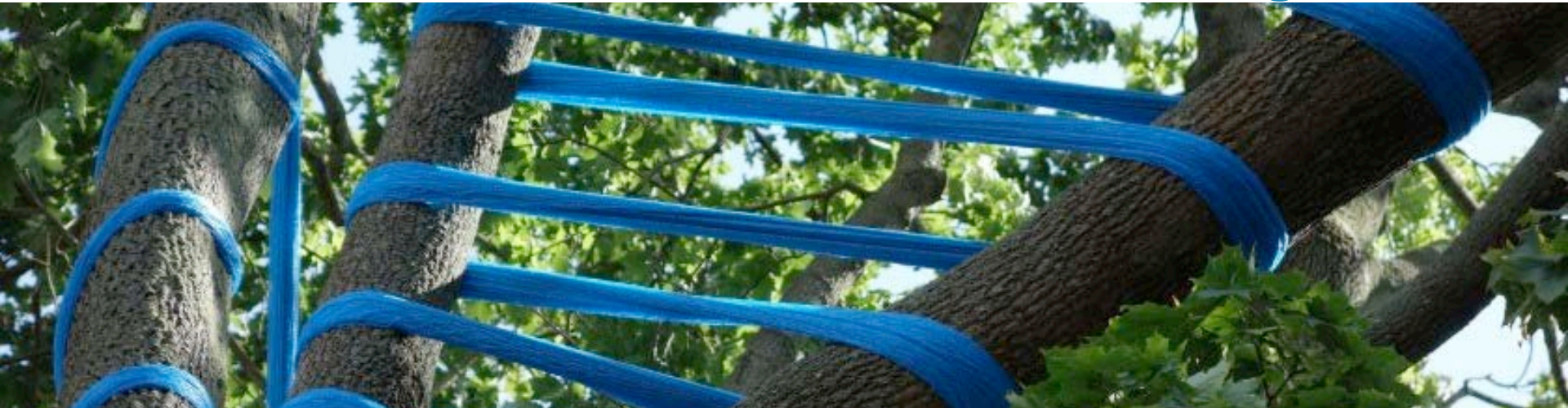
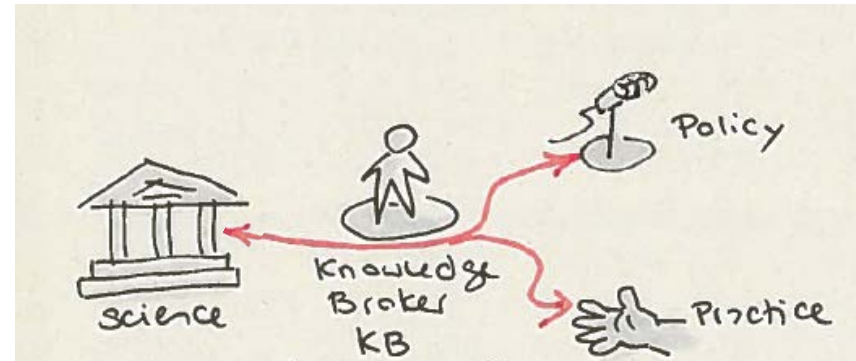


Indicators for measuring the contributions of individual knowledge brokers



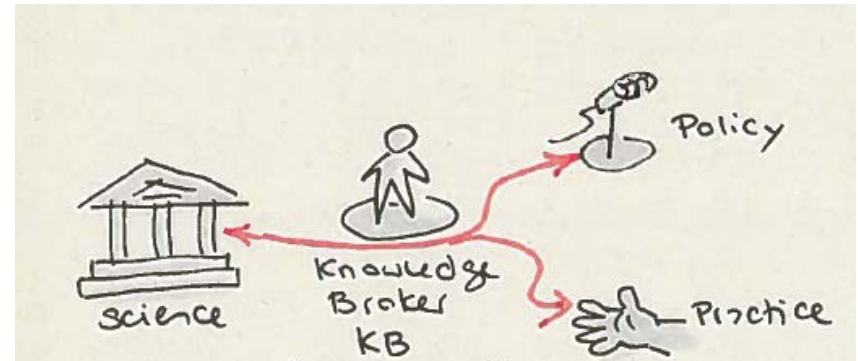
Dr. Sabine Hoffmann, Dr. Simon Maag, Dr. Timothy Alexander, Dr. Robert Kase
SciTS 2019, Lansing, USA

