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Strategic review

Improving the use of evidence for education policy, planning and implementation

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SHORT SUMMARY

The importance of evidence-based policy and practice to promote Sustainable Development Goal 4

Policy-makers use solid and reliable data and evidence to ensure that countries progress towards their education targets and understand policies and programmes that could improve their educational outcomes. However, the use of evidence is still limited in many countries due to two broken feedback loops: Between researchers and policy-makers, and between global and local levels.

This strategic review analyses the current practice and challenges in evidence use. It also provides recommendations for the Sustainable Development Goal 4 High-Level Steering Committee to promote evidence-based policy formulation and implementation as a critical lever for countries' advancement towards their education targets.

The review draws on a global survey, individual and group interviews and a comparator case study with the public health sector. It reveals that there is a surplus of research and evidence sources in education - the survey respondents identified 654 organizations and initiatives.

The review calls for reforming existing research and evidence utilization practices, by promoting the use of locally relevant evidence, fostering partnerships and building "regional bridges" between global and local levels. It also recommends using advocacy and resource mobilization to support these activities.

54%

of evidence-for-policy sources are national ones, which are unconnected or loosely connected to regional and global initiatives.



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"Since wars begin in the minds of men and women it is in the minds of men and women that the defences of peace must be constructed"

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List of acronyms and abbreviations

ACRES	Center for Rapid Evidence Synthesis	KIX	Knowledge and Innovation Exchange
AGREE	Appraisal of Guidelines for Research and Evaluation	KIX EAP	KIX Europe, Asia and Pacific
AHRI	Africa Health Research Institute	KT	Knowledge Translation
ANCEFA	Africa Network Campaign on Education for All	LLECE	Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación
ANTRIEP	Asian Network of Training and Research Institutions in Educational Planning	NCCMT	National Collaborating Centre for Methods and Tools
ASPBAE	Asia South Pacific Association for Basic and Adult Education	NCEE	National Center for Educational Evaluation
BE2	Building Evidence in Education	NCEER	National Center for Educational Research
BELDS	Better Early Learning and Development at Scale	NGO	Non-Governmental Organization
BMGF	Bill & Melinda Gates Foundation	NICE	National Institute for Health and Clinical Excellence
CDC	Centre for Disease Prevention and Control	NORRAG	Network for international policies and cooperation in education and training
CEPAL	Comisión Económica para América Latina y el Caribe	NUHS	National University Health System
CGDev	Center for Global Development	OECD	Organization for Economic Co-operation and Development
CLADE	Campaña Latinoamericana por el Derecho a la Educación	PASEC	Programme d'Analyse des Systèmes Éducatifs
EBM	Evidence-based Medicine	PEERSS	Partnership for Evidence and Equity in Responsive Social Systems
ECDAN	Early Childhood Development Action Networks	PHFI	Public Health Foundation India
EFA	Education for All	PILNA	Pacific Islands Literacy and Numeracy Assessment
EU	European Union	PISA	Programme for International Student Assessment
ESSA	Education Sub Saharan Africa	PISA-D	Programme for International Student Assessment for Development
ESSA-USA	Every Student Succeeds Act, USA	PPI	Policy, planning, and implementation
EVIPNet	Evidence-informed Policy Network	RCT	Randomized Control Trial
FCDO	Foreign, Commonwealth and Development Office	REDEtis	Red educación, trabajo e inclusión social
GCM	Global Education Cooperation Mechanism	SABER	Systems Approach for Better Education Results
GEEAP	Global Education Evidence Advisory Panel	SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
GEM	Global Education Monitoring Report	SEA-PLM	Southeast Asia Primary Learning Metrics
GPE	Global Partnership for Education	SDG	Sustainable Development Goal
GRADE	Grading of Recommendations, Assessment, Development and Evaluation	UNESCO	United Nations Educational, Scientific, and Cultural Organization
IANPHI	International Association of National Public Health Institutes	UNICEF	United Nations Children's Fund
IDRC	International Development Research Centre	UIS	UNESCO Institute for Statistics
IEA	International Education Assessments	URE	Use of Research Evidence
IIEP	International Institute for Educational Planning	USAID	United States Agency for International Development
ILO	International Labor Organization	WCC	WHO Collaborating Centers
INEE	Inter-agency Network for Education in Emergencies	WEF	World Economic Forum
INP	Initiatives, Networks and Platform	WHO	World Health Organization
IO	Intergovernmental Organization	WHO AFRO	WHO Regional Office for Africa
IWGE	Initiative for Women and Girls Empowerment		

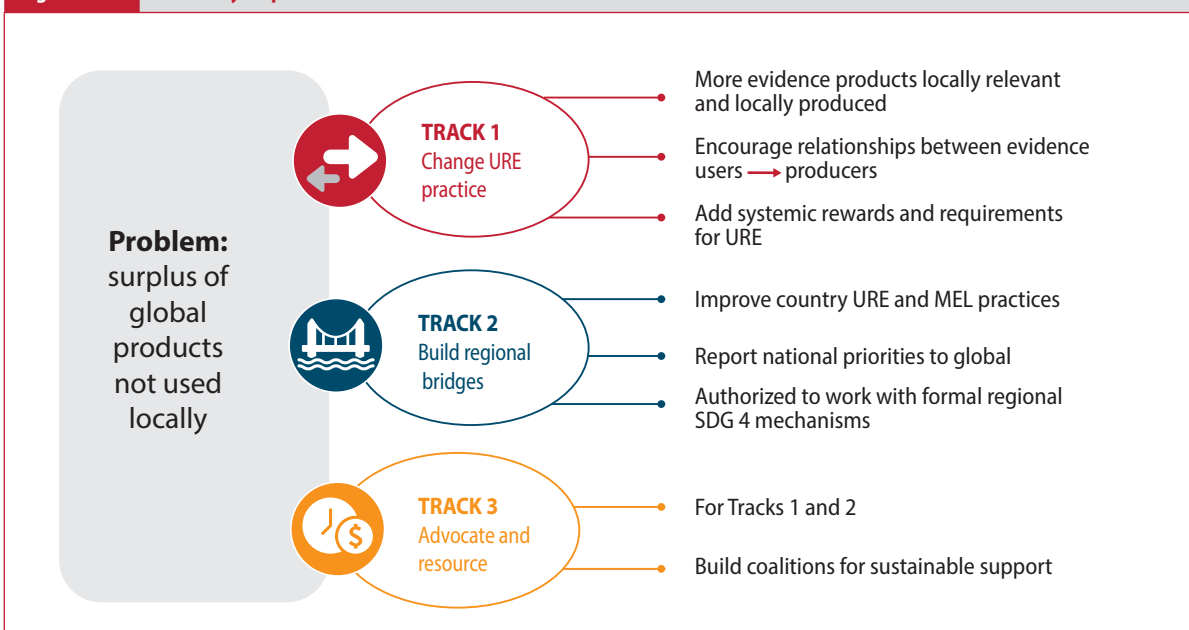
Executive summary

The current study, undertaken by the Authors: Steiner-Khamsi, G. and Faul, M. V. with Baek, C., Hopkins, A. N., and Iwabuchi, K., addresses the question of how the use of research evidence for policy, planning, and implementation (URE-4-PPI) could be promoted to more effectively work toward achieving Sustainable Development Goal 4. It draws on a survey, individual and group interviews, and a comparator case study with the public health sector.

Chapter 1 presents the two research questions, the sub-questions and the larger interpretive framework of the study. The two **research questions** are: (1) How can the use of research evidence (URE) be promoted to serve the achievement of the SDG-4 targets? (2) What can be learned from the public health sector in terms of how the use of research evidence is coordinated and managed? Two **problems** are identified: First, despite living in an era with a surplus of globally produced data and research, there is still limited uptake in policy, planning, and implementation. Secondly, global INPs keep producing a great number of studies that are not used at the local level. Achieving the strategic objectives of FA1 requires closing these two broken feedback loops through implementing all three tracks of our **recommendations**. The current approach to improving the use of research and evidence (URE) is not working. All countries (South and North) need to implement **all pathways to effective URE**, supported by **regional hubs** and global, regional and national **advocacy and resource mobilization**.

Chapter 2 provides an overview of the **methodology** used for the survey as well as the comparator case. To examine the landscape around the sources for the URE, NORRAG administered an online survey in six UN languages in October 2021. A total of 898 individuals residing in more than 103 countries filled out the survey. The breakdown of the respondents shows that there is a solid representation from national governments or ministries (19%), research/think tanks/university (22%), civil society organizations (18%), teaching profession or teachers associations (14%), intergovernmental organizations (IOs) (10%), and private foundations/private sector (8%). The respondents submitted the survey in all the six languages and reside in more than 103 countries, well representing all the five regions. The survey consists of eight questions on respondents' understandings, identification, and utilization of existing initiatives, networks, and platforms as well as which SDG-4 goals are well supported or underserved with evidence and research. Following the survey, NORRAG held 14 meetings with 33 stakeholders to complement our survey findings.

Figure ES.1 Summary of problem statement and recommendations



In addition, this study conducted the comparator case study to examine what the education sector could learn from public health about URE-4-PPI. This comparator case study used the following four methods: (i) database search for systematic reviews, (ii) a bibliometric analysis of scholarship in education and public health, (iii) expert interviews, and (iv) analysis of initiatives, networks, and platforms in public health.

Chapter 3 deals with a **survey** of the initiatives, networks, and platforms (INPs). The main findings are as follows: (i) the respondents indicated that **SDG 4 targets are not equally well supported**: Foundational learning (SDG 4 targets 1, 2, and 6) and gender and social inclusion (target 5) were well supported by policy research, but technical, vocational, and higher education (targets 3 and 4) and sustainable development and global citizenship (target 7) were underserved; (ii) approximately half of the respondents indicated that they turn first to INPs, **seeking evidence most in the design phase** of their projects or educational reforms; (iii) there is a vast number of URE sources: the respondents were able to identify 654 INPs or URE-related organizations by name or URL address. Indeed, every interviewee agreed that there is a **surplus of research and evidence sources** and argued that a lack of sources is not the main obstacle for using research evidence in education; (iv) interestingly and against the commonly held belief that most policy-relevant research is produced at the global level, particularly in the Global North, more than half of the sources that the respondents consult for URE were **national sources**; (v) when examining the relationship between the various sources that the respondents consult,

the INPs identified are rather loosely connected (density = 0.006). The component analysis confirmed this finding: there are a large number of national INPs that are unconnected to the regional or international levels. Unsurprisingly, there is great visibility of the INPs of the following international organizations, here listed in the order of frequency: UNESCO, OECD, World Bank, and UNICEF; (vi) national governments or ministries seem to mainly trust INPs that are administered by IOs (UNESCO, OECD, World Bank, GPE, UNICEF), whereas respondents in civil society organizations tend to be more diverse in their choice of INPs, including local platforms, regional organizations (CLADE, CEPAL, ANCEFA, and ASPBAE), and international organizations; and (vii) the request for more **user-friendliness** (especially from respondents in the Global North), on the one hand, and **better alignment** with national priorities, local participation, and capacity-building (especially from respondents in the Global South), on the other hand, was also reiterated in the individual and group interviews.

Chapter 4 examines **what the education sector might learn from public health** research and governance about how best to strengthen the production and use of research evidence for policy, planning, and implementation. This chapter combines an analysis of systematic reviews, learning from expert interviews, and a bibliometric analysis of scholarship in education and public health. A comparison with the public health subsector lends itself to comparison because it moved beyond the narrower focus on evidence-based medicine found in the health sector.

Figure ES.2 Summary of recommendations



TRACK 1

Change existing URE practices to move beyond global evidence syntheses to improve and increase:

- ① Effective and locally-relevant evidence and evidence synthesis;
- ② Relationships between evidence users and producers;
- ③ Add systemic rewards and requirements in countries, regions, global.



TRACK 2

Build regional bridges between global and local levels to improve:

- ① Capacity building for country URE and MEL;
- ② Report national results and priorities to global level;
- ③ Authorized by UNESCO and other GCM members to work with formal regional mechanisms (e.g., Ministerials and technical working groups).



TRACK 3

Advocate and mobilize resources:

- ① For the implementation of Tracks 1 and 2;
- ② Build coalitions for further support, e.g. with multilaterals and bilaterals.

The comparative bibliometric analysis presented here reveals (i) a **similar number** of articles published after 1999 in public health (1,660) and education (1,825). However, the scholarship on evidence use in policy grew significantly more in public health (on average 30.5% year on year) than in education (23.6%); (ii) equally important, there were many more highly cited papers in public health (520) than in education (66). Research into the evidence for public health is strongly interconnected through shared citations, whereas similar education research appears to be comprised of many smaller communities. These **specialized communities in education are more self-referential**, whereas public health scholarship extensively references policy theory and knowledge translation scholarship. Thus, there seems to be a greater agreement in public health than in education on what constitutes “evidence” and which scholars are authorized by their peers to make such universal claims; (iii) there has been an increasing number of publications in public health that are preoccupied with knowledge translation (KT). However, since the mid-2010s, there has been a growing awareness that **getting research into policy is not only a technical matter of KT** and exchange, but also a political, social, and systemic challenge; and (iv) similar

to the education sector, **controversies exist about the hierarchy of evidence** and how research evidence is used differently and for different purposes across the policy cycle.

The current approach to use of research and evidence (URE) is not working. **Chapter 5** offers a summary of the **main recommendations** to enable a more effective use of research evidence for policy, planning, and implementation (URE-4-PPI). This chapter details the recommendations arising from the analysis of the evidence of how decision making based on evidence can best be supported, the findings of the original research conducted for this study, and a roadmap for improving URE at global, regional and national levels over the next 4 years (Annex 1). The chapter concludes with a detailed roadmap and action plan. **All recommendations are critical** to achieve the objectives of FA1: to further promote URE and support the capacity of national actors in URE (including through South-South collaboration),¹ by fixing the two broken feedback loops between researchers and decision makers, and between global supply and regional/national demand. The third area of activity is advocacy and resource mobilization needed to support implementing the recommendations (Figure ES.2).

1 Terms of Reference p.16

1. Introduction

On 13 July 2021, the Ministerial Segment of the 2021 Global Education Meeting (GEM) approved a proposal for a new Global Coordination Mechanism (GCM) that enables a more effective steering of the Sustainable Development Goal 4 (SDG-4). It was also decided that the newly established High-Level Steering Committee (HLSC) will actively pursue three transversal functional areas:

- **Functional area 1**
promote evidence-based policy formulation and implementation
- **Functional area 2**
monitor progress and improve the availability/use of data
- **Functional area 3**
drive financial mobilization and improve alignment

This strategic review focuses on **functional area 1**.

Gita Steiner-Khamsi and Moira V. Faul with Chanwoong Baek, Anna Numa Hopkins and Kazuaki Iwabuchi were tasked with providing a review and making recommendations for functional area (FA1) of the HLSC, notably, promote evidence-based policy formulation and implementation. As mentioned repeatedly, “the focus of this function is not creating a new separate initiative, but about consolidating, amplifying and deepening the initiatives already being developed by diverse actors” (Terms of References, p. 2).

Therefore, the strategic review presents an analytical part (chapters 2, 3, 4 of this report) as well as a strategic part, providing recommendations and a feasible roadmap (chapter 5) on how to operationalize FA1 as part of the new global education coordination mechanism. It addresses two research questions:

1. How can the use of research evidence (URE) be promoted to serve the SDG-4 targets?

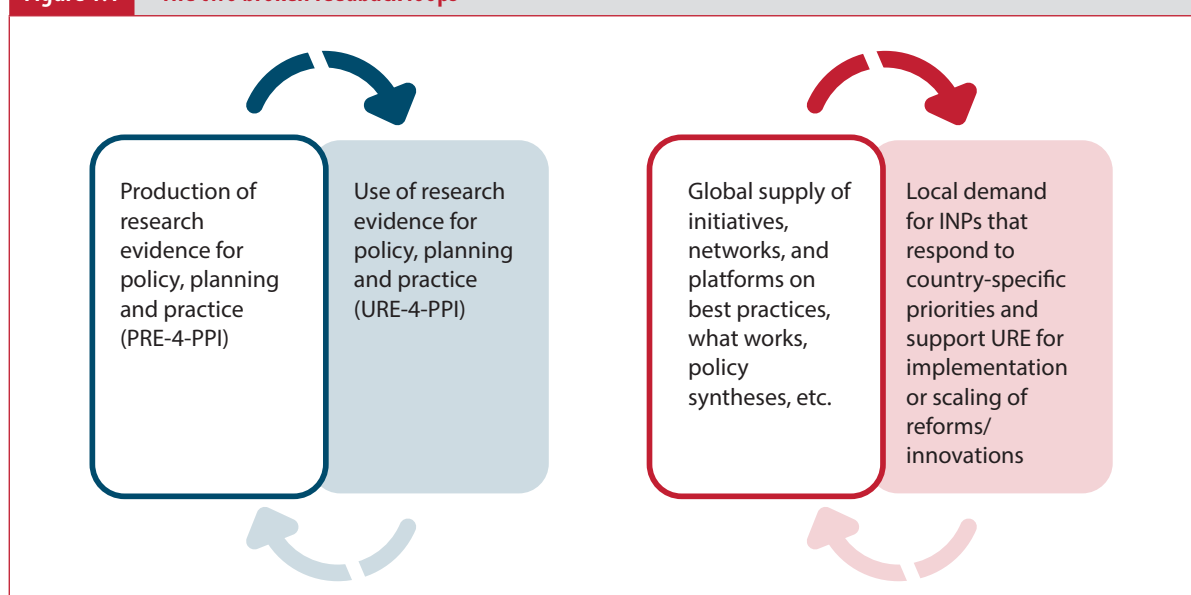
- Which initiatives, networks, and platforms promote the use of evidence for the SDG-4 targets?
- How, for what purpose, and by whom are initiatives, networks, and platforms actually used?
- What needs to be done to improve URE in policy, planning, and implementation of the SDG-4 targets?

2. What can be learned from the public health sector in terms of how the use of research evidence is coordinated and managed?

- What type of evidence is used in public health policy?
- What are the barriers and enablers to evidence use in public health policy?
- What lessons may be learned to promote URE in education in linear (knowledge products), relational, and systemic ways?

Achieving the strategic objectives of FA1 requires **closing two broken feedback loops** (Figure 1.1).

Figure 1.1 The two broken feedback loops



First, despite living in an era with a surplus of globally produced data and research, there is still limited uptake in policy, planning, and implementation. The second broken feedback loop is between the global and local levels: global INPs keep producing a great number of studies with the expectation that local experts subsequently adopt them and locally adapt them to their country context. The expectations are proven to be built on faulty premises. The two types of actors (researchers and policy-makers) and the two levels of operations (the local and global levels) are literally out of touch with each other. Our recommendations serve to close these

feedback loops and allow connections between evidence producers and users, and global and local levels.

There is a vast body of literature that deals with “evidence-based policy planning,” that is, the use of research evidence for policy, planning and implementation. For this study, our attention has been drawn especially to studies that investigate the reasons why research evidence is *underutilized* for policy decisions. We find three types of studies relevant: Those that shed light on the research-policy interface, on the global-local nexus, and finally studies that take the policy cycle into account.

1.1 The research–policy interface

Arguably, the small uptake of data and research for policy and planning in the Global South is one of the reasons why this strategic review has been requested. Our survey has shown (see **Chapter 3** in this report) that less than half of the respondents (286 of 898) consult knowledge platforms when they look for research and evidence to support their work. However, those who rely on knowledge platforms tend to use several of them concurrently. The users were able to provide URL addresses of over 654 organizations or platforms that promote the use of research for policy and planning. For a variety of reasons explained in **Chapter 2**, there is a large divide between the Global South and North. The professionals in the Global South tend to use national and regional resources, whereas their counterparts in the Global North access global knowledge platforms, which, without any exceptions, are located in Europe, North America, or Australia.

The focus on the research–policy interface begs two types of investigations: The first type of investigation is a study into the space in between, also known as knowledge brokerage. These intermediary organizations forge linkages between research and policy to enhance URE-4-PPI. Second, a closer examination of the two subsystems of science and politics is needed to understand the structural barriers that prevent the rapprochement of researchers and policy-makers. What ecosystems need to be put in place in the two subsystems to nurture a culture of evidence-based policy decisions (politics) and policy-relevant research (science), respectively?

First, the quest for knowledge brokerage is a relatively new phenomenon. It may be useful here to reiterate the three pillars in the policy process: research, knowledge brokerage, and policy, which has been explained in the two previous reports. The present study intends to shed light on the middle lane or pillar, notably how and by whom data and research (knowledge) is translated into evidence and then used for policy, planning, and implementation. It is this middle lane that bridges knowledge production (see **Figure 1.2** below, the right, slow lane) and knowledge usage for PPI (the left, fast lane). Compared with the knowledge producers occupying the slow lane, the proximate decision makers or policy-makers move in the fast lane. They are under public pressure to act not only quickly, but also to make policy decisions based on evidence. This especially applies to countries with an evaluation culture or “evaluation mind-set.”² In an era of a surplus of data and information or in a marketplace of good practices and what-works repositories—which are freely accessible on Internet—the middle lane with intermediaries or brokers that translate knowledge into policy has become key for advancing evidence-based policy decisions.³ Christopher Lubienski contends the following⁴:

“ Into the chasm between research production and policy-making, we are seeing the entrance of new actors— networks of intermediaries—seeking to collect, interpret, package, and promote evidence for policy-makers to use in forming their decisions.

2 Golden, G. (2020). Education policy evaluation: Surveying the OECD landscape. OECD Education Working Papers No. 236. Paris: OECD.

3 Steiner-Khamsi, G. (2021). *What does the surplus of data do to policy-making?* Policy Futures webinar series, presentation on May 28, 2021 (organized by K. Brogger). Copenhagen: University of Aarhus, DPU; Steiner-Khamsi, G. (2022). What is in a reference? Theoretically understanding the uses of evidence in education policy. In B. Karseth, K. Sivesind, and G. Steiner-Khamsi (Eds.), *Evidence and expertise in Nordic education policy: A comparative network analysis*. New York: Palgrave.

4 Lubienski, C. (2019). Advocacy networks and market models for education. In M. Parreira do Amaral, M. Steiner-Khamsi, and C. Thompson (Eds.), *Researching the global education industry* (pp. 69–86). New York: Palgrave.

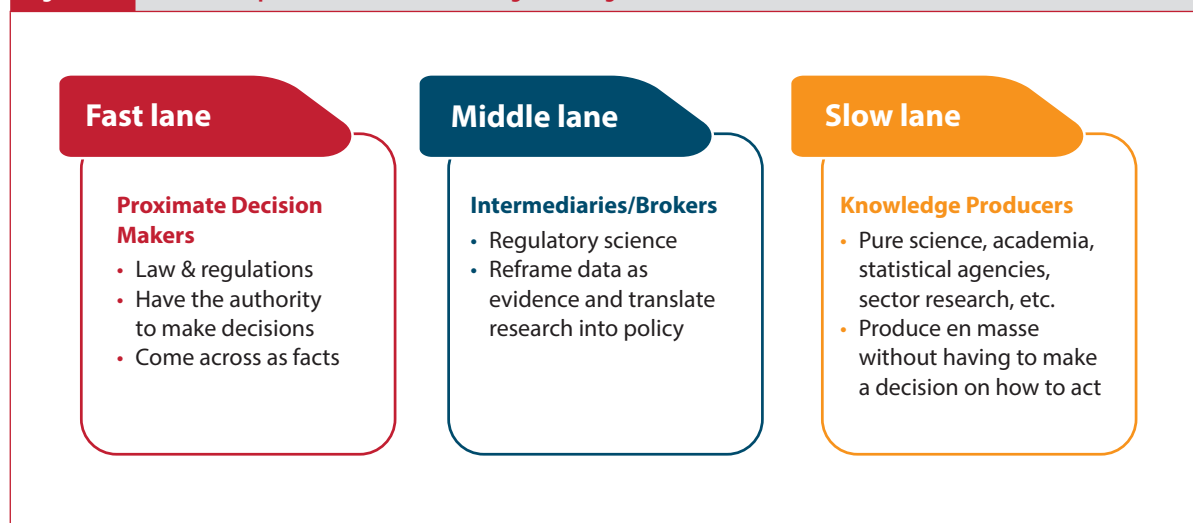
Looking back at the explosive growth in data and research output, which has been accompanied by a selective and relatively low uptake in actual policy, planning, and implementation, we seem to have arrived at a new stage of knowledge-based governance, one that focuses on the middle lane. Over the past few years, greater attention has been given to how data should be visualized and communicated more effectively. During the same period, we can notice a proliferation of organizations that synthesize research, produce systematic reviews, build relationships across research and policy, or seek to foster enabling environments for evidence use in policy and planning. In other words, these organizations attempt to bridge science (slow lane) and politics (lane) by translating research for policy use. The greater emphasis on synthesis and brokerage has also been noted by an important OECD study reviewing the current landscape of policy evaluation in the education sector.⁵

In some countries, for-profit or nonprofit think tanks have filled the vacuum, and in other countries, international initiatives (e.g., BE2, education.org, GEEAP) see themselves as operating in the middle lane. Finally, a growing number of foundations have committed to funding initiatives that promote the use of research for policy or practice toward achieving SDG 4 (e.g., Aga Khan Foundation, Al Qasimi Foundation, Gates Foundation, Hewlett-Packard Foundation, Jacobs Foundation, Lemann Foundation, Mastercard Foundation, William T. Grant Foundation, etc.).

Second, the research-averse habitus of policy-makers and, vice versa, the skepticism of researchers toward policy-relevant research need to be taken seriously. In interview after interview, this topic was addressed: On the politics side, we were reminded that ministers and high-level government officials are political appointees, not education experts, and experience a rapid turnover (12–14 months on average). On the science side, we are quite familiar with the cynicism of our peers, who, for good reasons, view a great number of so-called evidence-oriented policy analyses as agenda-driven research drawing on a façade of numbers, precision, and universalism to make recommendations that satisfy their funder. In the context of the Global South, the independent judgment of researchers is also jeopardized in another manner: in some countries more than others⁶, the poor infrastructure and low salary at universities contribute to a brain drain of researchers who carry out consultancies for international organizations and serve as translators or research assistants. Thus, filling “the space in between” by means of knowledge brokerage is not sufficient. It is equally important to invest in an ecosystem that instills a culture of evidence-based decisions in government and a valorization of applied policy-relevant research in universities.

Finally, this section draws out key lessons from recent analyses of the evidence of how to encourage decision making based on evidence⁷ can best be supported, identifying what kinds of activities support

Figure 1.2 The three pillars or lanes of knowledge-based governance



⁵ See Golden (2020), mentioned above.

⁶ The universities on the Latin American continent seem to be better resourced and seem to be less exposed to this phenomenon of brain drain from universities to international organizations.

⁷ Best, A., and Holmes, B. (2010). Systems thinking, knowledge and action: Towards better models and methods. *Evidence & Policy: A Journal of Research, Debate and Practice*, 6(2), 145–159; Hopkins, A., Oliver, K., Boaz, A., Guillot-Wright, S., and Cairney, P. (2021). Are research-policy engagement activities informed by policy theory and evidence? 7 challenges to the UK impact agenda. *Policy Design and Practice*, 1–16.

