–70 mins]
	M3-T3-A9 [Optional] Sequencing and timing [20–30 mins]
	M3-T3-A10 Quantitative and qualitative research and methods [30–40 mins]
	M3-T3-A11 [Optional] External speaker presentation on research [60–90 mins]
	Optional Videos
	HANDOUTS:
	M3-T3-H1 Overview of the elements of research design
	M3-T3-H2 Research abstracts
	M3-T3-H3 Critical reading framework

Action plan and review activities (Trainer to build in)

- **Reflection on action plans** (to be carried out at flashpoints suggested throughout the course) [5–10 mins]
- **Exit cards** (to be carried out at the end of each day) [5–10 mins]
- **Review of Module 3** (to be carried out at the end of Module 3) [10–15 mins]

Further reading

A critical view of systematic reviews for development policy:
www.odi.org/comment/6283-systematic-reviews-international-development-slrc

Africa Check is an award-winning fact-checking organization which has lots of examples and guidance on verifying information on public policy issues:
www.africacheck.org/

CLEAR – Regional Centres for Learning, Evaluation and Results – strengthening capacities and systems for monitoring and evaluation (M&E) and performance management, to guide evidence-based development decisions:
www.theclearinitiative.org/index.html

DFID – Assessing the Strength of Evidence: A How To Note: www.gov.uk/government/uploads/system/uploads/attachment_data/file/291982/HTN-strength-evidence-march2014.pdf

‘Is Your Evidence Robust Enough? Questions for Policymakers’
(Louise Shaxson, 2005): <http://www.ingentaconnect.com/content/tpp/ep/2005/00000001/00000001/art00006>

Systematic reviews and impact evaluations for international development topics from 3ie: www.3ieimpact.org/

TOPIC 1

AN APPROACH TO CRITICALLY ASSESSING EVIDENCE

MODULE 3 LEARNING OBJECTIVES RELEVANT TO TOPIC 1

By the end of this topic learners will be able to:

- Reflect on, and apply, basic ways of appraising information (source, objectivity, quality and relevance)
- Judge the reliability and credibility of information found online, and apply this to their own work situations

READ & REFLECT



This approach has been informed by Sutcliffe and Court (2005), Shaxson (2005), The Open University and Paul and Elder (2007).

The internet has completely transformed the way we access information and has made available a wealth of information that was previously difficult for the general public to access.

The flow of information, access to the internet and the increase in the number of open-access publications are all good things.

However, it also means we must be careful about the information we use; we can't rely on information in the same way as we could when everything went through formal review and publishing processes.

It is important to verify everything you read and to be careful about what information you choose to use as evidence to support decision-making.

The ability to critically assess what you read is a key skill for selecting the best evidence for informing decisions. The following approach can be applied to all of the four major types of evidence we consider (data, citizen evidence, practice-informed evidence and research).

WHY IS IT IMPORTANT TO ASSESS INFORMATION?

- Anyone can upload something to the internet;
- they can say anything they like – be it true or false;
- and leave it there as long as they like – even if it goes out of date;
- or change it without warning – perhaps even remove it completely.

THERE IS A DANGER THAT THE INFORMATION YOU FIND ON THE INTERNET MIGHT:

- be from a source that is unreliable,
- lacking in authority or credibility;
- have content that is invalid,
- inaccurate or out of date; or
- not be what it seems!

INASP, 2010.

To critically assess evidence, consider the following:

1. SOURCE AND CREDIBILITY

Identifying who provides the information is a key clue to its reliability. It represents the 'credentials' of a piece of information that support its status and perceived value. It is, therefore, very important to be able to identify the author, sponsoring body (i.e. the organization the author works in or that funded the research) or source of your information.

Factors to consider about authors:

- Are they acknowledged experts in the subject area? You could check this by doing a quick search through a search engine.
- Are they attached to a reputable institution?
- Have they been frequently cited by other authors in the field? In Google Scholar, for example, you can find out whether material has been frequently cited. Each search result shows how many times that study has been cited.
- Are they known to have a particular perspective on the topic? You could assess this by reading reviews of their work by other authors or the media, checking whether they have written further literature (such as opinion pieces) or participated in conferences.

Knowing good sources is helpful when time is scarce. For example, there are certain databases such as the Cochrane Library and the Campbell Collaboration that are reliable because the studies they provide go through a quality-checking process, which saves you time.

Factors to consider about sponsoring organizations:

- What type of organization is it: private company, NGO, research organization, policy institute, think tank, international organization?
- How well established is the organization? For example, how long has it been in existence? Does it work with reputable partners?
- Does the organization have any vested interests in the subject area being researched?
- How is the organization funded?

Factors to consider about the method of publication:

- Any individual can publish anything on the internet or post to a discussion list. This has to be judged on its own merit and with reference to the author's credentials.
- What do you know about the editor and/or the editorial board and how their editorial policy influences what will be published? Do you know if it has been submitted to peer review?
- Is the journal well regarded? Does it have a high rating in the Journal Citation Reports?

Remember that the source of a piece of information is not a direct clue to its quality. Sometimes renowned sources produce poor evidence, and little-known sources can also produce strong evidence. The 'stable theory' suggests that academic work is often valued highly just because it emanates from a prestigious research group or is published in a prestigious journal. We should judge information on its own merits.

This is an iterative process; with time, you will be able to build a trusted network of sources that you can refer to for different topics.

2. OBJECTIVITY VS. BIAS

In an ideal world, 'objective' or 'balanced' information would present all the evidence and all the arguments, and leave you to weigh this up and draw conclusions. In the real world, however, all information is presented from a position of interest. We also recognise that our own personal belief systems and opinions influence our ability to objectively evaluate information.

You will already have started to get some clues about bias and objectivity through your exploration of source and credibility. In some cases, authors may be expressing a particular viewpoint – this is perfectly valid as long as they are explicit about the perspective they represent. Hidden bias or errors of omission, whether or not deliberate, can be misleading, so it is considered good practice in formal research to clearly identify any potential biases. Therefore, your task is not necessarily to discount all biased information, but to ensure that you have identified the bias and allowed for it in your search process.

The familiarization exercises and contextual framework you created earlier should have provided you with some initial clues as to the potential areas of controversy in your topic, as well as the biggest stakeholders and what their interests might be.

Consider the following:

- **Information.** Is the evidence base clearly described, and are gaps/incomplete data acknowledged? Is it relevant to the question? Is there enough evidence? Is the information contrary to the conclusions included and explained?
- **Perspectives.** Do the authors state clearly the viewpoint they are taking? Do they situate themselves within current debates on the topic, identifying others whose position they agree with? Are different or competing viewpoints identified and addressed? Is there another way to look at the question?
- **Language** can be a useful danger sign. Look out for language that is either emotionally charged or vague. Assess the significance of the key concepts.
- **Sponsorship**, whether commercial, political or personal. For example, research may be sponsored by an industry or by a government. This does not necessarily make the research less objective, but it may make its interpretation selective. Make sure that all potential vested interests are clearly identified.

While no evidence product will be completely objective, combining the different points of view should mitigate these individual biases. If you fail to account for competing viewpoints, you run the risk of providing a biased answer to your research question.

3. QUALITY

Looking at the source of the information and assessing credibility and objectiveness should already have given you some strong indicators of quality. However, even credible, objective sources can sometimes produce poor-quality pieces of information!

Here are some questions to help you assess quality:

- **How was the information gathered?** We'll look more at detailed research methodology in Topic 4. But even with grey literature, data or programme reports from NGOs, you should be able to get a sense of how the information was gathered. Is there a methodology section? Was the information gathered through any kind of systematic process?
- **Does it include a range of types and sources of evidence?** Does it rely solely on one type or source of evidence? Is there a mix of qualitative and quantitative data? Are there any key types of evidence missing?
- **Do the claims made make sense based on the evidence presented?** A good piece of research will be very careful about what claims it makes. Researchers will usually use language such as "the survey results indicate that, within the specific population and context, X may be a contributing factor to Y". If your piece of evidence makes absolute or overblown claims about causality such as "X always causes Y" or "Z is the solution to Y", then you should proceed with caution.
- **Does it cite quality sources?** Regardless of whether you are reading a media article, blog, policy brief, PowerPoint presentation, academic article or any other source of evidence, always check whether the writer has cited their sources. This may be done in different ways, depending on the type of piece (a bibliography, footnotes, or citations within the text), but it is essential. If sources are not cited, this is an immediate indication that you cannot trust the quality of this piece of work. Look out for poor-quality citations such as Wikipedia, as well as sources that are out of date or unreliable.
- **What are other people saying about it?** When major think tanks and academic institutions release reports, other experts in the field often critically review these in the media and/or on blogs. Many academic journals also publish reviews of journal articles by other researchers. Reading critical reviews by other experts in the field can give you a sense of whether this piece of research is seen as credible and of high quality.
- **Timeliness.** Is it clear when the information was produced? Does the date of the information meet your requirements? Is it obsolete/has it been superseded?
- **Language and presentation.** Is the piece well written? Are there any spelling or grammatical errors? Does it clearly indicate who the authors are, the date of production/publication and, where relevant, the publisher and/or funder? Does it follow established format conventions for that type of evidence product?

Assessing the quality of research is not an exact science. But there are tools to help you do it, which we will explore more in Topic 4 on Understanding Research Design.

You will often find case studies or research that profile the right population you are looking for, but in a different context. Or you may find a study which focuses on exactly the right context, but the population is not quite the one you're looking at. Both can be relevant, but neither completely answers your question.

4. RELEVANCE

This is not a property of the research itself but the relationship between the research and your evidence needs. For example, you might be dealing with a piece of high-quality, objective information from a credible source but decide it is not relevant to the question you are asking or to the scope of your search.

The most important way to assess relevance is to be clear about *what question you are trying to answer* and *what type of evidence will help you answer it*.

The difficult part of assessing relevance is that you will rarely find a document which specifically answers your exact question. It is more likely that you will find a range of pieces of information which provide insights into different aspects of your topic.

For example, if you are looking to find out what is causing girls aged 15–17 to drop out of school in a certain town, you may not find much (or any) information on this exact topic. However, you might find:

- information on girls' high school drop-out in a range of regional contexts, including your own country, from global monitoring bodies such as UNESCO, but not focusing on the specific town you're looking at;
- survey results from an NGO working on school drop-out in the town you're looking at, but the data is not disaggregated, so you can't see how it specifically affects girls;
- other studies looking at youth issues such as work, early marriage and/or pregnancy, and lack of access to transport, which may mention school drop-out but don't focus on it specifically; or
- a study on your exact research question and target population but from a neighbouring country.

While on their own, none of these pieces of information completely answers your question, you can combine them to provide valuable insight into your issue.

Here are some questions you can ask yourself to help determine the relevance of a specific evidence product:

- How is the evidence connected to your evidence need and the type of question you are answering?
- Are there specific geographic limitations to the evidence you need (e.g. a study on cotton growth in arid soil in the western region of Zimbabwe)?
- If the evidence is from another context or with another population from the target you are looking for, is it a context/population which is still applicable to your situation, or is it too different to be useful?
- Are you seeking evidence about a specific period of time?
- Does the evidence address the complexity of the issue? Is it too complex or too simplistic?
- Are the findings/ recommendations widely applicable or context-specific?



KEY LEARNING POINT

Four key considerations for assessing evidence for policy making are: source, objectivity, quality and relevance.



REFLECTION POINT

In your workplace, how do you know if a source of information is of good quality? What do you do to check its credibility?

RECOMMENDED ACTIVITIES

PREPARATION



- Write up the learning objectives for the module on a flipchart and leave them displayed throughout the module so that they can be referred to at the start of each topic.
- In case of internet failure, print out the written transcript of the TED talk: www.ted.com/talks/markham_nolan_how_to_separate_fact_and_fiction_online/transcript?language=en for activity **M3-T1-A1**.
- Print out for each learner the cases in **M3-T1-H1. Questions to critically assess evidence** for activity **M3-T1-A3**.
- Write up questions for review activity **Exit cards** on a flipchart and label exit cards (three per learner).

M3-T1-A1

HOW TO SEPARATE FACT FROM FICTION ONLINE

[40–50 minutes]

1. Play the Markham Nolan video 'How to separate fact and fiction online': www.ted.com/talks/markham_nolan_how_to_separate_fact_and_fiction_online#t-85824.
2. Invite the learners, while watching the video, to consider and make notes on the following:
 - three main ideas from the video that they think connect to the topic of this course/ workshop; and
 - any examples they have of misinformation resulting from reliance on poor information on the internet.
3. Invite learners to share and discuss their ideas and examples in plenary.

M3-T1-A2 [OPTIONAL]

HOW TO FACT CHECK: TIPS AND ADVICE

[30–40 minutes]

1. Organize the learners into groups of three and appoint a group leader.
2. Ask the group leader to decide how the group will read the Africa Check article 'How to Fact Check: Tips & Advice' (available online at www.africacheck.org/how-to-fact-check/tips-and-advice). For example, each learner could read one or two specific parts or the whole group could speed read the whole article.
3. As a pre-reading task, ask the group to select and highlight up to three sentences which they find particularly interesting or useful.
4. Invite the groups in plenary to share their selected sentences together with their own examples or interpretations.

RECOMMENDED ACTIVITIES CONTINUED

M3-T1-A3

QUESTIONS TO CRITICALLY ASSESS EVIDENCE

[50–65 minutes]

1. Organize the learners into eight groups (with a minimum of two people) and hand out to each learner the cases in annex **M3-T1-H1. Questions to critically assess evidence.** Assign two groups Case A, two groups Case B, two groups Case C and two groups Case D. Ensure that the two groups working on the same case are not sitting close to each other.
2. If there are fewer than 16 learners in the group, then just divide them into groups so that all the cases in the handout are covered.
3. Check understanding of the task, and provide one or two examples from the Read & Reflect section only if necessary. Hand out two sheets of flipchart paper per group and marker pens for them to write down their questions. Ask learners to note down which case they are working on in a corner of their flipchart.
4. While the groups are working, note down which case each learner is working on. This list will help when forming new groups for activity M3-T2-A4 in Topic 2.
5. When the time is up, ask the groups to join the other group working on the same case. Invite them to share their questions, discuss and then agree on their final set of questions (between six and 12 questions as a guide) and ask them to write them clearly on one flipchart to present to the wider group. (If there are fewer than 16 learners in the group, then skip this step.)
6. Once the groups have prepared their flipcharts, ask each group to stick them on the wall or lay them on a table top so that the rest of the learners can move around the room and read them. Invite the learners to add any additional questions and/or make any comments on what they have read.
7. Review the flipcharts while learners are moving round the room and identify any gaps or missing questions to highlight (use the sample questions in the Read & Reflect section if needed). Keep hold of the flipcharts and type them up as soon as possible, as they will be used for activity M3-T2-A4.

EXIT CARDS

[5–10 minutes]



1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

TOPIC 2

ASSESSING EVIDENCE PRODUCTS

MODULE 3 LEARNING OBJECTIVES RELEVANT TO TOPIC 2

By the end of this topic learners will be able to:

- Compare and contrast the strengths and weaknesses of different evidence products
- Assess a wide range of evidence products using checklists

Each evidence product has different risks in terms of its quality. While research studies such as systematic reviews or formal peer-reviewed journal articles follow a process that enhances transparency and reduces the risk of bias, you still need to ensure that they are relevant to your question and purpose of searching for information. Some other products, such as research reports, policy briefs or think-tank working papers that are not submitted to quality and transparency processes, should go through a more detailed assessment to ensure you are selecting the most robust evidence available.

Remember that all the evidence products you are using will have different strengths and weaknesses, which is why it is important to combine several different products to answer your question.

TABLE 1
ASSESSING COMMON EVIDENCE PRODUCTS

Product	Type of literature	Pros	Cons
Systematic review	Peer reviewed; body of evidence	<p>Covers a large body of evidence so can provide a valuable overview</p> <p>Checks the studies it reviews for academic rigour (bias, methodology etc.) so you don't have to</p> <p>Provides insight into different points of view/key debates in an issue</p> <p>Follows a transparent process that ensures scrutiny of the methods used and reduction of bias</p> <p>They increase confidence about what can be expected from an option (by increasing the number of units for study)</p>	<p>Usually written for an academic audience, so can be difficult to understand</p> <p>Can be very long</p> <p>Covers only peer-reviewed work (no grey literature) so may miss important types of evidence such as citizen evidence or practice-informed evidence</p> <p>Can be too general in scope to provide insight into very specific policy issues</p>
Academic journal article	Peer reviewed (usually – do check!); can be single study or body of evidence	<p>Produced through a thorough and rigorous academic process – very credible</p> <p>Builds on existing knowledge through literature review – the author has already considered the other academic literature out there</p> <p>Analyses primary data to help understand why and how things happen</p>	<p>Written for an academic audience, so can be difficult to digest</p> <p>No requirement to review other kinds of evidence aside from the academic (so may not have consulted much practice-informed evidence or citizen evidence)</p> <p>Can be too theoretical/remote, lacking concrete policy options</p>
Annotated bibliography	Grey literature	<p>Provides an overview of what has been written on the topic</p> <p>Short descriptions of evidence products, so you can choose which are relevant</p>	<p>It is a list only – doesn't synthesize/summarize the research</p> <p>Can be difficult to tell from the short summaries what is useful to you</p>
Policy brief	Grey literature	<p>Specifically aimed at policymakers and focused on providing policy options</p> <p>Short, focused and engaging format; easy to read</p>	<p>Can be biased by specific interests, depending on source</p> <p>Not subject to formal academic quality checks (peer review, methodology etc.)</p> <p>No formal requirement to review existing evidence</p> <p>Cannot provide an in-depth picture</p>
Programme report (e.g. from an NGO)	Grey literature	<p>Rich source of practice-informed evidence providing insight into implementation</p> <p>Can be much more contextually/geographically specific than other products</p>	<p>Can lack scientific rigour, as not a formal research product</p> <p>Can be biased (e.g. towards funders)</p> <p>No requirement to build on/review existing knowledge, so can tend to 're-invent the wheel'</p>

Product	Type of literature	Pros	Cons
Report/paper from a think tank	Grey literature	<p>A research-intensive form of grey literature which includes rigorous analysis</p> <p>Often more likely to consider a wide range of grey literature than an academic journal article would</p> <p>Aimed at informing policymakers; gives more thorough analysis than a policy brief</p>	Can be biased depending on the ideological stance of the think tank
Statistics and data	Primary literature	<p>Provides concrete quantitative information to provide a snapshot of a specific issue</p> <p>National statistics can provide information which is often not available in the academic literature</p> <p>International statistics (e.g. from WHO, World Bank etc.) are useful for comparison with other countries</p>	<p>The way the statistics are gathered/combined (i.e. quality of methodology) can be dubious</p> <p>Official government statistics may be unreliable, as some governments 'massage' the numbers for political reasons</p> <p>Cannot establish causality on their own – they don't explain why something happens</p> <p>Easy to misinterpret, not as simple as they seem</p>
Impact evaluation	Grey literature; single study	<p>Provides insights into a specific policy or programme to show the contribution of an intervention to a particular outcome</p> <p>Focused on real-life interventions in specific contexts and aimed at practitioners and policymakers rather than academics</p> <p>The most research-intensive form of grey literature – follows rigorous steps, subject to quality assurance processes and scrutiny by external specialists</p>	<p>Not usually subject to formal academic quality checks (peer review, methodology etc.)</p> <p>Can be very long</p>



KEY LEARNING POINT

Each piece of evidence has different biases, strengths and weaknesses. There is no one 'perfect' product, so it is important to combine many different products to achieve a balanced view.