- Persons that **facilitate** processes to **foster mutual learning** among research, policy and practice
- **Catalyze positive change** in society and environment



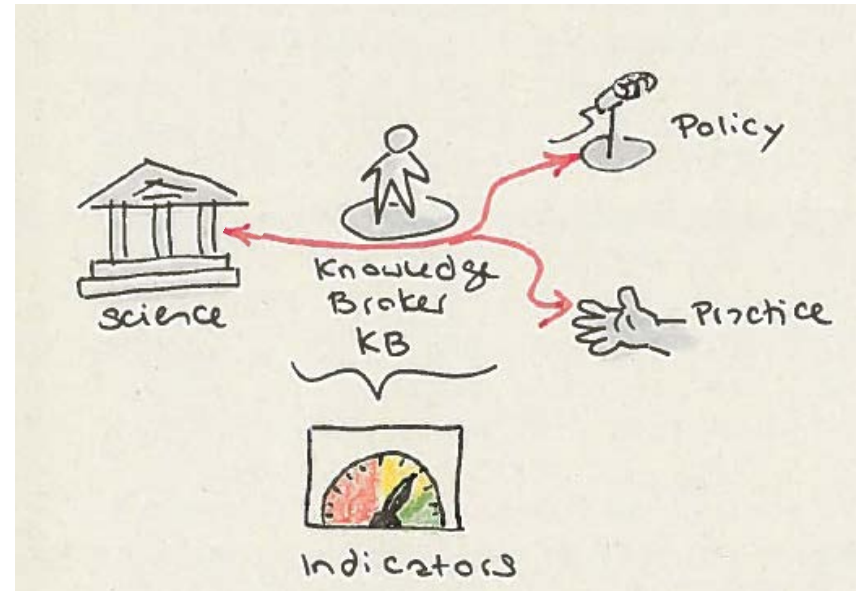
Knowledge Brokers – ‘Invisible’

- Their **roles** are often poorly specified
- They often **lack** recognition, institutional support and professional training



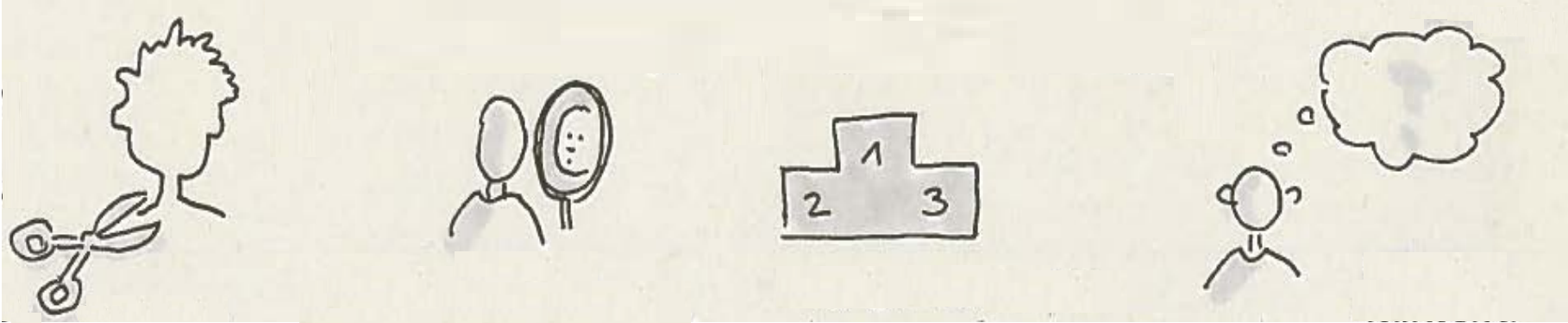
Develop indicators to assess the **quality** and **quantity of the contributions** of knowledge brokers:

- **Process Indicators** pertaining to the processes facilitated by knowledge brokers
- **Attributable Results Indicators** reflecting process results on which knowledge brokers have a decisive influence



Indicators support KBs in...

