



Educational Research and Innovation

Who Really Cares about Using Education Research in Policy and Practice?

DEVELOPING A CULTURE OF RESEARCH ENGAGEMENT

Chapter synopses



Chapter Synopses

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1 Introduction

Creating a culture of evidence use is a key ingredient for strengthening research impact. However, what it really means and how we can establish or change the culture often remains implicit.

This publication intends to open the black box of evidence use culture by exploring the following:

What do we mean by a culture that supports research engagement? What are the characteristics of such a culture and how can we develop these in educational organisations and at the system level?

How can we develop individuals' and teams' skills, and organisational and systemic capacity for the quality use of research in policy making and practice?

Which structures and processes support the development of an organisational and system-level culture for better research engagement?

This report addresses these questions by examining two distinct levels: system and organisational. It employs – and calls for – a systems approach to research engagement. Two themes emerge: The first relates to human resource strategies to build individual and collective competences for better research engagement and provide appropriate professional learning and development. The second theme was identifying, describing, creating and maintaining stable structures and processes to support the development of a culture of research engagement. This report presents cutting-edge research from leading experts in the field of knowledge mobilisation and draws on analyses conducted as part of the OECD/CERI Strengthening the Impact of Education Research project.

The policy survey

Survey design and data

The OECD *Strengthening the Impact of Education Research* policy survey – conducted from June to September 2021 – collected data on the mechanisms used to facilitate research use in countries/systems. Overall, 37 education systems from 29 countries¹ responded to the survey. The survey focused on the actors, mechanisms and relationships that facilitate the use of research in policy making and in practice; drivers of and barriers to research use; and actors / mechanisms of research production.

Policy makers in the survey

The policy survey targeted the highest level of decision making in education (ministry/department of education). Ministries were asked to co ordinate the response across departments. Responses represent the perspective of ministries of education at the national or sub-national (state, province, canton, etc.) level, about policy makers' and practitioners' individual attributes. Naturally, this most likely hides a significant degree of individual heterogeneity within systems. Ministries of education also had various definitions of policy makers. As a result, comparisons between systems in policy survey data should be made with caution.

Meaning of research

Education research in the Strengthening the Impact of Education Research project is understood as a form of systematic investigation of educational and learning processes to increase or revise current knowledge. This conceptualisation recognises that research need not necessarily be conducted within academia or by researchers only. However, this definition does not consider (raw) information and data as “research” as such – only when these are analysed and investigated for a purpose. Overall, respondents had a similar understanding of research, although some placed a stronger focus on certain types of research.

1. OECD countries: Austria, Belgium (Flemish and French Communities), Canada (Quebec, Saskatchewan), Chile, Colombia, Costa Rica, the Czech Republic, Denmark, Estonia, Finland, Hungary, Iceland, Japan, Latvia, Lithuania, the Netherlands, New Zealand, Norway, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland (Appenzell Ausserrhoden, Lucerne, Nidwalden, Obwalden, St. Gallen, Uri, Zurich), the Republic of Türkiye, the United Kingdom (England) and the United States (Illinois). Non-member countries: the Russian Federation and South Africa.

2 Co-ordinating the production of education research: Towards a system-level culture

In what ways does system-level co-ordination of education research production enable a strong research engagement culture?

Systems need to consider how much to invest in their capacity to produce locally relevant research, including scale-up and effectiveness research.

Many systems report shortages of research that is considered relevant. Shortage of research also calls for changes in the collection and reporting of data for education research which is largely lacking.

Policy makers perceived some types of research – such as effectiveness research – to be quite or highly relevant, but not very accessible (see Figure 2.1). Ministries and other education stakeholders may also need support to develop their understanding of how different types of research are relevant to their work.

A fine-grained analysis is needed to clarify the low accessibility of education research.

Accessibility may be impeded due to a lack of research in certain areas, lack of funds to access existing research or inaccessible format or language of the research. Smaller systems also face capacity limitations regarding the number of researchers and the transferability of research produced in other contexts.

There is considerable scope for high-quality evidence synthesis to be done systematically.

A lack of time to access research, coupled with the ever-expanding body of research, generates demand for evidence synthesis to improve research accessibility. Evidence syntheses – such as a systematic review, a thematic narrative review or a meta-analysis – draw evidence from a comprehensive body of literature instead of relying on a single study. They may enable educators and policy makers to understand which programmes or practices have been proven to work in other contexts and can help guide funding decisions.

Ensuring stable funding for education research production is key.

One way of co-ordinating research production is to fund targeted research. However, most countries allocate a very small fraction of their R&D funding to education, far less than to health.

Co-ordination mechanisms exist, but there is room to improve them. Our understanding of which mechanisms work in different contexts, and how well they work, could also be improved.

About 60% of education systems co-ordinate research production through regular internal

consultations with ministry staff and local governance actors on their needs. However, less than half of the systems reported having mechanisms such as a public research organisation, regular consultations with practitioners or a long-term strategy for producing education research.

System-level incentives are needed to support researchers' policy engagement, knowledge mobilisation activities and diverse actors' involvement in research production.

In many systems, there are few incentives for researchers to promote their work among practitioners and policy makers. Other incentives lead researchers to prioritise actions that enable pay raises and promotions, leaving them little time to increase their public engagement.

Some systems, e.g. Australia and the UK, have tried to address the issue of academic incentives by developing research excellence frameworks to promote an “impact agenda” for researchers.

More effective incentives could include rewarding the process of knowledge exchange or building long-term relationships with non-academics.

Promising practice

In Sweden, the government's revision of the Education Act in 2010 made it compulsory for education to be based on scientific knowledge and proven experience. This spurred collaboration with researchers and practitioners, especially in “practice-near school research”, which focuses on practitioners' needs and has practice improvement as a central purpose.

Collaborative research is promising, but key questions remain unanswered.

Involving stakeholders in the research process can strengthen the quality, relevance and availability of research to inform policy or practice. However, the evidence that collaborative research increases engagement with research evidence or has a positive effect on student outcomes is mixed.