INPs to actually improve URE in policy, planning and implementation most effectively. The framework developed in evidence use research that identifies three (nonexclusive) categories of activities can be used to improve evidence use in policy: linear, relational, or systemic. *Linear initiatives* are centered on research outputs and products. They can involve researcher activity to “push” evidence in to policy, or policy activity to “pull” evidence in. They include efforts to synthesize and disseminate research, including on platforms that aim to make research accessible to policymakers by publishing in different formats or creating toolkits and guides. Examples here include the What Works Clearinghouses and the RISE programme. In contrast, *relational initiatives* initiate and support interactions between knowledge producers and users. Such initiatives can bring together many types of researchers (from universities, think tanks, or private and public sector organizations) with planners, policymakers, and/or practitioners. Relational initiatives explicitly involve policy stakeholders and researchers in networking, partnering, knowledge sharing, and cocreation. They bring different groups into the same “space” or to work in partnership. Knowledge transmission is a two-way process: researchers also learn from other stakeholders. For example, the Early Childhood Development Network (ECDAN) includes policy, research, multilateral, and third-sector partners who take part in knowledge exchange. Relational initiatives may also aim to develop the skills of researchers to engage with policy or the capacity of policymakers to engage with and use research. Where there is an explicit focus on knowledge equity, relational initiatives can support the inclusion of historically marginalized communities and underrepresented

expertise. In addition to better linkages between researchers and policy-makers, improved institutional processes and structures are necessary to facilitate evidence use.⁸ *Systemic initiatives* aim to develop institutional or organizational capacity and infrastructure to provide the context in which individuals can better use evidence. They provide a strategic and coordination function, play a role in policy planning, or advocate widely for the judicious use of evidence in policy. The GPE Knowledge and Innovation Exchange (KIX) aims to work with a range of partners to strengthen education systems through building infrastructures that support countries to identify their policy priorities and build on context-relevant innovations.

Linear, relational, and systemic initiatives are interconnected and build on each other. The African Evidence Network (AEN) provides a strong example of work across this typology. It manages a repository of policy-relevant research (linear). In addition, the network seeks to build relationships between decision makers and researchers and offers capacity-building and training in evidence use in policy (relational), seeking to “support organizations and departments in institutionalizing evidence use and building structures and processes receptive to evidence use” (systemic approaches).⁹ Many INPs we identified demonstrate what might be gained from cultivating healthy evidence to policy ecosystems, particularly to improve the exchange from South to South and South to North.¹⁰ Such support requires funding, support, and leadership but can play a significant role in supporting cultures of evidence use in policy.¹¹

1.2 The global–local nexus

The webinars and meetings that we attended for this mandate repeatedly addressed the need for “local ownership” (Africa Evidence Network), “coproduction” (BE2), “translation” (Center for Global Development), or the necessity to use a systems approach that is sensitive to “national priorities and needs” (KIX EAP & UNICEF

BELDS Initiative). Some funders and agencies have moved beyond lip service and established benchmarks for setting in motion fundamental changes in the international aid architecture. The Chief Administrator of USAID, Samantha Power, for example, pledged in her vision for the agency¹² that by the end of the decade,

8 Hopkins, A., Oliver, K., Boaz, A., Guillot-Wright, S., and Cairney, P. (2021). Are research-policy engagement activities informed by policy theory and evidence? 7 challenges to the UK impact agenda. *Policy Design and Practice*, 1–16.

9 Africa Evidence Network. (n.d.). *EIDM in Africa*. Africa Evidence Network. <https://www.africaevidencenetwork.org/en/eidm-in-africa/#what>

10 Jakab, Z., et al. (2021). Building the evidence base for global health policy: The need to strengthen institutional networks, geographical representation and global collaboration. *BMJ Global Health*, 6, e006852. doi: 10.1136/bmjgh-2021-006852

11 Masood, S., Kothari, A., and Regan, S. (2020). The use of research in public health policy: A systematic review. *Evidence and Policy*, 6(1), 7–43.

12 Saldinger, A. (2021). Samantha Power lays out her vision for USAID. DEVEX News, November 4. In her speech, Power also reiterated the plan of her predecessor to substantially increase the budget for the local partners of USAID projects. She made a commitment to increase the allocation of funds to local partners from 6% to 25% of the total USAID budget. In line with other US federal agencies, USAID is notorious for granting large overhead charges to their implementation partners in the United States (up to 70% on personnel cost), leaving little funds for local organizations in the Global South.

50% of USAID programming will “need to place local communities in the lead” by having them co-design programmes and set priorities, as well as implement or evaluate them.

It is uncontested that the feedback loop between what is produced at the global level and what is required at the local level or national level is broken. Attempts to fix it are multifaceted, ranging from the traditional approach of capacity strengthening of experts in the Global South so that they use and adapt global public goods to fit their local purposes more effectively to more novel—or rather revitalized—approaches that encourage peer learning, communities of practice, or regional cooperation and exchange.

1.3 Policy cycle considerations

From a policy studies perspective, the question “evidence for what?” sounds more banal than it actually is. For example, does the left pillar (policy and decision makers) draw on evidence to justify a new reform, or is evidence needed to assess the effectiveness of a new reform initiative? Considerations of the policy process, particularly the utility of evidence for agenda-setting, review of policy options, policy formulation implementing a policy, evaluating a policy, or for providing a proof of concept, matter a great deal. For fundamental reforms or “third-order changes,”¹³ externalization or the reference to a transnational authority (e.g., GPE, OECD, UNESCO, UNICEF, World Bank) helps for coalition building or generating additional financial sources. As mentioned before, OECD and IEA large-scale assessments or regional large-scale assessments studies (SACMEQ, PASEC, LLECE, PILNA, SEA-PLM) are ideally suited to generate public awareness and political support in favor of big changes. What if the time of big changes has passed, or as is the case with the COVID-19 pandemic, educational systems are currently in shambles and struggle with the very basic challenge of making teachers and students come back to school? A landmark study by Bromley et al. analyzed a total of 6,700 education reforms in 147 countries over the period 1960–2017 using policy-related publications

Such appeals for more symmetrical knowledge production and dissemination are barely new. Perhaps today, there is a window of opportunity for fundamental change given the technological means and necessity to reduce international travel. Curiously, both technology and COVID-19 have had a salutary impact on strengthening and amplifying local expertise. Universal access to the Internet in the urban centers of the globe has facilitated a (i) democratization of expertise, (ii) networking, and (iii) an unobstructed assessment of which knowledge products are actually downloaded, by whom, and in which countries. The COVID-19 pandemic has been the fuel that has accelerated the necessary move toward local expertise and ownership. The pandemic has created momentum for a paradigm shift, if this momentum can be grasped right now.

from the OECD and the World Bank. Bromley et al. demonstrate that the period 1991–2008 experienced an explosive growth of neoliberal reforms worldwide. Since then, reform activity has decreased significantly, coming almost to a standstill by 2017. The pandemic has likely exacerbated the trend of reform fatigue or reform consolidation.¹⁴

Needless to say, fundamental decisions are still being discussed at the national level, calling for more research and evidence, such as the challenges of introducing community languages as languages of instruction in multilingual settings, revising the tracking policies in countries that demonstrate a large between-school variance in terms of student performance, or scaling social-emotional support for students in fragile and conflict-affected situations. These are issues that are top priorities for some countries. The only reforms that are currently universal are the ones listed in the SDG-4. As the survey has shown (see **Chapter 2** of this report), some SDG-4 targets are supported better with research and evidence than others.

Unsurprisingly, several international organizations currently invest in scaling innovations (e.g., Education Commission, GPE, IDRC, World Bank, etc.) rather

13 Peter A. Hall's (1993) differentiation of first-order, second-order, and third-order policy changes is useful here. He examined the third-order policy changes during the Thatcher-Reagan era, which resulted in an avalanche of new policies, such as the introduction of a national curriculum, school choice, and standardized exams. In contrast to these fundamental changes that signaled a paradigm shift (from input to outcomes regulation), first-order changes represent incremental changes or modifications of previous reform. In second-order changes, the instruments of regulation are refined or changed, but the policy goal remains intact. See [Hall, P. A. \(1993\). Policy paradigms, social learning and the state. The case of economic policymaking in Britain. *Comparative Politics*, 25\(3\), 275–296.](#)

14 Bromley, P., Furuta, J., Kijima, R., Overbey, L., Choi, M., and Santos, H. (2021). *The weakening of neoliberal world society: global determinants of education reform, 1960–2017*. Manuscript. The paper will be presented at the annual conference of the Comparative and International Education Society (CIES), 2022.

than advancing new fundamental reforms. Looking closer at this, the act of scaling innovations has less implications for policy but more for planning and implementation. It entails strengthening the meso-level and the school level in the education system.¹⁵ In other words, the use of evidence is needed for mid-level government officials at the central, district, or school level in charge of planning and implementing an innovation or reform initiative.

When a pilot project is scaled up, out, or deep,¹⁶ it is a matter of implementing existing pilot projects or innovations rather than creating new reform agendas. Learning from experiences in other countries (also referred to as horizontal policy learning or peer learning and communities of practice) and capacity-building on how to plan, manage, and implement nationwide reforms seem to be currently the top priority in several countries.¹⁷

2. Methods and data

In the present study, we investigate the research–policy interface *comparatively*, notably:

- Across multiple levels (national, regional, global)
- Along the policy process, ranging from the use of evidence for agenda-setting to scaling innovations at the implementation level
- In terms of how the research use for policy and planning is designed: linear, relational versus systemic
- Across two sectors: education and public health

- By identifying the similarities and differences in how national, regional, and global organizations have institutionalized the use of research evidence in their own organizations

The comparative policy framework permeates the design and interpretation of the study. The following sections present the methods and the database for the survey as well as for the comparator case.

2.1 Survey

To examine the current landscape around the sources for the use of research evidence (URE) in PPI (**Chapter 3**), we analyzed the survey responses and group interview data. The survey was completed by 898 respondents. Of those, about 24% (212 respondents) disclosed their identity and volunteered for a follow-up meeting with the research team. We created an online survey, using *Survey Monkey*, an online survey platform. The survey was made available in the six UN languages—Arabic, Chinese, English, French, Russian, and Spanish. Responses were collected between October 11–22. The survey was distributed via emails to groups of organizations and individuals identified as relevant by the UNESCO SDG-4 leadership, members of the FA1 reference group, and NORRAG.

The survey consists of eight questions on respondents' understanding, identification, and utilization of existing initiatives, networks, and platforms as well as which SDG 4 targets are well supported or underserved with policy-relevant evidence and research (see **Annex 2** for the full survey in English). The final section of the survey requests information on the respondents' profiles (e.g., country of residence, professional affiliation). Regarding professional affiliation, respondents choose one answer from the following eight categories: (i) national government, ministry, (ii) global or regional inter-governmental organization, (iii) civil society organization, (iv) teaching profession/teachers' organization, (v) private foundation, (vi) private sector, (vii) research, think tank, university, and (viii) other.

15 A good example is the NORRAG study on the results-based financing at the meso-level of the education system, authored by Arushi Terway, Nicholas Burnett, and Marina Dreux Frotté. The study is funded by the World Bank REACH Trust Fund and will be released in spring 2022.

16 See McLean, R., and Gargani, J. (2019). *Scaling impact. Innovation for the public good*. New York: Routledge.

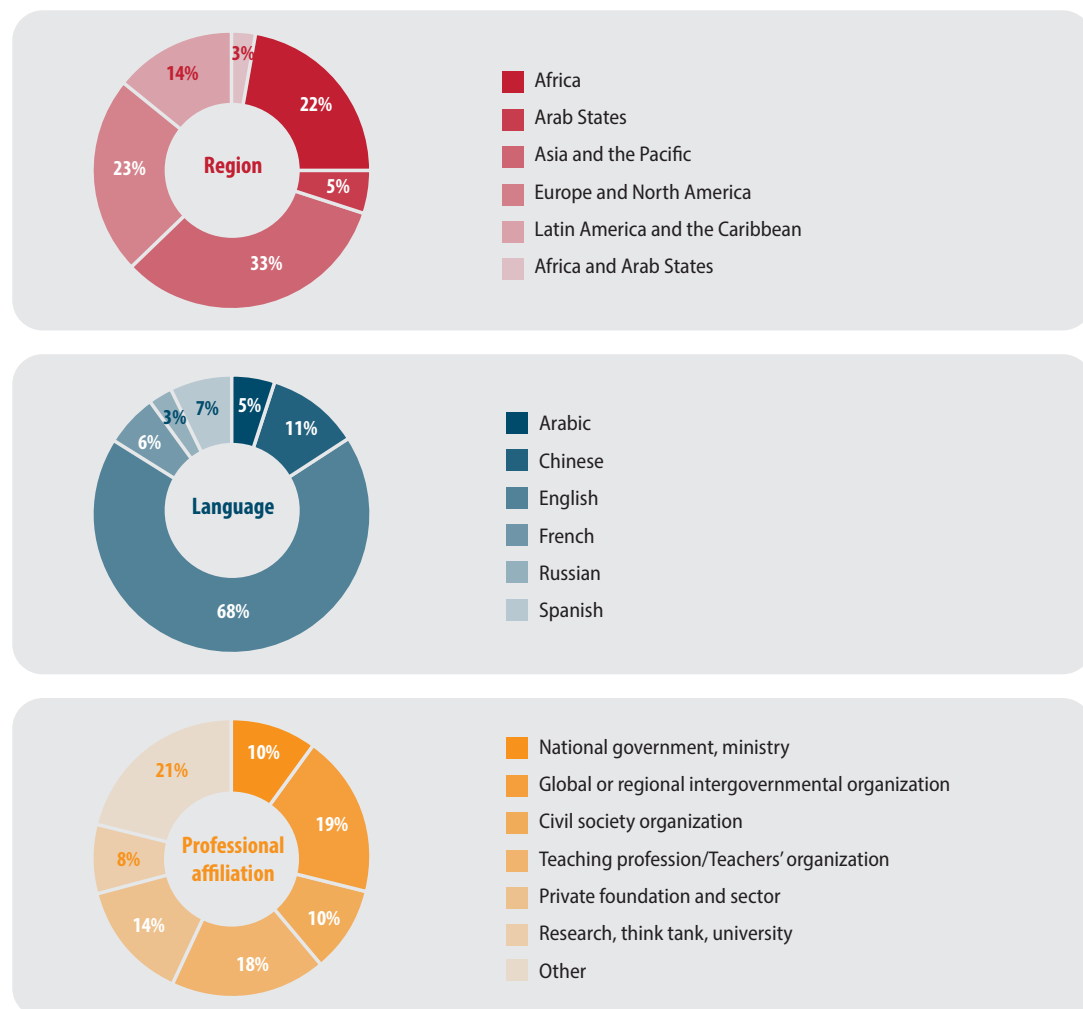
17 For example, the *KIX EAP baseline study* in 21 countries of the Europe and Asia–Pacific region was carried out during the pandemic in May 2020. In addition to the challenge of digital teaching and learning, the study revealed that the global reform of “competency-based curriculum reform” was implemented in some countries more than 20 years ago but that the revised curriculum framework still does not match the curriculum in teacher education, student assessment, and textbooks. This is an example where “scaling deep” (McLean and Gargani, 2019; *ibid.*) is needed to make an existing innovation (competency-based curriculum reform) coherent within the system.

Figure 2.1 provides the distribution of survey responses by language group and regional and professional affiliations. We are pleased both with the global reach of the survey and the representation from different stakeholders in education policy: more than half of the respondents (n=609) chose to fill out the English version of the survey. The remaining respondents submitted the survey in Arabic (n=46), Chinese (n=96), French (n=56), Russian (n=26), or Spanish (n=65). Of the 898 respondents who participated in the survey, 306 shared their country of residence. The respondents reside in 103 countries from five regions.¹⁸

Considering that the number of countries in each region differs, it seems that all five regions are fairly well-represented: Africa (25%), Arab States (8%), Asia and the Pacific (33%), Europe and North America (23%), and Latin America and the Caribbean (14%)¹⁹.

From those sharing their professional affiliation (approximately half of the respondents), there is a solid representation from national governments or ministries (19%), research/think tanks/university (22%), civil society organizations (18%), and teaching profession or teacher organizations (14%). Given the limited number of IOs

Figure 2.1 Distribution of survey responses by language, respondents' region, and professional affiliation



Source: Authors based on the Survey on initiatives, networks, and platforms in education (Annex 2).

¹⁸ The regional categories follow UNESCO's definition of regions. For the countries that are not a UNESCO member state, we identified their regions based on their geographical location.

¹⁹ The sum of percentages exceeds 100 because a few countries are categorized as both Africa and the Arab States according to UNESCO's definition (e.g., Djibouti).

in education²⁰, we are pleased with the return rate from global or regional IOs (10%). The only group that is somewhat underrepresented are private foundations (3%) and the private sector (5%). In our analysis, we have merged these two categories into one group: private sector including foundations.

Following the survey, we organized 14 meetings with 33 stakeholders to complement our survey findings. Our key informants include actors from IOs (UNESCO,

OECD, World Bank, UNICEF, USAID), civil society organizations and think tanks (e.g., RTI, FHI 360, IDRC, education.org), foundations (Aga Khan Foundation, Al Qasimi Foundation for Policy Research, Jacobs Foundation, Mastercard Foundation), regional organizations (CLADE, ESSA, SUMMA Chile), and others. Please see **Annex 3** for the full list of meetings and participants and **Annex 4** for the more detailed technical note on the methods used for the survey.

2.2 Comparator Case

The comparator case study examines what the education sector might learn from public health about how best to strengthen the production and URE for education policy, planning, and implementation. The chapter methodology comprised four aspects: (1) a database searches for systematic reviews on the use of research evidence in public health and in education; (2) a bibliometric analysis of the identified samples; (3) expert interviews with scholars; (4) an analysis of INPs in education and in public health in terms of **linear, relational and systemic** approaches to improving evidence use in policy.

Database search for systematic reviews: For this comparator case we conducted two separate database searches for public health and education, resulting in the inclusion and analysis of three reviews on the topic of public health and two on education. We identified systematic reviews with relevance to the use of evidence in policy including: the production and dissemination of research evidence for policy, planning, and practice; efforts to improve and strengthen the use of evidence in policy; evidence, policy and governance.

A bibliometric analysis of the identified samples in public health and in education: Bibliometric analysis aims to generate a picture of a research field, identifying core research topics and illustrating an academic landscape using a computational approach. We conducted a three-step analysis of the literature samples in public health and education: (1) a descriptive analysis of sample growth trends over time, defined as growth in annual scholarly production over the time period captured

by the sample; (2) a longitudinal analysis of the 5 most frequently occurring author assigned keywords to provide a sense of nominal association and field homogenization/fractionalization dynamics; (3) a co-citation analysis, to identify and organize connections among the sample's publications by identifying common connections between their bibliographies.

The searches and bibliometric analytical techniques used are detailed in the comparator case technical note (**Annex 5**).

Expert interviews with scholars: Expert interviews supported our analysis, aimed to ensure an international perspective, and strengthen the quality of our literature sample. Interviewees were identified through systematic reviews and snowball sampling. A list of interviewees is provided in **Annex 3**.

Analysis of initiatives, networks and platforms (INPs): We analyzed public health INPs in terms of the approach taken to improving evidence use in policy, specifically, linear, relational and systemic approaches. The analysis builds on literature and empirical work that has aimed to understand and assess efforts to improve evidence use in policy contexts. We draw on a framework developed in Oliver et al. (2021), Hopkins et al. (2021) and Best & Holmes (2010)²¹. Linear approaches focus on products (evidence syntheses and collection), whereas relational approaches seek to build relationships between producers and users of evidence and systemic approaches aim to create enabling environments in which URE – and those who work to promote URE – can flourish. Full details of these analysis can be found in **Annexes 6 and 7**.

20 Niemann and Martens (2021) contend that there are 30 total intergovernmental organizations in education at the global level and 20 at the regional level (see Figure 4.2 in this report).

21 Oliver, K., Hopkins, A., Boaz, A., Guillot-Wright, S. and Cairney, P. (2021) 'What works to promote research-policy engagement?' in *Evidence and Policy*; Hopkins, A., Oliver, K., Boaz, A., Guillot-Wright, S. and Cairney, P. (2021) 'Are research-policy engagement activities informed by policy theory and evidence? 7 challenges to the UK impact agenda' in *Policy, Design and Practice*, Vol. 4 Issue 3, Pages 341-356. <https://doi.org/10.1080/25741292.2021.1921373>; Best, A. and Holmes, B. (2010) 'Systems thinking, knowledge and action: Towards better models and methods', *Evidence and Policy*. doi: 10.1332/174426410X502284.

3. The use of research evidence for policy, planning, and implementation: A landscape analysis

This chapter presents the current landscape of the URE-4-PPI in education. Drawing on the survey responses and interview data, it first presents the perceived distribution of research and evidence by SDG4 targets, themes, and topics. It then identifies existing INPs and demonstrates how they are connected to each other and utilized by different stakeholders. Finally, this chapter ends with the potential solutions to improve national uptake and utility of INPs that are

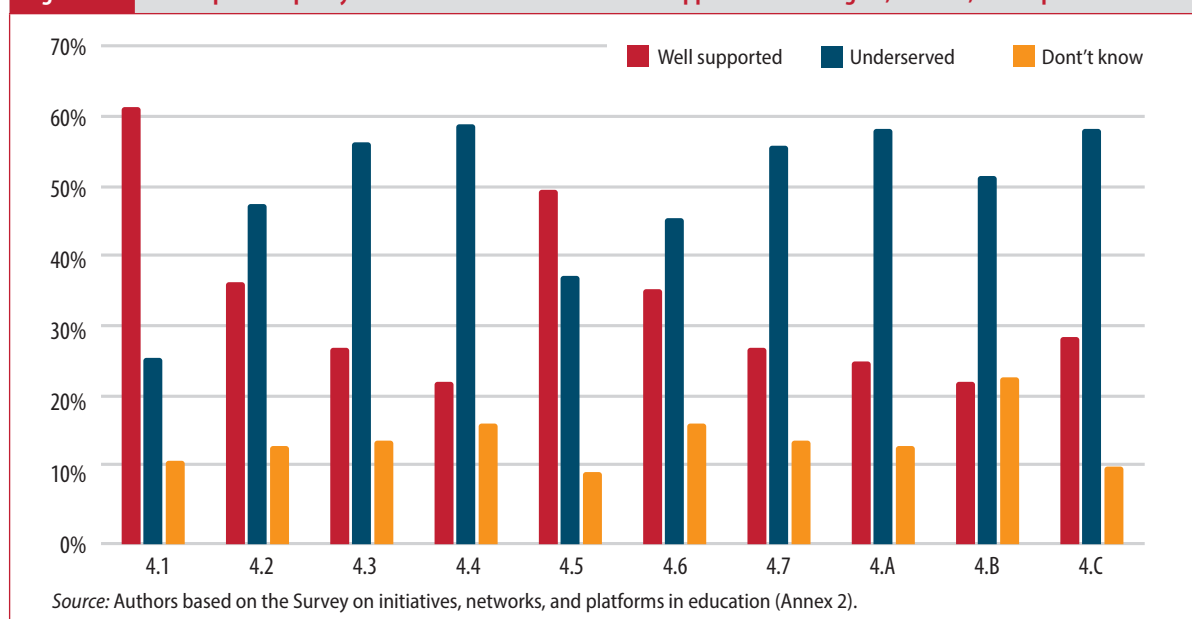
identified by international and national policy actors. In sum, the findings show that currently there is an unequal focus given across SDG4 targets, themes, and topics, existing INPs are many yet disconnected suggesting a surplus of sources yet a need for intermediary to facilitate the exchange of information between sources, and remedies for improving the national uptake should be contextualized with regional and national circumstances and needs.

3.1 The ecosystem of the URE in PPI

Regarding the existing research and evidence in education PPI, about half of the respondents indicated that SDG4 targets, themes, and topics are underserved by existing policy research and evidence, whereas about less than third of the respondents indicated that they are well-supported. When we look closely into the perception toward each target, theme, and topic, however, our analysis reveals that currently, the focus is spread unevenly across the SDG4 targets, themes, and topics. The respondents indicated that foundational and holistic learning (targets 1, 2, and 6) and gender and social

inclusion (target 5) were well supported by research and evidence, but technical, vocational, and higher education (targets 3 and 4) and sustainable development and global citizenship (target 7) were comparably underserved. As demonstrated in **Figure 3.1**, a great percentage of the respondents (63%) perceived that SDG target 1—“free primary and secondary education”—was well supported with existing policy-relevant evidence and research. In contrast, SDG target 4—“increase the number of people with relevant skills for employment”—was perceived to be significantly underserved (60%) by the respondents.

Figure 3.1 Perception of policy-relevant evidence and research support for SDG targets, themes, and topics



Our informants also confirmed that the IOs, particularly the World Bank, tend to put a greater focus on foundational learning because the interest in foundation learning is shared across different regional and national contexts.

Regarding the research and evidence sources, the respondents indeed identified the initiatives, networks, and platforms (INPs) as the main source. Approximately half of the respondents (423 respondents out of 876 responses) indicated that they turn first to INPs when searching for research or evidence to devise their projects or educational reforms. Learning from other countries (56%), finding evidence to support policy decisions (50%), and support for preparing an education sector analysis (40%) were the main rationales for consulting INPs.²² In the following subchapters, we look closely at these existing sources that facilitate and promote the use of research evidence for policy, planning, and implementation.

3.1.1 An ocean of URE sources

In the survey, we asked the respondents to name INPs that they know and those that they use often. Out of the 898 respondents, 338 respondents named at least one source, and 286 respondents listed at least one source that they consult frequently. In total, the respondents identified 654 and 432 unique sources for each question, respectively. We found the large number and diversity of the URE sources to be highly impressive. Indeed, every informant agreed that there is a surplus of research and evidence sources, arguing that a lack of the sources is not the main obstacle for the URE-4-PPI. This is interesting considering survey respondents' perception that SDG4 targets, themes, and topics are underserved by existing research and evidence.

We also examined how this large number of sources can be categorized by their types (see **Table 3.1**). More than half of the sources identified by the respondents were national, followed by international and regional ones. What needs to be highlighted here is the strong presence of national sources for research and evidence; this challenges the common perception that most research and evidence is produced or utilized at the global level.

However, the results also show that many of the respondents do not necessarily distinguish INPs and organizations. Although the survey questions specifically asked the respondents to identify the INPs, more than half entered organization names. It may be possible that the respondents entered organization names to refer to the INPs hosted or administered by the organizations. Regardless, this finding highlights the strong visibility of the organizations and, perhaps, the weaker visibility of INPs.

Table 3.2 shows the top 15 existing major evidence sources, including organizations (UNESCO, World Bank, UNICEF and OECD) alongside INPs, that were identified by our survey participants (**Annex 8** presents more detailed information specifically on the INPs). Among the sources, we have closely looked into the websites of the INPs to examine their geographic and thematic focus. Our analysis indicates that many of the INPs have a broad international reach, except two that have more clear regional commitment (CLADE for Latin America, ANCEFA for Africa). In terms of themes related to SDG4 targets and themes, all of them indicate their commitment and dedication for multiple targets and themes. Interestingly, most of the INPs have a clear and strong emphasis on target 1 and 5, which is consistent with the findings from our survey responses. Theme b (expanding higher education scholarships for developing countries) does not appear to have as much attention as other targets and themes in the major INPs.

Table 3.1 Distribution of the sources for the URE in PPI by types

	N	National	Regional	International	Initiatives	Networks	Platforms	Organizations
Knowledge	654	58.87%	14.07%	27.06%	8.41%	16.51%	18.04%	57.03%
Utilization	432	54.17%	17.13%	28.70%	7.87%	18.06%	16.20%	57.87%

Source: Authors based on the Survey on initiatives, networks, and platforms in education (Annex 2).

22 The sum of percentages exceeds 100 because the respondents were asked to select multiple choices (up to three that are the most relevant).