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Sharpening their professional profiles and clarify their roles and responsibilities

Self-assessing their contributions at the interface

Demonstrating the benefits of their work

Reflecting on their work and identifying ways to improve its effectiveness

Existing literature on KB processes and/or indicators

- Searching electronic databases
- Exploring reference lists
- Following hints from professional networks



Practical experience of KBs organized as a Community of Practice (CoP) at Eawag

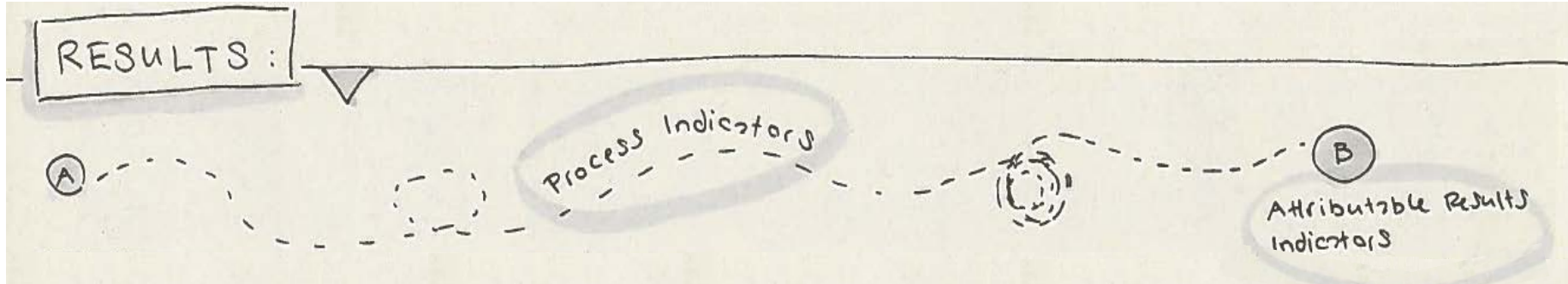
- 2 Workshops, 5 Interviews



 **Iterative process**



- List of **knowledge brokering processes**
- List of **process indicators** (quantity, quality)
- List of **attributable results indicators** (quantity, quality)
- **Guidelines** on how to use the indicators