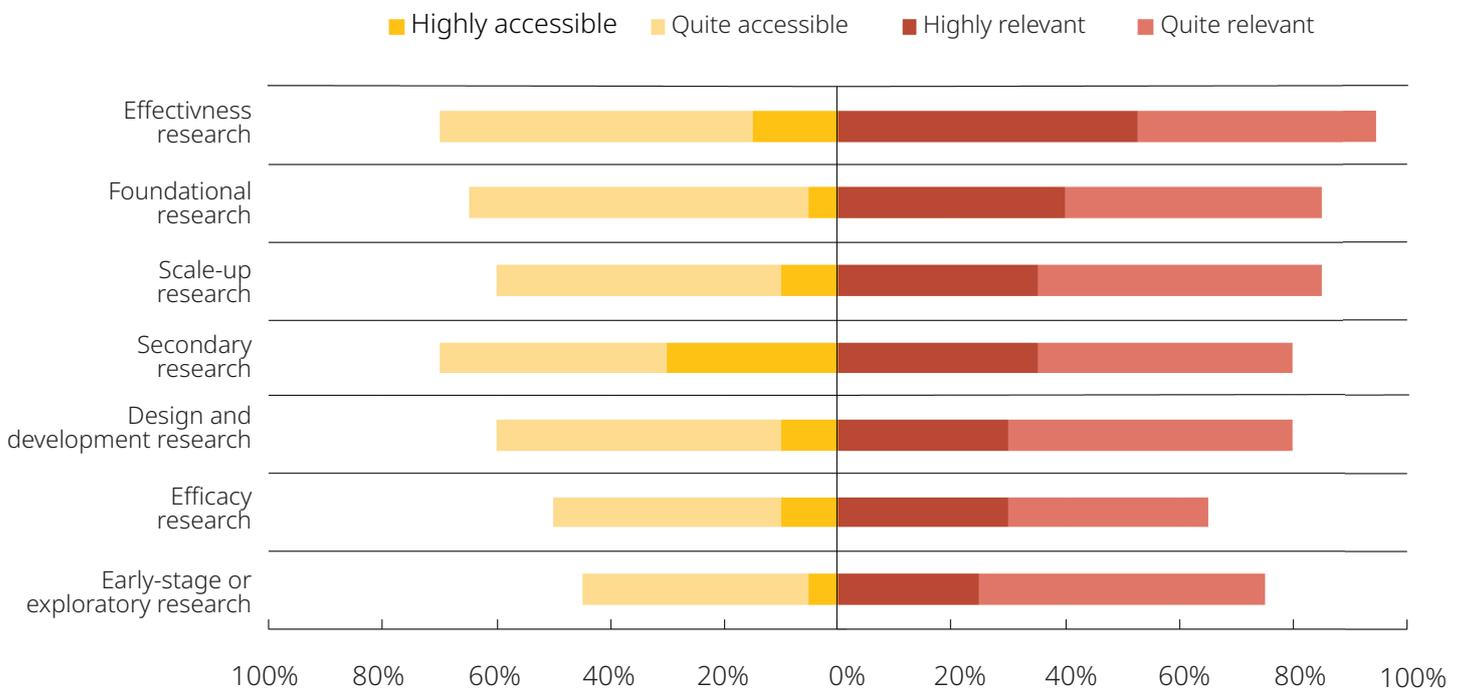
- The policy survey found practitioners were perceived to be the least involved in research production, and teachers' involvement is mostly in a passive role (filling in surveys or responding to interviews). This kind of passive role might not bring much benefit to teachers or schools.

- Policy makers were reported to be somewhat involved, on average, in research production, although they reported a lack of extrinsic incentives to do so (such as explicit time allocation, or a salary supplement), and were involved mostly at the start and finish of the production cycle, in designing or evaluating.
- Academics, practitioners and policy makers still lack support and training on how and when to work together. However, we still know little about which models are effective, under what conditions and at which stages of research production.
- Genuine collaboration requires managing power asymmetry between researchers and other stakeholders. This might be done by employing intentional strategies to guide partnerships, including rules for structured interaction.

It is essential to prioritise evaluating and piloting collaborative research. The question of the scalability of collaborative research initiatives will also need to be resolved.

Figure 2.1. Relevance and accessibility of research by type

Percentage of systems reporting relevance and accessibility of different types of education research, 2021.



Source: OECD Strengthening the Impact of Education Research policy survey data. StatLink <https://stat.link/pkrfcv>

3 Terms of engagement: Where learning meets culture

What are the characteristics of a culture of research engagement across OECD countries in policy and practice? Which resources and learning opportunities promote research engagement?

A culture of thoughtful engagement with research is strictly connected to organisational learning, stimulating evaluative thinking and systematic attention to building individual skills, knowledge, and attitudes, and supporting social processes.

Work on evidence-informed policy and practice has increasingly recognised the importance of cultural factors in mobilising knowledge. Specifically, interactions between decision makers and researchers have been found to be among the most effective for increasing evidence use. In education practice, engaging with research is a social process.

Policy makers and practitioners are generally motivated to engage with research; however, many systems lack quality relationships to thoughtfully do so, especially for practitioners. Systemic mechanisms for collaboration are crucial for a culture of research engagement at the system level. These must allow the time and space to develop trusting relationships.

Survey responses show (see Figure 3.1) that there is often genuine **motivation** to use research. It is encouraging that most respondent systems reported that using education research is important for both policy makers and practitioners. However, the sources of motivation differ.

Willingness to challenge the status quo promotes the open-ended inquiry needed to use research. However, some ministries seem unwilling to learn new skills and methods when these challenge preconceived notions of what education practice or policy should be.

Good **relationships** are an important way of encouraging a shared understanding of research and promoting the production of relevant research. However, survey responses show low levels of trust in researchers.

A culture of quality research engagement cannot exist without adequate skills and capacity for research among policy makers and practitioners. Skills must be systematically taught and practised.

Most ministries reported that policy makers have the skills for research **use** - to translate, apply and communicate research, but fewer agreed that practitioners had adequate research use skills.

Only one-third of ministries agreed policy makers have all the skills for research **production** - to formulate research needs, supervise production, and co-conduct it. Even fewer attributed such skills to practitioners.

A large majority of ministries agreed that policy makers had adequate research **literacy** skills, better than their use and production skills. Their view on practitioners' research literacy was more varied.

Promising practice

The European Commission's Joint Research Centre ([link](#)) developed a Competence Framework for Innovative Policy Making. The framework describes the level of competence expected of a generalist policy maker, including for working with evidence. It likewise mapped competencies for researchers, to improve their policy impact, under the "Science4Policy" Competence Framework. The two frameworks are interdependent and overlapping.

A research use culture is underpinned by appropriate organisational structures, systems and resources, but the survey responses show that these systemic enabling factors are overall lacking.