Table 3.2 Top 15 existing major evidence sources that are best known by survey respondents²³

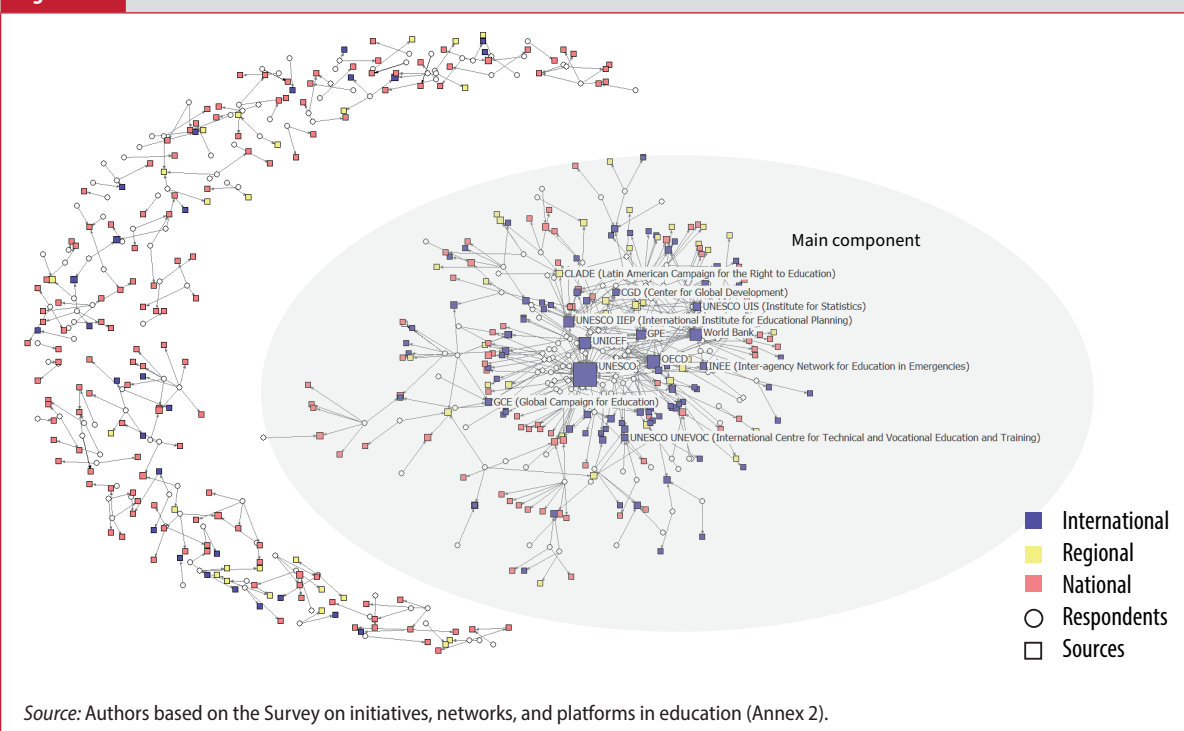
Rank	Name
1	UNESCO
2	World Bank
3	UNICEF
4	OECD
5	UNESCO IIEP (International Institute for Educational Planning)
6	INEE (Inter-agency Network for Education in Emergencies)
7	GPE
8	UNESCO UIS (Institute for Statistics)
9	CLADE (Latin American Campaign for the Right to Education)
10	GCE (Global Campaign for Education)
	RISE (Research on Improving Systems of Education) Programme
	WEF (World Economic Forum)
13	ANCEFA (Africa Network Campaign on Education for All)
	EEF (Education Endowment Foundation)
	GPE KIX (Knowledge and Innovation Exchange)

Source: Authors based on the Survey on initiatives, networks, and platforms in education (Annex 2).

The information on the websites of these INPs is accessible in multi-languages. Although there is a variation in terms of which languages are available, English is available in all of the major INPs, and there is no INP that offers information in all six UN languages.'

3.1.2 Loosely connected URE sources

When examining the network of various sources that our respondents frequently consult, we found that they are rather loosely connected (density = 0.006). The component analysis, which identifies a group of nodes that are completely disconnected from other groups, also confirmed the loose network structure. We located 121 components in the network, and save for the main component placed in the center (see **Figure 3.2**), all nodes in the peripheral area constitute 120 different components. **Figure 3.2** also shows that major international (coloured in blue) and regional (colored in yellow) sources are more strongly connected in the center, whereas most of the national sources (colored in red) are spread out in the peripheral area.

Figure 3.2 Network of the research and evidence sources in education PPI

23 Please note that the preliminary analysis identified NORRAG as one of the central sources with a high centrality in the network. However, considering the dominant role that NORRAG played in survey distribution, which may have influenced the profile of our survey respondents, we omitted NORRAG from the list of the major INPs and sources (Table 3.2 and Table 3.3).

Table 3.3 Research and evidence sources that the respondents consult often

Name	Count
UNESCO	64
OECD	23
World Bank	19
UNICEF	18
UNESCO IIEP (International Institute for Educational Planning)	17
GPE	13
UNESCO UIS (Institute for Statistics)	8
INEE (Interagency Network for Education in Emergencies)	6
GCE (Global Campaign for Education)	6
CGD (Center for Global Development)	5
CLADE (Latin American Campaign for the Right to Education)	5
UNESCO UNEVOC (International Center for Technical and Vocational Education and Training)	5

Source: Authors based on the Survey on initiatives, networks, and platforms in education (Annex 2).

To identify the most central sources in the network, we calculated the degree centrality of a source, which equals the number of respondents indicating that they use the source. In **Figure 3.2**, the degree centrality of each node corresponds to the size of the node (a node with a higher centrality has a larger node size). The most central sources that were named by more than four respondents are listed in Table 3.3. It may not be surprising that these most central sources were all international, except one regional source—CLADE (Latin American Campaign for the Right to Education)—because international sources such as UNESCO, OECD, the World Bank, and UNICEF are common denominators for all respondents from the global perspective and, thus, are more likely to be named multiple times.

UNESCO was identified as the most central source, reflecting its high visibility and name recognition in the education sector. It was named by 64 out of the 286 respondents who listed at least one research and evidence source. It is possible that UNESCO's active role in survey distribution and its logo on the survey may have impacted our sample and their responses, which then may have resulted in UNESCO's high centrality in the network. However, three out of seven UNESCO institutes and centers (IIEP, UIS, and UNEVOC) also appeared separately in the most central source list, attesting

to the overall strong presence of UNESCO in the network of URE sources in PPI.

In response to the prominence of international sources and the disconnection between the global and local sources in the URE source network, almost all informants highlighted the increased importance of and need for regional hubs that facilitate the translation between global and local, along with between research and policy. Furthermore, what needs to be particularly emphasized about the translation is that the relationship should be two-way. For example, the informants noted that research and evidence produced at the local level need to be translated into the global level as well, even though traditionally, there has been a greater focus on the translation from the global to local level.

The informants shared that the regional hubs are more likely to have a higher level of independence compared with IOs and, thus, can contribute to diversifying the discourses on education policy and practice. Indeed, national sources that are currently loosely connected to or disconnected from the main component of the network could have research and evidence perceived as different or innovative in the network. Capturing the free-floating national sources in the peripheral area and connecting them to the international and regional nodes in the main component would contribute to improving knowledge exchange across global, regional, and local levels.

3.1.3 URE sources for different stakeholders

To examine how the research and evidence sources are utilized for different professional groups, we analyzed the URE source networks for each type of our respondents' professional affiliation. Our analysis finds that the URE source networks are indeed unique for each professional group. In particular, the sources identified by the respondents from the national government (**Figure 3.3**) had a distinctively different network compared with the ones identified by the respondents from civil society organizations (**Figure 3.4**). The figures show that the main research and evidence sources for national government and ministry actors are limited to organizations (mostly intergovernmental), whereas the main sources for civil society organization actors are more diverse, ranging from local platforms to international networks.

Figure 3.3 Network of the research and evidence sources in education PPI (national government, ministries)

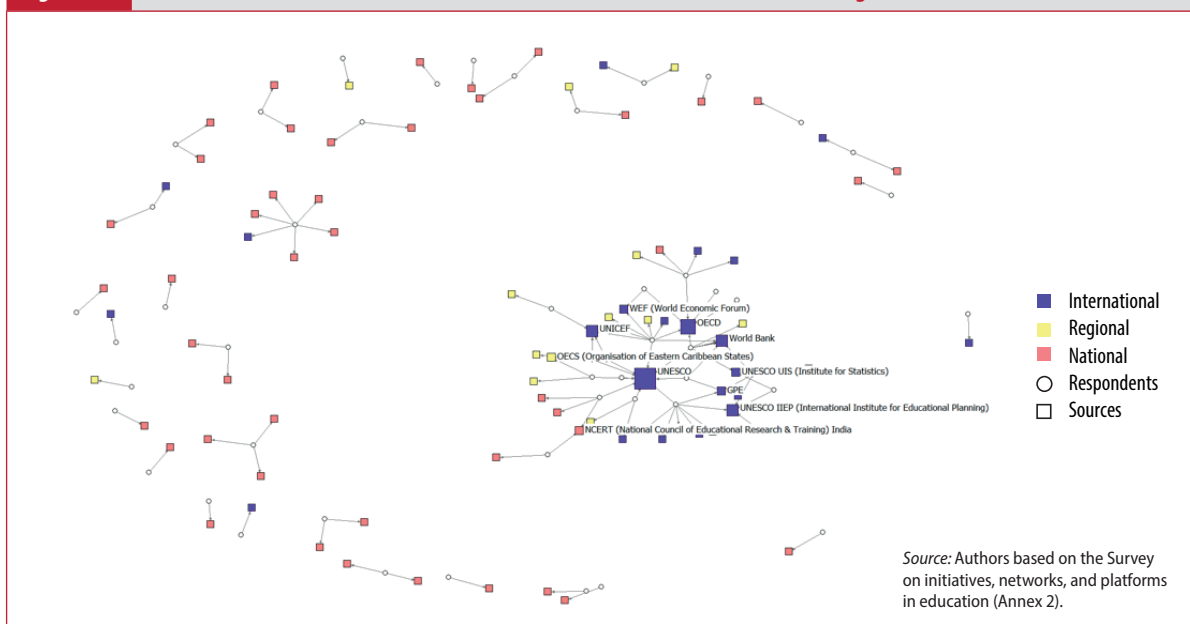
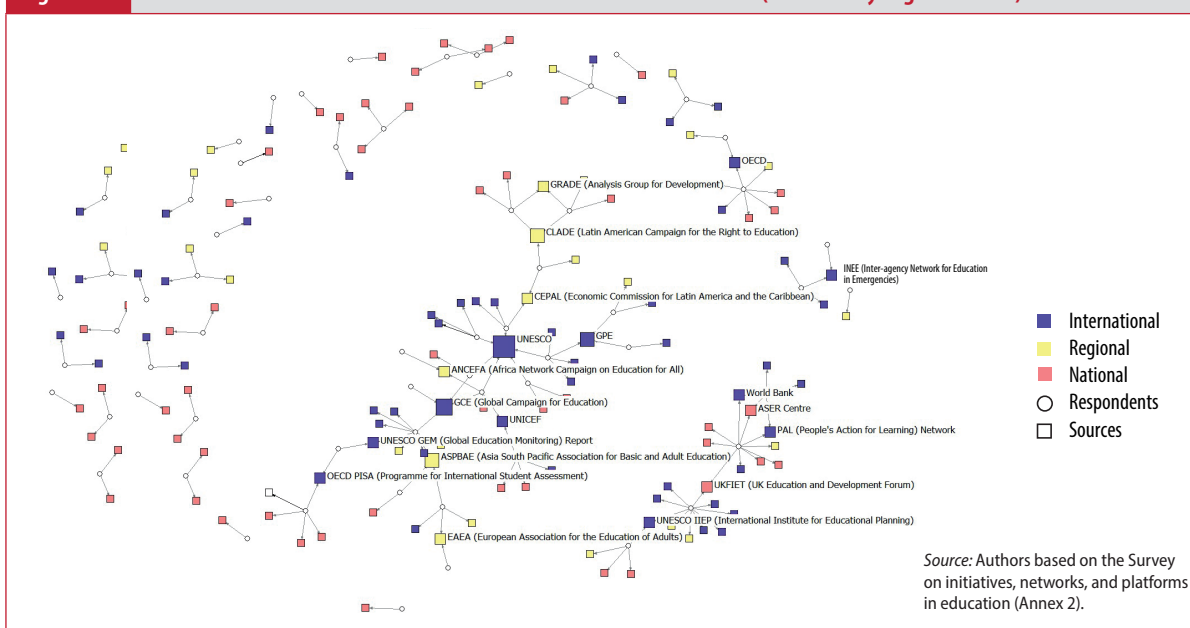


Figure 3.4 Network of the research and evidence sources in education PPI (civil society organizations)



The difference in research and evidence sources across professional groups is an outcome of institutional hard regulations (e.g., with whom they are allowed to work), as well as soft norms (e.g., which sources are considered more credible or legitimate). Thus, it may be difficult to change the network for each professional group in a short amount of time. An alternative solution to increase the connectivity within the overall URE source network (e.g., **Figure 3.2**) is a strategic partnership. For example, instead of investing in establishing direct relationships with various international, regional, and

local INPs, national government and ministry actors can focus on building a closer partnership with civil society organizations that are already better connected to various INPs and that can function as intermediaries. Many of our informants from civil society organizations and IOs also shared that recently, there have been more organized attempts to support the connection between the government, civil society, national university, and think tanks to promote URE-4-PPI.

3.2 Increasing the uptake and utility of INPs

In the survey, in addition to the questions that helped us understand the ecosystem of the URE in PPI, we also asked questions on how to improve uptake and utility of the URE sources, specifically INPs. Our analysis shows that there is a statistically significant relationship between the respondents' recommendations for improvement and their regional affiliations.

When it comes to the question on how to improve the coordination and management of INPs at the *global* level, the respondents could select up to three recommendations (see the survey in [Annex 2](#) for details) that can be grouped into five broad categories: the ecosystem, capacity-building, policy-relevant communication (policy user-friendliness), collaboration between policy and research, and funding.

The respondents from the Global North selected the recommendations differently compared with the respondents from other regions, particularly for policy-relevant communication and capacity-building. Almost 40% of the respondents from the Global North selected at least one recommendation related to policy-relevant communication, whereas only about 26% of the respondents from the Global South did. Furthermore, although almost 60% of the respondents from the Global South indicated that capacity-building is needed, less than half of the respondents from the Global North (43%) identified capacity-building as a helpful strategy to improve coordination and management at the global level.

For the question on how to improve INP utilization in policy-making at the *national* level, the respondents could select up to three recommendations (see the survey in [Annex 2](#) for details), which can be grouped into three broad categories: user-friendliness, capacity-building, and national relevance and participation. The results show that among the three categories, increasing national relevance and participation was the most requested by the respondents from both the Global North and the Global South. About 80% of the respondents who completed the question (392 out of 487 respondents) selected one of the recommendations regarding national relevance and participation. The need for user-friendliness and capacity-building was also evident. Approximately 60% and 40% of the respondents selected one of the recommendations regarding user-friendliness and capacity-building, respectively.

Similar to the patterns observed for the global-level coordination and management of INPs, there was a regional

difference in the respondents' recommendations. Although only about 27% of the respondents from the Global North identified capacity-building as a helpful strategy, about 45% of the respondents from the Global South called for greater capacity-building to improve national-level INP utilization. By contrast, regarding user-friendliness, almost half of the respondents from the Global North (49%) indicated that consolidating or synthesizing existing INPs into a one-stop shop would be helpful, whereas less than one-third of the respondents from the Global South did so.

The regional difference in recommendations for improvement reflects the different emphases and orientations regarding URE-4-PPI. The approach recommended by the respondents from the Global North emphasizes access to existing research and evidence (user-friendliness), and the other approach recommended by those from the Global South emphasizes the application and translation of research and evidence (capacity-building). Furthermore, the former approach is more supplier oriented with the latter being more user oriented. Interestingly, all of our informants identified national relevance/participation and capacity-building as the main strategies to improve URE-4-PPI. In particular, the informants noted that it is important to strengthen the intersection between demand and supply and policy design and implementation.

At the same time, many informants also acknowledged the difficulties in codesigning and coproducing research and evidence between global, regional, and local actors. Often, the main directions or focuses of each project and programme are predetermined by the funders or international partners. Or there can be extensive regulatory compliances that the international partners require that prevent local partners from focusing on the actual execution or implementation of the project or programme. Although changes occur over a long-term period, many projects and programmes are short-term and are not necessarily scaled up. In addition, the unstable leadership of local partners often leads to re-establishment of the partnership, a drastic change in educational agenda, and less interest in long-term projects and collaboration.

3.3 Key findings and recommendations

Table 3.4 summarizes the key findings and recommendations from our analyses in this chapter. More detailed recommendations and responsible entities are discussed in Chapter 5.

Table 3.4 Recommendations based on the findings from the landscape analysis		
	Findings	Recommendations
1	The focus given across SDG4 targets, themes, and topics is unequal.	Put a greater emphasis on underserved SDG 4 targets and themes when discussing SDG 4 agenda, highlighting the importance of meeting all SDG 4 targets and themes. Provide additional financial support for research and evidence regarding underserved SDG 4 targets and themes (e.g., 4.3, 4.4, 4.b)
2	It is perceived that existing research and evidence underserve SDG4 targets, themes, and topics are under	Findings 2 and 3 indicate that the abundant sources may not be well-connected or coordinated to deliver or disseminate existing research and evidence for policy actors. It is also possible that these sources do not produce the research and evidence relevant for SDG4 PPI. Thus, it calls for the need for an intermediary (regional hubs) that can facilitate the exchange of information between sources and produce relevant research and evidence.
3	There is a surplus of research and evidence sources	
4	The major research and evidence sources and INPs are mostly international, and the local and global sources are loosely connected.	Utilize regional INPs that function well to connect national units and international organizations
5	Although the information on the websites of the major INPs is accessible in multi-languages, there is a variation in terms of which languages are available.	Encourage and provide financial support for INPs to offer more language options for their evidence and research.
6	The sources of research and evidence differ across professional groups	Coordinate strategic partnership between INPs. For example, national government and ministry actors can focus on building a closer partnership with civil society organizations that are already better connected to various INPs and that can function as intermediaries.
7	Regarding how to improve the uptake and utility of INPs, national relevance and participation was emphasized across survey respondents and interview informants.	Nominate existing regional bodies as regional URE hubs that can create both horizontal (across regional mechanisms) and vertical (global-regional-local) coordination. Build and fund national URE institutions.
8	To improve utilization (national-level) and coordination (global-level) of INPs, the respondents from the Global North emphasize better and easier access to existing research and evidence (user-friendliness), and those from the Global South emphasize the application and translation of research and evidence (capacity-building).	Remedies for improving the national uptake should be contextualized with regional and national circumstances and needs .

4. Comparator case study: Evidence production and use for global public health

This comparator case study examines what the education sector might learn from public health research and governance about how best to strengthen the production and URE for education policy, planning, and implementation. It combines an analysis of systematic reviews, learning from expert interviews, and a bibliometric analysis, to arrive at a series of recommendations for strengthening the role of the global coordination mechanism (GCM). **Section 4.1** examines the state of knowledge on evidence use for policy in education versus that in public health.

Section 4.2 describes the nature of evidence for public health policy, and **Section 4.3** examines how, and how much, evidence is used. Finally, **Section 4.4** analyses INPs in public health in comparison to those in education, drawing out lessons on different approaches found (characterized as linear, relational, and systemic in Chapter 1) and how they may be effective for strengthening evidence use. **Annex 5** presents the methodology for the comparator study, and **Annex 6** details the operationalization of the approaches to URE in policy, planning and implementation (linear, relational, and systemic).

4.1 Learning for education from evidence use in public health

Global public health provides a rich source of comparative learning for education due to (a) the variety of perspectives offered by public health research and policy communities on the nature, role, and use of evidence in policy, planning, and practice,²⁴ (b) the nature and variety of the INPs that aim to strengthen the use of evidence in public health policy²⁵, and (c) the impacts on education of health concerns.²⁶

In sectors other than health, including education, comparative learning about the use of evidence for policy and practice often focuses on the dominant model of knowledge production and use for policy derived from medicine, that is, evidence-based medicine (EBM). EBM demands the use of reliable clinical evidence in the treatment of patients to minimize risks and maximize benefits for patients. Clinical trials have improved medical practice and policy enormously.

However, even within EBM, criticisms have arisen of an overzealous application of this approach, including the sidelining of doctors' expertise and ethics, the inequalities built into clinical trials, and a lack of attention to the social determinants of health.²⁷

The dominance of biomedical perspectives, at the expense of wider health concerns, has been challenged in public health research and practice communities and among researchers when it comes to putting evidence into policy.²⁸ In the COVID-19 pandemic (as in the Ebola crisis before it²⁹), medicine provided one part of the solution, alongside other relevant data and evidence from anthropologists, political scientists, sociologists, and public health specialists, among others. Like education, public health policy-making is complex, a system in which "poor health and health inequalities [are] outcomes of a multitude of

- 24 Alla K., Hall W. D., Whiteford, H. A., Head, B. W., and Meurk, C. S. (2017). How do we define the policy impact of public health research? A systematic review. *Health Research Policy and Systems*, 15(1), 1-12; Liverani, M., Hawkins, B., and Parkhurst, J.O. (2013). Political and institutional influences on the use of evidence in public health policy. A systematic review. *PLoS One*, 8(10), e7740; Lorenc, T., Tyner, E., Petticrew, M., Duffy, S., Martineau, F., Phillips, G., and Lock, K. (2014). Cultures of evidence across policy sectors: Systematic review of qualitative evidence. *European Journal of Public Health*, 24(6), 1041–1047, <https://doi.org/10.1093/eurpub/cku038>.
- 25 Armstrong, R., et al. (2013). Knowledge translation strategies to improve the use of evidence in public health decision making in local government: Intervention design and implementation plan. *Implementation Science*, 8. <https://doi.org/10.1186/1748-5908-8-121>; Rutter, H., et al. (2017). The need for a complex systems model of evidence for public health. *The Lancet*, 390(0112), 2602–2604.
- 26 UNESCO. (2020). *Implications of COVID-19 for educational research: Strengthening research capacity and partnerships for mutual learning*. Thematic Synthesis Paper: Building Evidence in Education (BE2) Meeting. Unpublished paper.
- 27 Tonelli, M. R. (1998). *The philosophical limits of evidence-based medicine*. *Academic Medicine*, 73(12), 1234–1240; Perez, C. C. (2019). *Invisible women: Exposing data bias in a world designed for men*. London: Random House.
- 28 Boaz, A., and Nutley, S. (2019). Using evidence. In A. Boaz, H. Davies, A. Fraser, and S. Nutley (Eds.), *What works now? Evidence-informed policy and practice*. Bristol: Policy Press.
- 29 Richards, P. (2016). *Ebola: How a people's science helped end an epidemic*. London: Zed Books; Hewlett, B. S., and Hewlett, B. L. (2007). *Ebola, culture and politics: The anthropology of an emerging disease*. Chicago: Cengage Learning; Hopkins, A., Foxen, S., Oliver, K., and Costigan, G. (2021). *Science advice in the UK*. London: Foundation for Science and Technology & Transforming Evidence. doi:10.53289/GUTW3567

interdependent elements within a connected whole.³⁰ It requires knowledge production, evidence, and tools that are multidisciplinary and that address inherently intersectoral issues. Both sectors confront a global environment in which what “counts” as evidence, which disciplinary contributions matter, and how research is funded, produced, and used globally is highly political and uneven.³¹ This chapter extends existing comparator studies³², looking at the lessons from public health on how best to strengthen URE.

4.1.1 Studying knowledge production and use for policy in public health versus education

This section presents a bibliometric analysis of systematic review texts in public health and education (see **Annex 5** for the technical note). Systematic reviews use a transparent method to pull together and synthesize all the available research on a particular topic, with clear criteria for assessing research quality and relevance and comparing findings.³³ By bringing together theoretical and empirical research from multiple studies, these reviews are useful for assessing the state of knowledge in a field.

4.1.1.1 State of knowledge of evidence production and use in public health

Our search of bibliographic databases yielded three English-language systematic reviews in public health (summarized in **Annex 9**). “Evidence-informed decision making” became part of the language of the public health sector in the 1990s. Since then, an expanding body of theoretical and empirical scholarship has addressed the production of research evidence for public health and its use in different contexts of decision making. In this context, the “quality of evidence” has become increasingly important. Starting in the early 2000s, there was a growing acknowledgment of the complexity of policy-making and recognition the multiplicity of

barriers to, and factors that influence, the use of research and information.³⁴ After 2010, an increasing number of publications used the concept of knowledge translation (KT) to describe “a dynamic and iterative process that includes the synthesis, dissemination, exchange and ethically sound application of knowledge to improve the health of populations, provide more effective health services and products and strengthen the health care system.”³⁵ Since the mid-2010s, there has been a growing awareness that getting research into policy is also a political, social, and systemic challenge.³⁶ Drawing on policy studies and social sciences more broadly, scholars began to describe the role of institutional structures, political contestation of issues, and the role of values and beliefs, among other factors.

4.1.1.2 State of knowledge production and use in education

Our search of bibliographic databases yielded two English-language systematic reviews in education (summarized in **Annex 10**). The phrases “evidence-based” and “evidence-informed” policy entered the lexicon of education research in the early 2000s, (primarily in UK and US contexts). Nevertheless, these concepts appear to have had variable effects in education research and have been less influential than in public health.³⁷ A concern with evidence for policy has however been taken up widely in policy contexts since 2015 (e.g. EU and US).³⁸ A key finding of this comparator case is that, despite growing attention on the need to strengthen education policy using evidence, we had difficulty identifying high-quality, systematic, literature (particularly compared with the public health literature) that could speak to how evidence is produced and used for education policy. This speaks to a relative underinvestment in and fragmentation of knowledge about evidence for policy in education. We return to this finding in our recommendations below.

30 Rutter, H., et al. (2017). The need for a complex systems model of evidence for public health. *Lancet*, 390(10112), 2602–2604. doi:10.1016/S0140-6736(17)31267-9

31 Cairney, P. (2016). *The politics of evidence-based policy-making*. London: Palgrave Pivot.

32 Burnett, N. (2019). Invited essay: It’s past time to fix the broken international architecture for education. *International Journal of Educational Development*, 68, 15–10; Mundy, K. (2021). *UNESCO-SDG-Education 2030 Input Paper on Global Education Coordination*. Paris: UNESCO SDG-4 Leadership, Unpublished paper.

33 EPPI-Centre. (n.d.). *What is a systematic review?* <https://eppi.ioe.ac.uk/cms/Default.aspx?tabid=67>

34 Alliance for Health Policy and Systems Research (AHPsR). (2004). *Strengthening health systems: The role and promise of policy and systems research*. Geneva: Global Forum for Health Research. http://www.who.int/alliance-hpsr/resources/Strengthening_complet.pdf

35 LaRocca, R., Yost, J., Dobbins, M., Ciliska, D., and Butt, M. (2013). The effectiveness of knowledge translation strategies used in public health: A systematic review. *BMC Public Health*, 12(1), 1–15 doi:10.1186/1471-2458-12-751.