REFLECTION POINT

Choose a product that you are familiar with or you are using in your workplace. Explain why transparent processes and scrutiny of the methods used in an evidence product contribute to ensuring a high quality of this product.

RECOMMENDED ACTIVITIES

PREPARATION



- Print out hard copies of the article 'What is Zimbabwe's maternal mortality rate?' (available online at www.africacheck.org/reports/what-is-zimbabwes-real-maternal-mortality-rate) for activity **M3-T2-A1**.
- Print out the table in **M3-T2-H1. Assessing common evidence products** so that there is enough for one handout per group for activity **M3-T2-A2**.
- Print out for each learner the Topic 2 Read & Reflect section for activity **M3-T2-A2**.
- Print out for each learner the cases in **M3-T2-H2. Critically assessing different evidence products** for activity **M3-T2-A4**.
- Depending on the size of the learner group, organise an additional breakout space for activity **M3-T2-A4**.
- Prepare document packages for activity **M3-T2-A4**. Depending on the level of the learners, choose two or three documents from a pool of documents of varying complexity stored in the electronic folder **M3-T2-A4 Document packages**. Select and print two or three documents from each of the four folders named objectivity, quality, relevance, and source and credibility. If it is a large group, print two sets rather than one set from each of the folders. Retrieve the final flipcharts with the learner questions from activity **M3-T1-A3. Questions to critically assess evidence**, type them up and print them out as one handout. Ensure that there are enough handouts to accompany each of the document packages printed from the obstacle course documents folder. Also add at a small pile of blank A4 paper to each of the document packages.
- Write up questions for review activity **Exit cards** on a flipchart and label exit cards (three per learner).

M3-T2-A1

ASSESSING MATERNAL MORTALITY RATES

[40–45 minutes]

1. Distribute to learners a hard copy of the article 'What is Zimbabwe's maternal mortality rate?'
2. Ask each learner to read the article and then discuss their initial thoughts and feelings about it in pairs or groups of three.
3. Invite the learners in the same groups to answer the following questions:
 - Who would have taken the DHS numbers? Why?
 - Who would have taken the census statistics, and who would have taken the more recent household survey figures? Why? (also UN modelling)
 - What can you practically do when all the data available is outdated?
4. Debrief the questions in plenary and ask learners for one or two pros and cons of this type of evidence.

M3-T2-A2

PROS AND CONS OF DIFFERENT EVIDENCE PRODUCTS

[45–50 minutes]

1. Organize learners into pairs or groups of three and hand out (one per group) the table in **M3-T2-H1. Assessing common evidence products** with the pros and cons columns to complete.
2. Invite the groups to brainstorm pros and cons for each evidence product and fill in the table (at least one pro and con per product).
3. Ask the groups to find at least two other groups to share and compare their tables with. Ask them to note down in their tables any new pros and cons they had not thought of.
4. Finally, ask the groups to return to their seats, hand out the Topic 2 Read & Reflect section and ask them to compare their completed tables with the one provided in the handout.
5. In plenary, invite three or four groups to briefly share any pros and cons they had not thought of but which were listed in the Read & Reflect table or vice versa.

M3-T2-A3**PROS AND CONS
OF WORK-RELATED
EVIDENCE PRODUCTS****[40–50 minutes]**

1. Invite learners to refer back to the list of evidence/documents they searched for and compiled on their work-related topic at the end of Module 2 (activities M2-T5-A2 and M2-T5-A3).
2. Ask them to select three different evidence products (if possible) and assess them against the pros and cons table in Topic 2 Read & Reflect, ticking off which factors they find.

M3-T2-A4**CRITICALLY ASSESSING DIFFERENT
EVIDENCE PRODUCTS****[140–210 minutes]**

1. Place the objectivity document package/s, quality document package/s, relevance document package/s, and source and credibility document package/s separately around the room, and in a breakout space if one can be organised. Ensure that the document packages around the same assessment criterion are not placed near each other.
2. Invite the learners to move to a document station which focuses on an assessment criterion (i.e. objectivity, quality, relevance or source and credibility) they did not write questions for in the previous activity in Topic 1. Check the list of names noted during the questions activity **M3-T1-A3**, if necessary. Make sure that there is a reasonable balance of learners in each group across the different document stations.
3. Distribute to each learner the cases in **M3-T2-H2. Critically assessing different evidence products**. Ask the groups to choose and read the case that corresponds to the assessment criterion at the document station where they are sitting. Inform learners at the source and credibility document station/s that at least one of them will need to have a computer with internet access to successfully complete the task. If no internet is available at the time of the activity, then remove the source and credibility document packages and ask learners to also assess source and credibility along with the other three criteria (quality, relevance and objectivity).
4. Check that learners understand the task and invite the groups to prepare and bullet-point their assessment of the evidence products within the document package, on the blank A4 paper provided. Remind groups that they can use as an aide the typed list of questions they compiled in the question activity in Topic 1.
5. When the time is up or the groups feel they have finished, ask the groups to move to a different document station to work on a different case.
6. Depending on the time available and the level of engagement of the learners, stop the activity there or give them the option to move to another document station to work on a third case.
7. Decide on the most appropriate way for learners to provide feedback on the written assessments. For example, one group could present their main findings on one case in plenary, with the other groups and the trainer adding their additional points and/or comments. A second option is for groups who worked on the same case to swap their written bullet-point assessments with each other for immediate written and/or verbal feedback. A third option is for the groups to submit their written bullet-point assessments to the trainer for feedback via email or on paper.
8. Conclude the activity by highlighting the key points around the four criteria outlined in the Read & Reflect section.

RECOMMENDED ACTIVITIES CONTINUED

EXIT CARDS

[5–10 minutes]



1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

REFLECTION ON ACTION PLANS

[5–10 mins]



1. Display the slides again, if helpful as a reminder, in annex **M1ppt. Action plans**.
2. Invite learners to reflect on what has been covered in the course so far and write down notes under the key headings – i.e. challenges and ideas to support the use of evidence in policy making and to address the challenges identified.
3. Note that a longer session will be built in at the end of the course for learners to transfer their notes into the formal action plan. There will also be time to review their plans with the trainer and their peers.

TOPIC 3

UNDERSTANDING RESEARCH DESIGN

MODULE 3 LEARNING OBJECTIVES RELEVANT TO TOPIC 3

By the end of this topic learners will be able to:

- Differentiate elements of research design and use their understanding of these elements to help assess the quality and relevance of research

READ & REFLECT



The same general principles which we have discussed – source, objectivity, quality and relevance – also apply to research. Formalized and explicit procedures, standards and conventions, help to make empirical research objective, and the peer-review process of published journal articles functions as an important quality control mechanism.

As a user of evidence you do not only want to be able to make your own interpretation of results but also have an understanding of how the results came about – i.e. know whether the methodology and research design are appropriate to answer the research question.

The research design can be thought of as the method of planning research to gather the most appropriate information, in the correct way, and to analyse the results effectively (Laws, Harper, Jones and Marcus, 2013). It consists of different elements and acts as the 'blueprint' of a study. Each element will be explained in more detail in Topic 4. An overview can be found in Table 2.

WHAT'S THE DIFFERENCE BETWEEN EMPIRICAL AND THEORETICAL RESEARCH?

Empirical research aims at the development of new insights through the collection of data (empirical = observation or measurement rather than theoretical reasoning).

Theoretical research generally uses existing theories or hypotheses to develop new ideas. These new ideas are not tested by collecting evidence.

CORRELATION AND CAUSATION

One of the most common mistakes made when reading research papers is to conflate correlation with causation.

Correlation is the association between two variables such that when one changes, the other also changes. Correlation does not prove causation.

A causal relationship is a relationship between two or more factors in which one factor directly explains the other.

TABLE 2
OVERVIEW OF THE ELEMENTS OF RESEARCH DESIGN

Element	Explanation	Questions to consider
Research question	<p>In natural and social science, the research question is the starting point of every study. Often this question is derived from theoretical considerations and implications or a gap in the literature.</p> <p>A good research question is sufficiently focused (e.g. determining location, type of research design, population and objectives of a study).</p>	<p>Is the research question explicitly stated?</p> <p>Where did the researcher derive his/her question from?</p> <p>Is the research question specific enough to guide the research?</p> <p>Is the research question answerable?</p>
Type of research design	The type of research design refers to how research or studies may be categorized according to certain similarities and differences. Typical designs include experimental and longitudinal studies, among others. Each design has its advantages and disadvantages.	<p>Is the research design type suitable to answer the research question?</p> <p>Does the research design type allow causal conclusions?</p> <p>Do other studies with different research designs reach the same conclusions?</p>
Population and sample	The population and procedures to draw a sample are crucial to generalize findings of a particular piece of research. Ideally, the research draws a probabilistic sample or proves that the sample corresponds to the targeted population.	<p>What is the study population?</p> <p>Is the study population of interest for my information need?</p> <p>Is the sampling procedure explicitly described?</p>
Timing and sequencing	Research may investigate a problem or phenomenon over time (process), such as longitudinal studies, or at a particular point in time (state), such as cross-sectional studies.	Do findings from the research apply to different times?
Data collection methods	Typically data is collected qualitatively – for instance, through open questions in interviews – or quantitatively – for example, by measuring unemployment rates. Quantitative and qualitative data is analysed differently and has different advantages and disadvantages.	<p>Is the data quantitative or qualitative?</p> <p>Is the quantitative indicator a valid measure of the phenomenon?</p>

Ideally, the researcher would have defined each of the elements of the research design before the start of the study. This helps to reduce biased and unstructured data collection and analysis. As good practice, clinical studies are sometimes registered beforehand, and the researcher is held accountable according to this pre-defined and registered plan.¹ To publish in high-impact medical journals, this registration process is often a requirement.

1. See, for instance, ClinicalTrials.gov.

RESEARCH QUESTION

The research question is the starting point for a study. However, defining this question is by no means straightforward and usually involves an intensive review of existing literature and theories. This is because a researcher often aims to generate new insights.

A research question should be clear and focused enough to guide the research design. There is no specific standard about how a research question needs to be phrased, but it may contain some or all of following characteristics:

- **Answerability.** For example, “*Are children good at mathematics?*” is not an answerable question.
- **Population.** Define who is being researched, referring to a population of individuals or objects. For example, “*How are the mathematical skills of school children aged 6 years?*”
- Set out **what** particular issues, events and/or characteristics are being researched. This may contain a definition of particular outcome and treatment variables. For example, “*How do mathematical skills in school children aged 6 years differ between private and public primary schools?*”
- Define the study's **timing and sequencing**, if it investigates a process or state. For example, “*How do mathematical skills develop in school children from age 6 to age 8?*”

The research question should appear in the first part of the study (or in the summary). You can check how relevant this research question is for your own information need.²

Once the research question is defined, the study's design can be planned more specifically.

TYPE OF RESEARCH DESIGN

The research design can be categorized into different types. While it is important to understand these categorizations, judging by type does not replace a critical reading of a particular study. As a critical reader of a research study, you will always have to ask whether the research design is appropriate to answer the research question.

From reading the abstracts provided in Topic 4, you will also see that many studies differ from the categories proposed in Table 2. Remember that no study design is perfect and that there are overlaps and different ways of combining designs.

Other ways of categorization may be:

- qualitative, quantitative and mixed-methods designs;
- exploratory and confirmatory approaches; and
- others?

DOES YOUR EVIDENCE SHOW HOW YOUR ISSUE AFFECTS BOTH WOMEN AND MEN?

Gender sensitive evidence should be used to inform all policies and programmes, so that gender issues are mainstreamed and policies are designed to enable equal opportunities for men and women. It's important that evidence looks at the impact of policies on both men and women, in order to ensure equal access to resources and opportunities. The collection, production, analysis and use of gender sensitive evidence can help policymakers begin to address these needs. This can include gender statistics, research evidence which looks at the impact of policies on both men and women, citizen evidence which includes equal representation of men and women, and practice-informed evidence of what has and hasn't worked in terms of gender equality.

Gender statistics are not just relevant for monitoring the status of women. They can also be used to shed light on specific issues relating to men, such as men's risk of accidents, or harmful use of tobacco and alcohol. Critical as they are to designing effective policies and programmes, the production of gender statistics presents significant challenges to national statistical systems and many data gaps exist, particularly in areas such as poverty, time use, violence against women, and the environment.

Source: United Nations Department of Economic and Social Affairs, 2014.

2. In particular, quantitative research usually involves another step, namely the deduction of several hypotheses from the research question and/or theory. However, often these hypotheses are not explicitly stated in an academic paper. If you want to find out more about research hypotheses, please look into our Further Resources.

TABLE 3
DIFFERENT TYPES OF RESEARCH DESIGNS AND THEIR ADVANTAGES AND DISADVANTAGES

EXPERIMENTAL

Type of literature	Pros	Cons
<p>Experimental designs are used to estimate the causal effects of an intervention.</p> <p>They have two key main characteristics. First, they <i>manipulate a variable</i>, also called treatment, grouping or independent variable. For instance, the treatment group would receive a new drug, and the control group would receive a placebo pill. In this case, the manipulated variable would be the intake of a new drug vs. a placebo pill. Second, experimental designs <i>randomly</i> assign study subjects to at least two different groups – for instance, for every study subject a toss of a coin decides whether they are assigned to the treatment or the control group.</p> <p>Examples of experimental designs are randomized controlled trials (RCTs). RCTs are considered the ‘gold standard’ in health research, especially when it comes to the assessment of drug or treatment effectiveness. They are, however, also employed in other fields such as education, agriculture and development.</p> <p>Experimental designs use a quantitative measurement of variables, though they may also employ qualitative elements.</p>	<p>The study's groups can be considered identical with regard to known and unknown confounding variables due to the random assignment of study subjects. The groups only differ regarding the manipulated variable (e.g. new drug vs. placebo pill). Therefore, one can conclude with higher confidence that any differences in the outcome variables are caused by the manipulated variable rather than pre-existing differences between the two groups.</p> <p>For example, after 10 days of taking the drug, the treatment group showed significantly fewer symptoms (outcome variable) than the control group receiving the placebo. The reduced number of symptoms can be attributed to the new drug.</p>	<p>Results cannot be easily generalized – i.e. the treatment may not operate in the same way in another time or place or with another sample.</p>

Measuring the impact of microfinance

In a microfinance study, a large Indian microfinance institution, Spandana, identified 104 low-income neighbourhoods in Hyderabad, India, which were potential locations to open a branch office. Prior to opening the branch offices, 52 neighbourhoods were randomly selected to have an office open in 2005 – this became the treatment group. The remaining 52 neighbourhoods remained ‘control’ (receiving an office in the following years). Households were then interviewed 15–18 months after the introduction of microfinance in the treatment areas.

Source: Banerjee et al., 2008.

QUASI-EXPERIMENTAL

Type of literature	Pros	Cons
<p>Quasi-experimental designs also aim to estimate causality but are different from RCTs in one key aspect: <i>study subjects are not randomly assigned</i> to the different groups. Instead, treatment and control groups are built through natural groups (e.g. two different classes in a school or persons living in different districts of a country receive different treatment). Groups may also be built through self-selection (e.g. the first people registering for the skill training will receive it).</p> <p>Similarly to an RCT, both groups are compared with each other after regarding the outcome or dependent variables. But because the groups may not be identical before the study started, the researcher usually conducts a pre-assessment to statistically control for known confounding variables, such as individual motivation, gender, socio-economic status or the outcome variable itself.</p> <p>Quasi-experimental designs use a quantitative measurement of variables, though they may also employ qualitative elements.</p>	<p>It can be used in situations where the researcher wants to establish a counterfactual – i.e. what would happen without the treatment – but cannot randomly assign people to the different groups because this is unethical or not feasible.</p> <p>If confounding variables are known (e.g. from literature review), they can be controlled for statistically, and causal effects hence estimated.</p>	<p>Increased risk that the study groups are not identical with regard to known and unknown confounding variables (e.g. in one group there may be more motivated persons, more males or generally persons with fewer symptoms). This may have an effect on the study's outcome variables and thus prevent any causal conclusions.</p> <p>Unknown confounding variables cannot be controlled for and hence bias results.</p> <p>The same disadvantages as for experimental designs apply (see p. 121).</p>

Effect of training on the clinical management of malaria by medical assistants in Ghana

Malaria accounts for over 40% of all outpatient consultations in Ghana. A common problem associated with its treatment with the drug chloroquine is over- and under-dosage, and a preference for the intramuscular route of administration. Inadequate treatment is an important factor in the selection of resistant strains of malaria parasites. To ensure the proper management of diseases at health centres, the Ministry of Health instituted an in-service training programme for medical assistants in 1987. The study evaluated the effect of this training on the clinical management of malaria using a quasi-experimental design. Three methods of data collection were used: prescription survey, assessment questionnaires and focus group discussions. The findings revealed that gains in knowledge following the training had deteriorated within a year. There was also a discrepancy between knowledge and practice of malaria treatment. This was shown by over- and under-dosing of chloroquine in children and adults, respectively. There was also overwhelming preference (85% of all cases) for injections and a high tendency towards polypharmacy (average of five drugs per visit). The motivating reasons for these were mainly socio-cultural and included patient demand and attitudes, prescriber self-interests and stereotypes and the daily practical challenges of the community. While paying greater attention to supervision of clinical work at health posts, consideration must be given to socio-cultural context of drug use in any such future training programmes if rational use of drugs is to be achieved.

Source: Ofori-Adjei and Arhinful, 1994.

OBSERVATIONAL

Type of literature	Pros	Cons
<p>Similarly to experimental and quasi-experimental studies, observational designs aim to draw inferences about potential effects of a treatment or intervention (grouping variable). However, the <i>manipulation of the grouping variable is outside the researcher's control</i>. Instead, grouping may be done according to time (e.g. before and after an event) or participant characteristics (e.g. comparing women with men or different age cohorts). Examples of this are cross-sectional surveys and longitudinal and cohort or panel studies.³</p> <p>Observational designs use a quantitative measurement of variables, though they may also employ qualitative elements.</p>	<p>Observational studies can provide important information from the general population or community-level data to design more informative experimental studies.</p> <p>Statistical methods that match two groups according to certain variables are used to reduce the effect of confounding variables and hence provide insights into causality – for instance, the effect of certain drugs on a particular health outcome.</p> <p>Longitudinal, panel data and cohort studies in particular can provide valuable information about developments over time.</p>	<p>Claims about cause and effect have to be treated with caution. There might be variables not considered or unknown by the study that moderate or influence the outcomes covertly.</p> <p>Longitudinal studies 'lose' their study subjects over time.</p> <p>Panel data may rely on unreliable statistics.</p> <p>Apart from these problems, the same disadvantages as for experimental designs apply (see p. 121).</p>

Growth and poverty reduction in Uganda, 1999-2000: panel data evidence

To explore factors underlying growth and poverty reduction in Africa while overcoming some of the limitations of cross-country analysis, this article uses micro-level survey and panel-data evidence from Uganda spanning 1992-2000. The high elasticity of both income growth and poverty reduction with respect to agricultural output (coffee) prices confirms the benefits from Uganda's decisive liberalization of output markets. It also suggests the importance of product diversification to protect poor households against price shocks and the potential of improvements in the cotton market to tackle persistent poverty in the north. The importance of improving access to basic education and health care emerges more clearly than in cross-country analysis, but benefits depend on complementary investments in electricity and other infrastructure, and reductions in civil strife.