Regarding **resources** (structures, tools, supportive leadership, financial resources and dedicated time), the lack of adequate time to engage with research is a major problem (reported by 73% of systems). Some 58% of systems also reported insufficient financial resources for policy makers, and 80% reported so for practitioners. A lack of mechanisms to support practitioners' research engagement was reported by over 60% of the ministries. A correlation was found between the presence of these mechanisms and higher levels of culture and skills dimensions within practice.

Learning opportunities are crucial to empower individuals to engage with research. A lack of learning opportunities is more often perceived for practitioners than for policy makers. Only around one-third of the ministries reported that training future teachers to understand and interpret research findings is required in all initial teacher education programmes, and less so in continuing professional development. When systems do integrate research literacy in teacher training, they do it comprehensively, but this is still rare.

For policy makers, survey responses indicate significant scope for increasing the visibility of existing learning opportunities.

The lack of adequate resources may be hindering the development of a research engagement culture.

Greater efforts should be given to dedicating time and space to the social processes behind research engagement.

Promising practice

Nesta in the UK ([link](#)) and The Policy Project in New Zealand ([link](#)) both offer learning and training opportunities and tools for policy makers on research engagement.

Policy and practice seem to face different challenges related to learning opportunities.

Questions remain around the precise nature of learning opportunities, their current focus and intended impact. Understanding these factors would allow the improvement of intermediary activities, such as providing training in research.

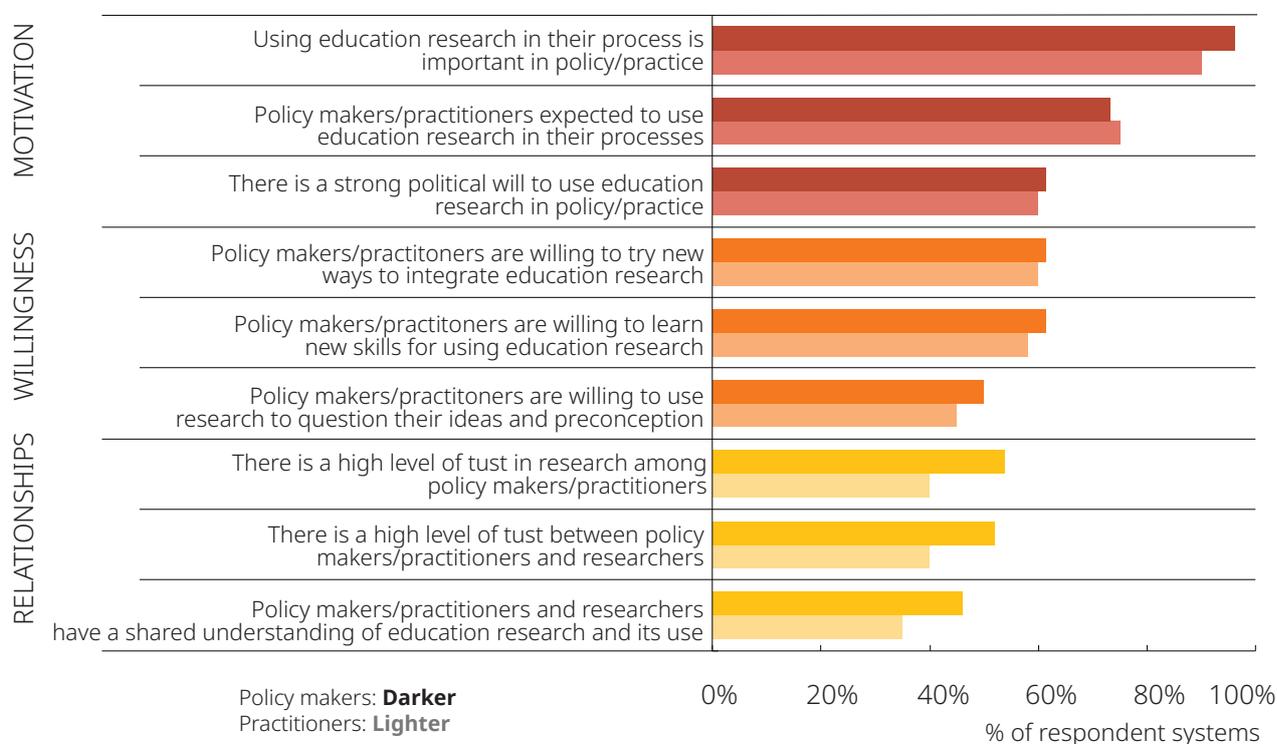
Human, financial and strategic resources are all interrelated and should work together to tackle big barriers, notably a lack of time. More research is needed to understand these interconnections.

- The higher the perceived levels of policy makers' research literacy, the more positive their relationships are with researchers. At the same time, two-thirds of the systems still do not agree that policy makers' relationships with researchers hold high levels of trust and mutual understanding.
- Systems that perceive adequate soft infrastructure also report that practitioners had greater levels of research literacy. Systems with resources for research engagement had noticeably stronger culture and skills. This suggests that systems recognise the role of databases, journal subscriptions, networks and forums in facilitating research engagement.

To support a culture of research engagement, explicit, specific and adequate interventions must address educational systems' learning needs. Evidence-informed frameworks can help policy makers understand, track and tailor relevant trainings. These frameworks can then serve as tools for human resource strategies, including recruitment and learning opportunities, e.g. professional development.

Figure 3.1. The landscape of culture

Percentage of respondent systems agreeing with statements on research engagement culture, 2021.



Source: OECD Strengthening the Impact of Education Research policy survey data. StatLink <https://stat.link/19paij>

4 The Dutch evidence journey in curriculum revision

How was knowledge used within the Dutch Ministry of Education, Culture and Science in the revision of school curriculum, according to the Quality Use of Research Evidence (QURE) framework (see Figure 4.1)?

The curriculum revision process

The process started in 2013, prompted partly by the publication of two advisory council reports. In its first phase, the process was highly participatory, but its output was criticised by parliament. This led to a shift towards a teacher-led development of curriculum “building blocks”. When the teachers’ proposals were perceived as over-ambitious, the process moved into a third phase of a step-by-step revision.

The Dutch education system & knowledge infrastructure

The Dutch education system is decentralised, with distributed responsibilities, and quality standards set by the ministry. The ministry’s Knowledge Unit is responsible for the overall knowledge infrastructure, alongside several other key actors outside the ministry.