Knowledge Brokering Processes

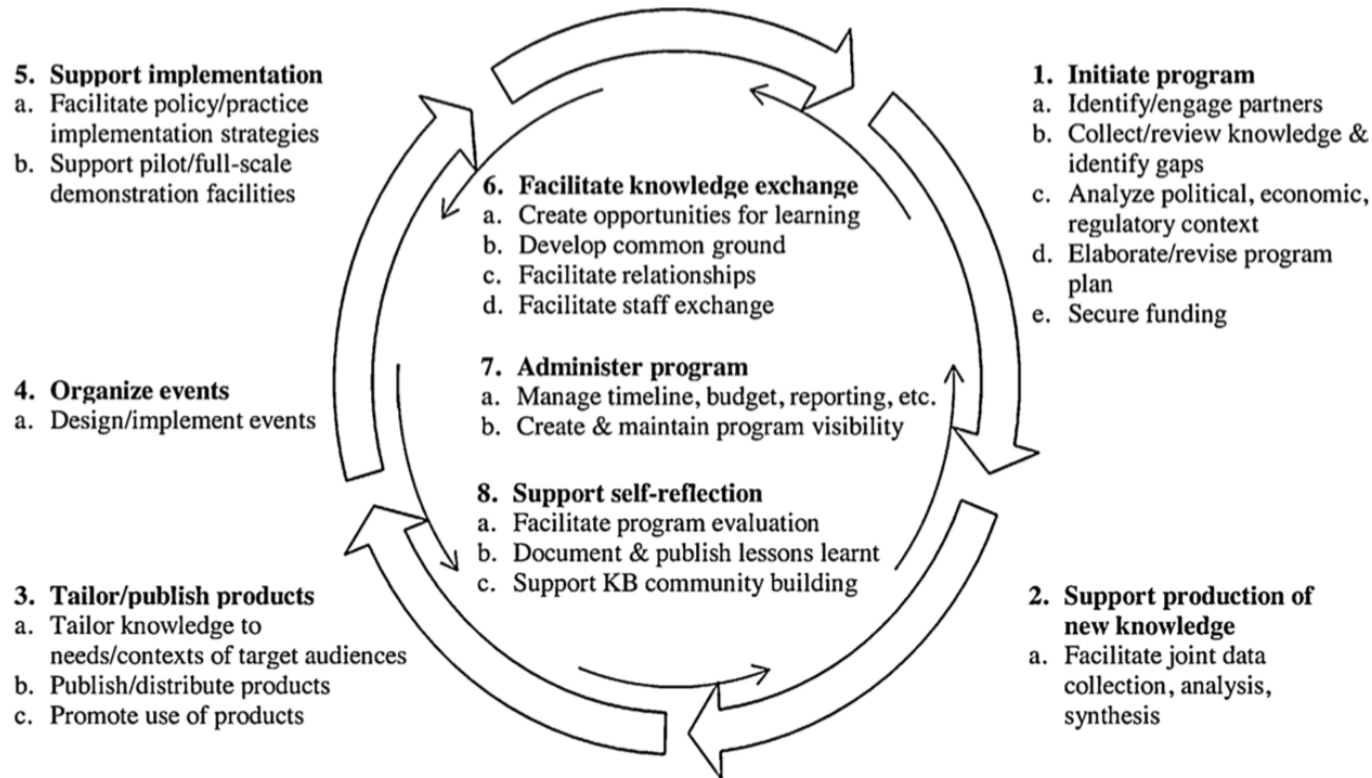


Fig. 1. KB processes, arranged along the stages of a stylized program cycle.

Process Indicators

Quantity



Time spent on the process



Number & type of internal team meetings / workshops



Number / duration of phone calls, face-to-face conversations & visits



Number and length of emails written



Number of research papers / books, official documents, regulations, webpages, etc. studied

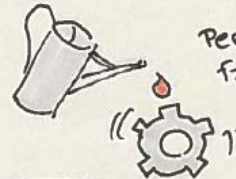
Quality



Demonstrated use of existing knowledge of KB processes, tools & frameworks



Perceptions of personal skills / qualities of the KB



Perceived quality of facilitation

Attributable Results Indicators

Table 1

Knowledge brokering processes (left column) and corresponding attributable results indicators (right column).

Knowledge brokering processes	Attributable results indicators
1. Initiate the program	
1a Identify and engage research/policy/practice partners 1b Collect/review existing data/knowledge and identify gaps 1c Analyze political, economic, regulatory context of the program 1d Elaborate/revise program plan based on needs, expectations, perspectives of program partners and the wider target audience 1e Secure funding for the program (including funding for KB processes)	1a Teams/networks created/maintained <ul style="list-style-type: none"> i. Size and composition of the team/network as compared to an ‘ideal’ team/network ii. Level and type of contributions to the program by research/policy/practice partners iii. Persistence/stability of the team/network 1b Number and type of reviews <ul style="list-style-type: none"> i. Perceived diversity/representativeness/completeness of data/knowledge considered [survey/interviews] ii. Perceived clarity of conclusions [survey/interviews] 1c Number and type of context analyses ¹ <ul style="list-style-type: none"> i. See (1b) 1d Program plan elaborated <ul style="list-style-type: none"> i. Diversity of perspectives/expectations/needs considered ii. Perceived clarity of common objectives, deliverables, responsibilities, roles, time plan, budget, evaluation approach, etc. [survey/interviews] iii. Breadth and strength of support for the program plan from research/policy/practice partners [official commitments, survey/interviews] iv. Feasibility and flexibility of the program plan [survey/interviews] 1e Amount and type of co-/in-kind funding granted to the program <ul style="list-style-type: none"> i. Diversity of funding sources ii. Continuing/follow-up program funding iii. Amount and type of funding granted for KB processes

Quantity (a, b, ...)



Quality (i, ii, ...)