Source: Deininger and Okidi, 2003.

3. To find out more about the particularities of each of the observational designs, see the Further Resources section.

META-STUDIES

Type of literature	Pros	Cons
<p>Meta-studies collect information and aggregate data from existing studies to summarize research in a particular field, point out research gaps and generate more generalizable and robust findings.</p> <p>Meta-studies comprise literature reviews, <i>systematic reviews</i> and <i>meta-analyses</i> as an important part of systematic reviews (for a more thorough explanation, see Topic 3).</p> <p>Systematic reviews are much more rigorous than traditional literature reviews and are generally less biased.</p>	<p>Meta-studies are very good at reducing the complexity and breadth of research.</p> <p>Generalizations of findings regarding time and population may be possible.</p>	<p>Unpublished research and research written in languages other than English is often not included in the reviews.</p> <p>There are debates as to how far synthesis/aggregation of findings based on different contexts is practical and whether it distorts results (“comparing apples with pears”).</p> <p>“Garbage in, garbage out” means that studies with bad methodological quality included in the review may distort findings.</p>

What is the impact of microfinance on poor people? A systematic review of evidence from sub-Saharan Africa

The study rigorously and systematically reviewed the evidence to identify the impacts of micro-credit and micro-savings on poor people in sub-Saharan Africa and tested a causal pathway to understand why these impacts occur. It found that micro-credit and micro-savings make some people poorer and not richer. Clients save more but also spend more. Health generally increases and, for some, so do access to food and nutrition. Impacts on education are varied, with limited evidence for positive effects and considerable evidence that micro-credit may be doing harm, reducing the education of clients' children. Micro-credit may empower some women, while both micro-credit and micro-savings improve clients' housing. There is little available evidence about the impact on job creation or social cohesion. Exploring the causal pathway for these impacts shows how clients' failure to increase their income, determined by external factors as well as how they spend their money, can lead them into further debt, unable to invest in savings and reliant on further cycles of credit. Successful increases in income, repayment of loans and the accumulation of financial wealth are all feasible, but the analysis shows how these are not always achieved.

What are the implications? Micro-savings may be a better model than micro-credit, both theoretically (because it does not require an increase in income to pay high interest rates, so implications of failure are not so high) and based on the currently available evidence. However, the evidence on micro-savings is small, and further rigorous evaluation is needed. In conclusion, micro-credit and micro-savings are doing harm, as well as good, to the lives of the poor people whom they purport to serve. Cautious implementation and further rigorous evaluation are required if these interventions are to alleviate rather than deepen poverty.

Source: Stewart et al., 2010.

QUALITATIVE⁴

Type of literature	Pros	Cons
<p>This group of designs comprises a variety of studies that take a qualitative approach to research. In contrast to the aforementioned designs, <i>qualitative designs</i> are more often exploratory, descriptive and seek to understand real-world problems or relationships, rather than measuring and quantifying them.</p> <p>For example, research that explores a community's behaviours and attitudes with regard to the use of technology in farming could be helpful when designing an agricultural programme or preparing a quantitative survey.</p> <p>Some participatory designs, such as action research, actively involve the study subject in the research to achieve social transformation.</p> <p>Qualitative research is different from quantitative research in many ways. Please see the following section.</p>	<p>Qualitative studies can provide valuable insights to inform future quantitative research and make sense of existing findings.</p> <p>Research that is done in a participatory⁵ manner usually achieves a higher uptake of its findings and can thus be more effective.</p>	<p>Claims about cause and effect as well as generalizations have to be treated with caution because the number of study subjects or cases is usually very small (e.g. single case studies).</p>

Exploring empowerment and democracy in Zimbabwe

This case study argues that an 'informed and alert electorate' is essential for the establishment of democratic governance in Africa and for the continent's future economic growth. This need is evident in Zimbabwe. This paper tells the story of a small community-based organization in a remote part of Zimbabwe, which helped to raise political awareness and consciousness among a disadvantaged rural population.

Source: Conyers and Cumanzala, 2004.

Adapted from DFID, 2014.

4. See the following sections for more information on qualitative research.

5. Please note that the other aforementioned research design types could also be participatory – for example, several stakeholders (researcher, policymakers, practitioners and/or study subject) are involved in the design and oversight of the study.

POPULATION AND SAMPLE

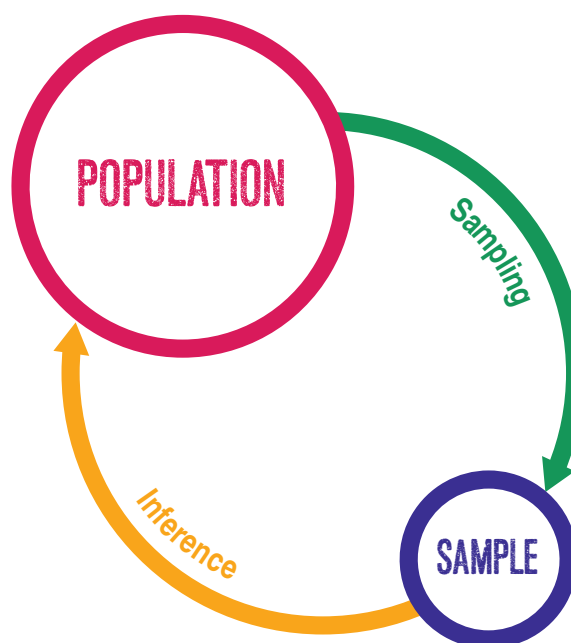
Usually in the abstract, executive summary or introduction of a piece of research you should be able to identify who the target population of the study was. Too often, we hear about a study being 'representative', and too rarely do we ask what this actually means.

Let's assume that an education researcher wants to find out about the mathematical skills of first-grade school children (study population), to identify where a mathematical skills programme should be conducted. They can make all first-grade school children take a maths test (census). This, however, could be a very resource-extensive study. Just imagine how many first-graders exist in your country and the logistical effort it costs to collect all the data. As an alternative, the researcher could ask a sample of first-graders to take the maths test. This would involve a lot less work for the researcher, and they can come to the same conclusions for the target population if the sample is drawn correctly – for example, through cluster sampling. Then, the researcher could infer from a sample of first-grade school children to the whole population of first-grade school children in the country. The mathematical skills programme could be adequately targeted.

There are different ways of drawing a sample – for instance, simple random sampling, cluster sampling, stratified sampling and so on – all of which can be termed *probability sampling*. Probability sampling means that each unit in the population has a chance of being selected in the sample. As a consequence, the sample has the same characteristics as the population, which allows generalizations. This stands in contrast to *non-probability sampling*, such as convenience, purposive and quota sampling, in which some units in the population have no chance of selection. The resulting sample does not necessarily have the same characteristics as the population, and generalizations are, therefore, often not possible.

Sampling is by no means an easy task. The sampling strategy, inferencing and/or extrapolation of results usually involves a skilled statistician, and adds to the quality of the study. You don't need to be an expert on sampling, but whichever study type you are referring to, make sure that the author clearly describes how the sampling was made. If a study claims representativeness, make sure you can identify the population referred to and that the sample has the same characteristics as the population.

FIGURE 1
SAMPLING AND INFERENCING IN RESEARCH



THE LAW OF LARGE NUMBERS

The Law of Large Numbers 'guarantees' stable long-term results for the averages of some random events. For example, you want to know the average height of a group of 100 people. If you randomly choose one person, and measure their height, your estimate will likely be very far away from the population average.

However, if you randomly pick 25 people and measure their height, you will get very close to the true value in the population. It is important to remember that the Law of Large Numbers only applies (as the name indicates) when a large number of observations are considered.

SEQUENCING AND TIMING

This section is about the time and sequencing of conducting a study and how that relates to your own information need. Broadly, research may investigate a problem or phenomenon over time (process), such as longitudinal studies, or at a particular point in time (state), such as cross-sectional studies. In the following, different examples are given in which timing and sequencing play a crucial role, namely causality in longitudinal studies and panel data, pre- and follow-up tests and time of study.

TIMING FOR CAUSALITY: LONGITUDINAL STUDIES AND PANEL DATA

Longitudinal studies follow the study subject(s) over a defined period of time ranging from several days to a lifetime. They involve the regular measurement of the same sample over time, usually on the same variables, to identify changes. If you are interested in the development of characteristics or processes over time, make sure you look for longitudinal studies. These studies would answer questions such as disease pathogenesis or the development of mathematical skills in primary school children.

While the term *longitudinal studies* is used for biostatistics, econometrics often refer to multidimensional panel data instead. Panel data involves measurement over time, just like longitudinal studies. For their economic models, econometricians often use panel data based on indicators collected on a regular basis, sometimes over many decades, such as gross domestic product (GDP) or the human development index (HDI).

Causal links between different indicators should be well explained. For instance, it seems plausible to argue that economic growth over time (e.g. measured by GDP) has caused an increase in formal employment. But the other way around may also be true: that only with increased formal employment can the economy grow. In this example, we can make a causal link between increasing formal employment and GDP only if:

- GDP is increasing *after* formal employment has risen; and
- this effect is shown consistently over many time periods; and
- when alternative explanations have been ruled out.

Panel data or longitudinal studies can help to untangle this problem of causality on a macro level when RCTs are not suitable.

PRE- AND FOLLOW-UP TESTS

Experimental and quasi-experimental studies may involve a pre-test before an intervention takes place, to ensure that study groups have the same characteristics. They may also employ a follow-up, to assess the sustainability of effects in the medium and long term. Do not confuse a quasi-experimental study involving a pre- and follow-up assessment with a longitudinal study; longitudinal studies often work with natural groups (e.g. age cohorts), whereas quasi-experimental designs manipulate the intervening variable (see Table 2).

TIME OF THE STUDY

When reading a study, always check the time the data was collected. Findings from a study 50 years ago may not be relevant today, because, for instance, collective behaviours and norms change. In that case, you may want to look for more recent studies or commission a replication.

QUANTITATIVE AND QUALITATIVE RESEARCH AND METHODS

Data can be collected in different ways. One of the most fundamental distinctions is between quantitative and qualitative methods, which are each based on different research paradigms.

No matter which type of method has been used, it should be explicitly stated and documented in the methodology part of the research paper. See Table 4 for the advantages and disadvantages of qualitative and quantitative research. Where both qualitative and quantitative elements are used, this is called 'mixed-methods research'.

QUANTITATIVE RESEARCH AND METHODS

Quantitative research asks questions such as "How many?", "To what extent?" or "How much?" using counting and other computation. Quantitative research is concerned with the collection of data in the form of various measures and indices, and its description and analysis by means of statistical methods.

Quantitative methods produce numerical data, which comprises not just numbers such as height or weight but also different types of categories. Quantitative scientists speak of different data types such as categorical, ordinal and interval data and analyse these with the appropriate statistical methods, such as regressions, significance tests, correlations or simple counts and averages.

For example, if you count the number of people in the room and measure their height respectively, you would be able to:

- categorize learners into short and tall people (ordinal data) using, for instance, a median cut-off point;
- calculate the mean average height in cm (interval data); and
- relate from height to, for instance, gender by using correlation coefficients etc.

In public health studies, height could be used as an indicator or proxy for malnutrition in the development of children. So it is important that indicators are a valid reflection of the reality they seek to describe. Regarding measuring malnutrition in the development of children, body-mass index would be a better proxy than height, as it also accounts for body weight. Make sure you consider how well certain indicators reflect the reality they seek to describe.

Quantitative data can be collected in many different ways – for example, through rating scales or closed questions in questionnaires.

QUALITATIVE RESEARCH AND METHODS

Qualitative research describes the nature of answers (evidence) in terms of their verbal, written or other descriptive natures. It asks questions such as who, which, what, when, where and why? Qualitative research belongs to a family of approaches concerned with collecting in-depth data about human social experiences and contexts.

Returning to the example of malnutrition in children, a qualitative study would look at a few particular cases of malnourished children. It could look at contextual factors, such as unemployment in the family or climate change, and investigate the effects of the malnutrition, such as the resulting behaviour of the child or problems in the family. A qualitative research question could be: 'How does a family deal with a malnourished child?'

Non- or semi-standardized interviews, focus group discussions and observations produce a wealth of qualitative data in the form of interview transcripts and videos. Analysis is done according to different criteria based on methods such as hermeneutics, grounded theory and/or qualitative content analysis. It is difficult to generalize qualitative findings to a population because study subjects are often not selected randomly but according to their ability to contribute to the research question.

TABLE 4
ADVANTAGES AND DISADVANTAGES OF QUANTITATIVE AND QUALITATIVE METHODS, APPROACHES⁶

	Advantages	Disadvantages
Quantitative	<p>The research results are relatively independent of the researcher (e.g. statistical significance)</p> <p>Can generalize a research finding when it has been replicated on many different populations and subpopulations</p> <p>Testing and validating already constructed theories about how and why phenomena occur</p> <p>Data collection using some quantitative methods is relatively quick</p> <p>Data analysis is relatively less time consuming (using statistical software)</p> <p>It is useful for studying large numbers of people</p>	<p>The researcher's categories and/or theories that are used might not reflect local constituencies' understandings</p> <p>The research may not be suited for explaining multiple aspects of complex situations</p> <p>Knowledge produced might be too abstract and general for direct application to specific local situations, contexts, and individuals</p> <p>Knowledge produced might not generalize to other people or other settings</p>
Qualitative	<p>Data based on the learners' own categories of meaning</p> <p>Useful for studying a limited number of cases in depth</p> <p>Useful for describing complex phenomena</p> <p>Can describe in rich detail phenomena as they are situated and embedded in local contexts</p> <p>The researcher almost always identifies contextual and setting factors as they relate to the phenomenon of interest</p> <p>Data is usually collected in naturalistic settings</p> <p>Qualitative approaches are especially responsive to local situations, conditions, and stakeholders' needs</p>	<p>Knowledge produced might not generalize to other people or other settings</p> <p>It is more difficult to test hypotheses and theories with large learner pools</p> <p>It generally takes more time to collect the data when compared to quantitative research</p> <p>The results are more easily influenced by the researcher's personal biases and idiosyncrasies</p>



KEY LEARNING POINT

Understanding the basic elements of research design will help you assess the relevance and usefulness of different pieces of research for your topic.



REFLECTION POINT

When do you use research information, and why?

6. University of South Alabama, 2007a; 2007b.

RECOMMENDED ACTIVITIES

PREPARATION



- Print out for each learner handout **M3-T3-H1. Overview of the elements of research design** for activity **M3-T3-A1**.
- Print out for each learner handout **M3-T3-H2. Research abstracts** for activity **M3-T3-A2**.
- Prepare separate PPT slides for each of the different research designs in the following order: observational, quasi-experimental, experimental and meta-study for activity **M3-T3-A4**.
- Source and print out one or two examples (depending on the size of the group) of each of the five research designs (observational, quasi-experimental, experimental and meta-study) for activity **M3-T3-A6**.
- Depending on the size of the learner group, organize an additional breakout space for activity **M3-T3-A6**.
- Print out for each learner the article Sutherland, Spiegelhalter and Burgman (2013). 'Twenty tips for interpreting scientific claims'. Nature 503: 335, in the Readings and Samples list, and the table **M3-T3-H3. Critical reading framework** for reading activity **M3-T3-A7**.
- Prepare one or two PPT slides to support an explanation on the difference between probabilistic and non-probabilistic sampling, drawing on the 'Population and sample' section of the Read & Reflect section for **optional** activity **M3-T3-A8**.
- Prepare two PPT slides on longitudinal and panel designs, drawing on the Read & Reflect section for **optional** activity **M3-T3-A9**.
- Prepare a PPT slide or flipchart with definitions of quantitative and qualitative research methods for activity **M3-T3-A10**.
- For **optional** activity **M3-T3-A11**, invite a researcher to address the group on a piece of research they have been involved in, describing the different elements of the research design and why they chose them. It is important that the speaker is **prepared carefully in advance** so that they use the same terminology and draw on content relevant to this topic.
- Write up questions for review activity **Exit cards** on a flipchart and label exit cards (three per learner).

M3-T3-A1

EXPERIENCES OF EMPIRICAL RESEARCH

[20–30 minutes]

1. Ask learners to volunteer what they understand by the term 'empirical research'. Allow two or three learners to answer before providing them with a working definition.
2. Ask learners to organize themselves into groups of four and appoint a group spokesperson to provide feedback in plenary and a scribe to make notes during the group discussion.
3. Invite each group to *briefly* answer the questions below, focused on their experience of empirical research (stress to learners that the answers needs to be about research):
 - What research question did you want to answer?
 - What study design was used, and why?
 - What did the sample look like?
 - How was the data collected?
4. Invite each group spokesperson to present the answers from their group. Record the different research questions, study designs and data collection methods on three separate sheets of flipchart paper.
5. Ask learners to review the flipcharts and volunteer what they think are the key elements of a research design. Conclude the activity by handing out to each learner the table in annex **M3-T3-H1. Overview of the elements of research design** to read.

M3-T3-A2

RESEARCH ABSTRACTS

[40–50 minutes]

1. Hand out to each learner the research abstracts in **M3-T3-H2. Research abstracts** and ask each learner to read them and highlight with a pen the different elements of the research design they identify in each abstract. Note that not every abstract in the handout contains clues as to each of the design elements.
2. Invite the learners to share their answers in plenary.

RECOMMENDED ACTIVITIES CONTINUED

M3-T3-A3 [OPTIONAL]

WHAT IS A CLEAR AND FOCUSED RESEARCH QUESTION?

[30–40 minutes]

1. Ask learners to briefly answer, in pairs, the following two questions: “Why is it useful to have a research question?” and “What are the characteristics of a clear and focused research question in your view?” Invite two or three pairs to share their answers, before explaining its usefulness and the different criteria one could apply to it. Make reference to the search strategy from Module 2.
2. Organize the learners into groups of three or four and ask them to work on at least four of the different research questions provided in the previous activity and listed on the flipchart. Ask them to write down revised versions of the research questions listed and discuss how the question has improved.
3. If insufficient or no research questions were provided in the previous activity, ask the learners in their groups to note down some work-related research questions. Invite the groups to pass their research questions to another group to write down their improved versions.
4. In plenary, ask each group to share one or two examples of the ‘before and after’ research questions and ask the other groups to decide whether the question has improved or not and to explain why.

