The use of Indicators for the Monitoring and Evaluation of Knowledge Management and Knowledge Brokering in International Development

Report of a workshop held at the Institute for Development Studies 8th March 2013

Walter Mansfield
Philipp Grunewald

CONTENTS

Executive summary 4

Background and introduction 5

100 knowledge indicators 6

The workshop 11

Introduction: Framing the discussion 11

Session 1: Clarifying what good indicators should be like 14

Session 2: Sharing indicators currently in use 15

Session 3: Reviewing the strengths/weaknesses of indicators 15

Session 4: New indicators challenge 17

Session 5: Towards effective Knowledge indicators 17

Annex a. Participant list 19

Annex b. Working definitions: Knowledge Management & brokering and Indicators 21

Annex c. Assessing indicators - guiding questions 23

Annex d. New indicators challenge – problem statements and responses 24

About the Institute of Development Studies (IDS)
IDS is a leading global charity for research, teaching and information on international development. Our vision is a world in which poverty does not exist, social justice prevails and economic growth is focused on improving human wellbeing. We believe that research knowledge can drive the change that must happen in order for this vision to be realised. For more information go to: www.ids.ac.uk

About IDS Knowledge Services
IDS Knowledge Services aim to ensure that research knowledge makes a greater contribution to poverty reduction in the global South through the delivery and development of knowledge-sharing products, services, networks and organisations. For more information go to: http://www.ids.ac.uk/knowledge-services

About Loughborough University
An internationally acclaimed centre of research excellence, Loughborough plays a leading role in the development of new knowledge and understanding across all its fields of activity. Loughborough University is world renowned for the high calibre of research it produces. The campus is home to more than 40 research institutes and centres, and over 100 research groups. For more information go to:
http://www.lboro.ac.uk/

Walter Mansfield and **Philipp Grunewald** are full time PhD researchers in the Department of Information Science at Loughborough University. Walter's PhD studies are funded jointly by the Arts and Humanities Research Council (AHRC) and the School of Science, while Philipp's PhD studies are funded by a studentship from Loughborough University's Graduate School.

About this publication
This report is a summary of a workshop on 'The use of Indicators for the Monitoring and Evaluation of Knowledge Management and Knowledge Brokering in International Development' held at the Institute for Development Studies (IDS) on 8th March 2013.

An electronic version of this publication is available as a free download from www.knowledgebrokersforum.org. Please send any comments or questions to W.Mansfield@lboro.ac.uk

The use of Indicators for the Monitoring and Evaluation of Knowledge Management and Knowledge Brokering in International Development
March 2013, Walter Mansfield and Philipp Grunewald

This work is funded by UK aid from the UK Government, through the Mobilising Knowledge for Development Programme (MK4D). This work has also been informed by a survey funded by the KM4Dev Innovation Fund.

EXECUTIVE SUMMARY

Those working within knowledge management (KM) and knowledge brokering (KB) in international development are under increasing pressure to demonstrate the relevance and impact of their work. Practitioners lack best practice guidance on suitable indicators for external **accountability** (enabling practitioners to demonstrate the impact of KM/KB, providing an evidence base to justify investment) as well as for **learning** (allowing practitioners to determine which approaches to KM/KB are more effective, enabling improvement within organisations and across the sector).

This workshop brought together 30 practitioners from across the international development sector to share indicators in current practice, explore common issues and challenges, and collaborate to improve KM/KB indicators. The workshop, held at the Institute for Development Studies on the 8th March 2013, was initiated, planned and facilitated by two PhD researchers from Loughborough University, Walter Mansfield and Philipp Grunewald, in partnership with IDS Knowledge Services.

During the course of the workshop, participants debated the use of indicators in current use and worked to improve the relevance and robustness of those indicators. This workshop report presents:

- a resource pool of 100 indicators for knowledge management and knowledge brokering
- a summary of workshop discussions and outcomes

Discussions found that knowledge practitioners are faced with multiple challenges when measuring the impact of KM/KB work and proving that this work has led to changes in knowledge, attitudes, policy, practice and action. The discussions around indicator development and use in this context suggest that:

- indicators should be usable, effective, appropriate, durable, useful, coherent, measurable and meaningful
- the usefulness of an indicator depends on its purpose, and on what one is aiming to measure, achieve or prove
- a combination of quantitative and qualitative indicators works best (although both are open to misuse)
- different indicators work best for different situations, whether internal or external, or at a particular level of an organisation or process
- context is central to the utility of indicators - knowledge practitioners need to ensure that indicators are tailored to the particular context in which they will be used and connected to a project's Theory of Change
- indicators alone cannot capture impact but do enable comparisons between different projects, programmes and organisations
- indicators gain strength when used as part of a basket of indicators - a structure that links multiple indicators together within a broader monitoring and evaluation framework

The workshop also highlighted a number of gaps in the indicators in current use. Particularly lacking are qualitative indicators for gaining deeper understanding of how knowledge activities

work. Other evaluation methods (connected to indicators) may provide a useful perspective on this challenging issue. It is hoped that the resource pool of 100 indicators developed at the workshop will also be used by knowledge managers, knowledge brokers and others working with knowledge to guide their work in M&E of KM//KB work.

There is a great deal of interest in building upon this initial discussion on indicators for M&E of knowledge management and knowledge brokering work. Several participants were interested in sector-wide, standardised indicator lists, benchmarking and a wider discussion to place indicators within a broader M&E framework.

BACKGROUND AND INTRODUCTION

Researchers from Loughborough University, in partnership with IDS (Institute for Development Studies) Knowledge Services developed and facilitated a workshop on 'The use of Indicators for the Monitoring and Evaluation of KM and KB in International Development. [1] The workshop and outputs were supported by IDS' Mobilising Knowledge for Development programme funded by the UK Department for International Development (DFID).

The workshop brought together 30 knowledge practitioners, academics and consultants from 20 organisations to review and discuss indicators for knowledge management and knowledge brokering in international development. Further details of participants can be found in Annex a. Participant list

Workshop objectives

The workshop aimed to:

- gain an overview of what indicators are currently being used to measure knowledge management and knowledge brokering activities in the international development sector
- discuss key issues and challenges
- develop new and improved indicators.