36 Liverani M., Hawkins B., and Parkhurst J. O. (2013). Political and institutional influences on the use of evidence in public health policy. A systematic review. *PLoS ONE*, 8(10), e77404. doi:10.1371/journal.pone.0077404

37 Davies, P. (2002). What is evidence-based education? *British Journal of Educational Studies*, 47(2). <https://doi.org/10.1111/1467-8527.00106>; Pellegrini, M., and Vivanet, G. (2021). Evidence-based policies in education: Initiatives and challenges in Europe. *ECNU Review of Education*, 4(1), 25–45. <https://doi.org/10.1177/2096531120924670>

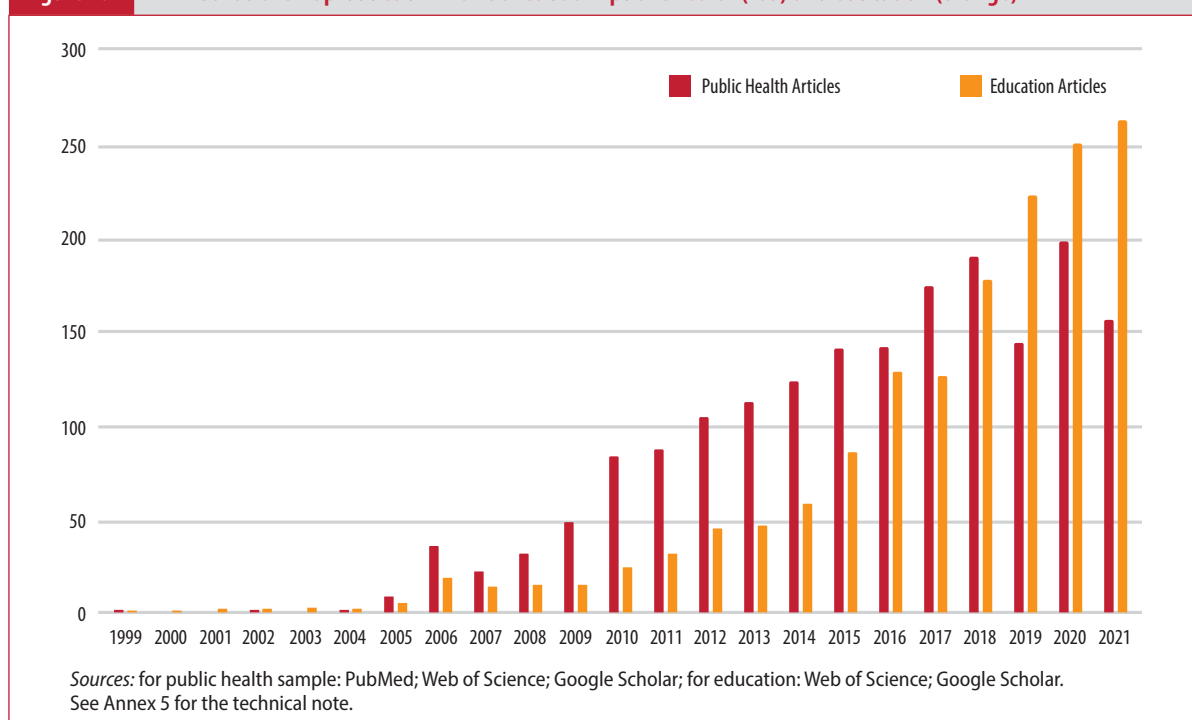
38 Pellegrini, M., and Vivanet, G. (2021). Evidence-based policies in education: Initiatives and challenges in Europe. *ECNU Review of Education*, 4(1), 25–45. <https://doi.org/10.1177/2096531120924670>; U.S. Department of Education. (n.d.) Every Student Succeeds Act (ESSA). U.S. Department of Education. <https://www.ed.gov/essa?src=mn>.

4.1.1.3 Bibliometric analysis comparing authors, countries, sources, and citations

We conducted a comparative bibliometric analysis which identified key differences and similarities between the two bodies of literature. In both the education and public health literature samples, a similar number of articles identified in the search were published after 1999 (1,600 and 1,825 respectively). However, the scholarship on evidence use in policy grew more in public health (on average 30.5% year on year) than in education (23.6%). There were many more highly cited papers in public health (520)

than in education (66). Research on evidence for public health is strongly interconnected through shared citations, whereas education research appears to be comprised of many smaller communities. Education researchers appear more self-referential, whereas public health scholarship references wider policy and KT literature extensively. Both the public health and education literature samples exclusively comprise English language publications predominantly produced in so-called Global North contexts. Of a large number of international collaborations in the sample, most are between researchers affiliated with Global North institutions.

Figure 4.1 Annual scientific production in evidence use in public health (red) and education (orange)



4.1.1.4 Who cites whom?

Co-citation analysis is a form of citation analysis that looks for connections between publications in the form of an identical cited reference in both papers' bibliographies (see the methodological note in Annex 5). The most well-connected publications (or "nodes") in the network are assigned a label to distinguish these as important contributions to the overall field. Network clusters visualize connected bodies of scholarship departing from highly cited papers and addressing shared themes. Below, **Figure 4.2a** displays clusters of scholarship on evidence in public health, and **Figure 4.2b** on evidence in education.

Figure 4.2a shows how research on evidence production and use for public health policy and practice are grouped around several key themes:

- Implementation frameworks (blue) focus on science uptake, moving innovations into practice.
- KT (purple) relates to the synthesis, exchange, and application of knowledge by stakeholders.³⁹
- Health research practice scholarship (in green) focuses on examining the practices of health actors.
- Policy implementation (in teal) focuses on implementation actors' perspective on URE.
- Public health innovation diffusion scholarship (in red).

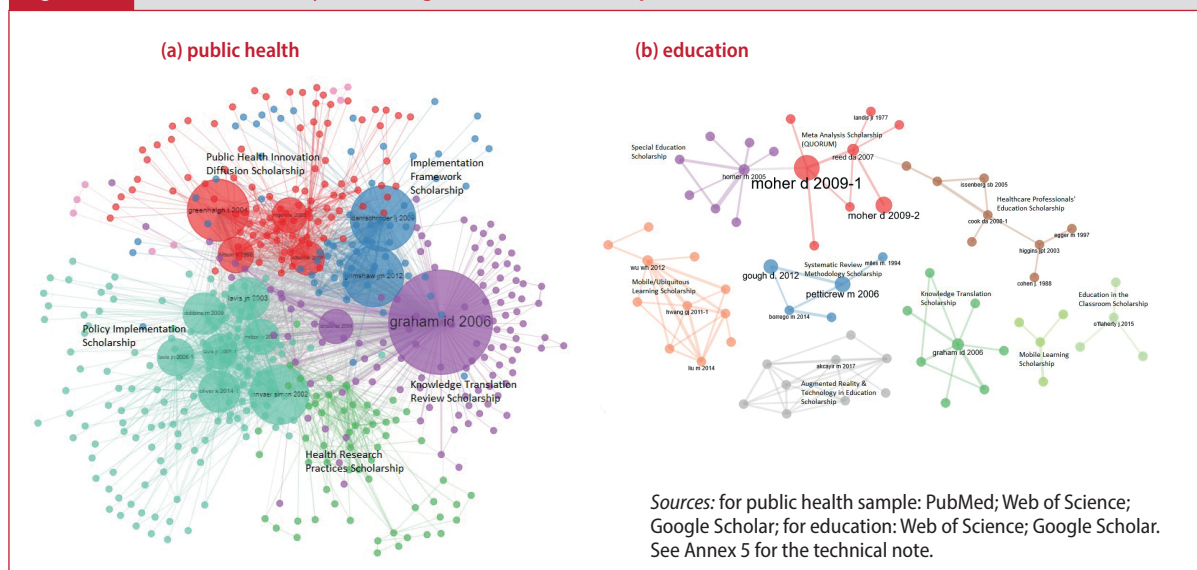
39 Blessing, V., Davé, A., and Varnai P. (2017). *Health evidence network synthesis report*, No. 54. Copenhagen: WHO Regional Office for Europe. https://www.euro.who.int/_data/assets/pdf_file/0009/291636/EVIPNet-Europe-strategic-plan-2013-17-en.pdf

Many of these clusters draw on scholarship from other disciplines, including policy and implementation studies.⁴⁰

Figure 4.2b visualizes the education cocitation network, which is fractured into seven unconnected components, with the largest component consisting of three tangentially connected communities. Whereas the public health cocitation network contains five large, comprehensively interconnected communities.⁴¹ Thus, compared with the cocitation network on evidence production and use for public health policy, this body of scholarship in education (a) appears fractured, displaying

multiple communities that tend to not cite each other and operate in relative isolation and (b) seems relatively self-referential, not citing literature outside of education.⁴² One of the implications of this might be that there is less learning in education about the more precise mechanisms and strategies involved in the production and use of evidence for policy.

Figure 4.2 Co-citation analysis showing clusters of scholarship in evidence in:



- 40 Most prominent source per cluster (clockwise): Grimshaw, J. M., Eccles, M. P., Lavis, J. N., Hill, S. J., and Squires, J. E. (2012). Knowledge translation of research findings. *Implementation Science*, 7(1), 1–17; Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W., and Robinson, N. (2006). Lost in knowledge translation: Time for a map? *Journal of Continuing Education in the Health Professions*, 6(1), 13–24. (also prominent in education cocitation network): Tetroe, J. M., Graham, I. D., Foy, R., Robinson, N., Eccles, M. P., Wensing, M., and Grimshaw, J. M. (2008). Health research funding agencies' support and promotion of knowledge translation: an international study. *The Milbank Quarterly*, 86(1), 125–155; Innvaer, S., Vist, G., Trommald, M., and Oxman, A. (2002). Health policy-makers' perceptions of their use of evidence: A systematic review. *Journal of Health Services Research & Policy*, 7(4), 239–244; Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., and Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *The Milbank Quarterly*, 82(4), 581–629.
- 41 Most prominent source per cluster (clockwise): Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., and Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Exceptional Children*, 71(2), 165–179.; Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., and Prisma Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7), e1000097; Cook, D. A., Levinson, A. J., Garside, S., Dupras, D. M., Erwin, P. J., and Montori, V. M. (2008). Internet-based learning in the health professions: A meta-analysis. *JAMA*, 300(10), 1181–1196; O'Flaherty, J., and Phillips, C. (2015). The use of flipped classrooms in higher education: A scoping review. *The Internet and Higher Education*, 25, 85–95; Wu, W. H., Wu, Y. C. J., Chen, C. Y., Kao, H. Y., Lin, C. H., and Huang, S. H. (2012). Review of trends from mobile learning studies: A meta-analysis. *Computers & Education*, 59(2), 817–827; Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W., and Robinson, N. (2006). Lost in knowledge translation: Time for a map? *Journal of Continuing Education in the Health Professions*, 26(1), 13–24. (also prominent in public health co-citation network): Petticrew, M., and Roberts, H. (2008). *Systematic reviews in the social sciences: A practical guide*. Hoboken: John Wiley & Sons; Akçayır, M., & Akçayır, G. (2017). Advantages and challenges associated with augmented reality for education: A systematic review of the literature. *Educational Research Review*, 20, 1–11; Hwang, G. J., and Tsai, C. C. (2011). Research trends in mobile and ubiquitous learning: A review of publications in selected journals from 2001 to 2010. *British Journal of Educational Technology*, 42(4), E65–E70.
- 42 Cairney, P., and Kippen, S. (2021). *The future of education equity policy in a COVID-19 world: A qualitative systematic review of lessons from education policymaking* [version 1; peer review: 1 approved with reservations]. <https://open-research-europe.ec.europa.eu/articles/1-78>. The authors identified two notable exceptions: Steiner-Khamsi, G. (2012). Understanding policy borrowing and lending: Building comparative policy studies. In G. Steiner-Khamsi and F. Waldow (Eds.), *World yearbook of education 2012 policy borrowing and lending in education*. Abingdon: Routledge; Rizvi, F., and Lingard, B. (2010). Globalizing educational policy. London: Routledge.

4.2 The nature of evidence for public health policy

The literature on evidence in public health addresses the complex nature of research evidence use in public health decision making. Public health researchers and policy communities have been concerned with how best to characterize research evidence, assess evidence quality, and define relevance for decision making.

4.2.1 A hierarchy of evidence?

The ways in which health and public health have aimed to address issues of quality and appropriateness in evidence for policy have changed over time. The same concern with the robustness of the evidence base for policy is reflected in international education research.⁴³ The first “hierarchy of evidence” model, now outdated but still influential, was built on EBM. Based on the characteristics of the study design, hierarchies of evidence commonly place systematic reviews at the top and case reports at the bottom. While hierarchies of evidence were useful for communicating to policy audiences that “not all evidence is equal”, the idea of an unchanging hierarchy has been criticized in many areas of social policy (a) for prioritizing internal validity over external validity (testing internal causality over generalizability); (b) failing to match research methods to research questions; (c) focusing on a specified and limited number of outcomes; and (d) failing to consider the policy relevance of research.⁴⁴ Specific critiques have increased regarding the injudicious use of Randomized Control Trials beyond the medical contexts they were designed to inform.⁴⁵ Questions have also been raised as to the extent to which any concept or hierarchy can be considered universal, particularly given decolonial critiques.⁴⁶ Rather than promoting one fixed hierarchy regardless of the context or subject matter, we present more nuanced ways of understanding the quality and appropriateness of research.

4.2.2 Appropriate, relevant and useful evidence

Increasingly, public health literature has paid attention to the appropriateness, relevance, and usefulness of evidence. For example, the “**horses for courses**” approach emphasizes choosing the most appropriate research methods to effectively answer the research question at hand, posed in context-sensitive ways.⁴⁷ This approach provides a typology or matrix to guide choices about evidence for use in policy, planning, and practice, such that qualitative methods and surveys may be more useful than RCTs or systematic reviews in answering questions of, for example, the salience or acceptability of an intervention. However, this approach continues to judge evidence quality primarily based on research design choice. This has prompted others to stress the importance of considering a broader set of **evidence principles** that take into account the crucial aspects of relevance and context, as well as addressing the values that underpin the assessment of evidence. Bond, a network for organizations working in international development, has produced a checklist of five evidence principles: voice and inclusion, appropriateness, triangulation, relative contribution of the intervention, and transparency.⁴⁸ In education, a small body of work has recently considered how best to appraise evidence claims, and provides a framework of the core issues when appraising evidence claims “fitness for purpose”.⁴⁹ Finally, new frameworks have emerged for informing choices specifically in **policy evaluation**. In an OECD publication, Golden (2020) outlines a framework for education policy evaluation that integrates institutional factors alongside

- 43 Huat, B. (2018). Evaluating the evidence in evidence-based policy and practice: Examples from systematic reviews of literature. *Research in Education*, 102(1), 37–61. <https://doi.org/10.1177/0034523717741915>; Snilstveit, B., Stevenson, J., Phillips, D., Vojtkova, M., Gallagher, E., Schmidt, T., Jobse, H., Geelen, M., Pastorello, M., and Eyers, J. (2015). *Interventions for improving learning outcomes and access to education in low- and middle- income countries: A systematic review*. 3ie Systematic Review 24. London: International Initiative for Impact Evaluation (3ie).
- 44 Parkhurst, J., and Abeyasinghe, S. (2016). What constitutes “good” evidence for public health and social policy-making? From hierarchies to appropriateness. *Social Epistemology: A Journal of Knowledge, Culture and Policy*, 30(5-6). <https://doi.org/10.1080/02691728.2016.1172365>
- 45 Cartwright, N. (2007). Are RCTs the gold standard? *Biosocieties*, 2, 11–20. doi: 10.1017/S1745855207005029; Deaton, A., and Cartwright, N. (2018). Understanding and misunderstanding randomized controlled trials. *Social Science and Medicine*, 210, 2–21. Doi: 10.1016/j.socscimed.2017.12.005; de Souza Leão, L., and Eyal, G. (2019). The rise of randomized controlled trials (RCTs) in international development in historical perspective. *Theory and Society*. doi: 10.1007/s11186-019-09352-6.
- 46 Faul, M. V., and Welply, O. (2021). Decolonizing education. *Global Challenges*, 10. <https://www.norrag.org/decolonising-education-by-norrag-executive-director-moira-v-faul-and-oakleigh-welply>
- 47 Examples include: Petticrew, M., and Roberts, H. (2003). Evidence, hierarchies, and typologies: horses for courses. *Journal of Epidemiology and Community Health*, 57(7), 527–529. <https://doi.org/10.1136/jech.57.7.52> (the cornerstone article of this approach); Moberg, J., et al. (2018). The GRADE Evidence to Decision (EtD) framework for health system and public health decisions. *Health Research Policy and Systems*, 16, 45 <https://doi.org/10.1186/s12961-018-0320-2>.
- 48 Nutley, S. Davies, H., and Hughes, J. (2019). Assessing and labelling evidence. In A. Boaz, H. Davies, A. Fraser, and S. Nutley (Eds.), *What works now? Evidence-informed policy and practice*. Bristol: Policy Press
- 49 Gough, D. (2021). Appraising evidence claims. *Review of Research in Education*, 45, 1–26; Petticrew, M., and Roberts, H. (2003). Evidence, hierarchies, and typologies: Horses for courses. *Journal of Epidemiology and Community Health*, 57(7), 527–529. <https://doi.org/10.1136/jech.57.7.52>.

the “who,” “when,” “what,” “how,” “for what,” and “what next” of policy evaluation processes.⁵⁰

In summary, within public health and many other areas of social policy, approaches to navigating the quality of evidence for policy, planning, and practice have evolved, moving from narrow hierarchies to broader methodological matrices to looser collections of underpinning principles. This process has demonstrated that “quality” is not universal but

rather negotiated and interacts with other factors. It also reflects a shift from “evidence-based” to “evidence-informed” policy-making, allowing for a more contextualized and realistic assessment of the role of evidence in decision making and the importance of other factors, such as values and political choices. Overall, a “dynamic assessment of evidence in the round is needed: its ‘fitness for purpose’ in the proposed context of use.”⁵¹

4.3 How evidence is used in public health policy

The COVID-19 public health emergency has highlighted the centrality of evidence use to global public health systems and exposed the complexity inherent in evidence use to the public view. The crisis has demanded evidence and policy formulation that exhibits methodological pluralism, adaptability and responsiveness. It has also demonstrated the complex interweaving of knowledge generation and use in systems characterized by inequity and the need for dialogue that incorporates research alongside other forms of evidence and expertise, including those affected by public health systems.⁵²

4.3.1 Understanding evidence use

Policy-making for population-level health is complex, and scholars have drawn on social science research to understand evidence use. In the KT field in public health, scholars have distinguished between instrumental, conceptual, and symbolic URE (building on the work of Weiss).⁵³ The majority of evidence in policy research addresses **instrumental use**, that is, the direct, tangible URE to bring about changes in behaviour or policy, planning, or practice. In addition, **conceptual use** refers to indirect and accumulated URE to bring about changes in attitudes, knowledge, and understanding. Finally, **symbolic use** refers to the more tactical URE to validate, legitimize, and sustain predetermined actions (what is sometimes called policy-based evidence). Reviews emphasize that the conceptual use of evidence is growing in importance.⁵⁴

4.3.2 Uses of evidence across the “policy cycle”

Traditionally, linear models of the policy cycle have divided the policy process into a series of stages, from a starting point at which policy-makers begin to think about a policy problem to an end point at which a policy has been implemented and policy-makers may consider its success.⁵⁵ However, our analysis of public health research systematic reviews reveal a more nuanced engagement with the use of evidence in policy. Public health policy involves decision making about public health programmes, policies, planning, and practice. Decision making is multiple; while public health policy is set by national governments and will affect institutions, organizations, and services in clear ways, both national and local policy contexts and programmes respond to varied influences at the global, regional, national, and local levels and to policies made by both the public and private sectors. Policies themselves may take multiple forms: rules, regulations, guidelines, laws, and agenda-setting, and they can involve multiple stakeholders from outside of public health, including the community sector. Acknowledging the interdependences between

50 Golden, G. (2020). *Education policy evaluation – Surveying the OECD landscape*. OECD Working Paper 236. Paris: OECD.

51 Nutley, S. Davies, H., and Hughes, J. (2019). Assessing and labelling evidence. In A. Boaz, H. Davies, A. Fraser, and S. Nutley (Eds.), *What works now? Evidence-informed policy and practice*. Bristol: Policy Press.

52 Lancaster, K., Rhodes, T., and Rosengarten, M. (2020). Making evidence and policy in public health emergencies: Lessons from COVID-19 for adaptive evidence-making and intervention. *Evidence & Policy*, 16(3), 477–490. doi: 10.1332/174426420X15913559981103

53 Masood, S., Kothari, A., and Regan, S. (2020). The use of research in public health policy: A systematic review. *Evidence and Policy*, 6(1), 7–43; Weiss, C. H. (1979). The many meanings of research utilization. *Public Administration Review*, 39(5), 426–31.

54 Masood, S., Kothari, A., and Regan, S. (2020). The use of research in public health policy: A systematic review. *Evidence and Policy*, 6(1), 7–43.

55 Cairney, P. (2013). *Policy concepts in 1000 words: The policy cycle and its stages*. <https://paulcairney.wordpress.com/2013/11/11/policy-concepts-in-1000-words-the-policy-cycle-and-its-stages>

diverse actors in public health decision making, a body of research has demonstrated that evidence-informed policy-making is messy and complex in practice.⁵⁶ This picture is further complicated by different cultures and capacities for evidence use in different sectors, geographies and political contexts of decision making.⁵⁷ In different contexts and at different times, research has shown that evidence may be used for certain tasks and not others. For example, some studies have found that evidence can be used conceptually for agenda-setting but then not at later stages. Research consistently emphasizes that context matters in evidence-informed decision making, geographical, historical and also at different times in the policy process.⁵⁸

4.3.3 The extent to which research evidence is used in public health policy

Quantifying the extent of evidence use by public health decision makers is challenging. However, reviews examined for this study (see Annex 9) emphasize that various types of research evidence are accessed and used to inform public health policy decisions. They also highlight that research evidence plays a role alongside many other forms of evidence, information, and expertise. Academic research has been found to be less commonly used than the other forms of evidence.⁵⁹ This reinforces the notion introduced earlier in the report (**Chapter 1**) that individuals who occupy the “fast lane” of decision making and the “slow lane” of fundamental knowledge production need help to reach each other in the middle lane and work together.

4.3.4 Barriers and enablers of evidence use

Multiple factors influence the use of evidence in decision making. The barriers and enablers of evidence-informed policy are well documented in public health research. What can be construed as a barrier can also be transformed into an enabler, for example, individuals’ level of knowledge, time available, and attitude toward change.⁶⁰ Other key factors include the characteristics of research (e.g. its policy relevance) and the capacities and skills of individuals (e.g., in identifying and using evidence, or establishing multisector interdisciplinary collaborations). However, there has been increasing recognition of the need to account for and address wider relationships (such as those with brokering organizations and academics) and institutional and political factors. These barriers and enablers have been addressed in both research and by INPs that aim to strengthen evidence use (see section 4.4 below).

4.3.5 The role of institutions, politics, and governance

Increasingly, public health scholarship drawing on policy theory has suggested that the use of research in policy-making can be enhanced where actors take into account the range of individuals who might use evidence, the institutions that influence actions, the role of values and ideas in influencing action, the role of policy networks in shaping processes, and the diversity of contexts (including histories) and events involved.⁶¹ Liverani et al. (2013) focus on the political systems, institutional factors, and political nature of public health itself in influencing evidence use. This necessitates a move away from purely technical recommendations to facilitate research uptake and from depoliticized notions of evidence and its use in decision making.⁶² For example, calling for policy to be “evidence based” might shift focus to simplistic solutions for which a more coherent body of evidence is available, as opposed to social and structural interventions that are more complex but potentially more effective in bringing about the desired change. Addressing the political nature of evidence production and use is critical, in research and in INPs.

56 Lancaster, K., Rhodes, T., and Rosengarten, M. (2020). Making evidence and policy in public health emergencies: Lessons from COVID-19 for adaptive evidence-making and intervention. *Evidence & Policy*, 16(3), 477–490. doi: 10.1332/174426420X15913559981103

57 Lorenc, T., Tyner, E. F., Petticrew, M., Duffy, S., Martineau, F. P., Phillips, G., and Lock, K. (2014). Cultures of evidence across policy sectors: Systematic review of qualitative evidence. *European Journal of Public Health*, 24(6), 1041–1047. doi: 10.1093/eurpub/cku038.

58 Masood, S., Kothari, A., and Regan, S. (2020). The use of research in public health policy: A systematic review. *Evidence and Policy*, 6(1), 7–43.

59 Masood, S., Kothari, A., and Regan, S. (2020). The use of research in public health policy: A systematic review. *Evidence and Policy*, 6(1), 7–43.

60 Masood, S., Kothari, A., and Regan, S. (2020). The use of research in public health policy: A systematic review. *Evidence and Policy*, 6(1), 7–43.

61 Liverani, M., Hawkins, B., and Parkhurst, J. O. (2013). Political and institutional influences on the use of evidence in public health policy. A systematic review. *PLoS One*, 8(10), e77404. doi: 10.1371/journal.pone.0077404

62 Liverani, M., Hawkins, B., and Parkhurst, J. O. (2013). Political and institutional influences on the use of evidence in public health policy. A systematic review. *PLoS One*, 8(10), e77404. doi: 10.1371/journal.pone.0077404

4.4 Fixing the broken feedback loop between evidence producers and users

4.4.1 Synthesizing and disseminating research (linear approaches)

INPs in public health aim to produce, share, and disseminate policy-relevant research in different ways. This includes the development of responsive evidence synthesis services and dissemination platforms, such as the Center for Rapid Evidence Synthesis (ACRES) at Makerere University and the Uganda Clearinghouse for Health Policy and Systems Research.⁶³ It has also included investments in research capacity at the regional and international levels, such as in the INDEPTH Network in Ghana, which disseminates synthesized evidence in policy documents, drawing on data gathered from its international network of research centers.⁶⁴ One of the most prominent networks for evidence dissemination globally in public health is EVIPNet,⁶⁵ which undertakes rapid evidence synthesis and dissemination as part of a wider suite of activities. Reviews of the evidence from public health have emphasized that passive dissemination strategies (e.g., online portals) are not sufficient to improve evidence use in policy. Active dissemination strategies, which are responsive to policy and involve tailored communication and messaging, are more likely to improve both knowledge and practice.⁶⁶

4.4.2 Collaborating and building skills for URE (relational approaches)

The creation of collaboration spaces across public health research, policy, and practice has aimed to support a more joined-up understanding, agenda-setting, and decision making about the production and use of evidence in policy. Collaborative processes may form part of knowledge production, for example, in response to COVID-19, coproduction processes were accelerated in Germany, Hong Kong SAR, Lebanon,

and Pakistan to promote research uptake.⁶⁷ Spaces for engagement and consultation take different forms. At the National Institute for Health and Clinical Excellence (NICE) in the UK, health and care stakeholders, professionals, and patients engage in a structured consultation process to arrive at research priorities for systematic reviews and generate health system guidance, recommendations, and information services. Other examples are networks, deliberative forums, and dialogues that create spaces where research producers and users can learn from each other. An example here is EVIPNet's Safe Haven dialogues, in which policy-makers, researchers, and civil society stakeholders aim to stimulate context-specific, evidence-informed local action. Systematic review evidence emphasizes that relationship building can strengthen evidence use in policy but that these INPs require organizational and systemic support and resourcing.⁶⁸

Several INPs in public health have aimed to build the skills and capacity of policy-makers to use evidence and, on the other hand, the skills of researchers to work with policy. The international Informed Healthy Choices Network, for example, provides training for professionals, educators, and parents “to think critically about health claims and make informed choices.”⁶⁹ The Network is led by a multidisciplinary team with backgrounds in research, public health, design, education, technology, and communication. The US Center for Child Health Policy and Advocacy, on the other hand, trains researchers to advocate in local policy environments.⁷⁰ Systematic review evidence suggests that opportunities for professional development and capacity-building, and improved skills and expertise in identifying and using a combination of different types of evidence, is a key enabler for improving evidence use.⁷¹

63 ACRES. (2019). *ACRES – The Centre for Rapid Evidence Synthesis*. <https://acres.or.ug>

64 INDEPTH. (n.d.). *INDEPTH network*. <http://www.indepth-network.org>

65 EVIPNet. (n.d.). *EVIPNet: Evidence-informed Policy Network*. <https://www.who.int/initiatives/evidence-informed-policy-network>

66 LaRocca, R., Yost, J., Dobbins, M., Ciliska, D. and Butt, M. (2013). The effectiveness of knowledge translation strategies used in public health: A systematic review. *BMC Public Health*, 12(1), 1–15 doi: 10.1186/1471-2458-12-751; Masood, S., Kothari, A., and Regan, S. (2020). The use of research in public health policy: A systematic review. *Evidence and Policy*, 6(1), 7–43; Best, A., and Holmes, B. (2010). Systems thinking, knowledge and action: Towards better models and methods. *Evidence & Policy: A Journal of Research, Debate and Practice*, 6(2), 145–159.