Evidence travels through policies and politics in a non-linear way, with many detours and hilly tracks. The use of research in the revision process was shaped at different levels, according to the QURE analysis (see Figure 4.1).

- System level influences: There was a shift in discourse on education from building 21st-century skills to tackling the lack of basic skills. This led to reduced support for a large-scale curriculum revision and paved the way for a step-by-step approach. This shift also led to the use of more inspection research and international comparative research.
- Leadership and culture within the ministry: Several strong nodes of knowledge were detected, but the links between them are weak, resulting in a lack of knowledge circulation and co-ordination.
- Skillsets and mindsets: The policy team leading the curriculum revision was found to have a good mix of education practice, communication, research literacy, programme and process management skills.

Several types of knowledge are available to inform policy. The types of knowledge used may change over time and along the stages of the policy process.

- Some knowledge sources used in the revision process are straightforward to define, such as scientific research, curriculum research, inspection research and international comparative research.
- Other knowledge was produced by high-level committees and strategic advisory councils.

These presented as a mixture of scientific research, practice expertise, knowledge produced in public consultation meetings and internal political-administrative knowledge. This knowledge is not a pure research evidence synthesis but an exercise where different kinds of knowledge are combined and complemented with more value-driven advice.

- This approach did have some gaps, including limited information on how teachers implement curriculum goals and materials in classrooms, and a lack of systematic analysis of teachers’ experiences with the curriculum.

For a thorough engagement with evidence, specific structures and mechanisms within the ministry are necessary.

- There was no structure or mechanism in the ministry for systematically gathering, accumulating, and weighing all the relevant pieces of knowledge and explicitly judging what they meant for policy.
- Research was often used pragmatically, considering the political-administrative context and opinions of schools and teachers. It was hard to say what came first, the policy or the knowledge.
- Often, specific pieces of analysis were applied rather than an assembly of research pieces.
- The use of knowledge was fragmented, different types of knowledge were dominant in different stages, and the use of research was intuitive and implicit.

- The synthesis of research was outsourced.

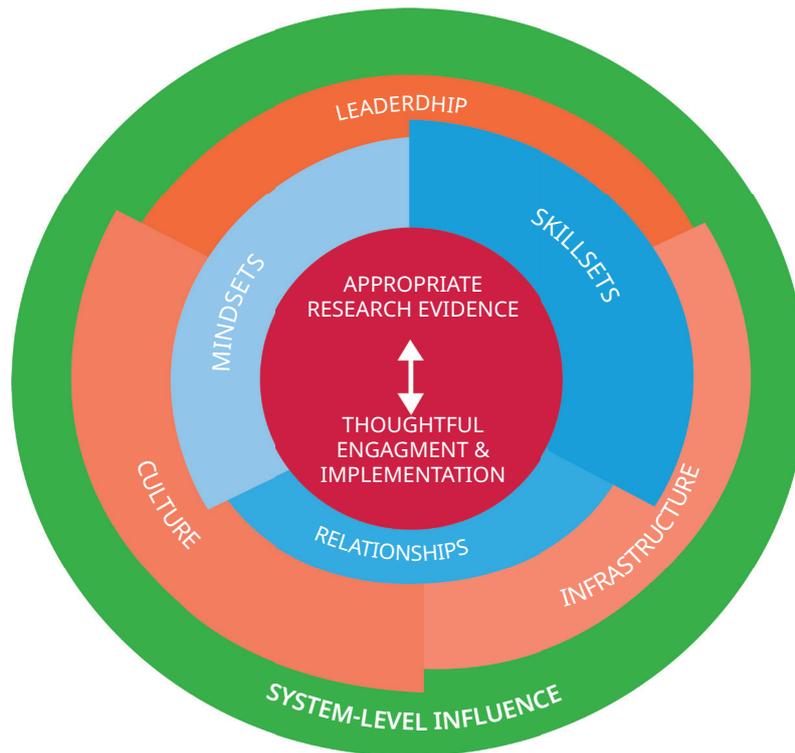
Several policy projects have recently aimed at improving the structure within the ministry.

- The Knowledge Unit is aiming for a series of collaborative evidence appraisal meetings to promote the uptake of policy evaluation and research. The goal of the meetings is a “percolation” of evidence into policy making, a

shift of thinking about issues, based on “lengthy interaction rather than one-way conversation”.

- The Knowledge Unit is exploring together with the Human Resources Management Department how these insights can feed into training for policy makers, and into the ministry's recruitment, development, and career paths of policy makers.

Figure 4.1. The Quality Use of Research Evidence (QURE) framework



Source: Rickinson, Using Evidence Better: Quality Use of Research Evidence Framework ([link](#))

5 Evidence use in implementing standardised testing in the Flemish Community of Belgium

How was evidence used in the policy-making process of implementing standardised testing in the Flemish Community of Belgium, using the OECD Framework of Strategic Education Governance (see Figure 5.1)?

Introducing standardised testing

There is no tradition of standardised testing in Flanders. However, following a decline in student attainment, from the 2024 onwards, primary and secondary schools will start implementing standardised and validated cross-network and cross-sector tests, whose primary aim is to support the internal quality assurance of schools. The tests are set up centrally, taken digitally, and will be analysed and reported on in a dashboard. The task of developing the tests was entrusted to the newly established Flemish Research Centre for Central Assessment in Education, a consortium of 40 university academics.

The Flemish education system

Key characteristics include freedom of education and high levels of school autonomy. Key challenges include declining student outcomes; significant teacher shortages; educational inequality; and policy making being a highly complex process involving diverse actors with diverse interests.

The main actor in evidence use

The Research and Policy Evaluation Team (in the Ministry for Education and Training), supports policy makers in collecting and using valid and reliable knowledge. The team identifies and formulates knowledge needs, tenders external research, or conducts research, builds bridges internally and externally, and supports the mobilisation of knowledge. Additionally, Flemish civil servants are required to have skills in working with evidence, communicating, and advising the political level.

Policy makers and stakeholders reflect upon evidence in diverse ways, each with their own interests and opinions in mind.

- Before designing the standardised testing, a strong knowledge base was built.
- Since academics are divided on the merits of standardised testing and there is evidence of undesirable effects, it was proposed that the implementation of the tests will be scientifically monitored to evaluate to what extent intended and unintended effects occur.
- Policy makers combined insights from research with political values and an understanding of the cultural context of the schools (e.g. the aversion to accountability measures in education). Thus, they proposed an approach involving low-stakes tests (with quick feedback and no effect on student grades), to uphold the tradition of allowing free choice of study options, and to allow the inspectorate to receive the results of all schools every year.