1 The workshop was developed by Walter Mansfield and Philipp Grunewald (Loughborough University) in collaboration with Yasotha Kunaratnam and Louise McGrath (IDS Knowledge Services).

100 KNOWLEDGE INDICATORS

To concentrate discussions, workshop participants were presented with a broad range of indicators for knowledge management and knowledge brokering in international development. Since no such consolidated indicator list was in circulation prior to the workshop, Walter Mansfield and Philipp Grunewald developed a broad indicator pool drawn from a number of sources including:

1. a review of development and knowledge management literature,
2. submissions received from pre-workshop surveys,[2]
3. the creation of new indicators through review and adaptation of good practice indicators in use in parallel fields.[3]

This initial indicator pool has now been supplemented with an additional forty indicators that were shared or created by participants during the course of the workshop. Altogether, this forms a 100 indicator pool.

How to use this resource

This pool of 100 indicators can be drawn upon by knowledge managers, knowledge brokers and others working with knowledge.

It is important to ensure that indicators are tailored to the particular context in which they will be used and connected to the project's Theory of Change. In many cases, the sample indicators presented in this list would need to be adapted to fit the individual project or context.

It is hoped that the dissemination of this consolidated indicator pool will provide a useful starting point for those wishing to monitor and evaluate knowledge management or knowledge brokering activities in international development.

For ease of presentation, indicators have been grouped under broad headings. Many of these indicators could work equally well under multiple headings.

The researchers intend to continue to reflect upon and refine this indicator resource pool and are interested in on-going inputs and feedback.

Indicators for an online community of practice (CoP) or knowledge sharing forum[4]

1. #[5] of members
2. # of contributions (differentiated by content type, such as discussion, file, blog, wiki entry)
3. # of views of different content types (discussion, file, blog, wiki entry, etc.)
4. distribution of member participation (contributors who also comment vs. contributors

2 Seventeen responses were received from a survey of workshop participants representing a 65% response rate. A separate survey funded by the Knowledge Management for Development Innovation Fund targeted a broader group of knowledge professionals and resulted in 51 responses.
3 Where indicators have been provided to the researchers by a survey or workshop participant, the organisation has been given. References have been provided for published indicators. All additional indicators have been developed by Walter Mansfield (Loughborough University) CC BY
4 Indicators 1-9 inclusive, UNDP, Knowledge, Innovation and Capacity Group (KCIG)
5 Key for indicators: # = number, % = percentage, Y/N = Yes/No (in response to a survey/interview question)

without comments vs. email only members)
5. # of responses per query/discussion
6. average # of days before a discussion query receives its first response
7. # of policy advisors who engage in discussions (who provide input to discussions based on their job description/terms of reference)
8. # contributions of policy advisors
9. # of inbound, outbound (reciprocated) connections of policy advisors and community members within the corporate social network
10. #/% of conversations in a CoP that switch directions/take unexpected turns *[6]
11. Y/N - was the primary target audience engaged in the set-up of the intervention *
12. Y/N - would target audience miss intervention if discontinued/not set up in the first place (as judged by supplier and target audience itself) *
13. # of one-to-one conversations you have had as a result of the portal *
14. Y/N - have you talked to someone you did not talk to before/would not have talked to without the community? *
15. Y/N - have you worked with anyone outside the portal that you met here? *
16. Y/N - Can you give an example for what the CoP enabled you to do? *

Indicators for a website or blog activity/participation[7]

17. # of unique visitors (by country, region, interest area)
18. # page impressions
19. # visits
20. # subscribers to news feeds
21. # 'share' button clicks
22. # comments (non-spam)
23. # track-backs[8]
24. # instances of references in media

Indicators for knowledge services[9]

25. # user enquiries
26. % of enquiries answered within X days
27. % of users who feel satisfied/very satisfied with response
28. # of incidences of requests for information (from knowledge service) by target audiences (over time) *
29. % of unsolicited demand/requests *
30. % of repeat requests from particular stakeholders/service users (customer loyalty) *
31. would you recommend the service to others (Likert item 1-5)[10] *
32. would you use the service again (Likert item 1-5) *
33. Y/N - have perceived barriers to uptake of knowledge been addressed e.g. information literacy *
34. % of feedback from users (level of critical engagement) *
35. # of instances of key terms or phrases within internal documentation / external media *
36. # meetings with policy makers to discuss knowledge strategy / policy (over time) *

6 Indicators that are followed by a * are additional indicators developed or shared at the workshop. (Indicators without a * are the list drawn up and shared before the workshop

7 Indicators 17-24 inclusive based upon, Nick Scott 'A pragmatic guide to monitoring and evaluating research communications using digital tools' January 2012 <http://onthinktanks.org/2012/01/06/monitoring-evaluating-research-communications-digital-tools/>

8 A track-back (or link-back) is one of several methods that enables authors of online content be notified when others link or refer to content they have published

9 Indicators 25-27 inclusive based on those supplied by Governance and Social Development Research Centre (GSDRC)

10 A Likert item is a type of statement often used in surveys to which respondents are asked for a subjective or objective response. An example of a standard five level Likert item: 1strongly disagree, 2 disagree, 3, neither agree nor disagree, 4 agree, 5 strongly agree. Multiple Likert items are used to form a Likert group.