M3-T3-A4

CATEGORIZING RESEARCH DESIGNS

[80–100 minutes]

1. Refer back to the flipchart with the different research designs provided by the learners in the earlier activity. Ask in plenary whether anyone can suggest how they could be categorized in terms of different types of research designs. Depending on what learners come up with, explain the differences between the research designs and how they could be categorized (i.e. experimental, quasi-experimental, observational and meta-studies).
2. Give short presentations on the research designs, in the order listed below, followed by the discussion and recommended activity:
 - Explain *observational* designs, then ask learners to discuss in pairs the pros and cons of this type of design. Ask pairs for examples and for any questions of clarification. Go to activity **M3-T3-A5. Correlation does not imply causality!** opposite.
 - Explain *quasi-experimental* designs, then ask learners to discuss in pairs the pros and cons of this type of design. Ask pairs for examples and for any questions of clarification.
 - Explain what *experimental* designs are, then ask learners to discuss in pairs the pros and cons of this type of design. Ask pairs for examples and for any questions of clarification.
 - Explain what *meta-study* designs are, then ask learners to discuss in pairs the pros and cons of this type of design. Ask pairs for examples and for any questions of clarification.
3. If not mentioned already, ask learners whether they think all the research designs are of the same rigour and, if not, how they differ. If not already covered in discussion, ask learners what they think is the most common problem associated with the four study designs presented – i.e. that it applies a positivistic view to reality where everything is measurable.
 - Explain to learners, as an answer to the above shortcoming, that the last presentation will cover qualitative designs. Ask learners to discuss the pros and cons of this type of design, in plenary.

M3-T3-A5

CORRELATION DOES NOT IMPLY CAUSALITY!

[40–50 minutes]

1. Write up on a flipchart or whiteboard the words ‘correlation’, ‘coincidence’ and ‘causality’. Ask learners to discuss in groups of three what the differences are between them, using policy-related examples where possible. Ask three or four pairs to share their thoughts in plenary, and encourage discussion among the wider group.
2. Ask each group to discuss and come up with three recent topical examples of causality and three topical examples of correlation.
3. Invite each group to present their examples in plenary, and encourage the learners to a lively debate over which are examples of causality and which are of correlation. Encourage the learners to question the rationale behind the choice of examples presented and to back up their positions by citing research and evidence.

M3-T3-A6**REVIEWING A RESEARCH STUDY DESIGN****[40–60 minutes]**

1. Place one or two examples (depending on the size of the group) of each of the five research designs at different work stations around the training room, and the breakout space if available.
2. Ask learners to decide which type of research design they would like to focus on and to go to the appropriate work station. Some variance in group numbers will be acceptable but make sure there are at least three learners per work station.
3. Invite groups to familiarise themselves with the research study and discuss the questions in the handout **M3-T3-H1. Overview of the elements of research design**.
4. Ask groups to share their analysis in plenary and invite learners to volunteer any additional questions that could be used in their analysis of the research studies.

M3-T3-A7**TWENTY TIPS FOR INTERPRETING SCIENTIFIC CLAIMS****[50–60 minutes]**

1. Ask learners to organize themselves into groups of three or four and appoint a group leader.
2. Hand out to each learner the article Sutherland, Spiegelhalter and Burgman (2013). 'Twenty tips for interpreting scientific claims'. Nature 503: 335, in the Readings and Samples list, and the table in handout **M3-T3-H3. Critical reading framework**.
3. Ask the group leader to decide how the group will read the article. For example, each learner could read four or more specific parts, or the whole group could speed read the whole article.
4. Explain the task and invite them to complete the table.
5. Invite the groups to share in plenary their selected quotes or ideas, together with their own reflections or interpretations. Recommend that the learners read the full article in their own time and consider the questions in the table.

M3-T3-A8 [OPTIONAL]**POPULATION AND SAMPLE****[50–70 minutes]**

1. In plenary ask the learners why a researcher takes a sample. Explain the rationale behind taking a sample, using the diagram on slide four of the PPT in annex **M3ppt. Introduction and concepts**.
2. Check the learners' understanding of the terms 'sample', 'population' and 'sampling procedure', to find out how much they know about the topic. Briefly explain the terms if necessary.
3. Ask learners if anyone knows the terms 'probabilistic' and 'non-probabilistic sampling' and refer them to the handout **M3-T3-H1. Overview of the elements of research design**, which mentions one of the terms. Invite learners to explain what they think the terms mean and what the difference is between the two sampling methods.
4. Depending on how much learners know about the two sampling methods, give a short explanation of the difference between probabilistic and non-probabilistic sampling, using one or two PPT slides that draw on the 'Population and sample' section of Read & Reflect.
5. In plenary discuss and try out different ways (probabilistic and non-probabilistic) of taking a sample from the learner group (the population).
6. Ask the learners whether the resulting sample is representative of the group (use a visual characteristic) and ask them to reflect on PPT slide five on the Law of Large Numbers in annex **M3ppt. Introduction and concepts** in relation to sampling. Highlight any points not covered by the learners in discussion.
7. If considered useful or it will further develop the learning of the group, select one or both of the discussion topics below and ask learners in groups of three or four:
 - to discuss to what extent they think random sampling is different from randomization, as explained in experimental designs, and why each one is done; and
 - to identify the populations and sampling procedures in the different studies provided throughout this topic and discuss why samples are representative – or not – for the given populations – i.e. whether they have the same characteristics.
8. Invite the groups to share their key conclusions in plenary, and encourage discussion among the wider group.

RECOMMENDED ACTIVITIES CONTINUED

M3-T3-A9 [OPTIONAL]

SEQUENCING AND TIMING

[20–30 minutes]

1. Invite learners to consider whether they think research findings are generalizable across time. Explain longitudinal and panel designs using two PPT slides drawing on the Read & Reflect section.
2. In pairs, ask learners to discuss what kinds of topics/evidence requests would be best answered by longitudinal studies and panel designs.
3. Invite the pairs to share their ideas in plenary using examples from their work. Encourage discussion within the wider group.

M3-T3-A10

QUANTITATIVE AND QUALITATIVE RESEARCH AND METHODS

[30–40 minutes]

1. Ask learners to share in pairs what they know about quantitative and qualitative research methods. Invite the pairs to share their ideas in plenary.
2. Display a PPT slide or flipchart with definitions of each term. Ask learners to discuss the circumstances in which they find qualitative information useful, and when they find quantitative information useful. Encourage them to use real work-related examples.
3. Invite the pairs to join another pair to form groups of four, and to discuss and write down on flipchart paper the pros and cons of qualitative and quantitative research methods. Ask the groups to move around the room and add anything missing from the other groups' flipcharts. Explain, if not already mentioned, that both qualitative and quantitative methods can be used, which is called a 'mixed-methods' design.

M3-T3-A11 [OPTIONAL]



EXTERNAL SPEAKER PRESENTATION ON RESEARCH

[60–90 minutes]

1. An invited researcher makes a presentation to the group on a piece of research they have been involved in, describing the different elements of their research design and why they chose them.
2. In advance of the presentation, inform the learners of the title of the presentation and ask each learner to write down one question they would like answered in the presentation.
3. After the presentation, open the floor to the learners to ask the visiting researcher any of their questions that have been left unanswered.



OPTIONAL VIDEOS

'Worm wars': www.youtube.com/watch?t=188&v=9SCFIYINILQ

Changing views on Zimbabwe's land reform: www.youtube.com/watch?t=3&v=t-7Vg0TNn2o

Multidimensional Poverty Index: www.youtube.com/watch?v=yEULKXlokFw

Richard Wilkinson – evidence on inequality: www.ted.com/talks/richard_wilkinson?language=en

EXIT CARDS



[5–10 minutes]

1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

FURTHER READING

Richard Mallet – A critical view of systematic reviews for development policy: www.odi.org/comment/6283-systematic-reviews-international-development-slr

Africa Check – an award-winning fact-checking website:
www.africacheck.org

CLEAR – Regional Centres for Learning, Evaluation and Results – strengthening capacities and systems for monitoring and evaluation (M&E) and performance management, to guide evidence-based development decisions:
www.theclearinitiative.org/index.html

DFID – Assessing the Strength of Evidence: A How To Note:
www.gov.uk/government/uploads/system/uploads/attachment_data/file/291982/HTN-strength-evidence-march2014.pdf

Louise Shaxson – Is your Evidence Robust Enough? Questions for Policymakers (Policy Press, 2005)

Systematic reviews and impact evaluations for international development topics from 3ie: www.3ieimpact.org

GLOSSARY

Annotated bibliography

A list of citations to books, articles, and documents. Each citation is followed by a brief (usually about 150 words) descriptive and evaluative paragraph, the 'annotation'. The purpose of the annotation is to inform the reader of the relevance, accuracy and quality of the sources cited.

Bias

Any influence which distorts or unduly influences the results of an investigation – perhaps as a result of the research method employed, sampling methods or the researcher's presuppositions. Some kinds of bias may be inevitable. To avoid any accusations of distortion, it is important to identify any factors you think may introduce bias (Laws, Harper, Jones and Marcus, 2013).

Correlation

The association between two variables such that when one changes, the other also changes. Correlation does not prove causality.

Causality

A causal relationship between two or more factors in which one factor directly explains the other.

Empirical research

aims at the development of new insights through the collection of data (empirical = observation or measurement rather than theoretical reasoning).

Experimental design

A research design in which the researcher tests the effects of an intervention by introducing the intervention to one group and compares this group with another which has not received the intervention (the 'control group').

Experimental evidence

Evidence as a result of an experimental study where a variable is manipulated and subjects are randomly assigned to a treatment or control group. For example, an intervention is given to one group of people but not to another one – i.e. the control group. The differences are then measured.

Evaluation

Aims to understand the performance and results from an organization, programme, project or any other intervention or initiative, using data captured during monitoring exercises conducted throughout the programme cycle.

Grey literature

Literature produced by government, academics, businesses, organizations and other institutions in formats not controlled by the commercial publishing industry.

Impact evaluation

An assessment of changes in the well-being of individuals, households, communities or firms that can be attributed to a particular project, programme or policy. The central impact evaluation question is what would have happened to those receiving the intervention if they had not in fact received the programme. Since we cannot observe this group both with and without the intervention, the key challenge is to develop a counterfactual – that is, a group which is as similar as possible (in observable and unobservable dimensions) to those receiving the intervention. This comparison allows for the establishment of definitive causality (World Bank, 2011).

Journal

A periodical in which articles relating to a particular discipline are published. Scholarly journals are often peer reviewed and present original research and reviews.

Literature review

A review of the current knowledge about a topic, including substantive findings, as well as theoretical and methodological contributions. A literature review is a standard part of any research paper (both formal academic papers and research reports from think tanks, NGOs etc). Although there are standard good practices for literature reviews, they do not follow as formal a process as systematic reviews and are not peer reviewed.

Non-experimental evidence

Evidence as a result of an observational study that describes research which observes (and explains) the effects of something already taking place in the real world. This means that – unlike experimental or quasi-experimental designs – the researcher does not directly design or implement the intervention themselves.

Observational design

A research design which observes the effects of something already taking place in the real world and where the researcher does not directly design or implement the intervention.

Policy brief

A short paper (usually three to four pages) that covers a specific issue. Typical briefs have four main functions: to explain and convey the importance of an issue or outline a problem; to present solutions and policy recommendations; to provide evidence to support the reasoning behind those recommendations; and to point the reader to additional resources on the issue.

Qualitative methods and data

The nature of answers (evidence) in terms of their verbal, written or other descriptive natures. It asks question such as who, which, what, when where and why? Qualitative research belongs to a family of approaches concerned with collecting in-depth data about human social experiences and contexts (Laws, Harper, Jones and Marcus, 2013).

Quantitative methods and data

asks questions such as "How many?", "To what extent?" or "How much?" using counting and other computation. Quantitative research is concerned with the collection of data in the form of various measures and indices, and its description and analysis by means of statistical methods (Laws, Harper, Jones and Marcus, 2013).

Quasi-experimental design

A research design which aims to measure the effects of an intervention, but without randomly assigning a group to treatment or control. These are often used when it is not practical or ethical to randomly assign people into groups.

Randomized controlled trial

A study in which people are allocated at random (by chance alone) to receive an intervention. One of these interventions is the standard of comparison or control. It can also be a type of impact evaluation which uses randomized access to social programmes as a means of limiting bias and generating an internally valid impact estimate.

Research design

The method of planning research to gather the most appropriate information, in the correct way, and to analyse the results effectively (Laws, Harper, Jones and Marcus, 2013).

Statistics: 'processed data'

It is the study of the process of collecting, analysing, interpreting, presenting and organizing data. Usually, governments have a unit or an agency that manages the statistics that have to do with their country. International/multilateral organizations such as the World Bank, WHO and African Union have useful statistical databases on their websites which enable comparison and analysis across countries.

Systematic review

A paper that gathers a large number of research papers and summarizes the findings through a specific, formal process which is peer reviewed. A systematic review uses transparent procedures to find, evaluate and synthesize the results of relevant research. Procedures are explicitly defined in advance, to ensure that the exercise is transparent and can be replicated. This practice is also designed to minimize bias. Studies included in a review are screened for quality, so that the findings of a large number of studies can be combined. Peer review is a key part of the process; qualified independent researchers control the author's methods and results (The Campbell Collaboration).

Theoretical research

generally uses existing theories or hypotheses to develop new ideas. These new ideas are not tested by collecting evidence.

Triangulation

looking at things from different points of view; the employment of a number of different research techniques, in the belief that a variety of approaches gives the best chance of achieving validity. This is because the way in which data is collected has an effect on the findings – for example, interviews, surveys, mapping exercises may all show different points of view on the same issue (Laws, Harper, Jones and Marcus, 2013).

Vested interest

A personal reason for involvement in an undertaking or situation, especially an expectation of financial or other gain – for example: "Banks have a vested interest in the growth of their customers" (Oxford Dictionaries, 2015).

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MODULE 3

HANDOUTS



HOW TO SEPARATE FACT AND FICTION ONLINE

At the TEDSalon in London, Markham Nolan shares the investigative techniques he and his team use to verify information in real-time, to let you know if that Statue of Liberty image has been doctored or if that video leaked from Syria is legitimate.

The video can be downloaded from www.bit.ly/1g9FmSu



QUESTIONS TO CRITICALLY ASSESS EVIDENCE

Read your assigned case below, discuss and write down your questions:

CASE A: SOURCE AND CREDIBILITY

Your country has just discovered oil, and you are looking for information on how to manage its extraction in the most effective way. You have reached out to your network to point you in the direction of any useful sources or relevant literature on the subject. You have found two different evidence products which could prove useful.

Identifying who provides the information is a key clue to its reliability. It represents the 'credentials' of a piece of information that support its status and perceived value.

You need to judge the source and credibility of the evidence products. Discuss and write down on the flipchart paper the questions you will need to find answers to, in order to do this.

CASE B: OBJECTIVITY VS BIAS

You are looking for information for a background note on sexual education to prevent HIV, and have reached out to your network to point you in the direction of any useful sources or relevant literature on the subject. One of your contacts has got back to you recommending two different evidence products which could prove useful.

Hidden bias or errors of omission in information, whether or not deliberate, can be misleading, so it will be important to clearly identify any potential biases in the evidence products before using them.

You need to judge the objectivity vs bias of the evidence products. Discuss and write down on the flipchart paper the questions you think you would need to find answers to, in order to do this.

CASE C: QUALITY AND TIMELINESS

You are looking for information on genetically modified organisms (GMOs) and have reached out to your network to point you in the direction of any useful sources or relevant literature on the subject. Using the sources you've been recommended, you have found a few different evidence products on the topic.

Looking at the source of the information and assessing credibility and objectiveness should give you some strong indicators of quality. However, even credible, objective sources can sometimes produce poor-quality pieces of information.

You need to judge the quality of the evidence products. Discuss and write down on the flipchart paper the questions you think you would need to find answers to, in order to do this.

CASE D: RELEVANCE

You are looking for information on preventing school dropout among girls, and you've found a lot of evidence products online about this issue. You need to decide which can help you give recommendations to address this issue in your country.

The most important way to assess relevance is to be clear about what question you are trying to answer and what type of evidence will help you to answer it. It is more likely that you will find a range of pieces of evidence which provide insights into different aspects of your topic.

You need to judge the relevance of the evidence products, to decide whether they can provide insights into a particular aspect of your information request. Discuss and write down on the flipchart paper the questions you think you would need to find answers to, in order to do this.

ASSESSING COMMON EVIDENCE PRODUCTS AND TYPES OF LITERATURE

Product	Type of literature	Pros	Cons
Systematic review	Peer reviewed; body of evidence		
Academic journal article	Peer reviewed (usually – do check!); can be single study or body of evidence		
Annotated bibliography	Grey literature		
Policy brief	Grey literature		

Product	Type of literature	Pros	Cons
Programme reports (e.g. from an NGO)	Grey literature		
Reports/papers from think tanks	Grey literature		
Statistics and data	Primary literature		
Impact evaluations	Grey literature; Single study		

Source: Produced by authors

CRITICALLY ASSESSING DIFFERENT EVIDENCE PRODUCTS

Select and read the relevant case below, assess the evidence products in your document package and then write your assessment down on paper using bullet points.

CASE A: SOURCE AND CREDIBILITY

Your country has just discovered oil, and you are looking for information on how to manage its extraction in the most effective way. You have reached out to your network to point you in the direction of any useful sources or relevant literature on the subject. One of your contacts has got back to you recommending two different evidence products which could prove useful.

You need to make an assessment of the source and credibility of one of the evidence products, which is provided on this table. Read, discuss and then write a written assessment (using bullet points).

CASE B: OBJECTIVITY VS BIAS

You are looking for information for a background note on sexual education to prevent HIV, and have reached out to your network to point you in the direction of any useful sources or relevant literature on the subject. One of your contacts has got back to you recommending two different evidence products which could prove useful.

You need to make an assessment of any potential biases and/or objectivity you identify in one of the evidence products, provided on this table. Read, discuss and then write a written assessment (using bullet points).

CASE C: QUALITY

You are looking for information on GMOs and have reached out to your network to point you in the direction of any useful sources or relevant literature on the subject. Using the sources you've been recommended, you have found a few different evidence products on the topic.

You need to make an assessment of the quality of one of the evidence products, provided on this table. Read, discuss and then write a written assessment (using bullet points).

CASE D: RELEVANCE

You are looking for information on preventing school dropout for girls, and you've found a lot of evidence products online about this issue. You need to decide which can help you give recommendations to address this issue in your country.

You need to review the different documents on the table and decide which combination of evidence products will provide you with the best insight into the topic and why. Read, discuss and then write a written assessment (using bullet points).