67 Marten, R., et al. (2021). Co-producing the COVID-19 response in Germany, Hong Kong, Lebanon, and Pakistan. *BMJ*, 372, n243. doi: 10.1136/bmj.n243

68 Masood, S., Kothari, A., and Regan, S. (2020). The use of research in public health policy: A systematic review. *Evidence and Policy*, 6(1), 7–43.

69 Informed Healthy Choices. (n.d.). *Informed Healthy Choices*. <https://www.informedhealthchoices.org>

70 Center for Child Health Policy and Advocacy. (n.d.). *Center for Child Health Policy and Advocacy*. <https://www.texaschildrens.org/departments/center-child-health-policy-and-advocacy>

71 LaRocca, R., Yost, J., Dobbins, M., Ciliska, D. and Butt, M. (2013). The effectiveness of knowledge translation strategies used in public health: A systematic review. *BMC Public Health*, 12(1), 1–15 doi: 10.1186/1471-2458-12-751; Masood, S., Kothari, A., and Regan, S. (2020). The use of research in public health policy: A systematic review. *Evidence and Policy*, 6(1), 7–43.

4.4.3 Building enabling systems (systemic approaches)

Increasingly, INPs in public health have aimed to develop multiarmed interventions to support and improve organizational capacities and the functioning of wider evidence ecosystems. Examples include the International Association of National Public Health Institutes (IANPHI), which aims to build public health capacity and capabilities by connecting, developing, and strengthening national public health institutes and governments worldwide.⁷²

This provides a good example of how systems approaches can build on and strengthen existing infrastructure. The Public Health Foundation India (PHFI) undertakes capacity-building in ways that address the needs and context of India's public health research and policy systems (further examples of INPs that carry out relational and systemic activities are provided in Annex 11).⁷³ In the UK, the Policy Research Units (PRUs) support short- and long- term policy development, facilitated by government staff based within research units.

4.5 Fixing the broken loop between global and national/local

4.5.1 The global architecture of public health INPs: “top down” and “bottom up”

The global architecture of public health is both uneven and contested. Increasingly, a wide range of actors play a role in the production and use of evidence in policy-making at the local, national, regional, international, and global levels. In each of these spheres, different accounts of what evidence is the most useful are contested. Stakeholders in the use of evidence for public health policy include non-governmental organizations (NGOs); international organizations; universities and research institutes; private and public funders; governments; and policy and practice bodies of different kinds. Although many challenges exist across this architecture, a degree of vertical connectivity between the “bottom” and “top” has been critical for facilitating productive exchange, research, and decision making about improving evidence use in policy.

Globally, the WHO has played a key role in setting standards and norms around evidence use, reflecting a contested and changing set of ideas around the kinds of knowledge that are valuable in public health. Alongside the WHO, private donors such as the Bill and Melinda Gates Foundation (BMGF) have played a role in shaping global perspectives about knowledge production and evidence. Importantly for appropriate evidence use, the WHO is also linked

to national public health institutes, including through the WHO Collaborating Centers (WCCs) and their global networks aiming to “assist, coordinate and make use of the activities of existing institutions.”⁷⁴ They aim to bring about a “mutual benefit,” “with WHO gaining access to and convening operational expertise to support delivery, research and policy development and host institutions enhancing their reputations through the WHO affiliation and extended networking.”⁷⁵ We return to the implications of this for UNESCO and the GCM in our recommendations.

Nationally, public health functions are provided by a range of organizations, policy bodies, and services typically sitting under the oversight of national Ministries of Health. National public health institutes are frequently autonomous from ministries of health, which each have different levels of authority to regulate or facilitate the delivery of public health policy and services, as well as playing a role in policy formulation.⁷⁶ The national research and policy landscape is highly uneven. For example, up to 15 countries in the WHO Africa region do not have dedicated institutes of public health, and newer institutes may have different capacities than those that are more mature.⁷⁷

72 IANPHI. (n.d.). *IANPHI*. <https://ianphi.org/index.html>

73 Public Health Foundation India (PHFI). (n.d.). *Public Health Foundation India (PHFI)*. <https://phfi.org>

74 World Health Organization. (n.d.). *Collaborating centers*. <https://www.who.int/about/partnerships/collaborating-centres>

75 Jakab, Z., et al. (2021). Building the evidence base for global health policy: The need to strengthen institutional networks, geographical representation and global collaboration. *BMJ Global Health*, 6, e006852. doi: 10.1136/bmjgh-2021-006852

76 Liverani, M., Chheng, K., and Parkhurst, J. (2018). The making of evidence-informed health policy in Cambodia: Knowledge, institutions and processes. *BMJ Global Health*, 3, e000652; Jakab, Z., et al. (2021). Building the evidence base for global health policy: The need to strengthen institutional networks, geographical representation and global collaboration. *BMJ Global Health*, 6, e006852. doi: 10.1136/bmjgh-2021-006852

77 Liverani, M., Chheng, K., and Parkhurst, J. (2018). The making of evidence-informed health policy in Cambodia: Knowledge, institutions and processes. *BMJ Global Health*, 3, e00065.

At the regional level, organizations such as the European CDC (Center for Disease Prevention and Control) and the African Union's Africa CDC were created to support national public health institutes and influence national public health policy. In addition to regional bodies, a wide number of intermediaries, stakeholders, and brokerage organizations play a role in the public health evidence that is incorporated into policy. The IANPHI, for example, functions as a "network of networks," connecting national public health institutes, building capacity and brokering knowledge on policy-relevant and intersectoral issues.⁷⁸ These approaches represent different ways of strengthening existing infrastructure through multi-stakeholder collaboration.

Thus, alongside this "top-down" architecture exists complex "bottom-up" public health structures in which local actors exercise differential decision-making power and multiple stakeholders contribute to decision making and the production of relevant information and evidence, with more or less access to funding. Local governments and services play varied roles, depending, in part, on the distribution of funding and decision-making power. In many contexts around the globe, a growing role is played by consultants in providing and synthesizing evidence and insights. NGOs, too, play significant roles in communities, often working across various areas of public health service provision.⁷⁹ At different levels, knowledge production, dissemination, and brokering is undertaken by organizations with varied relationships to government, academia, and the private sector. Examples of this variety include university institutes (such as the National University Health System (NUHS) in Singapore), independent research institutes (such as the Africa Health Research Institute (AHRI) in South Africa), arm's-length institutes (such as Brazil's Fiocruz), networks (such as the US-based Global Network for Academic Public Health), and think tanks (such as the UK's Knowledge Action Change).

Globally, public health is a multidisciplinary space. However, across different topics and environments, both research and policy contexts are more or less open to input from a range of disciplines. In Asia, public health research has tended to be dominated by medical perspectives, epidemiology, and biology. In contrast, the UK has a long history of research, practice, and policy-making being rooted in collaboration between multidisciplinary teams (although this is increasingly under funding and political pressure). There exist profound geographical disparities in public health capacities both "within and across countries and regions."⁸⁰ COVID-19 has posed an additional challenge to the balance of actors' responsibilities within global public health, as well as highlighting the need to critically re-examine sources of global knowledge compared with local, contextualized knowledge. Trends toward more localized and context-specific knowledge were seen in February 2020, when the African Union's Africa CDC with WHO Regional Office for Africa (WHO AFRO) led efforts to pool cross-sectoral resources, quickly involving national and international public and private stakeholders in the COVID-19 policy response.⁸¹

In the multistakeholder environment of public health, in which actors at different levels may hold different conceptions of what evidence is relevant for policy, global inequalities interact in complex ways with knowledge production and mobilization. Health agendas internationally represent "different ethical-political proposals that define the way health inequities are understood and proposed to be transformed."⁸² Public health researchers and practitioners in the Global South continue to highlight the need to interrogate the global knowledge production architecture and localize the sharing and use of research data to improve public health.⁸³

78 IANPHI. (n.d.). *IANPHI*. <https://ianphi.org/index.html>

79 Gaist, P. (2010). *Igniting the power of community: The role of CBOs and NGOs in global public health*. New York: Springer-Verlag

80 Jakab, Z., et al. (2021). Building the evidence base for global health policy: The need to strengthen institutional networks, geographical representation and global collaboration. *BMJ Global Health*, 6, e006852. doi: 10.1136/bmjgh-2021-006852

81 Jakab, Z., et al. (2021). Building the evidence base for global health policy: The need to strengthen institutional networks, geographical representation and global collaboration. *BMJ Global Health*, 6, e006852. doi: 10.1136/bmjgh-2021-006852

82 Borde, E., and Hernández, M. (2019). Revisiting the social determinants of health agenda from the Global South. *Global Public Health*, 14(6-7), 847-862. doi: 10.1080/17441692.2018.1551913

83 Anane-Sarpong, E., Wangmo, T., Sankoh, O., Tanner, M., and Elger, B. S. (2018). Application of ethical principles to research using public health data in the Global South: Perspectives from Africa. *Developing World Bioethics*, 18(2), 98-108. doi: 10.1111/dewb.12138

4.6 Key learning for the coordination of evidence production and use for global education policy

Table 4.1 summarizes some lessons that may be drawn for the education sector based on the findings of the comparator case study.

Table 4.1 Recommendations based on the lessons learned from the comparator case		
	Recommendations	Responsible
1	<p>Advocate for more and better evidence for policy and systems that support the use of evidence in policy, with consistent, predictable, and long-term funding, the involvement of local and global stakeholders, and coproduction between researchers, decision makers, and those affected by their decisions.</p> <p>Example activity GCM to have develop a clear mission to invest in linear, relational and systemic mechanisms to improve evidence use, supported by a dedicated funding streams and involving all relevant stakeholders.</p>	UNESCO GCM and the funders of research and education, research producers, and users
2	<p>Create coordination spaces both horizontally within global, regional, national, and local levels and vertically between these levels. Build capacity around the production and use of evidence for policy across and between these levels.</p> <p>Example activity Provide networking, learning and knowledge exchange opportunities at national and regional levels, provide tailored capacity building opportunities at multiple levels.</p>	UNESCO GCM
3	<p>Existing INPs tend to focus on one-side of the evidence-policy interface, working with researchers or policy-makers, but not both at the same time. We recommend improving the collaboration spaces between these two “worlds” by improving and increasing engagement mechanisms.</p> <p>Example activity UNESCO-GCM Education Policy Fellow and/or Intern positions to be created at regional level. Other examples of engagement mechanisms include: knowledge exchange programmes and professional development schemes (such as secondments, fellowships or pairing schemes); the provision of networking opportunities; supporting research-policy partnerships and knowledge cocreation.</p>	Funders, universities, and public administrations
4	<p>More initiatives are needed that build an enabling environment, for example, by rewarding researchers and policy-makers who collaborate and investing in brokerage organization and activities.</p> <p>Example activity SDG4 thematic awards for policy impact for researchers, awarded by UNESCO-GCM. Policy Fellowships that place international education policy-makers in research institutions of global excellence.</p>	Funders, universities, and public administrations
5	<p>It is critical to invest in more policy-relevant evidence production, including systematic reviewing and evidence synthesis capacity. Here, education can draw on the techniques used in public health (e.g., systematic reviewing, engagement with policy theory and knowledge translation), while also learning from the lessons witnessed in that field. Critically, many types of evidence are needed to inform policy, and dissemination is most effective when it is active and accompanied by relationship-building and systemic support.</p> <p>Example activity Establish “Evidence for SDG4” centres, in partnership with universities and research institutes and other relevant stakeholders.</p>	Funders
6	<p>The review recommends that education researchers diversify the sources and frameworks they employ to encompass policy theory and knowledge transfer. The use of policy frameworks should not be done naively, however. Education can leapfrog certain setbacks through the lessons learned by public health.</p> <p>Example activity Establish “Evidence for SDG4” centres, in partnership with universities and research institutes and other relevant stakeholders.</p>	Researchers
7	<p>Global inequities in knowledge production and use should be addressed directly to ensure the use of context-specific insights and the systemic inclusion of marginalized scholars and policy-makers in synthesis and networks.</p> <p>Example activity GCM and regional hubs to establish “Knowledge equity for SDG4” steering groups.</p>	Research producers and users in policy, planning, and practice

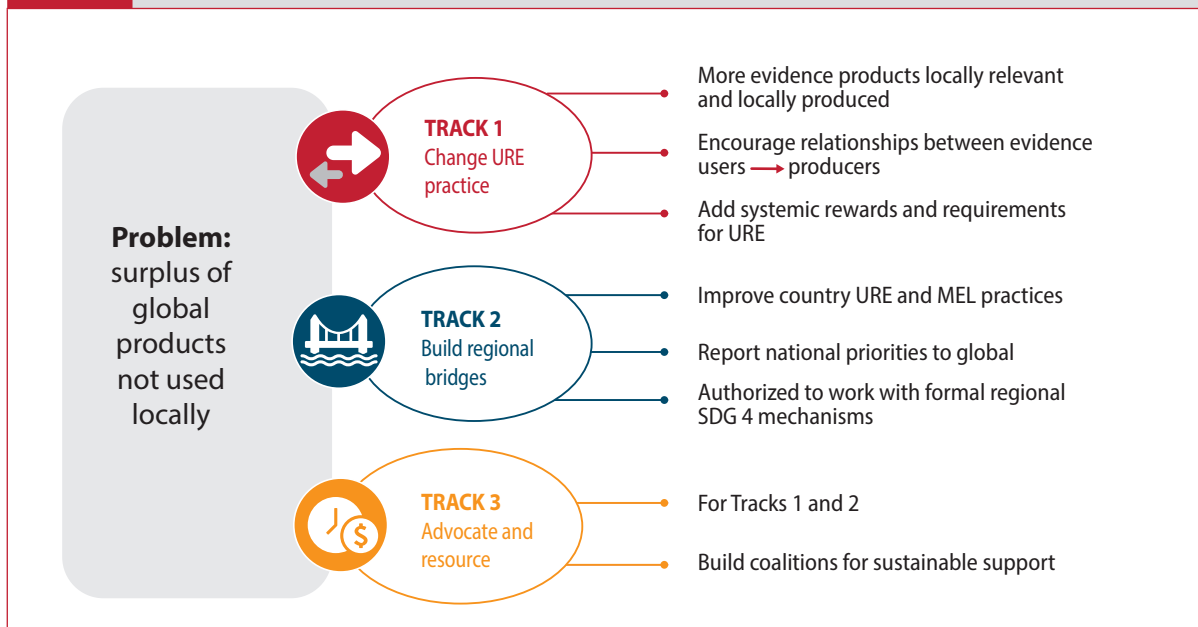
5. Strategic recommendations and roadmap

The current approach to improving the use of research and evidence (URE) is not working. All countries (South and North) need to implement all pathways to effective URE, supported by regional hubs and global, regional and national advocacy and resource mobilization.

This chapter details the recommendations arising from the analysis of the evidence of how decision making based on evidence can best be supported, and the findings of the original research conducted for this study. All recommendations are critical for the GCM, its members and UNESCO to consider in order to achieve the objectives of FA1: to further promote URE and support the capacity of national actors in URE (including through South-South collaboration),⁸⁴ by overcoming the errors made in the past. To achieve FA1, it is mission-critical to implement all recommendations in order to close these broken feedback loops by (i) changing URE practices, (ii) building regional bridges between global and local, and (iii) advocating and resourcing these changes.

All actors at all levels need to understand, advocate and undertake more effective URE practices recommended in Track 1. Track 2 build regional hubs to improve effective URE practices in country and to communicate local results and priorities to the global level. Track 3 builds advocacy and resource mobilization coalitions to support the implementation of Tracks 1 and 2.

Figure 5.1 Summary of problem statement and recommendations



5.1 Change URE practices to close the broken feedback loop between evidence production and use

Track 1 recommends changing existing URE practices to move beyond global evidence syntheses by improving and increasing:

1. Effective and **locally-relevant evidence** and evidence synthesis;
2. **Relationships** between evidence users and producers;
3. Add **systemic rewards and requirements** in countries, regions, global.

5.1.1 Support all three pathways to effective URE: relevant products, relationships and systems

In order for GCM and its members to provide global leadership for effective URE for SDG4, it is vital for them to have a **shared understanding** of all three of these pathways to effectively support the use of research and evidence in policy, planning and practice. While much time and resources have been spent on global evidence synthesis, more focus is simultaneously needed on ensuring locally relevant evidence production; building relationships between knowledge producers and users; and adding systems rewards and requirements that enable URE. **All three of these pathways** need to be present simultaneously to ensure effective use of research and evidence in policy, planning and practice.

5.1.1.1 Products

Co-create and disseminate **locally produced research that is relevant to country needs and priorities** and in underserved SDG 4 targets, including policy briefs and factsheets, evidence syntheses and blogs. A focus on products also requires **making or responding to formal institutional requests** for evidence, such as to Committees or to individual decision makers. Finally, **access to research** must be facilitated, e.g., through Open Access processes (Table 5.1 § 1-3).

5.1.1.2 Relationships

Relational approaches focus on **building networking skills** in both decision makers and researchers, and investing in **partnerships between evidence users and producers** (Table 5.1 § 4-6).

5.1.1.3 Systemic changes (enabling environment)

Building an enabling environment for URE requires designing system **rewards and requirements** for undertaking activities for impact, knowledge exchange, or evidence use; and creating and embedding

infrastructure and job posts focused on URE inside research and policy institutions (Table 5.1 § 7-9).

5.1.2 Provide systemic leadership

In order to set national, regional and global URE systems on a productive path, in 2022 the GCM, its members and UNESCO should take on the systems leadership role at the global level (described in Table 5.1 § 10, 11,12). Subsequently, in 2023, the Regional URE Hubs will take on a systems leadership role for country URE systems.

Systems leadership requires **attending to the systemic characteristics** of evidence production and use and **supporting all relevant actors and institutions** (in research, policy, or funding) towards cooperating to **strengthen the URE “ecosystem”** by connecting activities and initiatives. URE systems leaders address and influence those who produce evidence, those who make policy, what evidence “counts,” and those who access and participate in relational and systemic URE work. The GCE, its members and UNESCO should support all actors to improve and increase evidence syntheses, relationships between users and producers, and build enabling systems.

To ensure the effective synthesis and relevance of evidence alongside building relationships and enabling systems requires the GCM and its members to take on the role of **systems leadership at the global level** in 2022. The actions associated with this systems leadership are:

1. Strategic leadership of URE processes and content (particularly advocacy and resource mobilisation for (a) evidence synthesis and relationships and systems, and (b) the localisation and relevance of URE systems, priorities and knowledge)

2. Build responsive decentralised URE systems through coordination mechanisms and supporting cooperation and complementarity.

3. Embed learning through monitoring, evaluation and learning processes and adaptive management.⁸⁵

Underpinning these actions to implement effective URE, would be concrete examples of **good practices in URE** in countries in different regions and also cases of **how to support countries** to implement these good practices.

5.1.3 Build case studies of good practice

In the first instance, a number of INPs identified in this study should be written up as longer stand-alone case studies, supported by the GCM and its members, members of the coalition for URE (see 5.3) and the URE secondee/global liaison (see 5.3.4). Examples include Africa Evidence Network, OECD PISA-D peer learning processes, and GPE KIX, to mention a few. These case studies can be used to **illustrate good practices and build knowledge** of URE for education. Having these case studies would then incite further examples to be volunteered, vetted and produced.

5.1.4 Co-produce URE support manual and results frameworks with regional URE INPs

The next step is for the GCM and its members, Regional URE Hubs and liaison to use these cases (and others) to co-produce support materials for URE. It is critical to build results frameworks, theories of change and monitoring, evaluation and learning (MEL) for URE into the system from the outset. Through these national-regional-global MEL analysis and reporting systems, GCM and its members will be able to demonstrate and communicate impact of URE for education to global fora (such as HLSC and HLPF).

In 2023, the regional hubs will complement these global activities by providing **systems leadership at the regional level**.

Changing existing URE practices to move beyond global evidence syntheses to improve and increase: This set of recommendations derives from the findings of the original research conducted for this study as to how to generate a mechanism that **brings global and national levels into effective interaction** with each other in order to better support effective URE. We recommend that the

Table 5.1 Actions to transform URE practice in three pathways

Pathway to effective URE	Specifications
PRODUCTS	<p>5.1.1 Co-produce and disseminate research, relevant to country needs and priorities and in underserved SDG 4 targets</p> <ul style="list-style-type: none"> ▶ Policy briefs and factsheets ▶ Evidence syntheses and 'what works' summaries ▶ Online evidence libraries and platforms ▶ Blogs, web features, data viz
	<p>5.1.2 Formal institutional requests for evidence</p> <ul style="list-style-type: none"> ▶ Advisory bodies or mechanisms ▶ Consultations or calls for evidence ▶ Policymaker evidence services within government (e.g. Parliamentary Research Services and Libraries)
	<p>5.1.3 Facilitate access to research</p> <ul style="list-style-type: none"> ▶ Research commissioning services and support ▶ Advice or information services for policymakers

⁸⁵ Also cited as key to the success of UNESCO's Sexual and Reproductive Health and Rights (SRHR) education work, reported in UNESCO Internal Oversight Service (IOS), Evaluation Office (2019) *Evaluation of the future of UNESCO's education sector: The normative vs. operational role in the context of Agenda 2030*, Paris: UNESCO, p.22.

Pathway to effective URE	Specifications
RELATIONSHIPS	<p>5.1.4 Build decision-maker skills</p> <ul style="list-style-type: none"> ▶ Training for decision-makers on evidence and/or on URE ▶ Policy Fellowships or placements ▶ Learning events (e.g. events with structured learning component)
	<p>5.1.5 Build researcher skills</p> <ul style="list-style-type: none"> ▶ Training for researchers on policy or policy engagement ▶ Fellowship or secondment opportunities in government ▶ Research services and resources that support engagement
	<p>5.1.6 Build partnerships between evidence users and producers</p> <ul style="list-style-type: none"> ▶ Sustained networking or knowledge exchange ▶ Long-term partnerships or collaborative working ▶ Teaching and learning in partnership ▶ URE partnerships between different stakeholder groups, who access different types of evidence, e.g., government, civil society, academia, philanthropy, etc.
SYSTEMS (enabling environment)	<p>5.1.7 Leadership for evidence in policy</p> <ul style="list-style-type: none"> ▶ Training and capacity building for URE leadership skills (within each level, and then global-regional, regional-national) ▶ Advocacy (e.g. for evidence use; of specific evidence or research findings; on the role, nature and use of evidence)
	<p>5.1.8 Reward impact, knowledge exchange, or evidence use</p> <ul style="list-style-type: none"> ▶ Carrots: Prizes, rewards, awards from professionally relevant bodies (journals, policy institutes, funders) ▶ Sticks: Requirements imposed for using evidence in policy or producing policy-relevant evidence by professionally relevant bodies (government ministries, funders)
	<p>5.1.9 Create and embed infrastructure and jobs</p> <ul style="list-style-type: none"> ▶ Infrastructure for sustained research-policy engagement (e.g. national/departmental URE planning; capacity building) ▶ Posts – teams and jobs in URE engagement to connect and coordinate “supply and demand” (e.g. evidence teams, boundary spanners, intermediaries, knowledge brokers)
SYSTEMIC LEADERSHIP 2022 Global-regional: GCM & members 2023 Regional-national: URE Hubs	<p>5.1.10 Strategic leadership</p> <ul style="list-style-type: none"> ▶ Articulate goals: support URE at global, regional and national levels by promoting linear, relational and systemic approaches ▶ Address role and nature of evidence and evidence use in policy (e.g., knowledge equity, local and national priorities)
	<p>5.1.11 Systems responsiveness</p> <ul style="list-style-type: none"> ▶ Mechanisms for coordinating others who support URE systems ▶ Activities that support cooperation and complementarity, not competition, within and between organizations and levels of the broader “ecosystem” ▶ Adaptive and strategic resource mobilisation and investment in decentralized URE systems
	<p>5.1.12 Embed learning</p> <ul style="list-style-type: none"> ▶ MEL on systemic outcomes and indicators ▶ Adaptive management

5.2 Build regional bridges to close the broken feedback loop between global production and local use and relevance

Track 2 recommends building regional bridges between global and local levels support national URE units, and connect them to international organizations and agendas through:

1. Capacity building for **country URE and MEL**;
2. Report **national results and priorities** to global level;
3. Authorized by UNESCO and other GCM members to **work with formal regional mechanisms** (e.g., Ministerials and technical working groups).

This report recommends the regionalization of URE support. Regional URE Hubs communicate the global priority on FA1 to countries in ways that are relevant and useful to country actors, and communicate the results of this to the global level. **Country support** for effective URE practices (Track 1) from the Regional Hub is central to any successful change in URE. The regional level also support countries to build Monitoring, Evaluation and Learning (MEL) systems in order for countries to report their URE results to the Regional URE hub and then be supported to learn from that. The Regional URE Hubs then systematically **report these results up to the global level** in a standardized way, that reflects the work and change that is happening at national and regional levels. This will also enable a set of **nationally relevant rolling set of focus areas** to accelerate progress towards SDG 4, which should inform future GCM and UNESCO priority setting.⁸⁶

We set out a process and approach that starts from identifying a regional expert or group that already has a track record in supporting countries in all three pathways to effective URE (linear/products, relational and systemic). Being nominated as Regional URE hubs, gives these expert actors the authority to (a) engage in SDG 4 regional processes,⁸⁷ and (b) work with additional countries, focusing on the relevant institutions (universities, ministries, thinktanks) in different countries. These Regional URE Hubs build on their existing expertise and experience to **provide country support and regional leadership** in effective URE. This mechanism closes the feedback loop from local to global by **reporting national results in URE** and

5.2.1 Identify already effective URE regional INPs to support as hubs in a collaborative process

Start with an individual or group that has a track record in this improving FA1 at the regional level. On the basis of this report, the secondee in 2022 should **identify existing regional INPs** that have proven expertise in **understanding the importance of all three pathways** of effective URE and **experience in supporting countries to work effectively in URE** across evidence products, relationships and systems building and **nominate them as Regional URE Hubs** (for example, the Africa Evidence Network). This group is given authority and legitimacy by their selection as Regional URE Hub to expand and extend their current successful URE support to countries.

The selection of hubs and members of hubs should be a **collaborative, not competitive, process**. Rather than pitting URE actors against each other, the GCM should use this opportunity to nurture collaborative working from the outset. These Regional URE Hubs will be plugged into existing regional SDG 4 coordination mechanisms; multi-stakeholder bodies that maintain a strong link to national governments. The regional URE hubs should be at the core of these regional mechanisms, with links to other regional hubs, IOs and INPs, and linked to the HLSC. It is crucial that the process **start from existing effective URE initiatives that are well networked in the region**, which can be hosted in regional mechanisms. Two recent reports highlight the need for UNESCO to strengthen the uneven relevance and effectiveness of existing regional coordination models, therefore our recommendation is to start from effective regional URE actors, which

⁸⁶ The need for regionalisation has been recognised by several bilateral donors, intergovernmental organizations, and international foundations, who have moved to decentralise their operations, reduce the resources and staff at their headquarters, and channel more funds into their infrastructure at regional and country levels: Agence Française de Développement (AFD), the Mastercard Foundation, the Swiss Agency for Development and Cooperation (SDC), the U.S. Agency for International Development (USAID), UNESCO, The United Nations Children's Fund (UNICEF) and the World Bank are just a few of the organizations that committed to more country-level participation, greater local expertise, and in some cases, also more local decision-making.