Indicators for knowledge products[11]

37. # of knowledge products created
38. % of users who rate knowledge products as good/excellent/useful
39. # of citations of knowledge products
40. # of downloads
41. # of people having read a knowledge product *
42. % of readers having passed on the knowledge product *
43. # (% of readers) of examples where knowledge product informed your work/policy *
44. # of channels that a knowledge product is available through *
45. Y/N - have discussions been captured as knowledge products *
46. # of recommendations of knowledge products *
47. usefulness of knowledge product (Likert item 1-5) as perceived by target audience *
48. # of examples where work has been cited *

Indicators for organisational development of knowledge management / sharing / brokering capacity (Indirect, qualitative indicators using perception surveys)[12]

% of staff who agree or strongly agree with:

49. I feel encouraged to share knowledge with my colleagues
50. I have the time and opportunity to impart and receive knowledge to/from other people
51. I have shared knowledge with a colleague outside my immediate team an average of at least once a week
52. knowledge is an essential organisational resource
53. my organisation encourages me to seek knowledge from colleagues
54. when I have knowledge needs, my organisation designates a specialist to assist me
55. I know precisely who in my organisation has the specific knowledge to help me with my work
56. I am able to find the knowledge I need quickly and easily
57. when searching for knowledge within the organisational repository, the knowledge I find is of good quality and meets my requirements
58. my organisation's communities of practice improve the ease and efficiency of knowledge sharing
59. it is as easy to share knowledge with colleagues working in other locations as it is with those working within the same location as me
60. I have confidence that outputs that I have developed with potential value for future projects, will be known about, locatable and used after I have left the organisation
61. Y/N - we have structures for team and project work that encourage people to bring forward experiences and insights from other settings to shape their work *
62. Y/N - we encourage multiple perspectives and different points of view to emerge *

Examples of knowledge activities / success cases

63. #/% staff who are able to provide an example of how knowledge activities have contributed to organisational performance
64. #/% of staff who are able to provide an example of how knowledge activities contribute to the organisation achieving its aims
65. #/% of staff/partners who believe X is a learning organisation
66. #/% of staff who can give an example of where learning from a partner has improved a

11 Indicators 37-40 inclusive based on those supplied by Governance and Social Development Research Centre (GSDRC)

12 Indicators 49-59 inclusive adapted from Joia, LA and Lemos, B, 'Relevant factors for tacit knowledge transfer within organisations', Journal of Knowledge Management, Vol.14 Iss: 3 pp. 410-427 (2010) and Resatscha, F and Faisstb, U, 'Measuring and performance of knowledge management initiatives' discussion paper presented at OKLC 2004, Innsbruck, Austria, (April 2004).

programme or policy

67. Y/N - We have healthy innovation systems. We make room for fresh ideas and approaches and are good at transferring knowledge from one place to another *
68. To what extent are stories travelling around our organisation? *

Knowledge innovation

69. #/% of staff who are able to give examples of incremental innovations (applying existing knowledge in new ways or an improvement to an existing way of working)
70. #/% of staff who are able to give examples of radical innovations (entirely new knowledge)
71. #/% of innovations for which there is evidence of replication/take-up by others within and outside the organisation

Mainstreaming knowledge management/brokering[13]

Organisational commitment to knowledge management/brokering

72. % of management/leadership who are aware of knowledge management / brokering
73. % of management/leadership who are able to give an accurate description of knowledge management/brokering

Mainstreaming knowledge management/brokering within monitoring and evaluation systems

74. % of Monitoring and/or evaluation systems which consider knowledge management/brokering requirements

Policy and strategy

75. Y/N - there is an organisational knowledge management/brokering policy
76. % of key organisational policies or strategies which make reference to the knowledge management/brokering policy
77. % of key programmatic strategies/policies which explicitly refer to knowledge management/brokering
78. # technological solution (input/output) requests to knowledge database/system *
79. #/% uses/references in project documentation (of new initiatives/programmes) to previously conducted evaluations/existing knowledge *

Human resources / training and development

80. % of staff inductions which make staff aware of the organisation's knowledge management/brokering policy and processes
81. % of organisation staff who have basic awareness and understanding of knowledge management/brokering
82. knowledge management/brokering competencies have been adopted
83. % of job descriptions/TORs which make reference to knowledge management/brokering competencies and provide examples of related tasks/activities
84. # of cross-learning activities staff members are engaged in over a period of time *
85. % of outgoing staff who complete an exit interview which includes a knowledge handover *

Integration within programme cycle

86. % of programme cycle documentation which makes explicit reference to knowledge

13 Indicators 72-77, 80-83 and 86-89 inclusive adapted from the 'How to guide to conflict sensitivity', Conflict Sensitivity Consortium, February 2012 < http://www.conflictsensitivity.org/content/how-guide>

management/brokering

87. % of proposals which explicitly provide resources (staff time and/or funds) for knowledge management/brokering activities
88. knowledge management/brokering is explicitly referenced within project sign-off/approval
89. evaluation criteria include explicit reference to knowledge management/brokering

Finance / resource costs

90. # of project invoices to donor which were unpaid/needed to be reimbursed due to insufficient quality or absence of documentation
91. #/£ of examples of cost-savings directly attributable to knowledge management/brokering activities
92. # of distinct examples of 'where the organisation re-invented the wheel' (within a given time period) *
93. % in reduction of all staff emails/documents stored in emails *
94. reduction of staff time spent looking for information *

Indicators for a knowledge exchange / study visit

95. # of people *
96. # of visits *
97. # of communities represented *
98. duration of visits *
99. # of sites visited *
100. ratio of visitor to facilitator/knowledge holder *

THE WORKSHOP

The workshop was held at IDS on the 8th March 2013, facilitated by two PhD researchers from Loughborough University, Walter Mansfield and Philipp Grunewald, in collaboration with members of the IDS Knowledge Services team. [14]

Divided into six sessions, the workshop was structured as follows:

- Introduction: Framing the discussion
- Session 1: What good indicators should be like/provide?
- Session 2: Sharing indicators currently in use.
- Session 3: Reviewing strength/weaknesses of current indicators.
- Session 4: New indicators challenge.
- Session 5: Towards effective M&E for KM/KB

Introduction: Framing the discussion

Opening the workshop Jon Gregson, Head of IDS Knowledge Services highlighted the importance of indicators to the international development sector.

Key definitions: Knowledge Management and Knowledge Brokering

There is a plethora of terms in use in the Knowledge community. We decided that working definitions were useful to ensure that the language of the workshop was clear to all and to avoid debates over terminology. Our definitions are included in full in Annex b. Working definitions: Knowledge Management & brokering and Indicators and here in brief:

Knowledge Management (KM)	"Any processes and practices concerned with the creation, acquisition, capture, sharing and use of knowledge, skills and expertise [within an organisation] (Quintas et al. 1996) [sic] whether these are explicitly labelled as KM or not (Swan et al. 1999)" (Ferguson, Mchombu, Cummings, 2008, p.8).
Knowledge Brokering (KB)	Any processes and practices concerned with informing, linking, matchmaking, engaging, collaborating and building of adaptive capacity (Jones et al., 2012), of two or more external knowledge producers/holders and users/seekers, whether these are explicitly labelled as KB or not.