OVERVIEW OF THE ELEMENTS OF RESEARCH DESIGN

Element	Explanation	Questions to consider
Research question	<p>In natural and social science, the research question is the starting point of every study. Often this question is derived from theoretical considerations and implications or a gap in the literature.</p> <p>A good research question is sufficiently focused – for example, determining location, type of research design, population and objectives of a study.</p>	<p>Is the research question explicitly stated?</p> <p>Where did the researcher derive his/her question?</p> <p>Is the research question specific enough to guide the research?</p> <p>Is the research question answerable?</p>
Type of research design	<p>The type of research design refers to how research or studies may be categorized according to certain similarities and differences. Typical designs, among others, are experimental and longitudinal studies. Each design has its advantages and disadvantages.</p>	<p>Is the type of research design suitable to answer the research question?</p> <p>Does the type of research design allow causal conclusions?</p> <p>Do other studies with different research designs come to the same conclusions?</p>
Population and sample	<p>The population and procedures for drawing a sample are crucial to generalize the findings of a particular piece of research.</p> <p>Ideally, the research draws a probabilistic sample or proves that the sample corresponds to the targeted population.</p>	<p>What is the study population?</p> <p>Is the study population of interest for my information need?</p> <p>Is the sampling procedure explicitly described?</p>
Timing and sequencing	<p>Research may investigate a problem or phenomenon over time (process), such as longitudinal studies, or at a particular point in time (state), such as cross-sectional studies.</p>	<p>Do findings from the research apply to different times?</p>
Data collection methods	<p>Typically data are collected qualitatively – for instance, through open questions in interviews – or quantitatively, such as by measuring unemployment rates. Quantitative and qualitative data are analysed differently and have different advantages and disadvantages.</p>	<p>Are the data quantitative or qualitative?</p> <p>Is the quantitative indicator a valid measure of the phenomenon?</p>

RESEARCH ABSTRACTS

Highlight the different elements of the research design that you can identify in each abstract:

- Research question
- Type of research design
- Population and sample
- Timing and sequencing
- Data collection methods

ABSTRACT 1

MAJOR HEALTH PROBLEMS AND DISEASES OF STREET DOGS IN POKHARA VALLEY, NEPAL

(Acharya, M., Dhakal, S., *Int J Appl Sci Biotechnol*, (2016), Vol 4(1): 53-56. <http://dx.doi.org/10.3126/ijasbt.v4i1.14571>)

Objective of the study was to find the prevalence of major health problems among street dogs in Pokhara Valley, Nepal. Data were taken from the rescued street dogs brought for the treatment at Himalayan Animal Rescue Team (HART), Nepal, from January to December, 2011. A total of 171 sick or injured dogs were brought for the treatment. All the preliminary diagnosis was done by the veterinary officer and confirmatory diagnosis were limited. Data were analyzed using Microsoft excel program 2013 (Microsoft Corporation, New York, USA) and results are presented as number and in percentage. Mange infestation (40.35%) was the most prevalent problem, followed by general wound (18.12%), respiratory tract infection (7.60%), gastrointestinal parasites (5.26%), and general nervous signs (4.09%). Two dogs were suspected with rabies. Maggot infestations, tick infections, poisoning, bone fractures, otitis, pyometras, bite wounds, mammary tumors, hernias, abscesses, and anemic conditions collectively accounted for nearly 24.58%. Results presented in this study can be a reference for non-government organizations involving in rescue and treatment of sick and injured street dogs to plan their activities.

ABSTRACT 2

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS: PROMOTING HEALTH AND WELL-BEING THROUGH PHYSICAL EDUCATION PARTNERSHIPS

(Lynch, T. *Cogent Education*, (2016), 3(1), 1188469. <http://doi.org/10.1080/2331186X.2016.1188469>)

This paper shares a health and wellbeing partnership, modelling implementation of physical education (PE) advocated by the United Nations (UN). The Sustainable Development Goals (SDGs) exemplifies global efforts towards equality, specifically Goal 3 and 4 address health and wellbeing. The purpose of this paper is to provide insights into cross sector “partnerships”, identified as essential for the implementation of the SDGs. This is significant as the UN acknowledge a present gap of information on partnerships in action and a need for reporting from the ground level. The project “Best Start: A community collaborative approach to lifelong health and wellness”, began as a partnership between a university and nearby schools and quickly grew to involve Australian Registered Training Organisations, the local health industry, Education departments and sport governing bodies. The collaborations involved pre-service teachers teaching Health and PE lessons to children in a disadvantaged socio-economic area, creating valuable learning experiences for stakeholders.

Local and global communities were involved in research and reform. The project creatively optimised resources available through state, Australian and international connections. International partnerships enabled identification of unique contextual opportunities. Programme planning was strengthened with data gathered from an England and Wales Ofsted awarded Primary Physical Education course. Various methods, including; semi-structured interviews, reflective journal, observations, document analysis, and Student Evaluation of Teaching Units (SETU) were adopted. SETU is valid and reliable data collected by the university for the purposes of research. The findings support that partnerships enable SDG implementation and the research paper offers direction for localisation.

ABSTRACT 3**PERCEPTION OF AND ATTITUDE TOWARD MASS MEDIA REPORTAGE OF THE 2012 FLOOD IN RURAL NIGERIA**

(Ajaero, I., Okoro, N., Ajaero, C., SAGE Open, (2016). <http://doi.org/10.1177/2158244016666887>)

Despite reportage of the impending flood by the mass media, the 2012 flood was the most devastating in the history of Nigeria as it adversely affected 33 out of 36 states in the country. Therefore, this study examines people's perception of and attitude toward mass media reportage of the 2012 flood. A structured questionnaire was used to collect data from 300 households in rural communities in Delta and Anambra states while data analyses were by descriptive statistics, analysis of variance, and regression analysis. More than 75% of the respondents received information about the flood from either radio or television, and there were significant spatial variations in perceptions of flood reportage. Furthermore, the regression results showed that generally, mass media reportage of the flood was not too effective in influencing people's attitude. Subsequently, recommendations were made on how to ensure that populations affected by floods have access to comprehensive, easily accessible, and effective information.

ABSTRACT 4**AGROFORESTRY: A SECOND SOIL FERTILITY PARADIGM? A CASE OF SOIL FERTILITY MANAGEMENT IN WESTERN KENYA**

(Mango, N., & Hebinck, P., Cogent Social Sciences, (2016), 2(1), 1215779. <http://doi.org/10.1080/23311886.2016.1215779>)

This paper explores the claim whether agro-forestry is a second soil fertility paradigm. The answer to this question, however, is not unequivocal. Farmers in Western Kenya generally do not apply fertiliser and rather rely on many soil fertility replenishment (SFR) strategies. Scientists recognised that lowering the costs of restoring fertility is vital to the future of agriculture in the region and beyond. Agro-forestry emerged as an alternative strategy to replenish soil fertility and has been introduced through various programmes and institutions in Western Kenya since the early 1990s. Detailed field and case studies show that people are indeed convinced that agro-forestry helps them to replenish soil fertility and that over the years yields indeed have increased. The paper also traces the emergence of localised practices (niches) of soil fertility management. These niches stand for local ways of reproducing soil fertility. These practices coexist with improved fallows, and mutually transform each other through various kinds of interactions at field and village level as well as with technology institutions. Together they reflect the diversified soil fertility options that resonate well with the multiple nature of nutrient and other soil constraints. Low-cost technologies for supplying nutrients to crops are needed on a scale wide enough to improve the livelihood of farmers. The aim of the paper is to show whether and how externally induced improved fallow innovations resonate with farmer-produced niches in the domain of SFR in Luoland. The paper contributes in this way to a more appropriate understanding of socio-technical innovations.

CRITICAL READING FRAMEWORK

Complete the table as follows: In column 1 **choose one significant idea/quote from at least four sections of the reading**. This idea/quote should make you think of something that you noticed about yourself as a learner (please write this under column 2 next to the quote/idea) and/or something that you noticed as a civil servant at your workplace (please write this under column 3, in the same row as the quote/idea you are commenting on).

Quote/idea from each point/section of the reading	What it reminds me of as a learning person	How this applies at my workplace

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MODULE 4

COMMUNICATING
EVIDENCE



This trainer manual forms part of the VakaYiko Evidence-Informed Policy Making Toolkit. The Toolkit aims to support skills development and practical processes for evidence-informed policy making in public institutions in developing countries. It consists of a training course, a series of practical handbooks, and a range of informational and promotional materials.

This is the fourth in a four-part series of guidance notes for trainers. The complete Toolkit can be found on the INASP website here:

www.inasp.info/vytoolkit



Duration	2 days [805–1,050 mins]
Aim	To strengthen skills in communicating evidence to different audiences.
Rationale	In this module, learners practise using a variety of methods and channels to communicate evidence for policy making.
Learning objectives	<p>By the end of the module, learners will be able to:</p> <ul style="list-style-type: none"> • produce written outputs and structured presentations by taking into consideration the audience, the message and the channel; • summarize a written text; • deliver a short, structured oral presentation to their audience; • write a policy brief to their audience; • use infographics and data visualizations in their written and oral communications; • reflect on their current communication practices and how they use them in the workplace.
Key learning points	<ul style="list-style-type: none"> • The more that you can make your communications audience-focused, the better. Think about their needs and how you might best help. • Don't forget the importance of strong, clear and concise messages in any communications. Above all, you want your audience to retain and even act on a message. • All written outputs should be carefully selected, tailored to the audience and highlight and emphasize key information and solutions. How much information does your reader really need? • Presentations should be carefully prepared and audience-focused, with a clear objective and a strong message. They should be enhanced but not dominated by visual aids and slides. • Data visualizations and infographics should be clear and audience-focused, aiming to 'show not tell'.
Establish links	<ul style="list-style-type: none"> • By now they should have a list of new sources which they have assessed, which they are aiming to work into their policy brief.
Resources	<ul style="list-style-type: none"> • Projector and laptop for PowerPoint • Flash stick • Flipchart paper and different-coloured marker pens • Flipchart holders • Sticking tape • Small cards (exit cards) and post-it notes

TOPIC 1 p.153	KNOW YOUR AUDIENCE	[135–185 MINS]
	ACTIVITIES:	
	M4-T1-A1 What is my experience with communications at work?	[30–40 mins]
	M4-T1-A2 Who are my audiences?	[45–50 mins]
	Optional Videos	
TOPIC 2 p.158	DESIGNING EFFECTIVE MESSAGES	[150–190 MINS]
	ACTIVITIES:	
	M4-T2-A1 Identifying key messages	[40–50 mins]
	M4-T2-A2 Which channels do I use to communicate with my audience?	[40–50 mins]
	M4-T2-A3 Reviewing partner written pieces	[30–40 mins]
	M4-T2-A4 Summarizing skills 1	[40–50 mins]
	HANDOUTS:	
	M4-T1-H1 Samples of written communications	
TOPIC 3 p.163	DEVELOPING EFFECTIVE WRITTEN COMMUNICATIONS	[365–560 MINS]
	ACTIVITIES:	
	M4-T3-A1 Current and future written outputs	[15–20 mins]
	M4-T3-A2 How to develop the main content elements of a policy brief	[30–40 mins]
	M4-T3-A3 What is the structure of a policy brief?	[50–60 mins]
	M4-T3-A4 Review of written summaries	[30–40 mins]
	M4-T3-A5 Policy brief writing workshop	[180–240 mins]
	M4-T3-A6 Choosing the best policy brief	[60–70 mins]
	M4-T3-A6 [Alternative] Choosing the best policy brief	[70–90 mins]
	HANDOUTS:	
	M4-T3-H1 Structure of a brief	
	M4-T3-H2 Key principles for structured writing and presentations	
OPTIONAL TOPIC A p.172	PRESENTING KEY MESSAGES TO YOUR AUDIENCE: ORAL COMMUNICATIONS	[80–120 MINS]
	ACTIVITIES:	
	M4-TA-A1 Tips for presenting well	[40–60 mins]
	M4-TA-A2 Delivering a presentation	[40–60 mins]
	Optional Videos	
	HANDOUTS:	
	M4-T3-H2 Key principles for structured writing and presentations	

OPTIONAL TOPIC B p.175	INFOGRAPHICS, MULTIMEDIA AND DATA VISUALIZATIONS [135–180 MINS]	
	<i>N.B. This topic requires access to the internet and one computer per learner</i>	
	ACTIVITIES:	
	M4-TB-A1	Reviewing infographics [15–20 mins]
	M4-TB-A2	Exploring infographic web-based tools [50–70 mins]
Action plan and review activities (trainer to build in)	M4-TB-A3	Creating an infographic for a policy brief [70–90 mins]
	Optional Videos	
	• Consolidation of action plans	(to be carried out at the end of the last module – i.e. Module 4 or Optional Module) [20–420 mins]
	• End review	(to be carried out at the end of the last module – i.e. Module 4 or Optional Module) [40–60 mins]
	• Exit cards	(to be carried out at the end of each day) [5–10 mins]

TOPIC 1

KNOW YOUR AUDIENCE

MODULE 4 LEARNING OBJECTIVES RELEVANT TO TOPIC 1

By the end of this topic learners will be able to:

- Produce written outputs and structured presentations by taking into consideration the audience, the message and the channel
- Reflect on their current communication practices and how they use them in the workplace

READ & REFLECT



A core part of evidence-informed policy making (EIPM) is effective communication – getting information to the right person, at the right place and the right time to inform decision-making. This can be challenging, and without good communication planning, new ideas and important evidence frequently does not reach the right audience in the right way or is even simply ignored or rejected (Young and Quinn, 2012). Good communication is critical to the way you carry out your job, and although at times it will require extra effort, by and large it should become part and parcel of what you are doing on a daily basis with colleagues, superiors and other key stakeholders. Communication does not have to be complicated, nor do you have to spend a lot of time planning, but a little bit of reflection can make an enormous difference to achieving your aims.

The three key ingredients of effective communication are **audience**, **message** and **channel**. These ingredients will be the focus throughout this module. If you keep coming back to them, you can't go too far wrong.

WHAT IS THE AIM OF THE COMMUNICATIONS?

Before you can begin to develop any communications, you need to be clear of why you are doing it. Communications, in your case, could be an individual evidence product, such as writing a report, or a longer package of communications focusing on an upcoming political decision, for instance.

Here are a few pointers to help you think more about aims:

- Is there a problem you need to address?
- Are you offering a solution or a number of solutions?
- What do you want the communications to achieve? For example, informing decisions on how to improve economic transformation.
- Is it a direct mandate (someone asked for more information) or are you suggesting this evidence to help the recipient?

INTERNAL AND EXTERNAL AUDIENCES

You are likely to be working with both internal stakeholders – research directors, ministers and members of parliament, committees and others – and, from time to time, external stakeholders – the general public, the media. While the process by which you develop internal and external communications doesn't differ greatly, the type of information and the channels by which you communicate will be different. **You cannot develop the same communications for all stakeholders** – internal and external audiences are different and will have different needs and understanding. It is essential that all communications should be carefully tailored and adapted to the audience.

With internal communications, it can be much easier to gauge the audience's interest and the demand for the information. They often share common points of reference and may understand technical terms and style more easily. External audiences, such as the general public, will not have the same understanding but, rather, will have different perspectives and interests. Communications with external audiences may therefore need more careful planning, and should be as accessible as possible. External audiences may also need background information or for you to tell more of the story; this might not be necessary for internal stakeholders. In all cases communications should be as clear as possible.

The information needs of public-sector officials vary based on their hierarchical position within the sector. Papadópulos (2013) distinguishes three levels of officials: political, strategic and operating actors. While political actors make decisions on the global orientation of a certain policy, strategic actors are responsible for the political design, and operating managers are in charge of policy implementation actions.

Political actors work in a world of ideas and policy models, and their involvement in policy making is not daily. Their involvement is more intense during periods of innovation or policy change. They usually make decisions within briefer periods than strategic and operating actors, so timing is very important: certain information may be very valuable, but if it is not accessible at the right time, it may not be taken into account.

Strategic actors have a more day-to-day involvement, and their intervention is more intense during the implementation of new policies that require process innovation as well as the creation of specific programmes. These actors' knowledge is related to the innovation in administrative processes, the design of information systems, high-level management systems and assessment and monitoring processes and strategies.

Operating actors have a daily routine involvement implementing the actions designed by political actors and, mainly, by strategic actors. Their needs for knowledge vary according to their place in the policy-making and implementation process.

TABLE 1
INTERNAL AUDIENCES FOR EVIDENCE-INFORMED POLICY MAKING

Decision-making level	Type of information
Political actors	<p>A. The results and impacts of interventions they support. They usually require indicators that account for the advances in certain areas under their influence.</p> <p>B. Design and implementation alternatives when approaching a new policy. Comparative evidence may be required in these cases.</p> <p>C. Information about budget execution.</p> <p>D. Trends as regards government image, their own image and that of their potential competitors among the electorate.</p> <p>In general, they set the boundaries within which the strategic actors work, and enable them to act within those boundaries.</p>
Strategic actors	<p>A. Information related to plans and programmes functioning.</p> <p>B. Elements that allow them to innovate as regards specific programmes.</p> <p>C. Elements that allow them to innovate at administrative level: monitoring and assessment, information systems etc.</p> <p>D. Diagnoses about different situations that allow visualizing public policy problems.</p> <p>E. Information to justify new courses of action before different players of the political community (political actors themselves, opposing parties, funding organizations etc.).</p> <p>In general, they process and communicate part of this information to political actors as well as inform the operating actors about what needs to be done.</p>
Operating actors	<p>A. They are in charge of collecting and systematizing the information on indicators from projects developed within their area.</p> <p>B. They collect information that allows justifying new courses of action.</p> <p>In general, they process and communicate part of this information to strategic actors.</p>

Echt and Weyrauch, 2015.



REFLECTION POINT

Think about the main audiences you engage with through your work. How do their information needs differ?



KEY LEARNING POINT

The more audience-focused you can make your communications, the better. Think about their needs and how you might best help.

RECOMMENDED ACTIVITIES

PREPARATION



- Write the learning objectives for the module on a flipchart and leave them displayed throughout to refer to at the start of each topic.
- Remind learners of the pre-workshop request to bring their own institutional guidelines/policies that govern how they write policy briefs, reports etc. Ask them to bring the documents to the training room to work on throughout Module 4.
- Print out one example per card of well and poorly written communications in **M4-T1-H1**. Make sure that there are enough for one card per group of three or four people for activity **M4-T1-H1**.
- Write up questions for review activity **Exit cards** on a flipchart and label exit cards (three per learner).

M4-T1-A1 [OPTIONAL]

WHAT IS MY EXPERIENCE WITH COMMUNICATIONS AT WORK?

[30–40 minutes]

1. Invite learners to brainstorm the types of communications they use at work (e.g. presentations, reports, briefs, memos etc.). Write them down on a flipchart paper.
2. Ask the learners to fold an A4 piece of paper in two and on one side of the paper to write down things that went well in their communications at work, and on the other side to write down the challenges they have experienced.
3. Invite the learners to share their experiences in pairs, including the purpose of the communications they developed, and then ask them to provide feedback in plenary on any similarities and differences they identified.
4. Note down the key experiences on flipchart paper. Ask the learners to volunteer some of the purposes of the communications they discussed. Highlight the importance of identifying one or more purposes before actually starting to develop the communications, and invite learners to explain why this is important.

M4-T1-A2

WHO ARE MY AUDIENCES?