Capacity building is an integral part of the knowledge governance and stakeholder engagement processes.

- In the policy team leading the reform, the project leader has a strong academic background in educational effectiveness research. This has proven to be an important asset in building bridges between researchers and policy makers.
- Among stakeholders, the capacity to understand and interpret scientific evidence varies.
- Researchers at times express personal views and opinions that are ideologically driven and opposed to the political vision, which has been flagged as an issue of research production in education. There are also relatively few relevant researchers working on this topic in the Flemish context, and translating academic findings into policy decisions can be challenging.

It is important to find common ground in dialogue and listen to concerns. More could have been done to engage stakeholders early in the process.

Stakeholders were not involved in the early stages of the reform process, and felt they were faced with a fait accompli.

Later on, platforms for their involvement were established, such as the high-level forum (a feedback mechanism between stakeholders regarding the tests), a stakeholder steering group, school consultations, and user groups on test items and visualisations.

Involving stakeholders posed some challenges:

- Highly technical discussions require brokerage skills to keep everyone aboard;
- The stakeholders consulted do not necessarily represent the diversity of opinion within the groups they represent;
- Some stakeholders perceived the ministry's attitude as a top down discourse.

Decision makers made compromises between conflicting views in the process of policy making. Thus, on the question of measuring student learning gains, researchers and practitioners had opposing views, and a practical compromise was reached to measure only certain grades and conduct further research before moving ahead.

Thoughtful engagement with research evidence requires various stakeholders to have opportunities to collectively appraise evidence, while bringing their own contextual and professional knowledge to the discussion.

Such opportunities can help build a better understanding of evidence as well as trust in policy or reform processes. Having readily available evidence is not enough. It is important to compile and synthesise it.

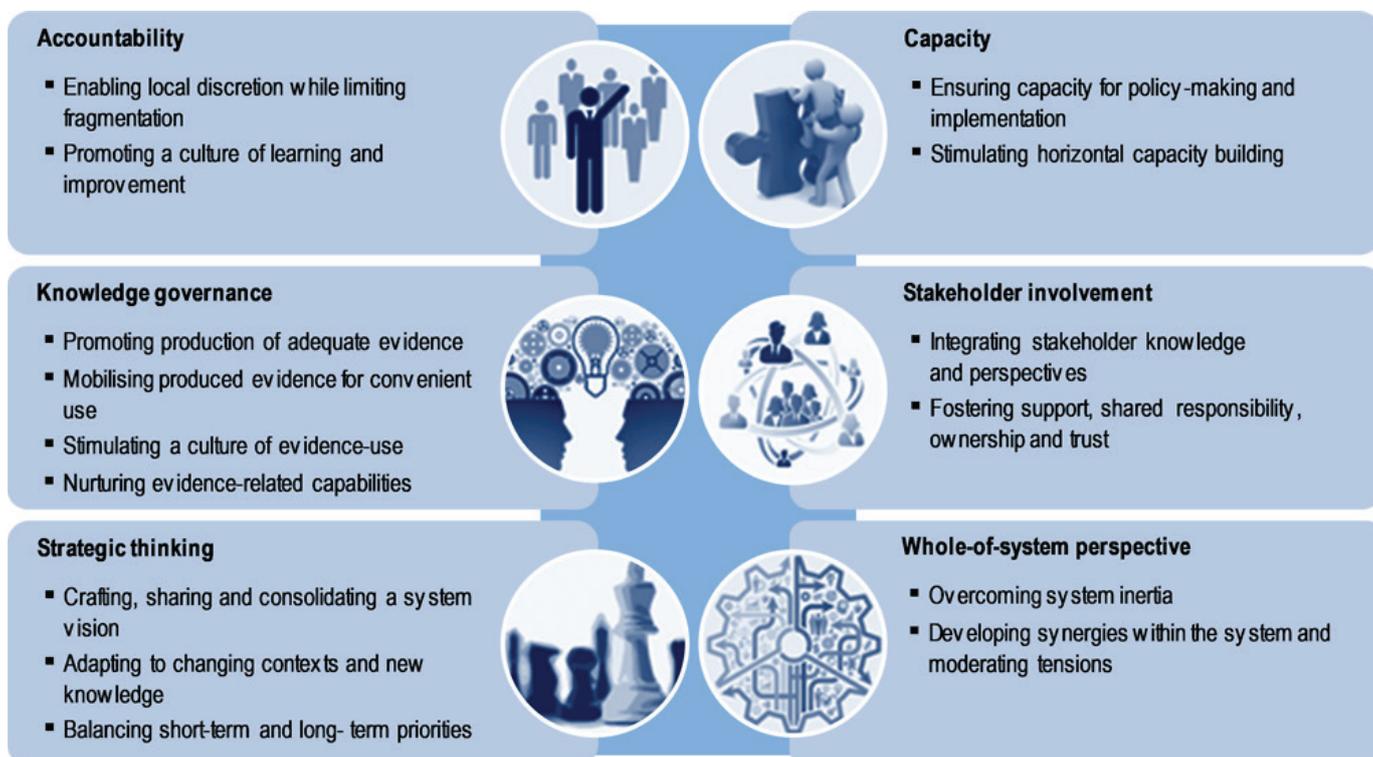
To maintain a whole-of-system perspective, the standardised tests need to be linked to other policy goals.

Other major developments affect the implementation of the tests, such as the revision of the curriculum. It is challenging to align different developments in the various policies. However, within the ministry, there is very close co-operation between the teams working on the tests and on curriculum development, exchanging information and sources of evidence.

The use of research results in the Flemish ministry is not yet a systematic practice.

- There remains a risk of fragmented use of research results, "cherry picking" of research findings, and using evidence as a tool for negotiation driven by political agendas.
- Some policy makers also lack the necessary capacities and time to gather and use evidence. And researchers' capacity to conduct policy and practice-oriented research is also limited.

Figure 5.1. OECD Framework of Strategic Education Governance



Source: Shewbridge and Köster (2019), Strategic Education Governance ([link](#))

6 Engaging with research to understand research use: The value of evidence use journeys

In previous chapters, Dutch and Flemish policy makers analysed the use of evidence in a specific policy reform. They each used an analytical framework to gain fresh insights. Through a comparative analysis of these we ask: How can the analysis of evidence use journeys improve our understanding of systematic and high-quality evidence use? Which factors enable the development of a culture of research engagement in policy organisations and processes?