Knowledge Management and Knowledge Brokering in practice

Two presentations were given, first by Rob Cartridge from Practical Action, who discussed the problems faced when trying to develop indicators and then by Anna Downie from the HIV/AIDS

14 Yasotha Kunaratnam, Louise McGrath, Kate Bingley and Steve Tovell

Alliance, who focused on the main drivers for measuring organisational learning and creating indicators. These presentations highlighted current practice in the field of international development, indicators in current use, and key challenges pertaining to the use of indicators to monitor or evaluate knowledge management and knowledge brokering.

Rob Cartridge, Practical Action

Rob described Practical Action's role as a knowledge supplier, broker and demander and discussed the difficulties of gauging impact of a technical enquiries service and the importance of knowing which services offer best value for money.

Rob raised the following challenges:

- ***Demonstrating reach and impact:*** While it is easy to measure activities, e.g. no. of enquiries received/ answered/ followed up, it is extremely challenging to bridge the gap between how many people you reach with an activity and the impact that has had.
- ***Accounting for impact on beneficiaries:*** When providing advice to other NGOs on appropriate technologies how do you account for impact to their end beneficiaries?
- ***Dealing with under-reporting:*** How do you deal with a massive under-reporting of number of enquiries?
- ***Verifying stated knowledge uses:*** It is unfeasible to verify what people have said they will do with the information they are provided with.
- ***Following up with and making sense of impact for a large audience base:*** Huge numbers make it very difficult and expensive to follow up with end beneficiaries in a scientific or statistically significant way
- ***Knowledge sharing vs. M&E costs:*** While the cost of knowledge sharing is relatively cheap, the cost of M&E can become very expensive and is difficult to justify particularly when activity budgets are low.

Rob then described a matrix Practical Action is developing to address some of these issues.

This matrix uses a conversion funnel and a sampling methodology to gauge number of clients, number of follow up activities and number of clients who act on knowledge provided. It also distinguishes between long-term benefits (what is done with that knowledge) and the short-term benefits, e.g. access to new knowledge supporting ability to make informed choices. Through this matrix, Practical Action hopes to make a better 'best guess' of the number of beneficiaries and the impact upon them.

Anna Downie, International HIV/Aids Alliance

Anna also outlined some of the challenges of measuring knowledge sharing posing these questions:

Defining knowledge sharing activities

- What activities are labelled as knowledge sharing activities?
- How do we put boundaries on them?

Demonstrating difference in practice and organisational capacity

- How can we demonstrate knowledge sharing and learning makes a difference in practice?
- What difference does knowledge sharing make to the capacity of the organisation?

Learning from and putting into use changes identified

- Where examples of change can be given, what systematic evidence can be collected that shows that such changes are representative- and not just individual stories?

Attribution and value for money

- Where changes have happened what can be attributed to our activities?
- How do we compare different learning activities to show what works best and what offers best value for money

Anna described how the HIV/AIDS Alliance carried out a baseline assessment of the extent to which the Alliance is a learning organisation. [15] This baseline assessment gave rise to a composite score and the HIV/AIDS Alliance is now using an annual survey to ask people to self-rate the value of knowledge activities in terms of learning. This has provided a quantifiable measure for the monitoring of changes, in addition to examples of where learning has changed practice.

Two additional approaches are being considered:

- To more systematically follow up after approximately six months to find out what changes occurred following a knowledge sharing activity
- Working backwards (based on contribution analysis) start with observed changes in capacity or effectiveness and trace backwards to find out what interventions contributed to that change, to see if knowledge sharing activities played a role.

What are the drivers for indicators?

Walter gave a short presentation on the various forces that are influencing an increased demand for indicators across the international development sector. Drivers for indicators can be split into two main groups: external and internal. External indicators focus upon **accountability** to funders, and demonstrating **value for money,** while internal indicators are used to monitor and improve **effectiveness**, **learn** what works and what does not, and to **justify** the investment of knowledge work relative to other activities.

As it can be a complicated and long causal pathway from knowledge management or knowledge brokering to reducing poverty or tackling inequality, it is important that we are able to demonstrate our contribution to intermediate outcomes, and indicators can play a vital part in establishing this link.

Measuring changes relating to knowledge sharing is particularly difficult due to the intangible nature of knowledge. However, we can more easily measure:

- The existence of knowledge objects (captured information[16])
- The existence of 'things' used to manage, use and broker knowledge[17]
- Perceptions of the success of knowledge activities (for example through qualitative methods such as interviews and surveys)

15 Based on Bruce Britton's 'The Learning NGO' <http://www.intrac.org/data/files/resources/381/OPS-17-The-Learning-NGO.pdf>

16 Knowledge is 'captured' when written down, documented or otherwise recorded e.g. within reports, wikis, videos, blogs, forums or multiple other knowledge objects

17 e.g. Knowledge Management Systems, Communities of Practice, Databases,

Session 1: Clarifying what good indicators should be like

Walter gave a short presentation on good practice in indicator development drawn from a review of monitoring and evaluation literature.

Indicators should be:

1. Robust (able to stand up to critique and interrogation)
2. Clear / explicit in intent and language
3. Contextualised (well suited to the context in which they are being used)
4. Meaningful (you have a reason for measuring it and the information is useful to you)
5. Quick and simple to measure
6. Useable (linked to accessible data we know how to find)
7. Valid (it measures what it claims)
8. Coherent (linked to the original problem and objectives/outcomes, and embedded within an overarching Theory of Change)
9. Used alongside other indicators for an indicator set or 'basket'
10. Durable: have longevity (being able to compare results over time)
11. Described in terms that are themselves defined
12. SMART (Specific, Measurable, Attainable, Relevant and Time-bound)

Group Exercise: What do good indicators look like?