Benefits of our lists of KB processes and indicators

- ... sharpening KB profiles
- ... clarifying KB roles
- ... demonstrating benefits of KB work
- ... strengthening evidence-based learning
- ... inspiring thinking about alternative processes & results



- Further **validate** and **refine** KB processes and indicators
- **Prioritize** indicators and select those that are most ‘useful’
 - **valid** (actually measuring what they intend to measure)
 - **reliable** (consistent over time & people)
 - **feasible** (achievable with the available resources)
 - **attributable** (under reasonable control of the KB)



Thanks!

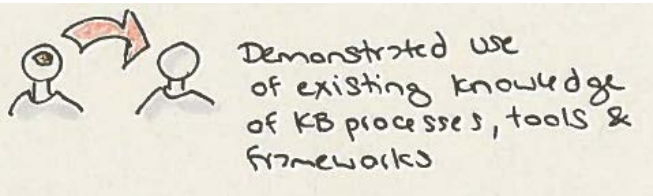
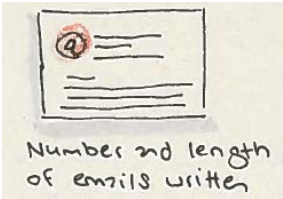
Dr. Sabine Hoffmann
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Eawag, Swiss Federal Institute of Aquatic Science and Technology
Switzerland
[*sabine.hoffmann@eawag.ch*](mailto:sabine.hoffmann@eawag.ch)

How to use the indicators

Table 1

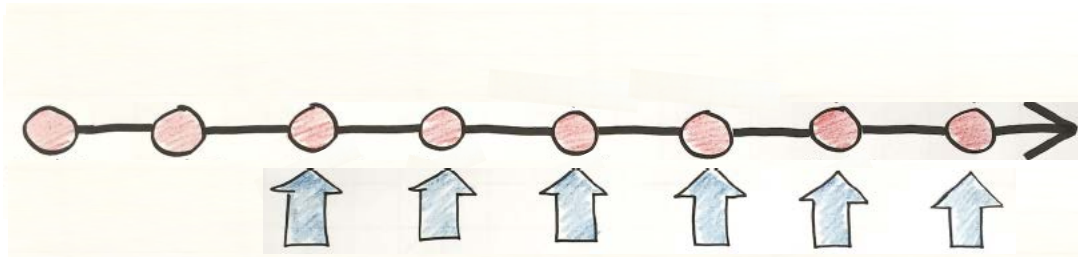
Knowledge brokering processes (left column) and corresponding attributable results indicators (right column).

Knowledge brokering processes	Attributable results indicators
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1a Identify and engage research/policy/practice partners 1b Collect/review existing data/knowledge and identify gaps 1c Analyze political, economic, regulatory context of the program 1d Elaborate/revise program plan based on needs, expectations, perspectives of program partners and the wider target audience 1e Secure funding for the program (including funding for KB processes)	1a Teams/networks created/maintained <ul style="list-style-type: none"> i. Size and composition of the team/network as compared to an ‘ideal’ team/network ii. Level and type of contributions to the program by research/policy/practice partners iii. Persistence/stability of the team/network 1b Number and type of reviews <ul style="list-style-type: none"> i. Perceived diversity/representativeness/completeness of data/knowledge considered [survey/interviews] ii. Perceived clarity of conclusions [survey/interviews] 1c Number and type of context analyses ¹ <ul style="list-style-type: none"> i. See (1b) 1d Program plan elaborated <ul style="list-style-type: none"> i. Diversity of perspectives/expectations/needs considered ii. Perceived clarity of common objectives, deliverables, responsibilities, roles, time plan, budget, evaluation approach, etc. [survey/interviews] iii. Breadth and strength of support for the program plan from research/policy/practice partners [official commitments, survey/interviews] iv. Feasibility and flexibility of the program plan [survey/interviews] 1e Amount and type of co-/in-kind funding granted to the program <ul style="list-style-type: none"> i. Diversity of funding sources ii. Continuing/follow-up program funding iii. Amount and type of funding granted for KB processes



Combine indicators with theory of change

Theory of change about the ways the program is assumed to achieve impact - with particular focus on external factors



Indicators to substantiate the theory of change - with particular focus on the most critical parts



- **Gaming of indicators**
- **Disagreement** about appropriate indicators
- **Timing** of the evaluation
- Availability of **resources**