[45–50 minutes]

1. Put up three sheets of flipchart paper on the walls of the training room. Label the first 'Audience', the second 'Message' and the third 'Channel' and distribute sticky notes to the learners. The flipcharts will remain on the walls until the end of Module 4.
2. Invite each learner to write on a separate sticky note their audiences in their work and to stick the notes on the flipchart paper labelled 'Audience'. Invite a learner to cluster the post-it notes into categories and name them.
3. Now introduce three categories that distinguish three levels of EIPM actors: political, strategic and operating actors. Encourage the learners to explain in what ways they think the policy-related responsibilities of each category are different.
4. Invite another learner, with the help of the wider group, to re-cluster the sticky notes under the three categories.
5. Put the learners into groups of three or four and hand out one sheet of flipchart paper per group. Invite them to discuss what each category's role as a communicator is, who are they communicating with, and what kind of evidence they need or are most interested in? Ask the groups to write down the different kinds of evidence each category needs or is most interested in on the flipchart paper.
6. Invite each group to look at the flipcharts of the other groups, adding anything they think is missing and/or challenging other groups on points they do not agree with.
7. If necessary display the table on PPT slide 4 in annex **M4ppt. Introduction and concepts** and invite comments from the wider group.



OPTIONAL VIDEOS

Stakeholder mapping, Ministry of Public Health and Sanitation Kenya:
www.vimeo.com/44463792

EXIT CARDS

[5–10 minutes]



1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

TOPIC 2

DESIGNING EFFECTIVE MESSAGES

MODULE 4 LEARNING OBJECTIVES RELEVANT TO TOPIC 2

By the end of this topic learners will be able to:

- Produce written outputs and structured presentations by taking into consideration the audience, the message and the channel

READ & REFLECT



If you look at a well-written report, strong oral presentation or any other type of effective communication channel or output, you will always find good messaging at its heart. A frequent mistake is to not think about messages at all. This is particularly common when synthesizing information, as it is assumed that you simply need to summarize as much as possible and then pass it on to your audience. But there should almost always be a message or a range of messages running through any communications and closely linked to the aim.

Messages are “just the tip of the iceberg” (Young and Quinn, 2012); they are what your audience most needs to know, and are supported by the main information (the rest of the iceberg) as needed. You can’t just give someone the whole lot and hope they will understand and absorb it all – the chances are that they won’t! Rather, you need to make sure they can quickly see what they most need to know and, ideally, do something as a result. Plus considering messages will help you shape and focus your communications for the better and not waste time on unnecessary information.

Example: ***International trade has been seen in many cases to help countries to integrate into global markets and global value chains. This can help reduce the burden of government to provide social protection in rural areas because some of the most vulnerable can earn greater incomes and thus alleviate poverty.***

The one-line key message here is: ***Trade can reduce rural poverty.***

Email is an interesting example. It is often very difficult to find the key message or messages because there is so much information, and you end up re-reading the whole email and only coming to the message at the end, buried in the details. Re-read an email that you have written recently (or one you have received). Did it have a key message or messages at all? If so, what was it, and do you think the reader would have found it quickly? How might it have been improved?

When planning your key messages, the single most important thing to think about is your audience. Who are they? What sort of message do you need to communicate to them, and why? Thinking through several questions can help you shape the message and then the channel for best conveying it:

- **Who are the audience?** What role do they play? Are they specialists in the topic or are they non-technical? Do you need the same messages for the same audience? Are they people you already know? Or are they the general public?
- **What might they need to know?** What are they currently working on? How can they draw on your information? Did they ask for the information? If so, are you delivering what they wanted? Do they need to know more?
- **How do they best receive information?** Do you know how they tend to prefer communications? What has worked well in the past, and what has not? Is it better to approach them for a meeting or develop a summary?

HOW TO CONSTRUCT AN EFFECTIVE MESSAGE

Heath and Heath (2007) talk about six dimensions to a good message. The ideas originate from the world of marketing but are universal to all types of messaging, including evidence into policy. They are:

Simple. Make sure you pull out the key information and don't over-elaborate your key message. Keep it concise and to the point. The best messages are always simple.

Unexpected. Critical to good messaging is getting people to sit up and listen. They are more likely to remember messages if they are counter-intuitive, surprising or put forward a different angle to a topic. Is there an important or surprising fact that you can put at the top of the paper or at the beginning of a presentation?

For example, Norway gets 98% of its electricity from hydroelectric power.

Concrete. Don't be too theoretical or abstract; make sure the message is tangible, relates to real life and the audience can identify with it. For example, rather than saying 25%, say one in four people (Martin, 2014).

Credible. Your message can be very clear, concise and well constructed, but if the message isn't credible, then the audience is unlikely to listen. Is your message backed up by good evidence? Is it believable? It is realistic? Can you back up your messages with strong facts or information that cannot be dismissed?

Emotional. We all know that emotions can provoke reactions. Is there a way you can make the audience care about the message by conveying a human story. This doesn't have to mean that you invoke strong emotions (it could be humour or surprise) but, rather, that you make the audience connect with the message in some way.

Stories. We use story telling throughout our communications in numerous ways. Can your message tell a story rather than just being cold, hard facts? What is the impact of the evidence?

Not all of these six dimensions will be appropriate for all messages all the time, but they can help.

Martin (2014) provides the following pointers:

- messages should be short, clear and concise;
- one message equals one idea. No more than three messages in any one communication, and no more than five in total;
- don't assume knowledge on the part of your audience – spell it out or clarify;
- and don't forget, each message needs evidence or key facts to support it.

RULE OF THREE

The rule of three is commonly used throughout different types of communications. There is evidence that audiences can retain three messages well, and any more and this retention declines considerably. It becomes too overwhelming, and they don't take in the information.

Gallo, 2014.

DEVELOPING KEY MESSAGES

Messages are meant to be simple, but it isn't always easy to develop them. Here are some questions to help you:

- Why is this issue or information important (or urgent)?
- How does this issue affect your target audience? Why should they care?
- What action can they take based on the situation?
- Does the audience need any background information to support the messages?
- What is the most important piece of information that my audience needs to know? Limit this to one overarching message and three key messages.



REFLECTION POINT

Think about a topic you are currently working on and think of a stakeholder who might need to know more about it. Go through each of the questions for developing key messages and try to refine yours.

CHOOSING YOUR CHANNELS

It is important not to think of communications as a one-directional process, moving from A to B, but rather as a dialogue with the stakeholder or audience. Communications should include feedback, and can move in many directions simultaneously. For example, giving a brief to a colleague may not be enough to convey the key messages on a topic, so you may want to follow up with a meeting or presentation to answer questions, or add an infographic to tell more of a story.

DON'T FORGET INFORMAL COMMUNICATIONS!

When thinking about communications it is very easy to focus on an individual publication such as a report, but what about more informal channels, such as a coffee with the stakeholder, picking up the phone to make a call or, an informal 'brown bag' lunch? It is important to not just see communications as individual actions or written documents.



CREDIBILITY OF THE MESSENGER

“People share, read and generally engage more with any type of content when it’s surfaced through people they know and trust.”

– Malorie Lucich, Facebook spokesperson

Without credibility, it can be very hard for your message to achieve its purpose. We can be so busy focusing on the message that we forget to think about the messenger, but the two are completely interlinked and can help build credibility. It may be that, at times, you aren't the most appropriate messenger but, rather, you need to collaborate with someone else or use indirect channels to pass on messages or information.



KEY LEARNING POINT

Don't forget the importance of strong, clear and concise messages in all communications. Above all, you want your audience to retain and even act on a message.

RECOMMENDED ACTIVITIES

PREPARATION



- Print out for each learner the examples in **M4-T1-H1. Samples of written communications** for activity **M4-T2-A1**.
- Source and print for each learner two or three different texts (ranging from a half to one side of A4) on the same topic or issue for activity **M4-T2-A4**.
- Write up questions for review activity **Exit cards** on a flipchart and label exit cards (three per learner).

M4-T2-A1

IDENTIFYING KEY MESSAGES

[40–50 minutes]

1. Organize learners into groups of three or four people and distribute one or two handouts to each group from **M4-T1-H1. Samples of written communications**. Ask one learner in each group to count round from one to five. Invite the learners to start by working on the example number they called out and then move onto another example which interests them. Ask them to discuss and answer the following questions while reading the examples:
 - What do you think is the purpose of this document?
 - What are the key messages?
 - Who do you think the audience is for this piece of writing? Why?
2. Invite the groups, in plenary, to choose an example (not already covered in plenary) and share their answers. Invite the other groups to add any new ideas or thoughts.
3. Identify together with the learners the main characteristics of a good message and write them on the flipchart paper labelled 'Message' (e.g. simple, unexpected, concrete, credible, emotional etc.).
4. Distribute the remaining handouts with the examples to the learners who would like a copy.

M4-T2-A2

WHICH CHANNELS DO I USE TO COMMUNICATE WITH MY AUDIENCE?

[40–50 minutes]

1. Clarify with the learners what a communication channel means and invite them to brainstorm which channels they use at work. Write their answers on the flipchart.
2. Invite the learners to find examples of situations where they have used that channel and explain why they have used it.
3. Invite a learner to list the channels on the flipchart labelled 'Channel'. If needed, prompt for inclusion of informal channels (e.g. meetings) as well as formal ones (e.g. reports).
4. To pull Topics 1 and 2 together, invite two or three learners to explain in their own words how the audience, the message and the channel are interconnected.

M4-T2-A3

REVIEWING PARTNER WRITTEN PIECES

[30–40 minutes]

1. Organize learners into pairs and invite them to swap their policy documents (memo, brief, report, case study, fact sheet etc.), which they've been working on throughout the workshop.
2. Ask each learner to review their partner's policy document and: a) identify the audience and key messages; and b) come up with suggestions for channels or pathways to communicate the messages or information.
3. Invite the pairs to discuss their conclusions and suggestions with their partner.
4. Invite learners, in plenary, to share something that surprised them or was new that they learnt from their discussions with their partner.

RECOMMENDED ACTIVITIES CONTINUED

M4-T2-A4

SUMMARIZING SKILLS

[40–50 minutes]

1. Distribute to each learner two or three different texts from the *readings and samples electronic folder* (ranging from a half to one side of A4) on the same topic or issue.
2. Tell learners that they have been requested by their head to produce a one-sider (max.) summarizing and pulling together the information from each text to highlight the key points around the topic or issue.
3. Before the learners start the task, brainstorm in plenary what the main characteristics of a written summary are (do not spend too much time on this, as it will be covered in more depth in Topic 3) – for example, it does not include recommendations or implications, outlines key information and messages from longer bodies of work in a concise format, helps the reader to view key messages and points and should be enough to read if the reader needs the basic facts.
4. Explain to learners that they should keep their written summaries, as they will be working on them in the next topic.

EXIT CARDS

[5–10 minutes]



1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

TOPIC 3

DEVELOPING EFFECTIVE WRITTEN COMMUNICATIONS

MODULE 4 LEARNING OBJECTIVES RELEVANT TO TOPIC 3

By the end of this topic learners will be able to:

- Write a policy brief to their audience
- Reflect on their current communication practices and how they use them in the workplace

READ & REFLECT



“Emphasise the decision...the underlying problem and the options to solve it. Minimise methodology, jargon and equations.”

Verdier, 1984, in Young and Quinn, 2012.

There are a wide range of written formats for communicating evidence. These include the brief, the memo, the summary, the fact sheet and the report. They may vary in purpose and length, but they tend to follow similar structures (except for the fact sheet), they are all guided by key messages and strengthened by layout to make sure they are easy on the eye and can be read at a glance. And, above all, they should all be carefully planned.

THE OPTIONS

- **Briefs or memos** are concise, standalone documents focusing on a particular issue requiring policy attention. Typical briefs have four main functions: to explain and convey the importance of an issue or outline a problem; to present solutions and policy recommendations; to provide evidence to support the reasoning behind those recommendations; and to point the reader to additional resources on the issue. They can be particularly effective in summarizing and highlighting evidence and research for policy, providing a response to a question or making a request. In certain cases the brief may give multiple or even competing solutions for the reader.
- **Summaries** do not include recommendations or implications for the reader, but otherwise are very similar to briefs and outline key information and messages from a longer body of work or synthesis in a concise format. The most commonly used summary is the executive summary, which helps the reader to briefly see an outline of a full paper, view key messages and points and could be enough to read if you need the basic facts.
- The **fact sheet** is the most condensed of all the formats, a simple one page of critical information for the reader. Fact sheets can outline technical data or statistics, provide answers to questions (FAQS) or are simply summaries of longer reports.¹

1. http://en.wikipedia.org/wiki/Fact_sheet

Ideally, all these formats should be between one and four pages long (and certainly no longer than six pages). If you need to write something longer, then it is probably a report or a policy paper you want to produce, rather than a brief or summary.

- The report or policy paper is the longest format, and gives much more detailed information. It expands on many of the points given in a brief, gives further background information and context, and may go into more details about the research. It is critical that you also produce shorter formats to accompany the report – such as an executive summary with one or two pages of key messages and an overview of the report or a box with a short summary of the paper.

EXAMPLE OF THE 1:3:25 RULE

The Canadian Health Services Research Foundation uses the 1:3:25 rule. This means that for every report they produce they also produce a one-page executive summary, followed by a three-page further summary with more detail and a full report that is no more than 25 pages – the 1:3:25 rule. Each one is targeted at different audiences, so a senior policymaker, for instance, may only read the one-pager.

Variations of this are also used by many organizations and government departments in other countries. It is a useful guideline, which can be adapted as needed. This is also where you can bring out your key messages that may not be so obvious in the body of a longer report.

FOCUSING YOUR WRITTEN COMMUNICATIONS

Similar to messaging, written formats depend on the following:

- **the objectives and messages** of the communications;
- **the specific context** – how do things work in your department, setting or context? But also what about the wider context in your country or region? What background information do you need to include? What can you leave out?
- **who the audience is** – what do they need to know specifically? What do they not need to know? Is this for one person or multiple stakeholders?
- **other supporting communications activities** – do you need to have a variety of formats such as a fact sheet, a summary and a report? What is most appropriate?

REFERENCES

Any written communications should use references in some capacity. References let the reader know that there is evidence to back up what is written, acknowledge the ideas of others and help build credibility with the audience. The extent to which you use references will depend on exactly the output you use.

- There are many types of references. Harvard style is one of the most commonly used styles. In addition, make sure you reference any ideas or information from another source within the body of the text – for example, *Maxwell (2010) suggests that the findings show that there needs to be more regulation by local government.*
- For reports and longer publications, you should always include references. These can be added at the end of the document or could be referenced via footnotes, if more appropriate.
- Briefs, summaries and memos should ideally have a short section at the end with either the main reference (or seminal work) or a few key references. They can also be useful for further reading for the reader. Once again, this helps the reader understand where the evidence is coming from.
- Fact sheets do not need a reference section but should acknowledge where information has originated.

HOW TO DEVELOP A BRIEF OR MEMO

The section outlines some helpful hints for writing briefs.

WHAT IS THE DIFFERENCE BETWEEN THESE TWO STATEMENTS?

1

All government programmes could incorporate the use of rigorous impact evaluations to enhance evaluation

2

These findings suggest new directions for revamping assessments to provide better information and opportunities to enhance evaluation.

RECOMMENDATIONS VS. IMPLICATIONS

It is important to know the difference between recommendations and implications because in certain instances it is better to use one rather than the other. Recommendations are usually developed by the author of a written document based on evidence they have examined, to put forward what they think should happen/what is the best course of action.

Implications, on the other hand, are less direct than recommendations (in language) and can be particularly useful when advice has not been requested or is not welcomed. Implications outline what policy changes the evidence points to. So, for example – *it is better for people not to eat sugar (recommendation) versus it appears that eating too much sugar could increase your chances of diabetes and obesity (implication).*

Musandu (2013) suggests the follow ways to make your recommendations stronger:

“Whatever the type, both recommendations and implications should always be backed up by evidence (they should not be just vague ideas of what should be done, based solely on opinion); should use clear language and not use too many words; they should be actionable, so use active language like engage, use and incorporate; and you should suggest three recommendations ideally, and no more than six. Above all ask yourself the question, is this recommendation viable.”

Look at an example of a policy brief, and ask yourself the following questions: Are there any recommendations or implications? How could they be improved? Are they clear and actionable? Does the author give a good line of argument to explain why they have been chosen? Are they backed up by evidence? Are they easy to find in the body of the text?

STRUCTURE OF A BRIEF

Generally, policy briefs are four pages in length (around 2,200 words, including references and tables). They are usually organized as follows:

Executive statement (10%)	Includes a brief overview of all of the parts of a policy brief Should be written last
Introduction (10–15%)	Highlights the importance of the issue, problem or situation, using entry points Gives a brief overview of the conclusions or the direction of the rest of the brief
Methodology (5–10%)	Designed to strengthen the credibility of the brief by explaining how the findings and recommendations were arrived at Not always applicable or necessary – you can sometimes omit this or restrict it to one sentence
Results and conclusions (30%)	Designed as an overview of the findings/facts Constructed around the policy recommendations
Implications or recommendations (30%)	This is the most important part of the brief Usually limited to three implications or recommendations Recommendations, which are direct and clear suggestions for action, are preferred, but less direct implications may be more appropriate, depending on the context
References and useful resources (10%)	Helps readers find out more on the issue if they require more information In a brief, keep references to a minimum, but make sure you do include them – particularly seminal work on the issue or topic

This may vary, depending on the purpose and context of your brief, but it is a good structure to aim for.

PLANNING A BRIEF

To develop the main content elements, there are four main steps:

1	2	3	4
Identify the purpose and overarching message of the brief	Determine three recommendations	Construct a logical line of argument for the recommendations (your results or conclusions)	Linked to the context of the issue, identify one or two <i>entry points</i> for the message

STEP 1

It helps to start off by identifying the purpose of the brief.

Sample objective statement:

*"The objective for this brief is to _____
(action verb such as convince, inform)
_____ (target audience(s) –
e.g. the Minister of Finance) that _____
(what should happen – e.g. they should increase
funds for social protection programmes)."*

This will then make it much easier to think about what messages you might need.

STEPS 2 AND 3

Once you have worked on your objective statement, you can then start to determine your recommendations or implications, *but* you need to make sure that you think very carefully about what evidence you have to support them.

Example policy recommendation:

"Additional funds could help to support local businesses to ensure their staff have insurance."

To back this up look at:

1. Why is this currently a problem?
2. Why is this urgent, timely or important?
3. Why should the target audience become involved?

STEP 4

Entry points or hooks are commonly used at the beginning of reports, summaries or briefs to make the reader want to read further. For example:

"Mental illness affects one in four people in their lifetime, and neuropsychiatric conditions now account for 13% of the global burden of disease – and 70% of that burden is in low- and middle-income countries."

KILLER FACTS

It can make a difference to your writing if you use striking facts to back up what you are saying. Green (2012) refers to several different types of facts to consider. They include:

Big number. A statistic which highlights the size of the problem:

"It is estimated that there will be more than 150 million environmental refugees by 2050 due to the likely effects of global warming."

Juxtaposition. Put two statistics side by side for comparison:

"A woman's risk of dying from pregnancy-related causes ranges from 1 in 18 in Nigeria to 1 in 8,700 in Canada."