The group reviewed the indicator pool collated prior to the workshop. This discussion generated the following reflections:

Useable indicators

- Data availability is a key factor in selecting appropriate indicators
- Gathering very specific data can be useful for gaining better quality information e.g. not simply number of views but number of views of a particular document.
- It is important that indicators used for knowledge activities are in line with existing organisational indicators.

Effective indicators

- Indicators can be a cost effective assessment tool.
- Indicators are much better at representing and gauging overall impact than success stories: an advantage indicators have over elicited success stories, is that it is much more difficult to make comparisons between different success stories.

Appropriate indicators

- It is important that benchmarks/targets exist to make the information you collect of use; e.g., an indicator on the ratio of female researchers within your project is of limited use unless the ratio of female researchers in the wider world is known.
- It is better to focus on behaviour rather than numbers: Focusing upon increasing numbers of activities or volume of traffic is sometimes unhelpful and may provide 'false comfort'.
- It is essential that indicators are designed to meet the needs of the audience and the reason for the original activity they are intended to measure. It is particularly useful to have different indicators for different audiences (funders, managers, field level).

Useful indicators

- It is helpful to be aware of the influence donors have on indicators and the importance of the political context. Indicators need to be attractive to the funder but this can be subject to shifting political contexts and short-term funding cycles.
- A good indicator is a useful indicator. The indicator has to be useful to somebody, to help make a judgment or decision.

Coherent indicators

- When developing indicators it is important to refer to your Theory of Change and know whether they are addressing internal learning or external accountability.
- Indicators should always link back to the aims of the original activity.
- It is important to understand the difference between activity, output and outcome indicators and how they interrelate.
- You should not develop indicators to match information you happen to have available.

Meaningful indicators

- Be aware of the dangers of overloading an indicator with meaning it cannot provide and making leaps of logic: e.g., the number of instances of citations in the media does not provide any certainty of whether meaningful knowledge exchanges have taken place, whether the media coverage was positive or negative, or if it made any difference or change.
- Indicator sets may be more useful to measure complexity: Single indicators are not good at handling complexity. Indicator sets or baskets may be more useful.

Session 2: Sharing indicators currently in use

In this session, participants shared examples of indicators in current use in addition to those already presented. These have been captured and added to the indicator pool.

Session 3: Reviewing the strengths/weaknesses of indicators

In this session, workshop participants discussed and reviewed the indicator pool, using a set of discussion questions as a guide (Annex c. Assessing indicators - guiding questions). Participants noted that a lack of context makes it problematic to review the indicator pool. When indicators are separated from their original context, much of the meaning is lost and the value of an individual indicator is difficult to assess. Acknowledging this issue, a number of reflections upon the provided indicator pool were provided.

Misuse of indicators

Participants noticed that most of the indicators are quantitative looking at 'how much' or 'how many' and few qualitative, looking at 'how' and 'why'. This was perceived to be a problem partly because quantitative measures rely upon underlying assumptions being true (e.g. the number of people having read a knowledge product [the indicator] gives an indication about what the benefit of the knowledge product was [what one is trying to find out]). It was suggested that quantitative measures are often misused; they are assumed to tell us things they are unsuited for. However, it was acknowledged that this is an issue with the way an indicator is put to use rather than a criticism of the indicator itself and others remarked that qualitative measures also suffer from misuse, for example only reporting on stories that show activities in a positive light.

Both context and knowing how you will measure is key when creating indicators

On the subject of indicator creation, participants felt that the context in which indicators were created was key. There was a view that the more an indicator is tailored to an individual project, the better the indicator. Participants underlined the importance of considering sources of information and means of measurement at the time of indicator development.

Indicators enable comparisons

Discussing indicator strengths, participants commented that one of the great advantages of indicators over other M&E tools is the ability to make comparisons (between different projects, programmes, organisations). To enable comparisons to be made there must be a balance between project specific indicators and more generic, universal measures, which might be more easily contrasted and benchmarked, within and across organisations.

Indicator baskets

Participants felt that indicators gain strength when used as part of a basket of indicators (a structure that links multiple indicators together within a monitoring and evaluation framework providing a more nuanced and deeper understanding of what is being measured).

Clarity of indicators

Participants commented that well-developed indicators use clearly defined language. This may result in longer and more complex indicators; however, by providing specific definitions one is acknowledging and addressing underlying value judgements and, thereby creating a more robust indicator. On a related point, it was noted that some of the indicators try to cover too much ground and would perhaps be better divided into two or more distinct indicators.

Quantitative and qualitative indicators

It was suggested that a combination of quantitative and qualitative indicators could be used to achieve different aims (quantitative generally better for accountability, and qualitative for learning) and to provide a complete and meaningful picture. It was acknowledged that indicators alone cannot capture impact, and that indicators have a specific role within a broader M&E framework.

Usefulness of indicators

Participants said that the usefulness of an indicator depends on its purpose (and on what one is aiming to measure, achieve or prove). Again, participants felt that the context is central to utility. Participants held that different indicators work best for different situations, whether internal or external, or at a particular level of an organisation or process. A 'hierarchy of change' can be useful to situate indicators at the place / stage where they are most relevant. Individual indicators might then refer to their place within that hierarchy and be used appropriately. Participants suggested that some of the indicators do this to some extent (noting indicators 24, 38 and 60). However, they could benefit from further development (adding more information to make them context specific and re-wording to define terms and remove assumptions e.g. defining 'good quality').

Some participants valued indicators as being cheap to measure relative to other forms of M&E. Participants asserted the importance of value for money, stating that it is difficult to justify spending more than a small percentage of a project/programme budget on M&E when this could

instead be spent on delivery. Thus, to be most useful, indicators often need to be easy to use, cheap, and quick to measure.

Session 4: New indicators challenge

In this session, participants were divided into working groups to review case studies and asked to come up with indicators to address them. The resulting indicators were added to the indicator pool. A detailed description of the discussion and results of this session can be found in Annex d.
New indicators challenge – problem statements and responses

Session 5: Towards effective Knowledge indicators

In this final session, participants gave feedback on the day and discussed potential next steps.