The analysis of “evidence use journeys” can bring us closer to a deep understanding of systematic and high-quality evidence use. It can support us in identifying factors that enable a culture of research engagement in policy organisations and processes.

- The self-reflective analyses performed by Dutch and Flemish policy makers were coined “evidence use journeys”. This metaphor reflects the fact that using evidence in policy is not a linear and straightforward process.
- The Dutch and Flemish analysis processes were country-driven. The analyses draw on the peer reflections generated by civil servants in two OECD learning seminars. The OECD provided insights from research, facilitated discussions to enrich self-reflection with peer feedback, and supported the framing of the analysis.

A reflection on policy making by policy makers contributes to improving the practice of policy making. So does conceptual research – using frameworks to analyse policy processes.

- In both cases, a team of policy makers explored a question about their own policy-making practice. They mobilised research knowledge and their knowledge of their own context to create new knowledge: about ways in which evidence can be used more systematically and better.
- These analyses could be called ‘policy action research’ or ‘collaborative policy enquiry’. They collaboratively look at a problem – in this case, the fragmented use of research evidence in policy making – and aim to improve it, directly assisting policy making. This is apparent in the Dutch case, where the ministry started to put the conclusions of this analysis into action.

Guided self-reflection is a valuable complement to policy advice.

As opposed to policy advice, this sort of “policy coaching” builds on countries’ willingness to change and supports policy action research as a tool for improvement.

These evidence use journeys have social value and robustness.

The collaborative enquiries have a clear purpose, and are salient and timely, specific and accessible.

They enable capacity development and are of clear value to policy makers. They seem to indicate personal growth and a potential for transformation.

The two evidence use journeys have the potential to contribute to research itself.

The analyses could drive further refinement and adaptation of each framework, including further specification of some of the dimensions and descriptors. Thus, while the primary goal of applied research is improving practice (in this case, the practice of policy making), it can also contribute to developing theoretical knowledge.

Promising practice

In the health sector, evidence-informed **deliberative dialogues** are often used, whereby conversations between stakeholders are structured to discuss the best available evidence and inform policy making. Deliberative dialogues should be informed by pre-circulated evidence summaries, ensure fair representation, engage skilled facilitators, and allow for frank deliberations. They can enhance the legitimacy of policy design, allow for combining values with evidence, facilitate discussions on high-stakes topics, and inform ethical, accountable policy decisions in highly politicised policy areas. Deliberative dialogues have proved to be effective in allowing participants to acquire new knowledge and a stronger culture of research use, and improving stakeholder involvement in, and satisfaction with, strategic planning processes.

Each analytical framework was differently adjusted to the analysis of the case at hand.

- Both the Dutch curriculum revision and the Flemish introduction of standardised testing were motivated by strong signals that student attainment was dropping, and were carried out in a politicised context. However, their timeframes, organisational landscape, and the extent of politicisation differ considerably.
- Both cases used conceptual frameworks to analyse evidence use. The Dutch case used the Quality Research Use (QURE) framework

developed by Mark Rickinson and his team to understand how research can be used well in schools. The Flemish team used the OECD/CERI Strategic Education Governance (SEG) framework, building on earlier work on governing complex education systems.

- The framework's *purpose* impacts its use: The QURE framework aims to reflect on the quality of research use, which is precisely the purpose of the Dutch analysis, allowing direct application. The SEG framework has a broader scope.
- The *context* for which each framework was developed influenced its adaptation: the SEG framework – was developed for policy, needing little adaptation; the QURE framework was developed for practice (schools), requiring more adaptation for using it to analyse a policy setting.

A collective appraisal of evidence by stakeholders can increase quality research use in education policy. It can also enable a more meaningful and systematic integration of stakeholders' professional and contextual knowledge in policy decisions.

Both analyses present how different *sources* of knowledge interact in complex ways in policy making, where evidence, context, interests and values are combined. A common conclusion was the need for better evidence synthesis.

Collective capacity development within policy organisations to build research engagement skills is key. Such competences should be identified and integrated into human resources policies.

Both analyses discuss the need for *capacity building*, when they reflect on the collective skills of teams rather than just individual policy makers' skills. Both analyses go beyond research literacy skills and discuss competences that are specific to the policy maker context, such as inquisitiveness, communication, and political advisory.

Both accounts view stakeholders' engagement with research in the policy process as key.

In the Flemish case, this is part of the SEG framework, analysing the intensity and nature of involvement, and finding a need for a more structured approach.

A systems perspective is explicit in both frameworks.

The Dutch case analyses the ways in which the political discourse influenced the curriculum revision process, adapting the QURE framework for the context of policy. The Flemish case discusses the ways in which different policy processes are interconnected, with regard to the whole-of-systems dimension of the SEG framework. Both analyses include political developments that posed challenges to the reform process and the influence of the media.

7 Research use in education policy making in Norway: A case study

What is the landscape of education research in Norway? How do policy makers use education research and perceive the strengths and gaps in education policy making?

The Norwegian education system

Norway's education system is decentralised and municipalities have a high level of autonomy. The Ministry of Education and Research steers national policy, supervises local governance and has direct responsibility for public higher education institutions. The Ministry is required to maintain an overview of the education sector's knowledge needs and to systematically consider research as a tool for achieving policy goals.

Norway has high public spending on education. Spending on education research more than doubled in the period 2007-19 and around 90% of education research undertaken in the country is publicly funded.

Norway has encountered challenges in aligning local and national goals and ensuring consistent implementation of education policy reforms. There is also a need to expand data collection and exchange. Norway has developed a competence development model for schools and has worked on its implementation.

An education research strategy that considers research generation and engagement.

Norway has had a Strategy for Educational Research since 2008, which is renewed every four years. The strategy aims to facilitate reliable and relevant education research that reflects current issues of interest and to provide a solid knowledge base to inform policy and practice.

In the process of renewing the strategy, the ministry defines key questions and invites written inputs to these questions. It also organises meetings with stakeholders to encourage dialogue, and stakeholders were invited to give a presentation to the ministry. These various inputs are then used as a basis to set priority areas and produce a draft strategy which is shared internally within the ministry for feedback. Underlying agencies also provide input during this process. The strategy was externally evaluated in 2018 by the Research Council of Norway, the findings of which informed the development of the strategy's latest version (for 2020-24).