⁸⁷ Including, but not limited to UNESCO regional convening bodies, or other SDG 4 coordination groups, or partners and networks relevant to the region e.g., OECD in EU and North America; UNESCO in Asia and the Pacific or Latin America, among others.

can be hosted by (but not held hostage by) existing regional SDG 4 mechanisms.⁸⁸ Rather than duplicating or setting themselves up in competition with the vast number of existing initiatives, networks, or platforms, the Regional URE Hubs should be supported to become sites for synergies and collaboration.

5.2.2 URE relevant to national contexts and needs

Global INPs keep producing a great number of products (syntheses of what works, analyses of best practices, and pilot studies of innovations that pass the proof of concept) with the expectation that local experts subsequently adopt and adapt them to their country context. The expectations are proven to be built on faulty premises: **abundant evidence at the global level may not be available, well-coordinated or relevant** to regional or national needs. In addition to these products, there is also **little to no evidence of systematic support to build relationships between evidence producers and users, nor of efforts to strengthen URE systems** for education.

5.2.3 Strengthen national URE ecosystems

In order to move from an existing focus on short-term, externally funded pilot projects to systemic impact, Regional URE Hubs should be empowered to **fund national URE infrastructure** and institutions e.g., posts or units in Ministries of Education or Finance, or in universities/thinktanks. They should also advocate and provide training for national **URE systems leadership and advocacy**. Professionally relevant bodies (such as funders, ministries, policy or research institutes and networks) should provide **rewards and requirements** to support decision makers in improving their URE and researchers to enhance their relevance to decision makers.

5.2.4 Differentiated support across whole SDG 4 agenda

These Hubs will support work to **advance all seven SDG 4 targets and three themes**, with different balance between the different targets depending on country need and context, thus providing “support and guidance

to localize SDG targets and interpret global targets in their national context.”⁸⁹

5.2.5 Horizontal coordination of actors for URE

Regional URE Hubs should **facilitate regional exchanges** of knowledge, expertise and experience; **provide technical URE advice** to national URE actors. As **hubs for regional intercountry peer learning and exchange**, Regional URE Hubs forge linkages between national policy analysts, makers, planners, and implementers working on similar challenges in their education system and facilitate opportunities for peer learning and exchange (in a similar way to the OECD PISA-D’s peer learning mechanism). The communities of practice are deliverable oriented, that is, they will be supported by the hub to develop **useful and relevant knowledge products** for their national educational systems (scoping studies, evaluations, implementation plans, etc.), nurture **effective relationships** between evidence producers and users, and **build national systems that enable the use of evidence** (see [Table 5.2](#)).

5.2.6 Vertical coordination of actors for URE

These Regional URE Hubs will address existing communication difficulties between national, regional and global levels and provide coordination functions from national to global levels. They will **support monitoring and learning** of progress in URE work at national and regional levels.⁹⁰ Strengthened capacity in MEL alongside URE would enable the GCM and its members to demonstrate and communicate impact of URE for education more effectively, as well as building stronger relationships for advocacy and resource mobilization (see Section 5.3 below). These Hubs will also provide the strategic leadership for national URE systems that the GCM provides to the regions, **articulating regional URE system goals, responding to system needs** in countries in their region, and **embedding learning from and monitoring of strengthening URE** to demonstrate progress and impact to education stakeholders, funders and decision makers.

88 ICON-INSTITUTE GmbH & Co. KG Consulting Gruppe (2020) *Strategic guidance for UNESCO’s global and regional SDG 4-Education 2030 coordination and leadership*, Paris: UNESCO; UNESCO Internal Oversight Service (IOS), Evaluation Office (2019) *Evaluation of the future of UNESCO’s education sector: The normative vs. operational role in the context of Agenda 2030*, Paris: UNESCO.

89 ICON-INSTITUTE GmbH & Co. KG Consulting Gruppe (2020) *Strategic guidance for UNESCO’s global and regional SDG 4-Education 2030 coordination and leadership*, Paris: UNESCO, p.2.

90 Reflected in UNESCO Internal Oversight Service (IOS), Evaluation Office’s ambitions for regional bodies, expressed in its 2019 *Evaluation of the future of UNESCO’s education sector: The normative vs. operational role in the context of Agenda 2030*, Paris: UNESCO.

Table 5.2 Actions to link global with local through regional hubs

Pathway to effective URE	Specific actions
Regional hubs support national URE systems	<p>5.2.1. URE relevant to national contexts and needs</p> <ul style="list-style-type: none"> ▶ Increase relevance of evidence sources to country needs and priorities ▶ URE support relevant to country priorities ▶ Provide financing for URE support in national and local languages, e.g., translation and interpretation of evidence and URE resources, and capacity building in URE for speakers of local and minority languages <p>5.2.2. Strengthen national URE ecosystems</p> <ul style="list-style-type: none"> ▶ Move from a focus on short-term, externally funded pilot projects to systemic impact ▶ Fund national URE institutions e.g., units in MoE/MoF or in universities/thinktanks ▶ Advocate carrots and sticks for URE systems <p>5.2.3. Differentiated support across whole SDG 4 agenda</p> <ul style="list-style-type: none"> ▶ Support URE in all 7 SDG targets and 3 themes, with emphasis depending on country needs
Regional hubs coordinate: national, regional and to global	<p>5.2.4. Horizontal coordination in countries and between hubs</p> <ul style="list-style-type: none"> ▶ With other URE hubs ▶ Between national actors ▶ Connect countries, subregions and regions ▶ Build cooperative and collaborative mechanisms, e.g., Communities of Practice, Networks, Peer learning and co-production <p>5.2.5. Vertical coordination national-regional-global</p> <ul style="list-style-type: none"> ▶ Vertical coordination national-regional ▶ Vertical reporting regional-global: GCM HLSC, IAG, HLPF, etc. ▶ Support and collate national MEL for URE ▶ Report national results to global mechanisms ▶ Make recommendations to global level for further support to national URE systems
Global (GCM and its members)	<p>5.2.6. Identify regional INPs to support as hubs</p> <ul style="list-style-type: none"> ▶ Some regional INPs already supporting URE in their regions or countries in their regions were identified in this study: e.g., AEN, CLADE. ▶ Others may exist that function well for URE, but were not nominated: e.g., UNESCO Chairs, UNITWIN, UNEVOC, TTF, Regional Centers of Expertise in ESD. ▶ Confirm regional INPs for URE that effectively provide systems leadership across linear, relational and systemic approaches (Table 5.1) ▶ Utilize collaborative (not competitive) process to nominate existing regional actors as partners for URE hubs functioning within existing regional SDG 4 coordination mechanisms
National	<p>5.2.7. All countries report results on URE systems to regional and global groups</p> <ul style="list-style-type: none"> ▶ MEL based on theory of change, which provides an overview of the key changes country URE systems and Regional URE Hubs aim to contribute to and support, through distinct efforts and activities.

5.2.7 All countries report results and priorities on URE systems to regional and global groups

Results reporting through common (co-developed) Monitoring, Evaluation and Learning (MEL) should be embedded in URE systems strengthening from the outset, in order to strengthen global-regional-national communication and coordination (see also 5.2.5). The results frameworks should be based on theories of change that provide an overview of the key changes country URE systems and Regional URE Hubs

aim to contribute to and support, through distinct efforts and activities. A recent example of effective national-regional-global MEL system can be found in the GPE KIX. In addition, this mechanism allows the identification of a **nationally relevant rolling set of focus areas** to accelerate progress towards SDG 4. This report recommends the regionalization of URE support, setting out the process and approach; future priority setting would be informed by country through the Regional URE Hubs.

5.3 Advocacy and resourcing for effective URE

Track 3 recommends supporting Track 1 and Track 2 by effective advocacy for and resourcing of the strategies used to achieve the objectives of FA1: to further promote URE and support the capacity of national actors in URE (including through South-South collaboration). Most of these recommendations relate to advocacy and funding the activities identified in Track 1 and Track 2. Implementing these recommendations will improve and **increase understanding and resourcing**:

1. Local relevance and effectiveness of evidence products and production processes;
2. Relational and systemic strategies to improve URE;
3. Regional hubs for URE to support effective and sustainable national URE systems.

Whatever resources and resource mobilization were planned to support FA1 should be deployed to support the recommendations in this report to being this change process. While it was beyond the scope of this study to identify funders of URE and their practices, the **GCM and its members** cannot advocate and provide resources for these global, regional and national URE activities alone, so they should build a coalition of **partners and funders** of education systems, URE and research (including multilaterals, bilaterals and philanthropies), as well as creating opportunities to **collate and disseminate** the impacts of effective and locally relevant URE work for SDG 4 (URE products, relationships and systems) and funding. An exit strategy should be built in to ensure sustainability; e.g., building systems rewards and requirements into research funding strategies or national civil service or teacher professional development. At the same time, **FA3 recommendations** should include resourcing strategies for supporting FA1 and FA2 (data and monitoring).

5.3.1 Advocate practices identified to URE funders and practitioners

All actors must understand and advocate for the change to more effective URE practices and regional hubs. While much time and resources have been spent on evidence synthesis at the global level, more focus is simultaneously needed on supporting the production of **evidence that is locally relevant**; building **relationships** between knowledge producers and users; and building **systems** that enable URE. Good practices and processes identified in all three URE pathways (strengthening **products, relationships and systems**) by **Regional URE Hubs** and from the partners in the **URE coalition** should be used in active advocacy that spreads good URE practice.

5.3.2 Identify good practices by URE funders: products, relational, systemic

Partnership, funding and donor relations departments in all GCM members should develop a clear value proposition for FA1 and focus their resource mobilization for FA1 towards support Track 1 (more effective URE practices) and Track 2 (regionalized URE strategy). One starting place with the Building Evidence in Education (BE2) Initiative, a **donor** working group that engages

bilateral and multilateral organizations and foundations. Their objectives are to increase the quality of education research; promote the use of evidence in education programming; and strengthen donor research collaboration. Simultaneously, we recommend mapping **national research funder practices** (e.g. FCT in Portugal, NSF in the USA, SNSF in Switzerland, or UKRI in the UK), and advocating that they include URE rewards and requirements in their funding calls, and ensure the meaningful inclusion and involvement of national researchers and policy actors in research projects. Moving away from global products alone requires strong advocacy, from the **GCM and its members** in the first instance in 2022, and then on through **Regional URE Hubs** from 2023 and, eventually, **national systems**.

5.3.3 Build global platform to showcase regional and national URE

The GCM and UNESCO should build a **globally and regionally networked platform** in which a great variety of trusted partners are presented. This platform will showcase examples from all three URE pathways (strengthening **products, relationships and systems**), recommended through **Regional URE Hubs and from the partners in the URE coalition that is being built**.

5.3.4 Recruit liaison who is expert in URE and education

In order for this plan to be successful, a **seconded liaison** at headquarters will need to support the Regional URE Hubs with technical expertise and also in facilitating learning and connections between the regions.⁹¹ The secondeed who will serve as global liaison should be an **expert in the three pathways to successful URE** (developing products, relationships and systems), and have expertise in **education**.

5.3.5 Build funder coalition to support good practices in URE

Building coalitions of donors, research councils, governments, and other stakeholders in relation to strengthening advocacy and resourcing for URE would enable the **GCM and its members** to broaden the partnership that is pressing for the same improvements in URE for education.

5.3.6 Build conditions for URE into governments' and funders' calls for proposals and reporting

A key aspect of system change is for professionally relevant bodies (government ministries, funders) to build the **requirement** for using evidence in policy or producing policy-relevant evidence into their calls and reporting. Equally, rewards (e.g., prizes or awards) from journals, policy institutes, funders

5.3.7 Advocate for URE good practices across all SDG 4 targets and in all countries

Advocacy for URE in education should address **all 7 SDG 4 targets and 3 themes**, with different emphasis on different targets **shaped by country needs and contexts**. More attention should be paid to those SDG 4 targets and themes that are known to be **underserved** (e.g., SDG 4.7 on Education for Sustainable Development).⁹² All **three URE pathways** should be pursued (products, relationships and systems) as strategies to effectively promote the use of research and evidence.

5.3.8 Build learning from national and regional URE into global reporting

The **GCM and its members** will be able to demonstrate and communicate impact of URE for education to global fora (such as HLSC and HLPF) as Regional URE Hubs strengthen national and regional capacity in MEL for URE (see **5.1.12** and **5.2.5** above), thus addressing existing communication difficulties between national, regional and global levels.

5.3.9 Global actors advocate for effective URE, relevant to local and national priorities

Global INPs develop a great number of products that are assumed to have universal application, with the expectation that local experts subsequently adopt and adapt them to their country context. However, **abundant evidence at the global level may not be relevant** to regional or national needs. In keeping with current agendas of regionalisation and localisation, **funders, GCM and its members and Regional URE Hubs** should advocate for evidence users and producers to address global inequities in evidence production and use. These activities can include requiring quotas of participants from the region in question in calls

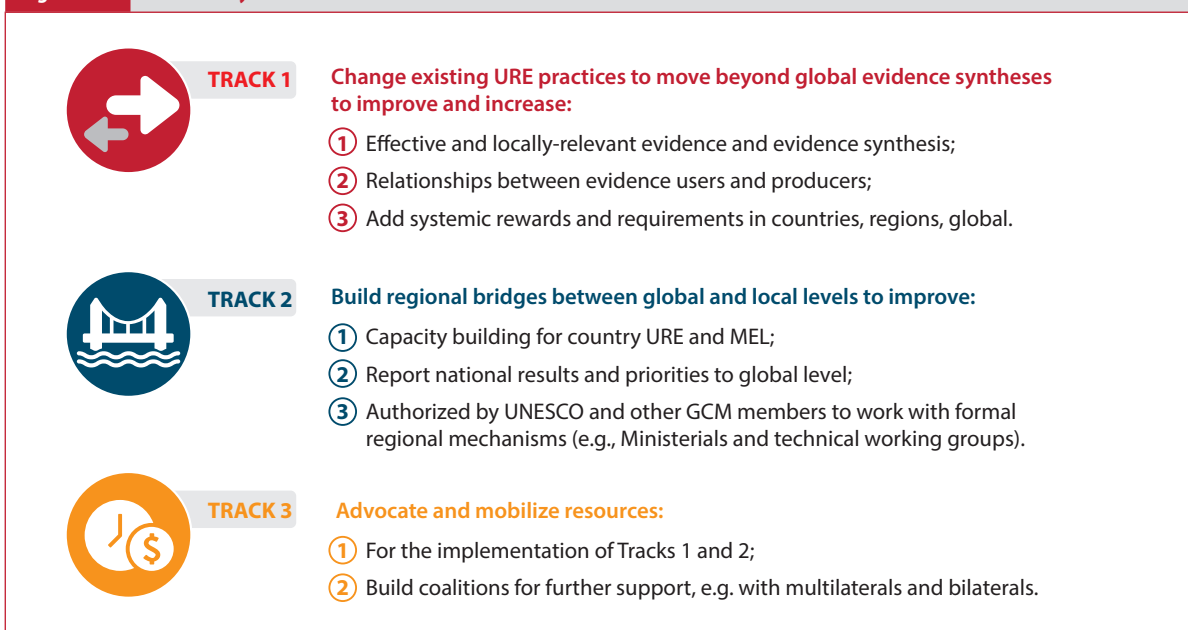
91 Also cited as key to the success of UNESCO's Sexual and Reproductive Health and Rights (SRHR) education work, reported in UNESCO Internal Oversight Service (IOS), Evaluation Office (2019) *Evaluation of the future of UNESCO's education sector: The normative vs. operational role in the context of Agenda 2030*, Paris: UNESCO, p.22.

92 SDG 4.7 has recently received more policy attention due to the increasing effects of climate change, e.g., UNESCO (2021) *Berlin Declaration on Education for Sustainable Development*, Paris: UNESCO; UN General Assembly (2021) *Draft resolution A/C.2/76/L.17: Education for sustainable development in the framework of the 2030 Agenda for Sustainable Development* New York: UN GA.

for proposals; addressing publication norms and models; financing for URE support in national and local languages, e.g., translation and interpretation of evidence and URE resources, and capacity building in URE for speakers of local and minority languages (see 5.2.1).

Figure 5.2 summarizes the three sets of recommendations that will close the broken feedback loop (1) between evidence and its use in policy and practice, as well as (2) between global and local levels, and (3) mobilise the additional resources necessary to achieving FA1.

Figure 5.2 Summary of recommendations



5.4 Roadmap

The focus is on global actors laying the ground for effective URE practices to **cascade from global priority (2022) through to regional hubs (2023 onwards) that support country practice and reporting**. Countries can only improve their URE (and contribute to achieving FA1) if global actors support regional actors to support country strategies, implementation, learning and reporting.

TRACK 1

The global level needs to consolidate their understanding of **three pathways to effective URE** (linear/product, relations and systems) in 2022, build a global platform to showcase all of these, and appoint a secondee (liaison) who is expert in supporting effective URE. They will provide leadership (Table 5.1 § 10-12) to the regional level through 2022, and Regional URE Hubs will take on the systems leadership role for countries as they are established through 2023.

TRACK 2

From 2023, **Regional bridges** should be built out from existing expert institutions and networks that have a proven track record in supporting countries in all pathways for effective URE (through training, communities

of practice, networks, etc.) and be plugged into regional coordination mechanisms as appropriate. They will also support countries in establishing and managing monitoring, evaluation and learning frameworks which allows standardized and credible reporting of change in more effective country URE to regional and global levels. In addition to reporting upwards, the results frameworks will enable countries to learn and adjust their strategies and allows regional hubs to identify the specific support that different countries may need to improve their URE. Regional hubs will also be able to collate and report substantive country priorities in the SDG 4 agenda, which can be taken up at the global level as a more relevant set of rolling priority areas (2024).

TRACK 3

Effective **advocacy and resource mobilization coalitions** will need to be built at global (2022 onwards), regional and country levels (from 2023) to ensure sustainability. Resources should be mobilized that close the broken feedback loops: (1) promoting three pathways to effective URE (evidence-policy products, relations and systemic change) as well as (2) regional bridges from local to global.

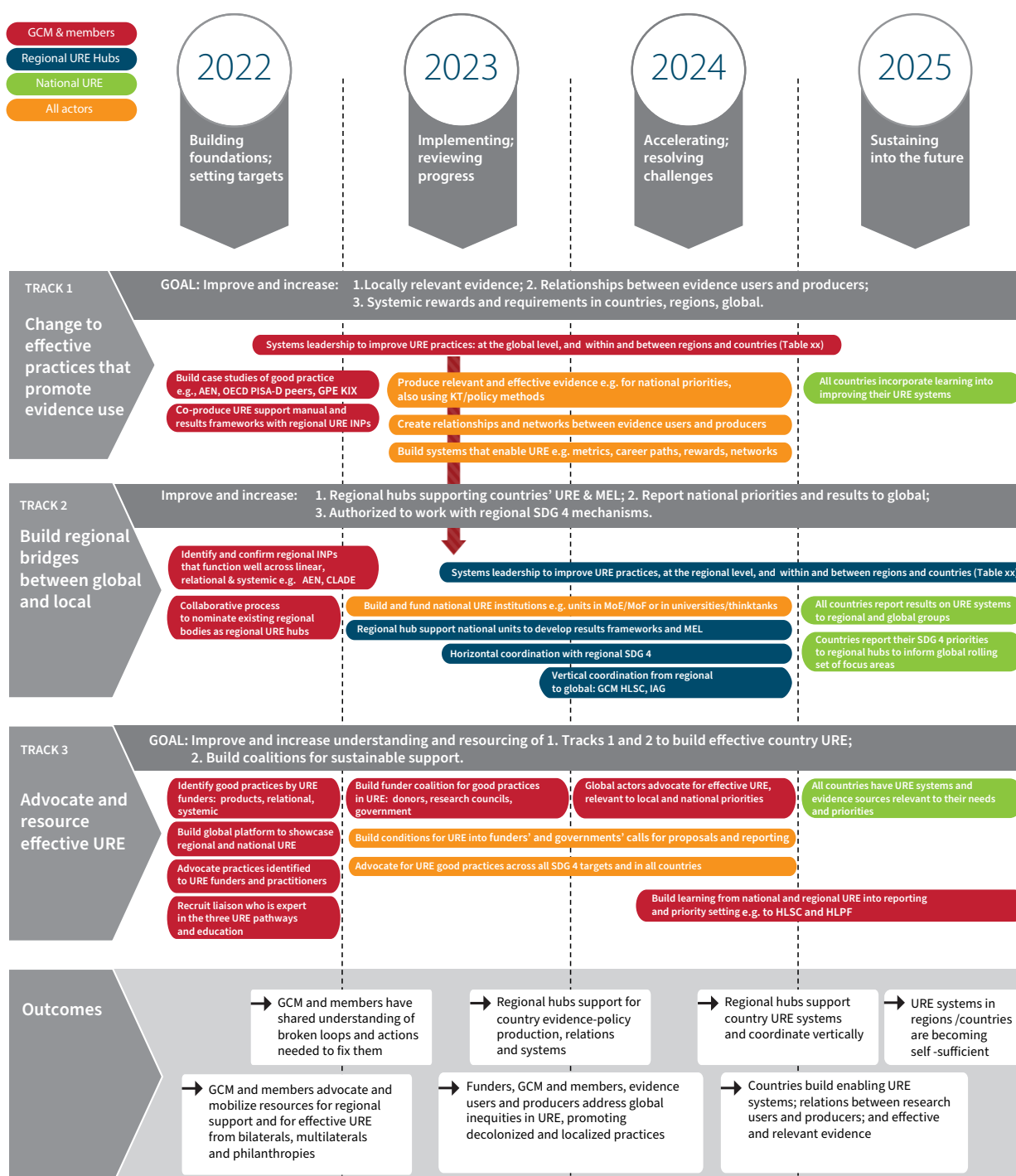
Annexes

- Annex 1** Roadmap and recommendations
- Annex 2** Survey on initiatives, networks, and platforms
- Annex 3** List of meetings, October – December 2021
- Annex 4** Technical report on the INP survey
- Annex 5** Technical report on the comparator case study
- Annex 6** Technical note on characteristics of linear, relational and systemic approaches to improve evidence use in policy, planning and practice.
- Annex 7** Linear, relational and systems approaches to improve evidence use in policy, planning and practice: coding and analysis of INPs
- Annex 8** Descriptions of INPs most frequently identified by survey respondents
- Annex 9** Summary of public health systematic reviews identified and included
- Annex 10** Summary of education systematic reviews identified and included
- Annex 11** Relational and systemic INPs identified in systematic reviews and interviews, including key characteristics and examples

Annex 1 Roadmap and recommendations

Recommendations and roadmap 2022-25

for GCM to improve the coordination of data, research, evidence and knowledge in ways that contribute to the effective use of relevant evidence (URE) for making appropriate policies and implementation strategies.



Annex 2 Survey on initiatives, networks, and platforms



This survey aims to gather information from key education policy stakeholders, as well as organizations in education. We are interested to learn more about initiatives, networks, and platforms that support the use of evidence for policy, planning, and practice for strengthening educational systems. The focus is on Sustainable Development Goal 4 (SDG 4): "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." The scope is universal across all regions and countries.

This survey is part of a strategic review of existing initiatives, networks, and platforms in education on one hand, and of country-level uptake, use, and capacity support needs on the other. UNESCO, the agency tasked with leading SDG 4 global coordination, commissioned to NORRAG this strategic review, within the overall framework of the reform of the Global Education Cooperation Mechanism (GCM), which aims at supporting countries to accelerate their progress towards SDG 4 in a more coordinated and effective manner. In the follow-up to the [Ministerial Segment of the 2021 Global Education Meeting](#), this strategic review will shape the first of the GCM's three core functions, to promote evidence-based policy formulation and implementation.

For more information, please contact: globalgovsdg4@gmail.com. Kindly note that all responses to this survey will be treated and stored confidentially.

The survey consists of 8 questions and should take no longer than 10 minutes to complete. We would also appreciate it if you could disseminate this survey widely within your networks by sharing the link. Many thanks for your time and help!

Professor Gita Steiner-Khamsi (NORRAG Academic Director, Teachers College, Columbia University, New York)
Dr. Moira Faul (NORRAG Executive Director, Graduate Institute of International and Development Studies, Geneva)

There are many national, regional, and international organizations that support the use of evidence and research for policy making in education. Nowadays most support is publicly available online. Typically, they are **initiatives, networks, and platforms** produced by governments, regional and international organizations, civil society organizations, higher education institutions, associations, think tanks, libraries, foundations, and the private sector. Some make resources available (e.g. databases, toolboxes, inventory of good practices, etc.); others connect researchers with policy makers, practitioners and planners, including through conferences; and others try to make the evidence-policy ecosystem work better. Examples include IIEP-UNESCO's Planipolis (platform), the Early Childhood Development Network (ECDAN) (network), or GPE Knowledge and Innovation Exchange (KIX) (initiative).

Q1. When devising projects or educational reforms, who do you turn to first to find the research and evidence you need to support your work?

- The policy evaluation unit of my organization
- National education research institute or center in my country
- The school of education of my national university or another academic resource
- Consultants
- Initiatives, networks, and platforms produced by governments, regional and international organizations, civil society organizations, think tanks, foundations, and the private sector
- Other (please specify)

Q2. Could you name the **initiatives, networks, and platforms** that support the production and use of evidence and research for policy making for strengthening educational systems? Please share their website addresses in the following format:

https://	<input style="width: 100%; height: 20px;" type="text"/>
https://	<input style="width: 100%; height: 20px;" type="text"/>
https://	<input style="width: 100%; height: 20px;" type="text"/>
https://	<input style="width: 100%; height: 20px;" type="text"/>
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https://	<input style="width: 100%; height: 20px;" type="text"/>
https://	<input style="width: 100%; height: 20px;" type="text"/>

Q3. Which **initiatives, networks, and platforms** have you personally consulted **most often**? Please share their website addresses in the following format:

https://	<input type="text"/>
https://	<input type="text"/>
https://	<input type="text"/>
https://	<input type="text"/>
https://	<input type="text"/>
https://	<input type="text"/>
https://	<input type="text"/>
https://	<input type="text"/>
https://	<input type="text"/>
https://	<input type="text"/>

Q4. For what purposes do you usually consult such **initiatives, networks, and platforms**? Please select **up to three** that are most relevant:

- For learning from other countries
- For preparing an education sector analysis
- For preparing an education sector plan
- For examples when devising a project or an education reform
- For accessing planning tools, software, and templates, etc.
- For evidence to support policy decisions
- Other (please specify)

Q5. What needs to be done so that existing **initiatives, networks, and platforms** are used more frequently at the national level for policy making? Please select **up to three** from the following items:

- Make them more user-friendly
- Provide training on how to use them
- Provide individual support on how to use them
- Make them more tailored to national priorities
- Involve national experts in developing them
- Provide examples for more country-specific cases
- Consolidate or synthesize existing ones into a one-stop shop
- Other (please specify)

Q6. In the following, you find a list with the relevant SDG 4 targets and themes. In your opinion, is each of the SDG4 targets currently well supported or underserved with policy-relevant evidence and research?

	Well Supported	Underserved	Don't Know
SDG 4.1: Free primary and secondary education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SDG 4.2: Equal access to quality early childhood development, care and pre-primary education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SDG 4.3: Equal access to affordable technical, vocational and higher education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SDG 4.4: Increase the number of people with relevant skills for employment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SDG 4.5: Eliminate gender disparities and ensure inclusion in education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SDG 4.6: Universal youth and adult literacy and numeracy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Well Supported	Underserved	Don't Know
SDG 4.7: Education for sustainable development and global citizenship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SDG 4.A: Build and upgrade inclusive and safe schools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SDG 4.B: Expand higher education scholarships for developing countries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SDG 4.C: Increase the supply of qualified teachers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other topic 1 Education in emergencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other topic 2 Lifelong learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other topic that you find relevant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(please specify)

Q7. In your opinion, how can **coordination and management** of research or evidence-oriented initiatives, networks, and platforms be improved at the global level? Please select **up to three** responses.