Conclusions

From post-workshop evaluations and feedback, it is clear that there is a great deal of participant interest in building upon this initial discussion. Several participants were interested in sector-wide, standardised indicator lists, and many expressed interest in being involved in benchmarking.

The usefulness of an event focused specifically upon indicators with clear aims and objectives was acknowledged. There also appears to be a great deal of interest in a wider discussion that places indicators within a broader M&E framework or that moves beyond indicators to encompass alternative methodologies for measuring knowledge management and knowledge brokering.

The workshop highlighted a number of gaps in the indicators in current use. Particularly lacking are qualitative indicators for gaining deeper understanding of how knowledge activities work. It may be the case that other evaluation methods (connected to indicators) would provide a useful perspective on this challenging issue.

Participant Comments

General reflections on the workshop:

- This has given me lots to think about, particularly interesting is the challenge of standardisation vs. context in indicators
- There were some very interesting ideas shared on how to structure / categorise different types of indicators
- It has been really helpful to spend so much time focusing on indicators alone
- I have discovered a lot of new potential indicators

How participants plan to use ideas gained from the workshop:

- We will develop our evaluation methods for follow up of KM activities
- We will use this learning in designing our knowledge service M&E framework
- I hope to implement some of the learning from today when finalising the log-frame for a new programme we are developing
- I will be using this when designing projects and proposals
- I intend to apply this learning in a new project we are developing
- We will be using this learning within our new strategy
- I will feed the learning from this into our M&E approaches for KS projects and in planning/finalising indicators for our review

- I will revisit our M&E frameworks and planning to ensure they are effective and relevant

New perspective on indicators

- We will revisit our existing indicators and review the balance of qualitative and quantitative method
- It has helped me to better understand the challenges involved and will assist in managing expectations of what indicators can achieve
- I will give greater consideration to the availability and accessibility of indicators
- It will help in developing more appropriate and acceptable indicators for conducting evaluations
- I will give greater consideration to the assumptions on which our programmes are based
- I will share this learning and continue the discussion within my organisation

Next steps

- Further associated research activities and events are likely to take place in 2013/2014. If you would like to be involved or have ideas for continued development of the workshop outcomes, we would be interested in hearing from you by email.
- The workshop facilitators would like to continue the discussion on benchmarking and would be interested in hearing from organisations who would like to be involved in developing and piloting standardised indicator sets.
- As part of this project, the researchers carried out pre-workshop surveys of participants and the wider knowledge community. [1] Another report, focussing on these surveys, will be distributed to workshop participants and via the Knowledge Management for Development (KM4Dev) and the Knowledge Brokers Forum (KBF).

PhD researchers from Loughborough will continue to explore the issues raised in this workshop:

- Walter is currently investigating the impact of knowledge management on organisational performance in UK based international development NGOs, and is seeking to develop and pilot a framework for measuring knowledge management impact. Walter would be interested in connecting with potential partnership and case study organisations.

- Philipp's current research activities focus on the facilitation of "south-south" knowledge exchanges in international development. Philipp is trying to understand how projects and programmes that facilitate inter-organisational knowledge sharing can be undertaken most effective and efficiently. He is interested in working with practitioners to enhance our understanding of these processes and is looking for further case studies.

Loughborough University has recently created a Working Group on Information and Knowledge for Development (WIKD). In November 2013 we will be leading a research theme at the Nordic Conference for Development Research and would like to invite interested parties to submit abstracts in the theme 'facilitating knowledge creation in organisations', or to other themes.[18]

IDS Knowledge Services is continuing to work with partners to explore and develop approaches to strengthen the effectiveness of knowledge mobilisation work, including work on planning, monitoring, evaluation and learning. The Impact and Learning blog and the Knowledge Brokers' Forum are spaces we support to share our latest thinking.

18 For further information please see <http://www.kehitystutkimus.fi/conference/working-groups/wg14>

ANNEX A. PARTICIPANT LIST

Name	Job Title	Organisation
Adrian Bannister	Web Innovations Convenor	Institute of Development Studies (IDS)
Alix Wadeson	Programme Officer: Knowledge Management	International Alert
Andrew Shaw	Evaluation Adviser	DFID
Anna Downie	Senior Programme Officer: Knowledge Sharing	International HIV/AIDS Alliance
Asuncion Valderrama	Head of Documentation Centre	IIEP, UNESCO HIV/AIDS Clearing House
Charles Dhewa	Chief Executive Officer	Knowledge Transfer Africa (KTA)
Cheryl Brown	Consultant (representing GDNet)	The Social Marketing Lady
Chris Barnett	Monitoring and Evaluation Advisor	IDS/ ITAD
Esther Lunghai	Project Officer	Arid Lands Information Network
Faruk ul Islam	Head, Policy Practice and Programme Development	Practical Action Bangladesh
James Andrew	Knowledge and Information Management Officer	British Red Cross
Jessica Romo	Monitoring and evaluation coordinator	SciDev.Net
Jon Gregson	Head of Knowledge Services	Institute of Development Studies (IDS)
Louise Kennard	Evaluation Adviser	British Council
Michelle Davis	Communications Manager	Malaria Consortium
Mokhlesur Rahman		Practical Action Bangladesh
Naomi Landau	Knowledge Broker	Third Sector Research Centre
Paul Corney	Knowledge Lead	Sparknow
Razia Shariff	Head, Knowledge Exchange Team	Third Sector Research Centre
Rob Cartridge	Head of Practical Answers	Practical Action
Robbie Gregorowski	Principal Consultant	ITAD
Ruth Goodman	Monitoring and Evaluation Learning Officer	Institute of Development Studies (IDS)
Sandra Baxter	Knowledge Manager	PEAKS
Tamlyn Munslow	Research Officer (Impact, Innovation and M&E)	Institute of Development Studies (IDS)

IDS and Loughborough University Facilitators and Support

Philipp Grunewald	PhD Researcher	Loughborough University	p.grunewald@lboro.ac.uk
Walter Mansfield	PhD Researcher	Loughborough University	w.mansfield@lboro.ac.uk
Kate Bingley	Monitoring & Evaluation Advisor	Institute of Development Studies (IDS)	k.bingley@ids.ac.uk
Louise McGrath	Programme Development Manager	Institute of Development Studies (IDS)	l.mcgrath@ids.ac.uk
Yaso Kunaratnam	Network & Partnerships Convenor	Institute of Development Studies (IDS)	y.kunaratnam@ids.ac.uk
Steve Tovell	Programme Coordinator	Institute of Development Studies (IDS)	s.tovell@ids.ac.uk

ANNEX B. WORKING DEFINITIONS: KNOWLEDGE MANAGEMENT & BROKERING AND INDICATORS

As in all emerging fields, a variety of different definitions, interpretations and terminology are in use and have been applied to Knowledge Management and Knowledge Brokering. Whilst we acknowledge this debate, some working definitions are useful in order to ensure that the language of the workshop is clear to all and that we do not become distracted by discussions of terminology.

