VAKA YIKO

inasp

MODULE 2

A COMPLETE SEARCH STRATEGY

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	By the end of the module, learners will be able to: • 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	• 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	• 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	• 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

MODULE 2

VAKAYIKO EVIDENCE-INFORMED POLICY MAKING TOOLKIT

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

1
Understand the request for evidence
What exactly are you being asked to find out, and why?
What format should the information be in?
What is the timeframe?

2
Familiarize yourself with the topic
What are the key concepts and terminologies?
What are the latest debates and key issues?
Who are the most significant stakeholders?

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?

4
Choose the right types of literature
What types of literature do you need to answer your question?
Primary or secondary?
Published literature or grey literature?
Single study or body of evidence?

5
Choose your sources
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?

6
Search effectively
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?

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.

1

Understand the request for evidence

• 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	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* Data from national sources: Ghana Statistical Services Gender Page: *www.statsghana.gov.gh/gender.html* Data from 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://news.ecowas.int/presseshow.php?nb=014&lang=en&annee=2015*
Continental framework	African Union Gender Policy: *www.un.org/en/africa/osaa/pdf/au/gender_policy_2009.pdf*
Global frameworks	UN Women: *www.unwomen.org* (see also MDG reports, UNDP Human Development indicators etc.)
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 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*
Research institutes working on the issue	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 Insitute for Social Development (UN-RISD) research theme on gender: *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*

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) repare a brochure for investors; b) rite 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

4

Choose the right types of literature

- 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.

REFLECTION POINT

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

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.

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

5

Choose your sources

- 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

- Universities
- internet
- Regional bodies
- Researchers
- TV
- Colleagues
- Newspapers
- Think tanks
- Libraries
- Internal information storage systems
- Research institutes
- Other government departments
- Development partners
- Statistics Agency
- Other...
- Consultants
- Your own experience
- Civil society organizations

REFLECTION POINT

Which of these sources of evidence do you use most frequently? Why?

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.

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.
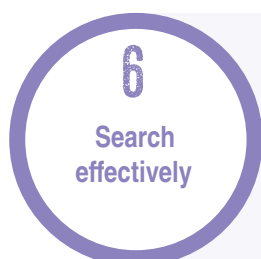
TOPIC 5
SEARCH EFFECTIVELY ONLINE

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

6

Search effectively

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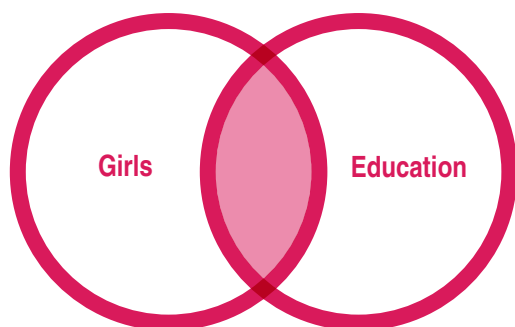
You can narrow the search by providing additional details – for example, affected population, youth, children, adults.

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.
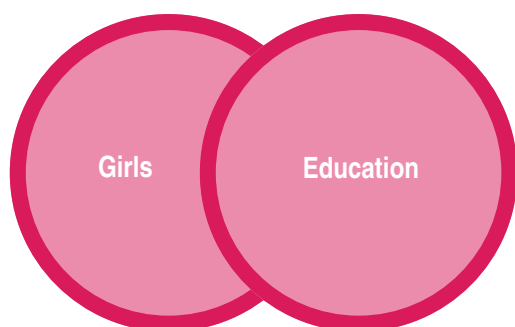- Finally, you can use truncation to find related words.

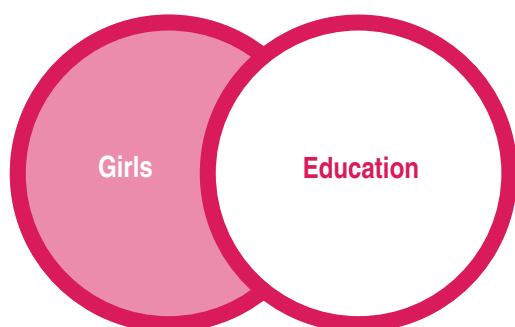## SEARCH REFINEMENTS

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-ma

'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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