- Build an environment and infrastructure that encourages research use in policy
- Build skills of policy makers to use research
- Build skills of researchers to contribute policy-relevant evidence
- Change policy and research cultures to incentivize collaboration and research use in policy
- Disseminate research in policy-relevant formats
- Encourage more partnering and co-creating between researchers and policy makers
- Improve networking and knowledge sharing between policy makers and researchers
- Improve strategic coordination between research and policy
- Provide more funding to produce policy-relevant research
- Synthesize existing policy-relevant research
- Other (please specify)

Q8. How do you think the use of evidence and research for policy making by governments could be improved?

Country of residence

I work for...

- National government, ministry
- Global or regional inter-governmental organization
- Civil society organization
- Teaching profession / teachers' organization
- Private foundation
- Private sector
- Research, think tank, university
- Other (please specify)

My organization contributes to...

- SDG 4.1: Free primary and secondary education
- SDG 4.2: Equal access to quality early childhood development, care and pre-primary education
- SDG 4.3: Equal access to affordable technical, vocational and higher education
- SDG 4.4: Increase the number of people with relevant skills for employment
- SDG 4.5: Eliminate gender disparities and ensure inclusion in education
- SDG 4.6: Universal youth and adult literacy and numeracy
- SDG 4.7: Education for sustainable development and global citizenship
- SDG 4.A: Build and upgrade inclusive and safe schools
- SDG 4.B: Expand higher education scholarships for developing countries
- SDG 4.C: Increase the supply of qualified teachers
- Other topic 1 | Education in emergencies
- Other topic 2 | Lifelong learning

Would you be willing or interested in a brief follow-up zoom meeting? If yes, please provide your email address:

Annex 3 List of meetings, October – December 2021

UNESCO

- **Assistant General for Education**
 - Stefania Giannini
- **UNESCO Project Team**
 - Ms Maki Katsuno-Hayashikawa, Director, Division for Education 2030
 - Ms Lily Neyestani-Hailu, Chief of Section, SDG 4 Leadership
 - Ms Mami Umayahara, Programme Specialist, Section for SDG 4 Leadership (Project Leader)
 - Ms Alice Mihalache, Associate Project Officer, Section for SDG 4 Leadership
- **UN Development Coordination Office, UN HQ, New York**
 - Rosemary Kalapurakal, briefing on the UN development system reform (regional coordinators and regional collaborative platforms (as part of the visit of the Advisory Council of International Cooperation of the Government of Switzerland)

Reference Group

- Mr Michael Ward, Senior Policy Analyst, Directorate for Education and Skills, OECD
- Ms Karen Mundy, Professor, Director, UNESCO International Institute for Educational Planning
- Mr Gwang-Chol Chang, Chief of Education Policy Section, UNESCO
- Ms Paula Razquin, Programme Specialist, Education Policy Section, UNESCO
- Mr Keith Holmes, Programme Specialist, Future of Learning and Innovation, UNESCO

OECD HQ and OECD Lead Analysts (government level or affiliated)

- Michael Ward, Senior Policy Analyst, Directorate for Education and Skills, OECD
- Mary Mazorchuk, Lead Data Analyst of Research and Analytics Department, Ukrainian Center for Educational Quality Assessment
- Maria Jose Guevara, Director of Educational Research, National Institute of Educational Evaluation – Ecuador / Educational Manager, National Foundation for Education Research in the UK
- Alisa Ibrakovic, Deputy Director, Agency for Primary and Secondary Education – Bosnia and Herzegovina
- Nadia De León, PISA Governing Board Representative for Panama
- Erind Çela, PISA Data Manager for Albania, Educational Services Center (Q.SH.A.) – Albania

UNICEF

- Chinargul Dzhumagulova, Early Childhood Development Officer, UNICEF Kyrgyzstan
- Ghazala Syed, Better Early Learning and Development at Scale (BELDS) Initiative, Project Coordinator, UNICEF
- Joa Keis, Early Childhood Education Specialist, UNICEF
- Manuel Cardoso, Education Specialist, UNICEF

USAID

- Elena Walls, Senior Measurement and Evaluation Advisor, Office of Education, USAID and Co-Chair of the Building Evidence in Education (BE2) Initiative
- Saima Malik, Senior Research and Learning Advisor, USAID

World Bank

- Harry Anthony Patrinos, Practice Manager, Education, World Bank
- Alexandria Valerio, Resident Representative in the Dominican Republic, Latin America and Caribbean, World Bank

Civil Society Organizations/Think Tanks

- Eric M. Johnson, Senior Director, Technical Strategy and Solutions, RTI International
- Carina Omoeva, Director of the Research and Evaluation Department, Global Education, Employment and Engagement Business Unit, FHI 360
- Suzanne Grant Lewis, Chair of Education Science and Policy, Education.org

International Development Research Center (IDRC)

- Tricia Wind, Programme Leader, GPE Knowledge and Innovation Exchange (KIX), IDRC
- Margarita Lopez, Senior Programme Specialist, KIX, IDRC

Foundations

- **Sheikh Saud bin Saqr Al Qasimi Foundation for Policy Research**
 - Natasha Ridge, Executive Director
- **Jacobs Foundation**
 - Donika Dimovska, Chief Knowledge Officer
 - Olaf Hahn, Co-Lead Learning Societies
 - Laura Metzger, Co-Lead Learning Minds
 - Sabina Vigani, Country Director
- **Aga Khan Foundation**
 - Andrew Cunningham, Global Lead for Education
- **Mastercard Foundation**
 - Robyn Read, Research Partner

Regional Networks and Initiatives

- **SUMMA – Latin America and the Caribbean Region**
 - Javier González, Director, SUMMA
 - Raúl Chacón, Director of Research and Knowledge, SUMMA and KIX LAC Hub Manager (funded by GPE/IDRC)
- **CLADE – Latin American Campaign for the Right to Education**
 - Nelsy Lizarazo, General Coordinator
- **ESSA – Education Sub Saharan Africa**
 - Lucy Heady, Chief Executive Officer
- **KIX Europe Asia Pacific (EAP) Region – funded by GPE/IDRC**
 - José Luís Canêlhas, KIX EAP Hub Manager, administered by NORRAG

Conferences and Webinars

- **Building Evidence in Education (BE2), meeting of November 18, 2021**
- **Center for Global Development**
 - Improving Learning at Scale: Evidence from Large Scale Successful Education Programs, held on November 23, 2021
 - On Power, Partnerships, and Policymaking: How to Realize the Potential of Evidence-to-Policy Partnerships, held on September 24, 2021
- **Africa Evidence Network, Evidence Capacities Webinar series**
 - Development for system-level evidence-use, held on November 17, 2021
- **IIEP UNESCO**
 - Mapathon: United Nations for Madagascar, held on October 27, 2021

- **Brookings Institution**

- How do we expand and sustain quality learning for children and youth? Scaling lessons from Côte D'Ivoire and United Republic of Tanzania, held on December 10, 2021

Experts in Public Health Interviewed for the Comparator Study

- Annette Boaz, Professor of Health Services Research and Policy, London School of Hygiene and Tropical Medicine, UK
- Marco Liverani, Associate Professor of Health Policy and Systems, London School of Hygiene and Tropical Medicine, UK
- Claire Maxwell, Professor, Department of Sociology, University of Copenhagen, Denmark
- Justin Parkhurst, Associate Professor of Global Health Policy, London School of Economics and Political Science, UK

Education Experts Interviewed for the Comparator Study

- Colette Chabbott, Adjunct Faculty Member, International Education Program, George Washington University, USA
- David Gough, Professor of Evidence Informed Policy and Practice and the Director of UCL Institute of Education Evidence for Policy and Practice Information and Co-ordinating Centre, EPPI-Centre, UK

Experts in Nutrition Interviewed for the Comparator Study

- Meeting with Frejus Thoto (Director, AECD Benin, Benin), attended by Moira Faul and Anna Numa Hopkins 'Analyzing evidence use capacity and ecosystems', held on 5 October 2021

Experts in Use of Research Evidence Interviewed for the Comparator Study

- Meeting with Annette Boaz (University College London Policy Impact Unit, UK), attended by Moira Faul and Anna Numa Hopkins, 'Learning from government-academic engagement initiatives internationally', held on 22 October 2021

Annex 4 Technical report on the INP survey

We created an online survey, using *Survey Monkey*, an online survey tool. The survey was pilot-tested among the NORRAG staff before distributing it to a wider audience. The survey was made available in the six UN languages: Arabic, Chinese, English, French, Russian, and Spanish. On the first page of the survey as well as in the email composed by UNESCO Education 2030, we explained that the survey is meant to explore initiatives, networks and platforms that support the use of evidence for policy and planning – with a special focus on SDG 4 (see the survey in Annex 2). The portal was open from October 11 –22 and 1-2 reminders were sent to the distribution lists (UNESCO to FA1 reference group one reminder; NORRAG two reminders). Both at the end of the email and of the survey, respondents were invited to distribute the survey as widely as possible within their organization and their network.

The survey consists of eight questions. The survey asks respondents to list existing initiatives, networks and platforms and investigates which SDG-4 goals are well supported or underserved with policy-relevant evidence and research. The final section of the survey requests information on the respondents' profiles with three questions on country of residence, affiliation, and to which SDG-4 goals their organization contributes. Regarding affiliation, respondents choose one answer from the following eight categories: (i) national government, ministry, (ii) global or regional inter-governmental organization, (iii) civil society organization, (iv) teaching profession/teachers' organization, (v) private foundation, (vi) private sector, (vii) research, think tank, university, and (viii) other.

The survey was sent via emails to groups of organizations and individuals identified as relevant by the UNESCO SDG-4 leadership, members of the FA1 reference group, and NORRAG.

For the **Chinese language** version, the Columbia University Global Center helped with the distribution among think tanks and research institutions in the field of education. They also used their own Wechat channel to help with the distribution in PR China. In addition, two professors in comparative and international education with close ties to UNESCO (Teng Jun, Beijing Normal University, Ji Liu, Shaanxi Normal University) helped distribute the survey widely among organizations that work on SDG-4.

For the **Russian language** version, we were able to use the network of the GPE/IDRC-funded KIX EAP hub. We announced the survey widely at the bilingual Russian/English the EPIC (Education Policy and Innovation Conference) that happened to occur exactly at the time of the survey.

For all other language versions—**Arabic, English, French, Spanish**—we relied on one hand on existing databased, listed in the following, as well as the web searches carried out by graduate research assistants, explained later. The existing databases included:

- UNESCO Division 2030 (193 member states)
- UNESCO Reference Group FA1 (26 addresses)
- NORRAG's listserv (4,613)
- KIX Europe – Asia - Pacific listserv (1,362)

As shown above, UNESCO Division 2030 shared the survey through their channel, covering 193 member states and their affiliated agencies/organizations. In addition, we tapped into three different channels to include other kinds of organizations, i.e., national, regional, and global organizations. First, we made use of NORRAG's listserv, comprised of 4,613 members. Second, we circulated emails through KIX EAP listserv with 1,362 contacts.

Finally, we recruited several multilingual graduate research assistants (Masters and PhD students) from Teachers College, Columbia University, New York, who helped with the web search. They identified relevant organizations that work on SDG-4. They took into consideration equal distribution among the different types of organizations (see types 1-7 listed above) as well as organizations working at national, regional, and global level. The great contribution of this group of research assistants is acknowledged in the Preliminary Analysis report (see preliminary pages). In total, they identified 1,343 organizations and email addresses for the distribution of the survey. The distribution by region is listed in **Table A4.1**.

In total, taken the existing databanks and the webs searches together, the survey was distributed to **at least 7,537 organizations and individuals** located in different regions and with different professional associations, but all working in one way or the other on SDG-4. The survey was **filled out by 898 individuals or organizations** which corresponds to a return rate of 12 percent.

Section 2 of the preliminary analysis report presents a few findings from the survey and also explains the composition of the respondents in greater detail.

Table A4.1 Number of contacts of national and regional organizations by region of their operations and type (through web search)

	Number of contacts
Africa	76
Arab States	34
Asia and the Pacific	406
Europe	141
Latin America and the Caribbean	338
USA & Canada	31
Teacher Unions	317
Total	1,343

Annex 5 Technical report on the comparator case study

The comparator case methodology comprised four aspects: (1) Database searches for systematic reviews on the use of research evidence in public health and in education; (2) A bibliometric analysis of the identified samples in public health and in education; (3) A small number of expert interviews with scholars identified through the systematic reviews and snowball sampling; (4) A synthesis of findings to answer research questions (1)-(6).

Database search for systematic reviews on the use of research evidence in public health and in education

For this comparator case we conducted two separate database searches for public health and education. Each of these searches is described below, and resulted in the inclusion and analysis of three reviews on the topic of public health and two on education. The differing search strategies employed and outlined below reflect the relative difficulty of identifying relevant reviews in international education. Key differences between the two research areas were demonstrated in the bibliometric analysis and are described in the discussion.

Public health search

Our inclusion criteria for the search were:

- Global or international focus of study;
- Employment of formal systematic review methodology for searching, screening, including, analyzing and synthesizing studies;
- Relevance to the use of evidence in policy including: the production and dissemination of academic research evidence for policy, planning, and practice; efforts to improve and strengthen the use of evidence in policy; evidence, policy and governance;
- Conducted after 2010;
- Published in a venue of high reputation and quality.

Databases searched:

PubMed; Web of Science; Google Scholar.

Search terms:

“research” “evidence” “use” “public” “health” “policy”; including FILTER “systematic review”. We also searched using alternative terms “knowledge translation” “research uptake” “knowledge mobilization”. From the top 15 “best match” results across databases we selected those *most relevant* to the project topic and *most cited* for each search retrieval.

The search yielded the following results:

- Retrieved from Web on Science from a total of 15,509 results:
Masood, S; Kothari, A and Regan, S. (2018). The use of research in public health policy: a systematic review. *Evidence and Policy*, 6 (1), 7-43.
- Retrieved from PubMed from a total of 4611 results:
Orton L, Lloyd-Williams F, Taylor-Robinson D, O’Flaherty M, Capewell S. (2011). The use of research evidence in public health decision making processes: systematic review. *PLoS One* 6(7): e21704. doi: 10.1371/journal.pone.0021704. Epub 2011 Jul 26.

A separate analysis of this review was deemed unnecessary as the Masood et al (2018) review extends its results. For this reason, we have discounted this review from our analysis.

- Retrieved from Web of Science from 676 results:
LaRocca, R, Yost, J, Dobbins, M, Ciliska, D, Butt, M. (2013). The effectiveness of knowledge translation strategies used in public health: a systematic review. *BMC Public Health*. 12 (751) DOI10.1186/1471-2458-12-751.
- Retrieved from Web of Science from 4,144 results:
Liverani M, Hawkins B, Parkhurst JO. (2013) Political and institutional influences on the use of evidence in public health policy. A systematic review. *PLoS One*. 2013 Oct 30;8(10):e77404. doi: 10.1371/journal.pone.0077404. eCollection 2013. PMID: 24204823 Free PMC article. Review.

For a summary of the reviews included in our analysis please see [Annexes 9 and 10](#).

Education search

SEARCH 1

At the outset, our inclusion criteria were the same as for the public health search, and included:

- English-language
- Global or international focus of study;
- Employment of formal systematic review methodology for searching, screening, including, analyzing and synthesizing studies;
- Relevance to the use of evidence in policy including: the production and dissemination of academic research evidence for policy; efforts to improve and strengthen the use of evidence in policy; evidence, policy and governance;
- Conducted after 2010;
- Published in a venue of high reputation and quality.

Databases searched:

Web of Science; Google Scholar.

Search terms:

“research” “evidence” “use” “education” “policy”; including FILTER “review articles” FILTER “web of science categories: Education Educational Research or Education Scientific Disciplines or Social Sciences Interdisciplinary”. We also used alternative search terms “research uptake” “knowledge translation” “knowledge mobilization” “use of evidence”.

Using the search criteria above, the search retrieved no relevant results.

SEARCH 2

Acknowledging the different research and policy contexts for education, we conducted a wider search with modified search and inclusion criteria.

Modified inclusion criteria included:

- English-language
- Identifiable global or international relevance (for example, discussion of more than one country context);
- Employment of formal systematic review methodology for searching, screening, including, analyzing and synthesizing studies Or broader review methodology discussing the results of systematic studies;
- Relevance to the use of evidence in policy including: the production and dissemination of academic research evidence for policy; efforts to improve and strengthen the use of evidence in policy; evidence, policy and governance; evaluation and impact for policy;
- Conducted after 2000;
- Published in a venue of high reputation and quality.

We also searched more widely, including in the following databases and portals: Web of Science; Google Scholar; Science Direct; EPPI-Centre Database; EIPPIE Project Database; Google web search; Manual search of paper references.

In addition to the manual search, we contacted an education review expert (Professor David Gough, UCL Institute of Education) to ask for recommendations of papers, as well as making enquires with other interviewees.

The search yielded the following results:

- Retrieved from Web of Science from a total of 113 results:
- Beng, H. (2018). Evaluating the evidence in evidence-based policy and practice: Examples from systematic reviews of literature. *Research in Education*, (02 (1), 37-61. DOI10.1177/0034523717741915.
- Retrieved from Manual search of paper references:
- Snilstveit, B, Stevenson, J, Phillips, D, Vojtkova, M, Gallagher, E, Schmidt, T, Jobse, H, Geelen, M, Pastorello, M, and Eyers, J, (2015). *Interventions for improving learning outcomes and access to education in low- and middle- income countries: a systematic review*, 3ie Systematic Review 24. London: International Initiative for Impact Evaluation (3ie).
- Retrieved from Google internet search:
 - Becheikh et al. (2009). How to improve knowledge transfer strategies and practices in education? Answers from a systematic literature review. *Research in Higher Education Journal*. Details not retrievable.

This study was excluded from our study as it failed to meet our inclusion criteria (Publication venue).

For a summary of the reviews included in our analysis please see [Annexes 9 and 10](#).

A bibliometric analysis of the identified samples in public health and in education

Bibliometric analysis aims to generate a picture of a research field using both text analysis and citation analysis. It is a way of identifying core research topics and illustrating an academic landscape using a computational approach. Here, we used a keyword analysis to identify important themes in education and public health research and how those have changed over time. We also used a co-citation analysis to generate an overview of the field and to extract research clusters.

Public health sampling

We analyzed bibliographic records of the academic papers identified in our search. Web of Science was selected for data collection as it is the most extensive generalist database for research/research metadata. Due to the database used (Web of Science), the systematic reviews by LaRocca et al. (2013) and Masood et al. (2020) were included. The sample contained 1825 publications. The sample was analyzed using Aria & Cucurullo's (2017) Bibliometrix package for R, as well as its proprietary extension BiblioShiny.

We excluded from the bibliographic sampling frame irrelevant source materials, such as clinical trial data. We also applied the Web of Science subject category filter "Health".

TS=("systematic review" AND "public health policy" AND "research" Or "knowledge translation" Or "research uptake" Or "knowledge mobilisation") AND SU=("Health")

Education sampling

We analyzed bibliographic records of the academic papers identified in our search. Web of Science was selected for data collection as it is the most extensive generalist database for research/research metadata. Due to the database used (Web of Science), only the review by Beng, H. (2018) was included. The sample contained 1660 publications. The sample was analyzed using Aria & Cucurullo's (2017) Bibliometrix package for R, as well as its proprietary extension BiblioShiny.

TS=("systematic review" AND "Education" AND "research" Or "knowledge translation" Or "research uptake" Or "knowledge mobilisation") AND SU=("Education")

Text (keyword) analysis

We conducted a three-step analysis of the two samples:

- (1) an descriptive analysis of sample growth trends over time, defined as growth in annual scholarly production over the time period captured by the sample;
- (2) a longitudinal analysis of the 5 most frequently occurring author assigned keywords to provide a sense of nominal association and field homogenization/fractionalization dynamics;
- (3) a co-citation analysis, which serves to identify and organize connections among the sample's scholarship by identify common connections between publications' bibliographies.

To avoid tainting the annual growth coefficient when determining growth of the samples, a 2021 cut-off was maintained. Both samples included several articles in pre-print, intended for publication in 2022, which were removed from consideration when mapping field growth.

Co-citation analysis

In citation network analysis, each paper is treated as a "node" and citations as links in the network. We regarded direct citation as a link. Where papers did not cite any other papers in our dataset, we treated them papers as digressional from the mainstream of the research and eliminated them.⁹³ In certain cases in the longitudinal keyword analysis, two or more words are analyzed as one due to an overlap in use in the literature, which required ngram stemming. This was due to a high degree of specificity utilized by Bibliometrix' in recognizing keywords. Specifically "Systematic

93 Kajikawa, Y., Tanco, F. & Yamaguchi, K. (2014). Sustainability science: the changing landscape of sustainability research. *Sustain Sci* 9, 431–438. <https://doi.org/10.1007/s11625-014-0244-x>

Review” and “Review” were stemmed (counted as identical), given the sample’s emphasis on reviews and meta-analyses. This aimed to support the intelligibility of the keyword growth plot.

Education co-citation analysis: To visualize the co-citation network plot, we took the following steps in order to improve clarity while retaining as much detail as possible:

- (1) all isolates (non-connected nodes) were removed;
- (2) only the 10 most degree-central nodes were assigned a label;
- (3) only nodes which are connected with at least six other nodes were considered eligible for this visualization;
- (4) clusters of fewer than three nodes were omitted from the visualization.

The co-citation analysis and visualization thus contains 510 interconnected “nodes” (publications). The most well-connected nodes in the network are assigned a label for clarity, and to distinguish them as key contributions to the overall field.

Public health co-citation analysis

To contract the co-citation network plot, we took the following steps in order to imp/the 25 most degree-central nodes were assigned a label for visual clarity;

- (1) all isolates (non-connected nodes) were removed;
- (2) only the 25 most degree-central nodes were assigned a label for visual clarity;
- (3) only nodes which were connected with at least six other nodes were included in the visualization; (4) clusters of fewer than three nodes were omitted.

The co-citation analysis and visualization thus contains 66 interconnected nodes. The most well-connected nodes in the network are assigned a label for clarity, and to distinguish them as key contributions to the overall field.

Comparison

The samples were exported and compared via Bibliometrix’ DuplicateMatching command to determine a 7% overlap in scholarship (126 duplicate publications), chiefly in literatures pertaining to knowledge translation and education of healthcare professionals.

Strengths and limitations

A key strength of this analysis is the inclusion of review and systematic review papers, which aim to provide an overview of a field. In general, bibliometric analyses suffer can from bias resulting from, for example, the strength of the bibliometric data sample and the preponderance of literature from the Global North that is found in scientific databases.

Expert interviews with scholars

Expert interviews supported our analysis and aimed to strengthen the quality of our literature sample (for example, we asked interviewees for paper recommendations, see note on the education database search above). Additionally, interviews aimed to ensure an adequately global perspective. We contacted a) key authors identified through the database searches, b) further experts identified through snowballing.

Expert interviewees:

- **Colette Chabbott** (International Education Program, George Washington University, USA)
- **David Gough** (UCL Institute of Education Evidence for Policy and Practice Information and Co-ordinating Centre, EPPI-Centre)
- **Marco Liverani** (Associate Professor of Health Policy and Systems, London School of Hygiene and Tropical Medicine)
- **Claire Maxwell** (Professor, Department of Sociology, University of Copenhagen)
- **Justin Parkhurst** (Associate Professor of Global Health Policy, London School of Economics and Political Science)

A synthesis of findings to answer research questions 1-6

We conducted thematic analysis of the systematic reviews (see Annexes 9 and 10) and interview data, using the research questions established for the study.

Three reviews from public were included in the synthesis (Masood et al. (2018), LaRocca et al. (2013) and Liverani et al. (2013)) and two reviews from education (Beng. H. (2018) and Snilstveit. B. (2015)). Supporting literature was included to a) provide context for the study and b) to develop themes identified through the systematic review analysis.

Research questions:

1. What does “evidence” and “evidence-based policy” mean to global actors in education? How does the definition of “evidence” and the preferred modes of knowledge production differ between education and public health?
2. Do actors perceive that there is a hierarchy of evidence (what is considered solid evidence as opposed to less solid). Does the assessment vary between different actors or sectors, users or producers, and reasons for use?
3. Who produces what is considered to be policy relevant or actionable “evidence” in education? In comparison, who produces policy relevant or actionable “evidence” in public health?
4. What is evidence used for in different sectors? Are different types of evidence used differently within or across sectors?
5. What are the barriers and enablers in evidence production and use in different sectors, for different actors?
6. If actors have access to evidence, to what extent is it incorporated in their decision-making? What else is taken into account?

Annex 6

Technical note on characteristics of linear, relational and systemic approaches to improve evidence use in policy, planning and practice

Criteria

The line between different approaches is sometimes hard to distinguish, and INPs may pursue more than one approach (Table A6.1).

Table A6.1 Characteristics of linear, relational and systemic approaches

Linear approaches	Relational approaches	Systems approaches
Activities		
<p>1. Disseminating and communicating research</p> <p><u>Examples</u></p> <ul style="list-style-type: none"> disseminating policy briefings policy or practice facing events or roundtable discussions evidence and ‘what works’ summaries and resources online evidence libraries and platforms blogging networks of evidence producers 	<p>1. Building decision maker skills</p> <p><u>Examples</u></p> <ul style="list-style-type: none"> Training and professional development on research evidence and/or on evidence use Policy Fellowships or placements Learning events (e.g. dialogues or events with structured learning component) 	<p>1. Strategic leadership</p> <p><u>Examples</u></p> <ul style="list-style-type: none"> Providing training and capacity-building for individuals to develop strategic leadership skills Policy Planning Strategic leadership and coordination between different actors Advocacy
<p>2. Formal institutional requests for evidence</p> <p><u>Examples</u></p> <ul style="list-style-type: none"> advisory bodies or mechanisms consultations or calls for evidence policy maker evidence services within government (e.g. Parliamentary Research Services and Libraries) 	<p>2. Building researcher skills</p> <p><u>Examples</u></p> <ul style="list-style-type: none"> Training for researchers on policy engagement or policymaking Fellowship, internship or secondment opportunities in government Research services and resources that support engagement 	<p>2. Rewarding impact, knowledge exchange, or evidence use</p> <p><u>Examples</u></p> <ul style="list-style-type: none"> Prizes/ rewards (Often run by journals, networks, policy institutes, universities, learned societies as well as funding bodies) Departmental / national requirements for evidence use in policy development Practitioner requirements or incentives for evidence use (for e.g. ‘Evidence-Based Practice’ award of certification.)
<p>3. Facilitating access to research</p> <p><u>Examples</u></p> <ul style="list-style-type: none"> Research commissioning services and support Advice or information services for policymakers 	<p>3. Building professional partnerships</p> <ul style="list-style-type: none"> Sustained networking or knowledge exchange Long-term partnerships or collaborative working Teaching and learning in partnership Research and evidence use partnerships 	<p>3. Creating and embedding infrastructure and posts</p> <p><u>Examples</u></p> <ul style="list-style-type: none"> Infrastructure that supports sustained research-policy engagement (e.g. national/departmental evidence planning; national/departmental research evidence capacity-building; Areas of Research Interest) Posts – job roles or teams for people with skills in research-policy engagement who work to connect and coordinate “supply and demand” (e.g. government evidence teams; intermediaries, boundary spanners and knowledge brokers)

Linear approaches	Relational approaches	Systems approaches
Roles (who does what)?		
Researchers produce evidence	Researchers and policymakers collaborate to produce knowledge	Researchers and policymakers collaborate within an “ecosystem” of relationships between those involved in the production and use of evidence
Researchers and research institutions disseminate evidence (push)	Researchers and policymakers exchange knowledge and expertise, aiming to develop mutual understanding	Government supports interaction between research and policy expertise
Government gathers research and evidence (pull)	Funders fund knowledge exchange and relationship-building, including collaborative networks and platforms	Funders fund initiatives that build the “ecosystem”
Funders fund <ul style="list-style-type: none"> • Evidence production OR • Evidence collection OR • Evidence synthesis 		
Characteristics and assumptions		
No collaboration / one-sided	Collaboration between evidence producers and users	Ecosystem of relationships and partnerships between the researchers, funders and policymakers involved in the production and use of evidence. [please see summative questions at the end of the document]
Knowledge is a product made by researchers and supplied to policymakers	Knowledge and expertise of different kinds is held by both researchers and policymakers	Knowledge production and use in policymaking involves complex interaction between research and policy expertise within dynamic “ecosystem” [please see summative questions at the end of the document]
Knowledge is communicated in different ways (e.g. ‘Best Buys’) but remains independent from policy contexts	Knowledge is shared and developed collaboratively or in dialogue with contexts of use	Networks and partnerships provide support for engagement and knowledge use in complex policymaking environments [please see summative questions at the end of the document]
Networks are usually between researchers Or policymakers. They share information but do not support collaboration	Networks and partnerships facilitate sustained, long-term interaction between research and policy. (May be reflected in formal structures e.g., Governance structure, advisory board, board structures, regular meeting. Useful to distinguish between what people actually do vs what they say they do/ aspire to do!)	