Knowledge Management (KM)	"Any processes and practices concerned with the creation, acquisition, capture, sharing and use of knowledge, skills and expertise [within an organisation] (Quintas et al. 1996) [sic] whether these are explicitly labelled as KM or not (Swan et al. 1999)" (Ferguson, Mchombu, Cummings, 2008, p.8).

This definition highlights the ***organisational nature*** of KM, managed as a capital resource for the benefit of the organisation.[19]
Example: After Action Review to promote organisational learning.

Knowledge Brokering (KB)	Any processes and practices concerned with informing, linking, matchmaking, engaging, collaborating and building of adaptive capacity (Jones et al., 2012), of two or more external knowledge producers/holders and users/seekers, whether these are explicitly labelled as KB or not.

KB takes a ***sector perspective*** and is concerned with processes reaching *across organisations*.
Example: Setting up a portal, focused around a theme.

KM and KB	
- differences:	• KM focuses on benefitting the organisation and KB focuses on the sector.

- similarities:	• Both, KM and KB aim at promoting and facilitating evidence-informed policy making and/or practice. Both try to address knowledge gaps.
	• KM and KB can both be undertaken by individuals and institutions alike.
	• Both, KM and KB, are roles that actors can play at different times.
	• At the practical level KM and KB activities and interventions are often similar; e.g.
	  ◦ putting in place a knowledge sharing system
	  ◦ developing communities of practice or learning networks
	  ◦ creating knowledge sharing relationships with partners
	  ◦ building a repository of good practice
	  ◦ providing a knowledge advisory service

19 This definition situates KM within the organisation; however, KM has been used more widely in the development sector over the last decade. The definition employed here includes, for example, organisations using knowledge wherever it may be situated for the benefit of that organisation. Other definitions go even further and include all knowledge related processes and practices within the development sector under the term 'KM4Dev'.

Indicators	"Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor" (OECD, 2010, p.25).

Given the focus of this workshop, the indicators under discussion are those which measure the achievement of KM and KB activities.
Example: Participant numbers in facilitated community of practice.

Bibliography

FERGUSON, J., MCHOMBU, K., CUMMINGS, S., 2008. *Meta-review and scoping study of the management of knowledge for development.* [online]. IKM Emergent. [viewed 08/01/2013]. Available from: http://content.imamu.edu.sa/Scholars/it/net/080421-ikm-working-paper-no1-meta-review-and-scoping-study-final.pdf.

JONES, H., JONES, N., SHAXSON, L., WALKER, D., 2012. *Knowledge, policy and power in international development a practical guide*. 1st ed. Bristol: Policy Press.

ORGANISATION OF ECONOMIC CO-OPERATION AND DEVELOPMENT, 2010. *Glossary of Key Terms in Evaluation and Results Based Management* [pdf] Available at: <http://www.oecd.org/development/peerreviewsofdacmembers/2754804.pdf> [Accessed 08 January 2013].

QUINTAS, P., LEFRERE, P., JONES, G., 1997. Knowledge Management: A strategic agenda. *Long range planning* 30(3), 385-391.

SWAN, J., NEWELL, S., SCARBROUGH, H., HISLOP, D., 1999. Knowledge management and innovation: networks and networking. *Journal of Knowledge Management* 3(4), 262-275.

ANNEX C. ASSESSING INDICATORS - GUIDING QUESTIONS

The following questions are intended to be a guide for discussion.

- Which of the indicators are good, developed, or most useful?
- Which of the indicators are bad, crude, or least useful?
- Do all the indicators tell you something?
- Is there any commonality between the indicators that you find most useful?
- Would it be possible to improve the least useful indicators?
- Which of the indicators are easiest to use?
- Which of the indicators would be difficult or expensive to verify?
- How would you go about finding the evidence for these indicators?
- The indicators have been placed under titles. Do you agree with these?
- Many of the indicators might be described as measuring outputs, are there any, which are successful in measuring outcomes or impact?
- Which of the indicators are better for learning and which are better for accountability?
- What are the gaps? What other indicators would you like to see?

ANNEX D. NEW INDICATORS CHALLENGE – PROBLEM STATEMENTS AND RESPONSES

Indicators cannot meaningfully be discussed in isolation from the project that they are aiming to monitor. In order to contextualise our work on indicators, the workshop presented four scenarios and challenged participants to develop indicators in response to four unique knowledge problems. The indicator outputs of this exercise have been added to the indicator pool (100 knowledge indicators).

Problem 1

I represent a consortium of agencies working on conflict. We have technical specialists scattered around the world. In conducting their work, they work in isolation. There have many examples of re-inventing the wheel, not learning from successes, and capacity gaps when key individuals leave. We have initiated an international community of practice bringing together all individuals working on, or interested in conflict.

How do we go about measuring a) the effectiveness, b) impact and c) demonstrate the community of practice is worthwhile?

Challenge:

- Can you design an indicator for accountability to your funder?
- Can you design an indicator for learning purposes to help you improve the effectiveness of the CoP?
- Can you design an indicator to help you justify to senior management further investment in the CoP?

Group response:

This group started off defining what change a successful CoP would bring about. They outlined that it should lead to less reinvention of the wheel, more learning from successes and failures and fewer capacity gaps when people leave.

In the response to accountability considerations suggestions included % of money spent on different activities and the achievements (outcomes, impact) of these activities.