The current strategy emphasises dissemination and mediation of research findings, through clearly defined processes, such as by strengthening the role of key actors. It aims to increase the quality and scope of research, promote user participation and practice-oriented research, facilitate the availability and sharing of research and summaries of research, and develop research competence in teacher education.

A systems approach to using education research in policy requires stable processes and structures within the ministry.

Norway developed several **processes** to facilitate the use of education research in policy, including: systematically identifying policy makers' needs in terms of knowledge; commissioning research to address policy needs; encouraging interactions; legislating to promote the use of research in education policy; monitoring and evaluating the impact of education research in policy making; building capacity among policy makers to use education research; and developing toolkits and online platforms for policy makers that synthesise and disseminate education research findings and are user-friendly.

Norway also has some **structures** that promote the use of research evidence in educational policy, such as the Section for Policy Analysis (ARK) within the ministry, which provides analytical support for policy making, reports on international research, and facilitates strategic discussions.

Another such structure is the Programme for Research and Innovation in the Educational Sector (FINNUT) which promotes and funds innovation in the educational sector, fosters collaboration among key actors, and links with other programmes. It is a large-scale, long-term programme that is a key financial instrument for following up on the government's current policy for research on the educational system, e.g. it explicitly focuses on

communication and dissemination. The ministry also funds education centres in universities, which provide knowledge dissemination and support research-based practice.

Regular reflection on education research at the system level serves to create continuity, signals a consensus on priority areas, and helps to establish and clarify expectations among stakeholders.

The Ministry is satisfied with the extent to which policy makers use research. It contends that there are adequate human and financial resources, soft infrastructure, policy makers' competences, and a high level of trust between policy makers and researchers. However, the Ministry finds that barriers to improving the use of education research in policy making include lack of time and appropriate mechanisms, and low accessibility of research in terms of its format.

The Norwegian Public Sector PhD Programme (OFFPHD) aims to enhance research engagement. To maximise the potential of such schemes, academic-policy engagement schemes need to be strongly embedded in both communities.

The OFFPHD enables public sector employees to undertake a PhD in a university, funded both by the Research Council of Norway and the public sector body employing them. The programme is an example of an academic-policy engagement scheme that seeks to expand research activities in public

sector bodies, increase researcher recruitment and promote greater collaboration between academia and the public sector.

- The PhD project should be strongly anchored in the public sector body's work, thereby earning the public body a doctoral project that delves into an issue relevant to the organisation.
- This also allows policy-relevant issues to be the focus of research. It is also an opportunity for the academic institution to develop collaboration with public sector bodies relevant to its own research programme.
- The public body furthermore gains research competence within the organisation through the candidate's doctoral training, resulting in a more research-informed civil service.
- The PhD project should facilitate good collaboration between the public body, the candidate and the academic institution through regular meetings. This forges active links between stakeholders.

Going forward, Norway is designing a new instrument for research and innovation policy.

This initiative will promote the inclusion of young people in education, employment and society using a cross-sector approach where research-based knowledge is a prerequisite.

8 The role of learning conversations to improve outcomes for students

When are learning conversations most effective for educational improvement, and what makes them so?

What are learning conversations?

Learning conversations are collaborative conversations practitioners have about complex educational issues or problems. The conversations are often centred on teachers engaging with knowledge (e.g., from data and literature) and are guided by a facilitator who steers learning in useful ways and reminds participants to provide evidence for their assertions.

In learning conversations, teachers engage with research to systematically generate and test ideas, respond to problems, and achieve educational improvement. It is an elaborate process of collaborative learning, meant to understand the root causes of problems, or develop innovative approaches, in an evidence-informed and contextually meaningful way.

Are learning conversations effective?

There is emerging evidence on the effectiveness of learning conversations to help teachers successfully engage with research evidence. They are also linked to enhanced teaching practices and improved student outcomes. Studies find a positive effect at the student, teacher, and organisational levels.

The best way to start is with a vision of success, with “the end in mind”.

This can be done by asking participants to imagine what success will look like. This exercise creates alignment among participants, providing a foundation for action.

A deep understanding of the problem is necessary.

- Teachers need a way of measuring the “baseline”. This will allow them to know what the gap between the vision and the current situation is; measure whether they are closing it; better understand the potential causes of the gap; and inform ideas about what interventions might work.
- Based on the deep understanding achieved, new approaches to teaching and learning should be developed. It is crucial to carefully plan, communicate, and evaluate the new approach.

The wider education policy context can create opportunities for learning conversations, as well as allow room to experiment and implement actions for sustainable school improvement. For teachers to improve education in an evidence-informed way, systemic incentives and conditions need to be in place.

- A trusting environment in schools is critical for learning conversations, so that teachers feel free to have open discussions and to share and adopt innovation.

- Local norms and culture regarding innovation will influence the possibility to broker change within a specific school. Schools that are learning organisations have a dynamic, adaptive culture for change. If a culture of innovation is lacking, school leaders can promote it.
- Because a positive emotional state is ideal for reflective thought, it is important to help practitioners have a positive experience and a positive view on the learning conversation’s purpose. It is thus better to focus on continuous improvement, rather than accountability.
- Coming together regularly for a sufficient amount of time and being free to experiment is essential to enable an intensive learning process. Longer term processes with a larger number of allocated hours work better, as do systematic and continuous ones.

9 The audacity of imagination: Arts-informed approaches to research and co-production

How can the arts help to increase engagement with research?

What are arts-informed approaches?

Arts-informed approaches in research can include a wide range of activities, types and genres such as: visual arts, performing arts, creative writing and games. Although each genre has distinctive elements, they all encompass multiple creative processes and media as methods of reflecting, thinking, exploring and communicating.

Arts-informed activities can be integrated at different stages of the research process, from initial research design, data collection and data analysis to a mechanism to improve stakeholder engagement with research or support how research can be disseminated.