Summative questions to ask at the end of case analysis:

- What are the **formal roles/ network** structures?
 - **Practice vs Rhetoric:** what are they doing vs what they say they are doing
 - When they say they are doing
- Is there an “**Ecosystem**” of relationships?
 - After coding, to what extent is the evidence telling us that there is an ecosystem?
 - If it does have a systems approach: are they receiving external funding, by whom, and how much?

Other coding issues to discuss:

- Is data relevant to either **characteristics or roles** collected at this or other stages of analysis?
- Are any additional categories needed to support the SNA?

Annex 7 Linear, relational and systems approaches to improve evidence use in policy, planning and practice: coding and analysis of INPs

Our approach to analysing INPs (initiatives, networks and platforms) is derived from literature and empirical work that has aimed to understand and assess efforts to improve evidence use in policy contexts. We draw on a framework developed in Oliver et al (2021) and Hopkins et al (2021) in a study of over 2000 initiatives to improve the use of evidence in policy in 41 countries⁹⁴. The framework outlines 9 practices which underpin efforts to improve evidence use in policy, and describes the activities through which these practices are realised by key stakeholders. The framework builds on work by Best & Holmes, who in a 2010 article identified three generations of thinking about how best to improve evidence use in policy⁹⁵. They describe linear, relational, and systemic approaches, and propose that as our understanding of how to support the use of research evidence develops, we move through these perspectives. Importantly, these approaches are interdependent and cumulative: linear and relational aspects remain a core element of more systemic approaches. The framework and the practices it outlines are also supported by the systematic review *The Science of Using Science*, conducted by Langer, Tripney & Gough (2016) at the UCL Institute of Education EPPI-Centre⁹⁶.

For the purposes of analysing INPs (initiatives, networks and platforms) to strengthen international education policy, adaptations to the framework have been developed in conversation with its authors (Annette Boaz, Kathryn Oliver and Anna Numa Hopkins) and the NORRAG team (Gita Steiner-Khamsi, Moira Faul, Anna Numa Hopkins and Georgia Ellen Thorne).

Table A7.1 below displays the framework and an example of coding against one project, the GPE Knowledge & Innovation Exchange (KIX) (please note this example is purely for illustrative purposes and does not contain all relevant data). Two researchers conducted independent coding of INPs to ensure reliable codes and improved inter-rater reliability. Disagreements were noted, discussed and resolved via consensus.

94 Oliver, K., Hopkins, A., Boaz, A., Guillot-Wright, S. and Cairney, P. (2021, forthcoming) 'What works to promote research-policy engagement?' in *Evidence and Policy*; Hopkins, A., Oliver, K., Boaz, A., Guillot-Wright, S. and Cairney, P. (2021) 'Are research-policy engagement activities informed by policy theory and evidence? 7 challenges to the UK impact agenda' in *Policy, Design and Practice*, Vol. 4 Issue 3, Pages 341-356. <https://doi.org/10.1080/25741292.2021.1921373>

95 Best, A. and Holmes, B. (2010) 'Systems thinking, knowledge and action: Towards better models and methods', *Evidence and Policy*. doi: 10.1332/174426410X502284.

96 Langer, L., Tripney, J. and Gough, D. (2016) *The Science of Using Science: Researching the Use of Research Evidence in Decision-Making*. Available at: <https://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3504>.

Table A7.1 Coding of effective support for URE (linear, relational and systemic) and example

Practices: Analysing the work of INPs to strengthen evidence use in education policy, planning and practice				Example: GPE Knowledge & Innovation Exchange (KIX)
LINEAR (product-focused)	<p>1. Disseminating and communicating research Including:</p> <ul style="list-style-type: none"> • Congressional testimony • Policy briefs and factsheets • Roundtables and convenings • evidence and 'what works' summaries and resources • online evidence libraries and platforms • Op Eds and commentaries • Blogs, web features, data viz • networks of evidence producers (for more detail on types of dissemination see for example 'Pyramid Philosophy' by the Urban Institute) 	<p>2. Formal institutional requests for evidence Including:</p> <ul style="list-style-type: none"> • advisory bodies or mechanisms • consultations or calls for evidence • policymaker evidence services within government (e.g. Parliamentary Research Services and Libraries) 	<p>3. Facilitating access to research Including:</p> <ul style="list-style-type: none"> • Research commissioning services and support • Advice or information services for policymakers 	<p>1. Dissemination and communication: Policy briefings e.g. "Factsheet""Breif" Social media (Twitter, FB, IN) Blog "Education for All support"</p> <p>2. Formal institutional requests for evidence: Not found</p> <p>3. Facilitating access to research: Supporting national teams to commission research "Develop evidence-based solutions"</p>
	<p>4. Building decision-maker skills Including:</p> <ul style="list-style-type: none"> • Training and professional development on research evidence and/or on evidence use • Policy Fellowships or placements • Learning events (e.g. dialogues or events with structured learning component) 	<p>5. Building researcher skills Including:</p> <ul style="list-style-type: none"> • Training for researchers on policy engagement or policymaking • Fellowship, internship or secondment opportunities in government • Research services and resources that support engagement 	<p>6. Building professional partnerships Including:</p> <ul style="list-style-type: none"> • Sustained networking or knowledge exchange • Long-term partnerships or collaborative working • Teaching and learning in partnership • Research and evidence use partnerships 	<p>4. Building decision-maker skills: For national policymakers "Learning programmes".</p> <p>5. Building researcher skills: Not found</p> <p>6. Building professional partnerships: National and regional partnerships.</p>

Practices: Analysing the work of INPs to strengthen evidence use in education policy, planning and practice			Example: GPE Knowledge & Innovation Exchange (KIX)	
SYSTEMS (enabling environment)	<p>7. Leadership for evidence in policy Including:</p> <ul style="list-style-type: none"> • Providing training and capacity-building for individuals to develop strategic leadership skills. • Policy Planning • Advocacy (including advocacy for evidence use; advocacy of specific evidence or research findings; advocacy on the role, nature and use of evidence) 	<p>8. Rewarding impact, knowledge exchange, or evidence use Including:</p> <p>Carrots:</p> <ul style="list-style-type: none"> • Prizes/ rewards (Often run by journals, networks, policy institutes, universities, learned societies as well as funding bodies) • Practitioner incentives for evidence use (for e.g. 'Evidence-Based Practice' award of certification.) <p>Sticks:</p> <ul style="list-style-type: none"> • Departmental / national requirements for evidence use in policy development • Research assessment exercises • Practitioner requirements for evidence use. 	<p>9. Creating and embedding infrastructure and posts. Including:</p> <ul style="list-style-type: none"> • Infrastructure that supports sustained research-policy engagement (e.g. national/ departmental evidence planning; national/ departmental research evidence capacity-building; Areas of Research Interest) • Posts – job roles or teams for people with skills in research-policy engagement who work to connect and coordinate “supply and demand” (e.g. government evidence teams; intermediaries, boundary spanners and knowledge brokers) 	<p>7. Leadership for evidence in policy: Leadership capacity-building e.g. “Strategic capabilities programmes”</p> <p>8. Rewarding impact, knowledge exchange, or evidence use: Not found</p> <p>9. Creating and embedding infrastructure and posts: Funding system transformation e.g. “System capacity grants”</p>
SYSTEMS LEADERSHIP	<p>10. Strategic leadership Including:</p> <ul style="list-style-type: none"> • Articulated organizational systems goals • Coordination with or between relevant actors in the ‘ecosystem’. • Strategy for addressing the role and nature of evidence use in policy. 	<p>11. Systems responsiveness Including:</p> <ul style="list-style-type: none"> • Mechanisms for policy responsiveness • Adaptive resource investment 	<p>12. Embedded learning Including:</p> <ul style="list-style-type: none"> • MEL on systemic outcomes and indicators • Adaptive management 	<p>10. Strategic leadership: Goal of improving education systems “GPE supports governments to transform their education systems by drawing on the breadth and strength of the partnership.”</p> <p>11. Systems responsiveness: Not found.</p> <p>12. Embedded learning: Not found</p>

Below, we developed descriptive categories to support coding, developed from Oliver et al (2021) Hopkins et al (2021), Langer, Tripney and Gough (2016), Best and Holmes (2010) and supporting literature (Table A7.2).

Table A7.2 Coding scheme for effective support for URE (linear, relational and systemic)

Roles: who does what to improve evidence use in policy				
LINEAR (product-focused)	Researchers produce evidence	Researchers and research institutions disseminate evidence (push)	Government gathers research and evidence (pull)	Funders funds <ul style="list-style-type: none"> • Evidence production OR • Evidence collection OR • Evidence synthesis
RELATIONAL (relationship-focused)	Researchers and policymakers collaborate to produce knowledge.	Researchers and policymakers exchange knowledge and expertise, aiming to develop mutual understanding.	Funders fund knowledge exchange and relationship-building, including collaborative networks and platforms	
SYSTEMS (enabling environment)	Researchers and national policymakers collaborate within an “ecosystem” of relationships between those involved in the production and use of evidence	Government and international Organizations support interaction between research and policy expertise	Funders fund initiatives that build the “ecosystem”	
SYSTEMS LEADERSHIP	All institutions (research, policy, funding bodies) attend to systemic characteristics of evidence production and use (including: who produces evidence, who makes policy, who accesses and participates in relational and systemic work, what evidence ‘counts’)	All institutions connect activities and initiatives to strengthen an evidence “ecosystem”		

Characteristics and assumptions about evidence use in policy				
LINEAR (product-focused)	No or limited collaboration / one-sided	Knowledge is a product made by researchers and supplied to policymakers	Knowledge is communicated in different ways (e.g. 'Best Buys') but remains independent from policy contexts	Networks are usually between researchers Or policymakers. They share information but do not support collaboration.
RELATIONAL (relationship-focused)	Collaboration between evidence producers and users	Knowledge and expertise of different kinds is held by both researchers and policymakers	Knowledge is shared and developed collaboratively or in dialogue with contexts of use	Networks and partnerships facilitate sustained, mutualistic, long-term interaction between research and policy.
SYSTEMS (enabling environment) + SYSTEMS LEADERSHIP	Complex relationships and partnerships between the researchers, funders and policymakers involved in the production and use of evidence. [please see summative questions at the end of the document].	Knowledge production and use in policymaking involves complex interaction between research and policy expertise within dynamic "ecosystem" [please see summative questions at the end of the document].	Networks and partnerships provide support for engagement and knowledge use in complex policymaking environments [please see summative questions at the end of the document].	

Annex 8

Descriptions of INPs most frequently identified by survey respondents

Name of INP	Description
<p>UNESCO IIEP (International Institute for Educational Planning)</p>	<p>As an integral part of UNESCO, UNESCO IIEP has engaged in educational planning since its establishment in 1963. The institute helps ministries to plan and deliver necessary education services by providing training programmes and technical cooperation, conducting policy research, and sharing knowledge (UNESCO IIEP, n.d.). Through knowledge sharing, it facilitates context-relevant analyses and supports educational policymaking and planning. In its 11th Mid-Term Strategy 2022–2025, it announced its goal to serve as a global reference in data analytics for educational planning and management. The institute intends to provide diverse support including: the operationalization of concepts such as quality and inclusion, data collection, policy planning based on data, and provision of digital solutions.</p>
<p>INEE (Inter-agency Network for Education in Emergencies)</p>	<p>INEE is a global network of members working to ensure the fundamental right to education, particularly focused on education in emergency (EiE) and crisis contexts. INEE members include personnel from the UN and Ministries of Education, NGOs, donors, researchers, teachers, and students. In the context of evidence-based policymaking, INEE serves as the hub for collecting and synthesizing evidence and knowledge particularly on EiE to inform policymakers, practitioners, and researchers. Its Strategic Framework 2018–2023 identifies the use of knowledge, information and evidence as its third strategic priority. Specifically, INEE plans to develop a monitoring and evaluation framework targeting EiE and strengthen its knowledge platforms, such as the INEE Resource Database and EiE Toolkit.</p>
<p>UNESCO UIS (Institute for Statistics)</p>	<p>UNESCO UIS was established as the official statistical agency of UNESCO. Aligning with the SDGs, it provides a wide range of indicators and makes them available online through the platform of UIS.Stat. Through data, it seeks to help both national governments and international organizations to assess benchmark progress, particularly in relation to the SDG 4. In addition, it engages in technical cooperation to strengthen countries' data collection and evidence-based policymaking.</p>
<p>CLADE (Latin American Campaign for the Right to Education)</p>	<p>CLADE is a network of civil society organizations across 18 countries of Latin America and the Caribbean. Its members include NGOs, movements, coalitions, and networks at national, regional, and international levels. CLADE aims to realise the human right to education through improving state accountability. Their goals include the provision of universal and free education without discrimination. CLADE has engaged in knowledge production and collaborative work with researchers and applied it to advocacy. CLADE's Strategic Plan 2019–2022 aims to collaborate with researchers and evidence-based policymaking to facilitate dialogue with various stakeholders, such as media, international organizations and policymakers.</p>

Name of INP	Description
GCE (Global Campaign for Education)	<p>GCE is a civil society movement stemming from the World Education Forum in Dakar. It originally intended to coordinate civil society organizations in relation to the global education agenda and strives to achieve the fundamental right to quality education for all. In its most recent strategic plan, GCE recognizes the importance of gathering data and disseminating information to influence debates on education policy. Representing civil society organizations, GCE emphasizes the need for civil society advocacy to align with shifts in global education policy to ensure the right to education and achieve citizen-led research and dissemination of data. While GCE calls for greater transparency in governments' data collection and disclosure, it aims to complement it with data collected by civil society.</p>
RISE (Research on Improving Systems of Education) Programme	<p>RISE is a research programme that tackles the issue of children's lack of foundational skills in developing countries. It aims to achieve this goal by analyzing interactions between relevant actors. The programme is a global venture involving research teams in multiple countries. By identifying reasons why education systems do not produce good learning outcomes, the programme is expected to inform policymakers of how to reorganize systems to improve learning outcomes. RISE has developed several frameworks and tools, such as the RISE system diagnostic, in which government actors and researchers can engage in communications based on the data and adopt appropriate reform options.</p>
ANCEFA (Africa Network Campaign on Education for All)	<p>As a regional network, ANCEFA coordinates coalitions and networks in 39 African countries. Through collaboration with civil society organizations in Africa, it advocates for access to free quality education. To achieve this mission, ANCEFA helps its network members by sharing knowledge and informing policy. As one of its aims, ANCEFA conducts research for evidence-based advocacy and collecting information on good practices to facilitate dialogue.</p>
GPE-KIX (Knowledge and Innovation Exchange)	<p>Founded as a joint endeavour between GPE and the International Development Research Center (IDRC), GPE KIX is committed to tackling knowledge gaps in education. With a budget of more than US\$75 million, it is the largest fund among those holding similar goals (GPE, 2019). By funding evidence-based solutions, it aims to inform national policymakers of such options and strengthen countries' capacities for innovations. It consists of four regional hubs, through which it facilitates knowledge sharing on policy challenges and responses and disseminates effective solutions. As of March 2022, it engages in four knowledge initiatives targeting: early education (Better early learning and development at scale [BELDS]), gender equality, national learning assessments, and education information systems.</p>

Annex 9 Summary of public health systematic reviews identified and included

Review title and authors	Aims	Literature type and setting	Key findings
<p>Political and institutional influences on the use of evidence in public health policy.</p> <p>(Liverani, Hawkins and Parkhurst, 2013)</p>	<p>To examine the influence of key features of political systems and institutional mechanisms on evidence use, and contextual factors that may contribute to the politicization of health evidence</p>	<ul style="list-style-type: none"> • Peer reviewed journal publications and grey literature • 56 studies included • Variety of countries, settings, and public health issues; including multi-country comparison 	<p>Relevant political and institutional aspects affecting the use of health evidence included the level of state centralization and democratization, the influence of external donors and organizations, the organization and function of bureaucracies, and the framing of evidence in relation to social norms and values. However, understanding of such influences remains piecemeal given the limited number of empirical analyses and comparative works, and the limited consideration of political and institutional theory.</p>
<p>The effectiveness of knowledge translation strategies used in public health: a systematic review</p> <p>(LaRocca, Yost, Dobbins, Ciliska, Butt, 2012)</p>	<p>To identify the effectiveness of Knowledge Translation (KT) strategies used to promote evidence-informed decision making among public health decision makers.</p>	<ul style="list-style-type: none"> • Studies directed towards health practitioners in a public health or community setting were included in this review • 5 primary studies included (four randomized controlled trials and one interrupted time series analysis) • Of the 5 studies one was conducted in the United States, two in Canada, one in Norway and one in England 	<p>No singular knowledge translation strategy was shown to be effective in all contexts. Conclusions about interventions are context dependent. Knowledge translation strategies shown to be less effective were passive and included access to registries of pre-processed research evidence or print materials. Knowledge brokering can have a positive effect on those organizations that at baseline perceived their organization to place little value on evidence-informed decision making. Simple or single knowledge translation strategies were shown in some circumstances to be as effective as complex, multifaceted ones when changing practice.</p>

Review title and authors	Aims	Literature type and setting	Key findings
<p>The use of research in public health policy: a systematic review (Masood, Kothari, Regan, 2018)</p>	<p>To examine:</p> <ol style="list-style-type: none"> 1) the extent to which research evidence is used 2) types of research evidence used 3) the process of using research evidence 4) factors other than research influencing decisions 5) barriers to and facilitators of evidence use 	<ul style="list-style-type: none"> • 16 studies, representing 864 individuals • limited to countries with universal healthcare coverage (that is, Canada, Australia, New Zealand, and countries within Europe) 	<ul style="list-style-type: none"> • Informal evidence is more often used than research findings in public health policy-making, but the use of research findings has improved • Challenges and enablers exist at multiple levels of the system, suggesting that use of research evidence is a complex, interdependent process. Research findings tend to be conceptually used, and the normative aspects of policy-making are important • Organizational supports and services facilitate evidence-informed policy-making • Increased contact between researchers and policy-makers can enable research use

Annex 10 Summary of education systematic reviews identified and included

Review title and authors	Aims	Literature type and setting	Key findings
Evaluating the evidence in evidence-based policy and practice: Examples from systematic reviews of literature (Beng, H., 2018)	Evaluate the quality of evidence behind some well-known education programmes	<ul style="list-style-type: none"> • Review of previous systematic reviews of over 5,000 studies on a range of topics • UK context 	Much of the evidence supporting 'evidence-based' policy is weak, and fundamental flaws in research are not uncommon.
The impact of education programmes on learning and school participation in low- and middle-income countries (Snilstveit, B, 2016)	To analyze the effectiveness of these interventions in improving children's enrolment, attendance, completion and learning outcomes in primary and secondary school in low- and middle-income countries (L&MICs)	<ul style="list-style-type: none"> • Synthesized evidence from 216 programmes reaching 16 million children across 52 L&MICs 	There are no 'magic bullets' to ensure high-quality education for all, but there are lessons to be learned for improving future education programmes. It identified interventions that worked in most contexts, that were promising, that did not always work, and what is unknown.

Annex 11

Relational and systemic INPs identified in systematic reviews and interviews, including key characteristics and examples

Type	Name, Funder, Location	Remit	Description
LINEAR & RELATIONAL	INDEPTH NETWORK		
	<p>Location: Ghana</p> <p>Funders: Hewlett Foundation, Sida and Wellcome Trust.</p>	<p>INDEPTH is a global membership of 49 Health and Demographic Surveillance Systems (HDSS) sites run by 42 research centers in 20 countries across Africa, Asia and the Pacific region.</p>	<p>INDEPTH aims to provide robust answers to some of the most important questions in health and population research and development. Its mission is to lead a coordinated approach to provide timely longitudinal evidence across a range of settings to understand and improve population health and development policy and practice by</p> <ul style="list-style-type: none"> • building the skills and strengthens the capacity of research centers and researchers by improving training, enhancing career paths, and sharing data • providing information that enables policy-makers to make informed decisions and to adapt their programmes to changing conditions • synthesizing the generated knowledge into comprehensive policy documents

Type	Name, Funder, Location	Remit	Description
LINEAR & RELATIONAL	<p>CENTER FOR CHILD HEALTH POLICY AND ADVOCACY</p> <p>Location: US</p> <p>Funders: Texas Medical Center Health Policy Institute, Texas Children’s Hospital Educational Scholarship Program, Episcopal Health Foundation</p>	<p>To advance policy and advocacy strategies to impact legislative and regulatory action on the behalf of vulnerable children in the areas of patient care, education, and research.</p>	<p>The Center aims to serve as a catalyst to impact legislative and regulatory action on the behalf of vulnerable children at local, state, and national levels.</p> <ul style="list-style-type: none"> • Research on social determinants of health and a systematic review to inform development of an Evidence-Based Early Childhood Development Strategy • Conference, education and events programme • Online publications, policy and issues briefs • Provides training, mentorships and placements for research students to work in and influence policy, in the Texas Legislature, to create leaders who will improve child health outcomes and general child well-being
	<p>NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE</p> <p>Location: UK</p> <p>Funder: Department for Health and Social Care</p>	<p>NICE is responsible for producing and supporting the use of evidence-based guidance and recommendations for health, public health and social care in the UK.</p>	<p>NICE produces guidance and provides information services based on systematic review evidence. It sets research priorities and develops guidance through stakeholder consultations processes and that involve patients and health and social care professionals and other stakeholders.</p> <ul style="list-style-type: none"> • Creates guidance, quality standards and performance metrics for those providing and commissioning health, public health and social care services • Provides a range of information services for commissioners, practitioners and managers across health and social care. e.g., NICE Pathways evidence summaries, Evidence Search, clinical knowledge summaries, journals and databases • Acts as a forum for clinicians and researchers to coproduce guidelines and recommendations • Provides quality improvement and implementation support for evidence-based practice
RELATIONAL			

Type	Name, Funder, Location	Remit	Description
SYSTEMIC	INTERNATIONAL ASSOCIATION OF NATIONAL PUBLIC HEALTH INSTITUTES (IANPHI)		
	<p>Location: France / US / International</p> <p>Funder: United States Centers for Disease Control and Prevention and the Bill and Melinda Gates Foundation</p>	<p>IANPHI is a membership organization that strengthens national public health institutes (NPHIs) using an evidence-based international framework for development. IANPHI has 110 member institutions in 95 countries. It has 4 regional networks: Africa, Asia, Europe, and Latin America.</p>	<p>IANPHI work to strengthen national public health institutes (NPHIs) using an evidence-based international framework for development. It has a peer-to-peer model, supported by targeted investments, that aims to promote long-term national self-sufficiency.</p> <ul style="list-style-type: none"> • Builds public health capacity and capabilities by connecting, developing and strengthening national public health institutes worldwide • links and strengthens the government agencies responsible for public health, including through peer-to-peer evaluation and assistance, grant support and efforts focused on advocacy, collaboration and sustainability • supports the development of regional networks which bring together member NPHIs with the aim of fostering regional collaboration, facilitating the provision of mutual support and technical assistance, and sharing expertise and experience
SYSTEMIC	PUBLIC HEALTH FOUNDATION INDIA		
	<p>Location: New Delhi, India</p> <p>Funder: independent foundation</p>	<p>The Public Health Foundation of India (PHFI) is a public- private initiative that adopts a broad, integrative approach to public health, tailoring its endeavors to Indian conditions and bearing relevance to countries facing similar challenges and concerns.</p>	<p>The Public Health Foundation of India (PHFI) has evolved through consultations with multiple constituencies including Indian and international academia, state and central governments, multi & bi-lateral agencies and civil society groups. PHFI is a response to redress the limited institutional capacity in India for strengthening training, research and policy development in the area of public health. Activities include:</p> <ul style="list-style-type: none"> • Training the public health workforce through India relevant courses and training programmes • Supporting the improvement of core public health programmes • Capacity building through technical assistance to the Government of India and state governments • Implementing public health projects across a wide range of areas • Promoting policy and programme relevant research by filling knowledge gaps • Conducting health impact assessment and evaluating innovations for improving the outreach and effectiveness of health systems • Supporting policy development and launching advocacy initiatives

Type	Name, Funder, Location	Remit	Description
SYSTEMIC	EVIDENCE INFORMED POLICY NETWORK (EVIPNET)		
	<p>Location: International</p> <p>Funder: WHO</p>	<p>EVIPNet is a network which attempts to improve public health by coordinating the efforts of policy-makers and health researchers. EVIPNet was established by WHO in 2005 and is currently active in multiple regions, most recently in Europe since 2012.</p>	<p>EVIPNet’s mission is to promote a network of partnerships at the national, regional and global levels. These are expected to strengthen health systems and improve health outcomes through regular access to and assessment, adaptation and use of context-specific research evidence.</p> <ul style="list-style-type: none"> • At the regional and global levels, EVIPNet develops and fosters capacity-strengthening strategies to enable policy-makers, researchers and civil society representatives to combine political and policy analysis with evidence synthesis and stakeholder engagement • At country-level, EVIPNet establishes teams who produce evidence briefs for policy, conduct policy dialogues and undertake rapid evidence syntheses and dissemination. “Safe haven” deliberative forums or policy dialogues, involving policy-makers, researchers and civil society aim to stimulate context-specific, evidence-informed local action



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Educational, Scientific
and Cultural Organization

Strategic review

Improving the use of evidence for education policy, planning and implementation

Data and evidence inform policy-makers about how countries are advancing towards their education targets and which policies and programmes could improve their education outcomes. There is a tremendous growth in education data and research output which could serve this purpose. A growing number of international organizations, think-tanks and foundations are engaged in evidence generation, synthesis and brokerage. However, the use of evidence for education policy, planning and implementation is still limited. The SDG 4 High-Level Steering Committee (HLSC), the apex body for global education cooperation, recognizes this evidence-to-policy link as a critical lever for countries' towards the Sustainable Development Goal 4 and promotes evidence-based policy formulation and implementation as one of its core functions.

To understand and better guide the HLSC's evidence and policy function, UNESCO commissioned NORRAG at the Graduate Institute of International and Development Studies, Geneva, to conduct this strategic review to examine the current practice and challenges in using evidence for education policy-making and implementation at the country level and to provide recommendations and a roadmap of actions for the HLSC to consider. The review, undertaken by the Authors: Steiner-Khamsi, G. and Faul, M. V. with Baek, C., Hopkins, A. N., and Iwabuchi, K., draws on a global survey, individual and group interviews and a comparator case study with the public health sector. It has served as an input for the HLSC's Evidence and Policy Technical Committee to develop a work plan aimed to strengthen country capacity in evidence use; promote regional cooperation to build evidence-to-policy bridges; and produce and disseminate tools, methodologies and knowledge products as global public goods.