Surprising stats. Statistics that can surprise the reader:

"More people die of road traffic accidents than die of malaria."

Humanizing abstract issues. Turning the abstract into a concrete, real-life example:

"12 million children will go hungry by 2050 because of climate change."

Source: www.oxfamblogs.org/fp2p/how-to-write-killer-facts-and-graphics-what-are-your-best-examples.

TIPS FOR MAKING YOUR WRITTEN FORMAT MORE VISUALLY ENGAGING

As well as having strong content, reports, briefs and summaries can also be **visually engaging**. Common techniques employed to capture the reader's eye include the creative use of the following elements:

- **Titles really do matter.** Many of us may decide to read further based on the title of a publication or report, so make sure it is concise, concrete, not too long and gets to the point. For example: *"Economic losses from natural disasters."*
- **The stand first** originated from journalism but is commonly used as a sentence or two to explain what the written document is about, underneath or near the title. It can be very useful for the reader. For example: *"This paper argues that putting employment at the centre of country policy means focusing not only on employment quantity, but also on the importance of quality and access."*
- **An abstract** is a short summary paragraph, particularly common with reports and working papers.
- **Key messages summary.** It can make a big difference to add in a box at the beginning of a written output with the key message outlined. For example:
"Key messages"
 - *Most households don't have the education level or jobs that will pull them out of poverty, improve wealth and assets or reduce food insecurity.*
 - *Households that experienced serious crimes during the war are significantly worse off today than other war-affected households.*
 - *Livelihood and social protection services are rare and aren't targeted to those who need them most; rather, these services often go to better-off households."*
- **Sub-headings and text boxes** break up the paragraphs and sections and allow the reader to quickly find sections or key information.
- **Photographs.** Where appropriate, use photographs and reference their source. They can really liven up a written document. Flickr creative commons is a very good source of open source photos.
- **Graphs, charts and infographics.** Where appropriate, use graphs, charts or infographics (see next section).



REFLECTION POINT

Read the box 'Killer Facts' and come up with a few of your own examples for your context. Try looking through blogs and op-eds, as these usually use a number of killer facts.



KEY LEARNING POINT

All written outputs should be carefully selected, tailored to the audience and highlight and emphasize key information and solutions. How much information does your reader really need?

RECOMMENDED ACTIVITIES

PREPARATION



- Prepare an overview (using PPT) of the four main steps to developing the content elements of a policy brief, drawing on the Read & Reflect section, for activity **M4-T3-A2**.
- Print out the handout for each learner in **M4-T3-H1. Structure of a brief**, for activities **M4-T3-A3**, **M4-T3-A4** and **M4-T3-A5**.
- Print out one example of a policy brief for each learner to work on in activity **M4-T3-A3**.
- Print out the table for each learner in annex **M4-T3-H2. Key principles for structured writing and presentations**, for activity **M4-T2-A5**.
- Write up questions for review activity **Exit cards** on a flipchart and label exit cards (three per learner).

M4-T3-A1

CURRENT AND FUTURE WRITTEN OUTPUTS

[15–20 minutes]

1. Ask each learner to note down the different written documents they are currently producing, what the audience is for each output and what the purpose of the different documents are. Suggest they do this in the form of a table in their notebooks.
2. Invite each learner to consider if there are any different written outputs they should be producing in the future, and if so why? For example, is there is a particular audience they are not currently reaching?
3. In pairs, ask the learners to discuss the current and future written documents they have identified. Invite learners, in plenary, to share some of the different written outputs they think they should be producing in the future and why.

M4-T3-A2

HOW TO DEVELOP THE MAIN CONTENT ELEMENTS OF A POLICY BRIEF

[30–40 minutes]

1. Ask learners in pairs to discuss and come up with a loose definition of a policy brief. Invite pairs to provide feedback on the key elements, and note them down on flipchart paper.
2. Invite learners to share in plenary what they think the first step is in developing the content elements of a policy brief and any examples they have. Display the first step in the pre-prepared PPT.
3. Continue to go through the same process step by step, asking the learners what they think the next step is and exploring together examples for each step.

M4-T3-A3

WHAT IS THE STRUCTURE OF A POLICY BRIEF?

[50–60 minutes]

1. Organize learners into groups of three or four and hand out the table in **M4-T3-H1. Structure of a brief** to each learner and ask them to read it. Invite any questions or comments the learners might have.
2. Distribute a policy brief and ask the groups to read the example policy and assess it according to the structure/key elements introduced in the table.
3. In plenary, go through and discuss each main section of the policy brief, inviting the groups to present their assessments.

M4-T3-A4**REVIEW OF WRITTEN SUMMARIES****[30–40 minutes]**

1. Ask learners to retrieve the written summary papers they produced at the end of Topic 2.
2. Invite learners to pair up, and ask each learner to read out loud their written summary while their partner listens and follows how much of the summary corresponds to the structure and points in their handouts (**M4-T3-H1. Structure of a brief**).
3. Ask each learner to provide feedback to the reader and then together discuss to what degree the main points synthesized on the flipchart paper were also followed.
4. Conclude by noting that while summaries do not include recommendations or implications for the reader, they are otherwise very similar to briefs and outline key information and messages from a longer body of work or synthesis in a concise format.

M4-T2-A5**POLICY BRIEF WRITING WORKSHOP****[180–240 minutes]**

1. Invite learners to refer back to the existing policy document (memo, brief, report, case study, fact sheet etc.) they have been working on throughout the workshop. If any learners did not bring a policy document with them, ask them to refer back to the work-related topic they have been working on so far.
2. Explain to learners that they have a choice of: a) further improving their policy document if they brought in a policy brief; b) developing a policy brief out of the policy document they brought in, if it is a memo, report, case study or fact sheet, for example; or c) writing a new policy brief based on the work-related topic they have been working on so far.
3. Pair up learners, where possible by the same option – i.e. learners who have selected a), b) or c) so that they work at a similar pace. Explain that they will work individually on their briefs but can confer with their partner for support and advice during the writing process. Recommend that learners write their policy briefs clearly on paper to enable immediate feedback later on in the writing workshop.
4. Email learners the full Read & Reflect section for Topic 3 or save an electronic version on their computers for them to use when writing their policy brief. Also remind them of the lists of evidence/documents and sources they compiled (at the end of Module 2) for the subject of their policy document or their work-related topic, which they can incorporate into their briefs.
5. Invite learners to swap their draft policy briefs with their partner, once all the sections are reasonably complete. Hand out the table in **M4-T3-H2. Key principles for structured writing and presentations** to each learner and ask them to use it to assess their partner's policy brief and to provide their partner with constructive feedback.
6. Allow time for the learners to receive feedback from their partner and make revisions or not to their draft policy briefs.
7. In plenary, ask learners whether they would like to add any other principles to the key principles for structured writing and presentations table in annex **M4-T3-H2**. Then ask learners to find another person in the room from whom they would like to receive feedback on their policy paper, and ask them to swap papers.
8. Allow some time for the learners to review their partner's policy paper, provide feedback and make revisions or not to their draft policy briefs. Explain to learners that if they would like some short feedback directly from the trainer, they can type up and email their policy papers or submit a hard copy before the end of the workshop.

RECOMMENDED ACTIVITIES CONTINUED

M4-T2-A6

CHOOSING THE BEST
POLICY BRIEF

[60–70 minutes]

1. Ask learners for a show of hands if their policy briefs include recommendations rather than implications. Invite learners to form groups of three, including at least one learner whose policy brief includes recommendations.
2. Invite the groups to quickly select the policy brief which they think is the most persuasive and credible, which they will share with other learners.
3. Divide the groups roughly into two sides – for example, Side A=4 x groups of three, and Side B=4 x groups of three.
4. Explain that the groups in Side A will be decision-makers who will quickly read the policy briefs one by one (they have 5–10 minutes for each brief) selected by the groups in Side B (mirroring the often short timeframes policymakers have to read these types of documents). Explain that the decision-makers' task is to decide, in their groups, which of the briefs is the most persuasive and credible, with recommendations they are most likely to pick up and take action on.
5. Allow time for the groups in Side A to quickly confer and each come to a decision. Ask for a show of hands, and choose the brief with the most votes. If it is a tie, the Trainer makes the deciding vote! Invite the decision-makers (Side A) to give their reasons for their choice.
6. Invite Side B to become the decision-makers and Side A to share their selected policy briefs, and follow the same process as detailed above.

M4-T2-A6 [ALTERNATIVE]

CHOOSING THE BEST
POLICY BRIEF

[70–90 minutes]

1. Ask learners for a show of hands if their policy briefs include recommendations rather than implications. Invite learners to form groups of three, including at least one learner whose policy brief includes recommendations.
2. Invite them to quickly decide which one of their policy briefs they are going to present and ask them to prepare a short presentation of no more than five minutes, using one sheet of flipchart paper or one PPT slide as a visual aide (making it as engaging as possible).
3. Divide the groups roughly into two sides – for example, Side A=4 x groups of three, and Side B=4 x groups of three.
4. Explain that the groups in Side A will be decision-makers listening to four short presentations made by the groups in Side B, based on their chosen policy brief. Explain that the decision-makers' task is to decide, in their groups, which of the briefs is the most persuasive and credible, with recommendations they are most likely to pick up and take action on.
5. Invite the groups in Side B to make their presentations in turn. Be strict with the five-minute presentation slots and allow one extra minute for any questions from the decision-makers.
6. Allow time for the groups in Side A to quickly confer and each come to a decision. Ask for a show of hands, and choose the brief with the most votes. If it is a tie, the Trainer makes the deciding vote!
7. Invite Side B to become the decision-makers and Side A to make their presentations. Follow the same process as above.

EXIT CARDS

[5–10 minutes]



1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

CONSOLIDATION OF ACTION PLANS

[20–420 minutes]



1. Display the slides again, as a reminder, in annex **M1ppt. Action plans** and ask learners to retrieve their action plan templates that were handed out or emailed to them at the end of Topic 1, Module 1.
2. Explain to learners that they now have the opportunity to reflect on the notes they made throughout the course under the key headings – i.e. challenges and ideas to support the use of evidence in policy making and/or to address the challenges identified.
3. Explain that this longer action-planning session will enable learners to reflect on and consolidate their notes then transfer them into the formal action plan. Learners may choose to do this individually or by department. The trainer should proactively make themselves available during this session for any feedback or support the learners may require.
4. Once they have compiled their formal action plans, give learners the opportunity to review their action plans with their peers and/or other learners, and with the trainer if they so wish.

END REVIEW

[40–60 minutes]

1. In groups of four or five (organized by same sector, ministry or country), invite learners to discuss and then formulate six key principles that they think are necessary to facilitate EIPM in their sector, ministry or country. Ask the groups to write them down on a sheet of flipchart paper.
2. For the trainer's reference only, six example principles, from an agri-food public health policy and research study in Canada, are listed below:
 - A. establish and clarify the policy objectives and context;
 - B. support policy making with credible [scientific] evidence from different sources;
 - C. integrate [scientific] evidence with other diverse policy inputs (e.g. economics, local applicability and stakeholder interests);
 - D. ensure that [scientific] evidence is communicated by research and policy stakeholders in relevant and user-friendly formats;
 - E. create and foster interdisciplinary relationships and networks across research and policy communities; and
 - F. enhance organizational capacity and individual skills for EIPM.

A supportive culture was also mentioned, and additional education and training in both research and policy realms are important to facilitate EIPM [in this sector]. See www.ncbi.nlm.nih.gov/pubmed/24528517.
3. Once the groups have finished, ask them to present their principles to the wider group or put their flipcharts on the wall or on a table top, and invite the groups to move round the room and read them.
4. Invite the groups to comment on what they liked and why, where there were commonalities and differences, and ideas for how they could use the six key principles document in their departments and/or beyond.
5. If useful to learners, the trainer can present the six key principles from the Canadian agri-food public health study on a PPT slide.

OPTIONAL TOPIC A

PRESENTING KEY MESSAGES TO YOUR AUDIENCE: ORAL COMMUNICATIONS

MODULE 4 LEARNING OBJECTIVES RELEVANT TO TOPIC A

By the end of this topic learners will be able to:

- Produce written outputs and structured presentations by taking into consideration the audience, the message and the channel
- Deliver a short, structured oral presentation to their audience
- Reflect on their current communication practices and how they use them in the workplace

READ & REFLECT



At some point in your work, you will need to present to an audience – either formally or informally. This section examines some of the ways you can improve your oral communications and, in particular, share messages on evidence-informed research.

TIPS FOR PRESENTING WELL

- What is the purpose of the presentation, and who is the audience? This will help you to focus on the information you most need to prioritize – and, most important, your key messages.
- Structure your presentation. Make sure you have one overarching message and three key points to share. Make sure the beginning of the presentation captures your audience (use one of the elements of a good message as outlined in the last section to do this). Quotes or surprising facts can work well. Then introduce the outline of your presentation. To close, highlight your key points, any recommendations (if you have them) or next steps.

- Plan your presentation and give yourself time to practice. Even the most experienced presenters practise, practise, practise.
- “If you can’t explain it simply, you don’t understand” – so goes the quote by Einstein. It’s a good point; try practising what you want to say with someone who does not know very much about the topic (a relative, friend, spouse or colleague) and get them to give you honest feedback. You could also record yourself and listen back.
- What’s the time limit? Find out how long you have to speak and try to prepare for less time. You will usually present for longer – unless you are a very fast speaker. Also try to keep presentations short if possible, or break it up with time for questions. Don’t just speak non-stop at the audience – they will switch off.
- Find your passion. Stakeholders are more likely to listen to you if you sound confident but, above all, interested in what you are saying.
- Finally, don’t start preparing a PowerPoint presentation until you have prepared properly what you are going to say.

COMMON MISTAKES WITH PRESENTATION SLIDES

You may decide that to accompany what you are saying you need to produce a PowerPoint presentation or use some type of visual aid (see Annex 4). Here are some tips on how to make sure they help and don’t hinder:

- **Don’t use your slides as ‘crutch’.** Slides are there to enhance, not duplicate. People can’t listen and read slides at the same time. If you need support to remember what you are going to say, have notes, but don’t rely on your slides; they are there for the audience.
- **Less is more.** Don’t put lots of information or text onto your slides. Break text up with slides with images, videos or quotes. There are lots of studies that show that people respond to visual stimuli much better than text (Gallo, 2014). Be careful with graphs and data – they can be great, but equally make sure they are clear and easy for your audience to read. Any text you do use must be 22 pts or more.
- **Rule of three.** In the previous section we explored the ‘rule of three’, and the same applies to your presentation and slides. Try to stick to three messages in a presentation (with one overarching message). For example, in this section of the handbook, the overarching message is: *“Make sure you use your PowerPoints carefully.”* The three key messages are then: *“Don’t use it as a crutch; less is more; and rule of three.”*
- **Don’t just use PowerPoint.** There is other software out there, including Prezi, which is more dynamic and flexible to use.



REFLECTION POINT

How might you present the key messages from your piece orally to a colleague or other stakeholder? Write a short plan to lay out the messages – the introduction and conclusion.



KEY LEARNING POINT

Presentations should be carefully prepared and audience-focused, with a clear objective and a strong message. They should be enhanced but not dominated by visual aids and slides.

RECOMMENDED ACTIVITIES

PREPARATION



- Line up the video **M3-T1-V1**, or print copies of the transcript (same one as used for activity **M3-T1-A1**): www.ted.com/talks/markham_nolan_how_to_separate_fact_and_fiction_online/transcript?language=en for activity **M4-TA-A1**.
- Prepare handouts for each learner with 'Tips for presenting well' from the Read & Reflect section.
- Write up questions for review activity **Exit cards** on a flipchart and label exit cards (three per learner).

M4-TA-A1

TIPS FOR PRESENTING WELL

[40–60 minutes]

- Play the Markham Nolan video 'How to separate fact and fiction online': www.ted.com/talks/markham_nolan_how_to_separate_fact_and_fiction_online#t-85824.
- Invite the learners, while watching the video, to use the criteria in **M4-T3-H2. Key principles for structured writing and presentations** and make notes.
- Invite learners to share their thoughts in plenary, and encourage a discussion on how best to present key messages and information orally.
- Distribute the pre-prepared handout to each learner with the 'Tips for presenting well' from the Read & Reflect section for learners to read. Invite learners to share their reflections and what implications this might have for them as communicators of research.

M4-TA-A2

DELIVERING A PRESENTATION

[40–60 minutes]

- Organize the learners into groups of three and invite each learner to choose a topic on which to deliver a five-minute presentation and an audience.
- Tell learners that they can use the tips for presenting distributed in the handout and some of the criteria listed in **M4-T3-H2. Key principles for structured writing and presentations**. Point them towards the audience, message and channel flipchart papers.
- Invite each learner to make their presentation in turn to the rest of the group. Ask the other two members of the group to listen and provide feedback at the end of the presentation using some of the criteria in **M4-T3-H2. Key principles for structured writing and presentations**.
- Invite two to three volunteers to deliver their presentations in plenary and then invite learners to consider and discuss what their key learning points from the experience were and what they will do as a result of this learning.



OPTIONAL VIDEOS

PowerPoint presentations:
www.youtube.com/watch?v=lpvgfmEU2Ck

EXIT CARDS



[5–10 minutes]

- Carry out this activity at the end of each day.
- Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - What helped you learn today?
 - What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - What comments or suggestions do you have for the trainers?
- Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

OPTIONAL TOPIC B

INFOGRAPHICS, MULTIMEDIA AND DATA VISUALIZATIONS

MODULE 4 LEARNING OBJECTIVES RELEVANT TO TOPIC B

By the end of this topic learners will be able to:

- Use infographics and data visualizations in their written and oral communications
- Reflect on their current communication practices and how they use them in the workplace

READ & REFLECT



When communicating, you should not just think about purely written or oral communications; multimedia, infographics and data visualizations are increasingly important formats to turn to and use to highlight key information and evidence.

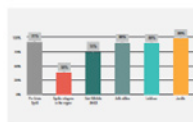
WHAT IS THE DIFFERENCE BETWEEN INFOGRAPHICS AND DATA VISUALIZATIONS?

Data visualizations showcase data or information in visual form, so there are a wide variety of options that fall under this category (see illustration below). At the simplest level a data visualization could be a graph or chart, a timeline, a map or an illustration.

According to the UK Office for National Statistics, an **infographic** is “a self-contained visual story presenting information, data or knowledge, with clear meaning and context and without bias. Infographics use visuals to tell a story or relay a key message.”

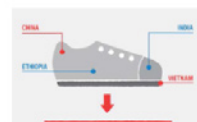
Charts and graphs

Criteria: data set
Good for: visualising relationships between data – e.g. trends/comparisons



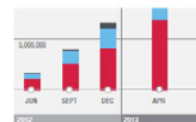
Illustration

Criteria: concept, idea or process
Good for: visualising and simplifying qualitative information



Timeline

Criteria: series of events/data at regular time periods
Good for: showing changes over time



Map based

Criteria: data/information linked to multiple locations
Good for: showing geographical trends/distribution



Infographic

Criteria: data set with a clear message
Good for: Highlighting a surprising piece of data, a key message or visualising a research finding



Narrative infographic

Criteria: data/information that tells a self-contained story
Good for: summarising a piece of research/concept/process succinctly



Source: Internal ODI infographic guide.