For learning purposes it was suggested to look at people's experience in the CoP; an example for measurement would be the frequency of engagement with each other and determining the qualitative aspect of those conversations (what is it about). A baseline would have to be established and then one could compare frequency and quality of engagement pre and post the creation of the CoP.

To justify further investment in the CoP the group suggested using output indicators that show that the CoP is being used.

Problem 2

Our organisation has a knowledge portal with discussion forums, a document repository and a 'knowledge wiki', which was designed to aid North – South, South-South, and South - North knowledge exchange. While there are a large number of members only a small core of these are very active and we feel that the key target group (Southern partners) are not being reached. We have a very limited budget for M&E, how can we gauge the impact of the portal with a small set of easy to measure indicators?

Challenge:

- Can you design easy to measure indicators to measure the impact of this knowledge portal?

Group response:

This group also started with a problem analysis. The most important thing, as they perceived it, was the issue around the key target group (southern partners). Besides that, they noted that there is an online social network and a wiki-repository. Their discussion of the challenge at hand mostly focussed on contributions to the social network and repository and the usage of those.

The first measurement was determining whether southern partners contribute and access (measuring contribution and access levels by geography). The next indicator related to sharability of the contributions. The task group suggested to measure activity by looking at the ratio of members and contributors (e.g. every 5th member is also a contributor) and by looking at the contributions and contributors (e.g. every contributor contributes 5 times in a month); baselines would need establishing to give an understanding of what low, sufficient and high contribution levels would look like.

The next indicator referred to the overlap in contributions and access with regards to the themes covered. In other words: the group suggested to measure the contributions and downloads/access in themes and compare the degree to which levels of access overlap with levels of contribution. This could give an indication of how well the intervention is doing at providing information in the areas members are interested in. If the access rates in a certain themes are higher than in others (relative to the number of contributions) than the facilitators might encourage more contributions in this area.

The task group found it important to connect the popularity (access) of information/themes to current political events in the countries that participants come from. It was also seen as important to compare web statistics (downloads, time spent on site, etc.) on a "north/south" basis and that all of these measures should be monitored over time to inform trial and error learning on the side of the facilitators (what works? what doesn't?).

The last aspect this task group touched on was usage of information. It was suggested that a survey could provide useful data on the perceived quality and usage of the information provided through the intervention. This survey could to be carried out in two steps. The first step would be mainly quantitative and sent to all participants whereas the second step would consist of a qualitative follow up with selected individuals from step one.

Example questions/indicators:

Step 1:

1. # of one to one conversations you had as a result of the portal
2. Have you talked to someone you did not talk to before/would not have talked to without community?
3. Have you worked with anyone outside the portal that you met here?

Step 2:

4. Can you give an example for what the CoP enabled you to do?

Problem 3

Our organisation has hired a knowledge manager to design and implement a KM strategy across the organisation. Some of the aims of this are to enable staff to work more efficiently and spend less time searching for information. The strategy also aims at improving the organisation's institutional memory through encouraging internal knowledge exchange and capturing and documenting existing knowledge. We want indicators to measure the success of this programme.

Challenge:

- Design indicators that measure the effectiveness of such a programme.
- Design indicators that measure if organisational learning is taking place.

Group response:

The task group discussed the project's anticipated longer-term aims and more intermediate outcomes. The longer terms aims are improved institutional memory and improved learning practices. An intermediate outcome is increased efficiency of staff when looking for information (access to more relevant information in less search time). Additionally, increased knowledge exchange is supposed to lead to improved practice.

To gain an understanding of how the intervention is performing the task group defined desired behaviours. These would have ideally been identified in a needs assessment and baselines would have been established prior to the intervention:

- prioritization of knowledge sharing/exchange
- nature and breadth of interaction across organisation
- staff willingness to use technology/system

The group came up with a variety of indicators to address this problem:

1. # of cross-learning activities staff members are engaged in over a period of time
2. level of usage technological solution (input/outputs) / requests to database
3. % in reduction of all staff emails/ documents stored in emails
4. reduction of staff time spent looking for information
5. existence (in the eyes of demand) of information when needed (Y/N)
6. HR exit interviews accounting for how knowledge handed over (Y/N)
7. use/reference of project documentation (of new initiatives/programmes) to previously conducted evaluations/existing knowledge (%/#)

Problem 4:

Our organisation is trying to facilitate knowledge exchange between practitioners situated in developing countries. Our funder has decided that the project's thematic focus shall be on water and sanitation. We have identified some good practices in Latin America and run study visits for people from around the world to these locations. However, this is a very expensive way of enabling knowledge sharing and we would like to know if it is worth the investment.

Challenge:

- Design indicators that shed light onto the outcomes of this project.
- Design indicators that show behaviour change of participants.
- Design indicators that show improvement in living conditions of the local communities that participants come from.

Group response:

Even though the challenge asks for outcomes and impact indicators the task group argued that there is still value in coming up with output indicators. The group acknowledged the importance of having a coherent overarching Theory of Change. Examples for output indicators for this challenge include:

1. # of people
2. # of visits
3. # of communities represented
4. duration of visits
5. # of sites visited

The group then considered viable outcome and impact indicators. One example of this could be the number of instances of appropriations of new technologies learnt during the study visit. This could give a valuable insight into the increase in availability and quality of the water and sanitation installations in the communities from where participants came (other quantitative indicators could also be employed to substantiate this). The group then stated that impact would have to be measured in terms of people's improved health (reduction in water and sanitation related diseases).

One member of this group wrote his own reflections after the workshop:

"Apart from developing indicators on number of visits, number of people, cost and places visited, we grappled with how to track most significant change: in behaviours; in improvements in health and reduction in water and sanitation related diseases; standing in the community of the visitors; and their resultant ability to influence behaviours in their immediate vicinity. We noted the potential for improved productivity and innovation and the need to design indicators that captured that. In short, we acknowledged the benefit of using quantitative indicators to inform qualitative enquiries that would surface otherwise hidden stories".[20]

20 Paul Corney, Sparknow, <http://knowledge-manager.sparknow.net/post/45111877472/lies-damned-lies-and-comfort-indicators>