

# MODULE 3

## HANDOUTS



## HOW TO SEPARATE FACT AND FICTION ONLINE

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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](http://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