Data visualizations and infographics can be a great way to capture information and present it in a visual format for the target audience. They can be particularly good to enhance a report or to share in addition to a brief. Concerns are that they are both time-consuming and costly, which can be the case, but there are some simple ways to do them yourself. Rather than just putting in a table of data, it can make a huge difference to a written output or presentation to present the data in a more interesting and visual way. At a very simple level, Excel has lots of tools able to do this quickly. You can also take it one step further and visually showcase the story as an infographic

Technologies are evolving all the time, and new software and apps are appearing that can help to make your life easier. Here are a few that you may want to consider trying:

Piktochart – a free online tool to develop charts and infographics: <http://piktochart.com>

Visual.ly – a tool that also allows you to see what others are doing and share your content: www.easel.ly

Google Fusion tablets – you can use this tool to turn data into charts or maps and customize as you need: www.google.com/drive/apps.html#fusiontables

Tableau public – a free tool to create more dynamic data visualizations www.tableau.com/public

Datawrapper – another data visualization tool for creating maps and charts www.datawrapper.de

Tiki-toki – helps you to develop timelines www.tiki-toki.com

For Further reading and how-to guides, visit: <http://onthinktanks.org/tag/data-visualisation> and www.tdatavis.onthinktanks.org/data-visualisation-resources.

CHECKLIST

- Have you double-checked the data is correct?
- Does someone else understand the infographic without prior explanation?
- Is the design easy to follow?
- Would additional context help improve the story?
- Does the title frame the content correctly?
- Is the story presented self-contained?

Internal ODI infographic guide.

A FEW TIPS

Know your audience and purpose: What is the desired outcome? Who is the target audience? Tailor the infographic to your audience and consider which channels are appropriate for what you want to achieve (e.g. a printed report/booklet).

Add context: Think about what you can highlight or introduce to improve the story.

Check the data and its interpretation: Keep checking back with your data sources, as manipulation of data can occur throughout the developmental process. Make sure you have properly referenced sources (if the data is from an outside source, make sure you obtain permission to use it first).

Keep it simple: ‘show’ information and data, rather than ‘tell’ where possible.

Teach users something new: Will the audience learn something? Yes = success; no = time to refine or rethink.



KEY LEARNING POINT

Data visualizations and infographics should be clear and audience-focused, aiming to ‘show not tell’.



REFLECTION POINT

Looking at the data visualization and infographic options, can you identify how they could be used more in your day-to-day work? When might they be most appropriate?

RECOMMENDED ACTIVITIES

PREPARATION



- **Topic B requires access to the internet and one computer per learner.**
- Print colour copies of infographics for activity M4-TB-A1, so that there are three to five copies per group.
- Consider using www.atlas.cid.harvard.edu/ to download some country-specific data visualizations for your context.
- Prepare one or two examples of using web-based tools for the production of infographics, such as Tableau Public, Piktochart, Datawrapper etc. (as listed in the Read & Reflect section) for activity **M4-TB-A2**.

M4-TB-A1

REVIEWING INFOGRAPHICS

[15–20 minutes]

1. Organize the learners into groups of three or four and give each group three to five different printed infographics.
2. Ask each group to decide on its favourite infographic and explain in plenary why they made this choice.
3. Ask the learners what they think the key indicators of quality for infographics are, and note them on flipchart paper (e.g. not too much writing, clarity, use of colour etc.). Try to elicit from learners the key points in the 'A few tips' section towards the end of the Read & Reflect section and any additional indicators the learners volunteer.



OPTIONAL VIDEOS

ODI animations:

www.youtube.com/playlist?list=PL8sELjFjX-Up8bn3BWcaoQ8teidZaWU9tK

M4-TB-A2

EXPLORING INFOGRAPHIC WEB-BASED TOOLS

[50–70 minutes]

1. Demonstrate to learners one or two examples of using different web-based tools, such as Tableau Public, Piktochart, Datawrapper etc. (as listed in the Read & Reflect section).
2. Organize the learners into groups of three or four and ask each group to investigate one of the web-based tools and report back to the others on how it works (through demonstration and verbal explanation).
3. To conclude, ask learners to refer back to their action plan notes, and invite each learner to write down any new individual action points which have emerged during this activity.

M4-TB-A3

CREATING AN INFOGRAPHIC FOR A POLICY BRIEF

[70–90 minutes]

1. Ask learners to refer back to their revised or newly produced policy briefs which they worked on towards the end of Topic 2.
2. Invite each learner to select one of the web-based tools to create an infographic which they can include in his/her report. Display the checklist on PPT slide 5 in annex **M4ppt. Introduction and concepts** as an aide for learners while they develop their infographic.
3. Invite learners in pairs or groups of three to show each other the infographics they have produced (on their computers) and encourage their fellow learners to assess them against the checklist as well as providing their own feedback in terms of what they like and what could be improved.

RECOMMENDED ACTIVITIES CONTINUED

EXIT CARDS



[5–10 minutes]

1. Carry out this activity at the end of each day.
2. Hand out the pre-prepared exit cards (three per learner) and ask each learner to write answers to the following three questions:
 - A. What helped you learn today?
 - B. What questions of clarification do you have/ areas you are unclear on from the sessions covered today?
 - C. What comments or suggestions do you have for the trainers?
3. Gather the completed cards from the learners and explain that their comments will be reviewed after today's sessions and that there will be a short summary and response at the beginning of the following day's sessions.

FURTHER READING

Extensive online resource on preparing evidence-based policy briefs:

<http://global.evipnet.org/SURE-Guides>

Hans Rosling's TED talk on data, using innovative visualizations:

www.ted.com/talks/hans_rosling_shows_the_best_stats_you_ve_ever_seen#t-286249 and see *GapMinder* here: ***www.gapminder.org***

The Atlas of Economic Prosperity is a tool developed by Harvard University which allows you to view graphs of economic data for any country in the world: ***www.atlas.cid.harvard.edu***

Resources on plagiarism:

www.authoraid.info/en/resources/?q=plagiarism

How to Give a Science Flashtalk: ***www.scidev.net/global/communication/practical-guide/flash-talk-science-video-guide.html***

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MODULE 4

HANDOUTS



SAMPLES OF WRITTEN COMMUNICATION

EXAMPLE 1:

Excerpt from '**Taxation and Livelihoods: Evidence from Fragile and Conflict Affected Situations**',
Secure Livelihoods Research Consortium, October 2013:
www.securelivelihoods.org

Introduction

Despite growing interest in the linkages between taxation, development and governance, surprisingly little attention has been paid to the relationship between taxation and people's livelihoods, particularly in places affected by conflict. Yet, it is in these contexts that people encounter fierce challenges to livelihood recovery, often finding themselves operating in a political economy environment that is at once complex and shifting, as well as brutal and exploitative. People affected by conflict tend to have urgent service-related needs, and violent conflicts can erode trust in governance actors. Drawing on a recent working paper (Lough et al., 2013), this evidence brief provides an overview of the evidence base when exploring the relationship between taxation and livelihoods in conflict affected situations. It discusses the geographical, methodological and thematic nature of the evidence base, summarises key findings, clarifies what the research means for policymakers, and provides links to relevant empirical material.

What is this evidence brief based on?

The working paper on which this evidence brief is based emerged through a selective review of key literature on taxation and livelihoods in low-income rural areas (particularly those affected by conflict) in more than 20 countries. The review involved a search of key journal databases using predetermined search strings and, for retrieved documents, full text searches for key words. The same process was repeated using Google Scholar and the standard Google search in order to capture institutional and non-academic literature on the topic. Snowball sampling was also used, with the starting point determined by references from key documents and existing literature reviews. As the study progressed, the publication records of any authors whose work emerged as particularly relevant were also reviewed, along with the publication databases of organisations involved in similar research. The authors also shared and discussed the project's concept note with academics, researchers and practitioners in relevant fields.

EXAMPLE 2:

Excerpt from blog: ‘**Pushing the Boundaries in Research and Development among Academics in Africa**’, by Charity Ashimem Angya and Barnabas A. Ikoyo:
[https://beyond2015.acu.ac.uk/submissions/view?id=135&x\[0\]=list%3F](https://beyond2015.acu.ac.uk/submissions/view?id=135&x[0]=list%3F)

Academic research is the foundation for sustainable growth and development of a nation. Universities worldwide play a key role in developing both the citizens and in contributing towards innovations in both policy and technological development. Education is widely accepted as a leading instrument for promoting economic growth ^{2,3}. For Africa, where growth is essential if the continent is to climb out of poverty, it is particularly important for key players in the education sector to participate more in research activities. The fact that Africa contributes to less than 3% global publication and less than 1% scientific output underscores the fact that research as whole is yet to take the stage in higher education in Africa².

Although previous reports have attributed the reduced research activities to the brain drain, with reports indicating that roughly 30% of the region’s university trained professionals live outside Africa, and recent estimate suggesting that up to 50,000 African-trained PhDs are working outside Africa ⁴, a couple of other reasons for this low research output needs to be addressed.

In Nigeria for example, there is need for researchers and academics to shift focus from publishing for the sake of career advancement to concentrate more on high impact result based research: research that will add value to knowledge. This is often mirrored in publication in internationally high impact peer reviewed journals. Though being the country with the largest population in the whole of Africa’s, Nigeria has only 15 scientists and engineers engaged in research and development per one million people ⁴. It has also been reported that low levels of investment in research capacity and education may be reasons why the country’s non-oil economy has remained consistently sluggish during a decade of international economic expansion ³.

2. Bloom, D.E., Canning, D. and Chan, K. (2006). Higher education and economic development in Africa. Washington, DC: World Bank.

3. Saint, W., Hartnett T.A. and Strassner, E. (2003). Higher education in Nigeria: A status report, Higher Education Policy 16(3): 259–281.

4. Mohrman, K., Ma, W. and Baker, D. (2008). The research university in transition: The emerging global model, Higher Education Policy 21(1): 5–27.

EXAMPLE 3:

Excerpt from **Bank of Ghana Policy Brief, 'The Housing Industry in Ghana: Prospects and Challenges'**:
www.bog.gov.gh/privatecontent/Research/PolicyBrief/pbrief-housing-new.pdf

Issues in brief

Housing is one of the most important basic needs in every society. Improved housing markets also provide positive externalities, as well as direct consumption benefits. For instance, increased housing activities also stimulate economic activities through ancillary industries such as building materials and also benefits professionals such as architects and civil engineers.

Generally, housing constitutes a major component of household wealth, especially for low-income households, and no doubt, housing wealth is increasingly gaining importance in the Ghanaian economy. For many households, it is the most important form of savings as homeownership is considered as a hedge against inflation in the medium term. In other instances, it is utilized as collateral for borrowing by homeowners, thereby generating funds for other investments and wealth creation. Thus, the housing industry has the capacity to both cultivate and protect wealth.

Since Ghana's independence, provision of housing has remained central to the development agenda. Various policies, programmes and institutions have sought to address issues such as land tenure, land title regulation, and provision of affordable housing units to the working population. However, a number of these housing strategies were negatively affected by lack of funds, poor macroeconomic environment and lack of private sector participation. Thus, compared with other advanced countries, Ghana's housing industry remains rudimentary.

In recent times however, and within the context of the improved macroeconomic environment characterized by low inflation rates, low interest rates and relatively stable exchange rates, activities in Ghana's housing sector is gaining momentum. Although housing demand and supply gaps that are fueled by a rapidly growing middle-class as well as increased urbanization remain, the rising mortgage debt outstanding to GDP ratio provides evidence that the sector has recorded moderate growth over the past three years in particular, albeit from a low base.

The gradual improvement in housing supply notwithstanding, the sector faces a number of challenges such as land acquisition, prolonged land title and registration processes, high costs of rental units and house prices that require policy intervention. Empirical evidence has demonstrated that housing policies based on the "Enabling Markets Approach (EMA)" often yields better results. Basically, the EMA relies on the private sector as the main supplier of houses and issuer of long-term financing for households whereas Government's role is limited to that of a regulator and facilitator. This underscores the importance of government emphasis on creating an enabling environment for increased private sector participation in Ghana's housing industry.

EXAMPLE 4:

Excerpt from **an open letter to Ben van Beurden, CEO of Shell, from John Ashton, former UK Envoy for Climate Change**: www.theguardian.com/environment/2015/mar/30/open-letter-shell-ben-van-beurden-john-ashton-climate-change

Th[is] is the story of your mask: a manifesto for the oil and gas status quo, justified by the unsupported claim that the economic and moral cost of departing from it would exceed the benefit in climate change avoided.

Beneath the mask is the face. Its story is encoded in language and tone, and it does not match the mask. You reject “stereotypes that fail to see the benefits our industry brings to the world”. But you resort freely to stereotypes yourself, to attack those who want more ambition.

You and those who agree with you have a monopoly on realism and practicality. You are “balanced” and “informed”. Your enemies are “naive” and “short sighted”. And you accuse them of wanting “a sudden death of fossil fuels”. No phrase in your speech is more revealing. Nobody is asking for this and if they were they would be wasting their time. But the Freudian intensity of your complaint flashes from the text like a bolt of lightning.

Moreover, although you acknowledge doubts about the credibility of your industry, you don’t address them. You speak, as it were, peering down, with authority and detachment, at a world that should self-evidently look the same to others as it does to you. And from that height, you seem to be want us to believe that the issue is not how to deal with climate change but how to do so without touching your business model.

EXAMPLE 5:

Extracts from **Center for Global Development Working Paper Number 50, ‘seven Deadly Sins: Reflections on Donor Failings’** by Nancy Birdsall, December 2005

Abstract

In the face of continuing development challenges in the world’s poorest countries, there have been new calls throughout the donor community to increase the volume of development aid. Equal attention is needed to reform of the aid business itself, that is, the practices and processes and procedures and politics of aid. This paper sets out the shortcomings of that business on which new research has recently shed light, but which have not been adequately or explicitly incorporated into the donor community’s reform agenda. It outlines seven of the worst “sins” or failings of donors, including impatience with institution building, collusion and coordination failures, failure to evaluate the results of their support, and financing that is volatile and unpredictable. It suggests possible short-term practical fixes and notes the need ultimately for more ambitious and structural changes in the overall aid architecture.

Extract from Introduction

In this paper I focus on the “sins” of donors as a community in the hope it will enrich the ongoing discussion of reform of what might be called the “business” of development assistance. I deal with the shortcomings of the donor countries as providers of development assistance, leaving aside in this paper their shortcomings in such other areas as trade, security, and international migration that also affect the developing countries. In referring to donors and the donor community I refer both to bilateral donors and the World Bank, the IMF, and other international institutions that provide credit at below-market rates to developing countries, and whose policies and practices are heavily influenced by the rich countries.

After more than a decade of declines in total foreign aid, commitments on amounts of aid have increased, both in the U.S. and in Europe, so I refer only briefly to the inadequate quantity of aid. Instead I concentrate on problems with the “quality” of aid. The problems with aid quality matter tremendously because research indicates that they reduce considerably the effective value of the aid that is transferred, and in the most aid-dependent countries may well mean that the way the “business of aid” is conducted actually undermines those countries’ long-term development prospects. The sins I discuss are, in the order in which I address them:

1. Impatience (with institution building)
2. Envy (collusion and coordination failure)
3. Ignorance (failure to evaluate)
4. Pride (failure to exit)
5. Sloth (pretending participation is sufficient for ownership)
6. Greed (unreliable as well as stingy transfers)
7. Foolishness (underfunding of global and regional public goods)

My purpose is not to condemn the donor “sins” but, by being frank and clear about them, to generate a broader conversation among donors, recipients, and the concerned non-official development community, about how they might be addressed. In that spirit, I suggest “fixes” for the sins of donors.

STRUCTURE OF A BRIEF

Generally, policy briefs are four pages in length (around 2,200 words, including references and tables). They are usually organized as follows:

Quote/idea from each point/section of the reading	What it reminds me of as a learning person
Executive statement (10%)	Includes a brief overview of all of the parts of a policy brief Should be written last!
Introduction (10–15%)	Highlights the importance of the issue, problem or situation, using entry points Gives a brief overview of the conclusions or the direction of the rest of the brief
Methodology (5–10%)	Designed to strengthen the credibility of the brief by explaining how the findings and recommendations were arrived at Not always applicable or necessary – you can sometimes leave this out or restrict it to one sentence
Results and conclusions (30%)	Designed as an overview of the findings/facts Constructed around the policy recommendations
Implications or recommendations (30%)	This is the most important part of the brief Usually limited to three implications or recommendations Recommendations, which are direct and clear suggestions for action, are preferred, but less direct implications may be more appropriate depending on the context
References and useful resources (10%)	Helps readers find out more on the issue if they require more information In a brief, keep references to a minimum, but make sure you do include them – particularly seminal work on the issue or topic

KEY PRINCIPLES FOR STRUCTURED WRITING AND PRESENTATIONS

The following principles for written pieces and structured presentations⁵ have been compiled from the feedback from the assignments completed by parliamentary researchers, as well as the key principles outlined throughout Module 4, and the checklist used to assess briefs written by the UK Parliamentary Office for Science and Technology (POST).

Criteria	Yes	Partially	No	N/A
1. Structure				
Chosen structure is appropriate for topic (e.g. in length and format)				
Clear beginning, middle and end. The beginning tells the reader/listener what to expect and why it is important, the middle focuses on the details of each key point in turn, and the end summarizes what has been said and 'looks forward' (mentions implications, links the issue to the wider context)				
If provided, recommendations are specific, clear and feasible suggestions for action				
2. Clarity				
The purpose and key messages of the presentation/document are clear				
Uses simple language as much as possible, rather than technical jargon				
Graphs, charts, infographics and pictures are easy to interpret and help the reader/listener understand the key points				

5. Note this is intended as a general guide for written communications for a range of audiences, not a guide for academic research writing. Formal research writing is a much more specific skill with accepted principles and standards which are not covered in this guide.

Criteria	Yes	Partially	No	N/A
3. Use of evidence				
Evidence is properly referenced; all sources are fully acknowledged				
Evidence is accurately presented/interpreted				
Evidence is treated with objectivity				
Evidence comes from credible and official sources; where the source is informal or unofficial, this is clearly acknowledged				
A combination of different kinds of evidence is used (primary and secondary sources, research evidence, grey literature etc.)				
4. Relevance				
Directly addresses the topic without extraneous information				
Addresses the topic comprehensively, providing an accurate contextual framework/overview, and does not omit key information				
Contextually relevant in scope and content and enhances understanding of the specific situation				
An appropriate balance of theory and practical application				
Appropriately targeted at the audience and makes allowances for different information needs				
5. Visual presentation				
Titles and section headings are clearly and concisely labelled				
Presented in an engaging and professional visual style which is appropriate to the audience (e.g. use of colours, font, bold and italics, logos etc.)				
Where appropriate, the piece makes use of pop-out boxes, graphs, charts and infographics				
Visual style and use of headings, bullets etc. is consistent throughout				

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