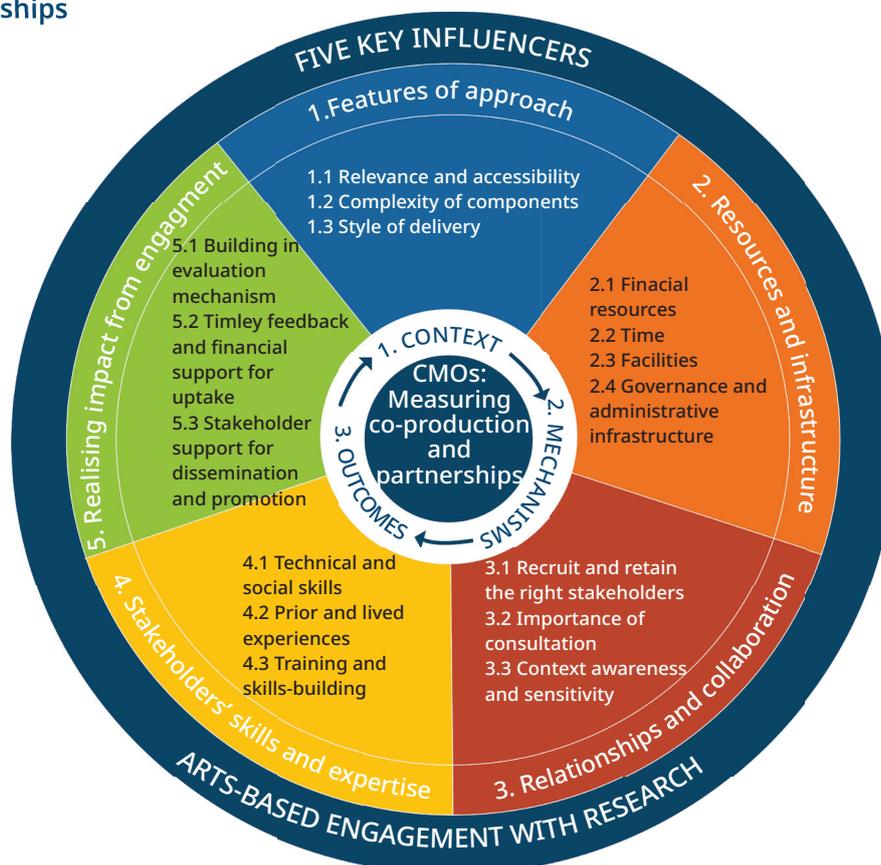
Arts might unleash creative expression that provides new ways of seeing and engaging in co-production to achieve system changes. Arts can also help to make research more accessible to a broader range of stakeholders.

The arts can promote engagement with research, by meaningful reflection, understanding, representation and communication of individual and communal experiences. Artistic tools and practices can benefit processes of co-production among researchers, evaluators, practitioners, and policy makers. Using the arts in research can bring in diverse and pluralistic views on complex societal issues and engage marginalised communities with research in new ways.

Arts-informed approaches can address equity via context specificity and sensitivity. They value integrating different forms of knowledge in research processes and collaborations. These approaches can also enhance skills related to the arts, research, evaluation and partnerships, and broaden thinking about impact.

Arts-informed approaches have several key influences within research-practice partnerships (see Figure 9.1). The conceptual framework combines: (1) CMO configurations to measure co-production and partnerships (inner circle), embedded in (2) the broader key influences on arts-based approaches with research (outer circle).

Figure 9.1. Measuring co-production and key influences of arts-informed approaches in research practice partnerships



Note: CMO: context + mechanism = outcome.

10 Organising for research use: Lessons from four deep-use schools

How can schools strengthen their organisational capacity to support their teachers' use of research?

This piece explores how four schools in the US are actively working to increase research use among practitioners and highlights some key lessons.

Who are the case study schools?

The four schools do not highly differ from the average US school on many criteria: not especially high-performing nor in affluent communities, they serve diverse student populations, the types of problems they faced were not unique, and they represent different communities, governance arrangements and visions for their work. Even regarding research use, these schools did not have additional specialised organisational structures or processes to facilitate research use, nor offer any incentives to encourage research use.

However, these schools see research use as being part of the core work of their school. Underlying their practice are good organisational processes, structures, a supportive culture and leadership.

What is “deep use”?

“Deep use” describes the complex ways in which research use can be meaningful, systematic and likely to generate improvements. It does so in terms of the extent of participation in research-use activities and the frequency of research use in schools' practice; the extent to which teachers search for evidence and involve interpretation in the context of practice; and the stage of decision making at which evidence is relied upon, and the use of different forms of evidence.

In a “virtuous diamond” (see Figure 10.1) each organisational dimension supports and is supported by the others.

In deep-use schools, each of the four organisational dimensions is inextricably connected and equally important. The synergy among the four points of the virtuous diamond facilitated many aspects of research-use practices in the four schools, from participation to interpretation and search, creating conditions for deep use of research.

The four schools created mutually reinforcing conditions of organisational processes, structures, culture and leadership (see Figure 10.1) to effectively support research use.

They embed research use into regular school **practices** and organisational processes, including: Instructional processes (focused on meeting student learning needs), learning **processes** (teacher's professional development), decision-making processes (on school-wide needs and issues), and human resources processes (staffing). They also use the processes to reinforce norms and expectations for research and data use (e.g. in hiring processes, candidates are asked about how they use research).

They leverage common existing **structures** to ensure participation and protected time for research

use. This ensures that research use is part of the work of the school, rather than additional work. Such structures include: School leadership teams, committees, professional learning communities, faculty meetings, professional development, coaches and specialists. They also employ a few research-use specific structures and supports, such as: research-based products that were adopted system-wide (such as a school data system) and relationships to external resources and expertise, such as a local university.

They develop an organisational **culture** of improvement and trust that centres on “doing what's best for kids”. Research use is seen as a natural part of how things are done and goes along with a growth mindset and a commitment to improvement and change in the long term. Another cultural element is a strong foundation of professionalism and collective responsibility with trusting relationships, openness, autonomy and flexibility.

They have **leaders** who model research use and create conditions for use. Leaders contribute in specific ways to the use of research in their schools: Through their own use, by brokering research, by shaping organisational supports and resources for research use, and by creating broader conditions that support research use. Finally, by engaging staff

in decision making, soliciting feedback on practices, engaging teachers in key processes, encouraging teacher autonomy and professionalism and promoting teacher advocacy, leaders fostered collective responsibility for improvement and school-wide participation in evidence use.

Context matters in enacting deep research use.

School leaders may need guidance on developing contextually appropriate approaches to evidence-informed improvement and tailored strategies for building local collective capacity.

Research use should not be more work, but the work.

Support for research use should be intentional and strategic. This can be supported beyond the school

level by taking a systems perspective on research use and applying thoughtful design across levels of the education system.

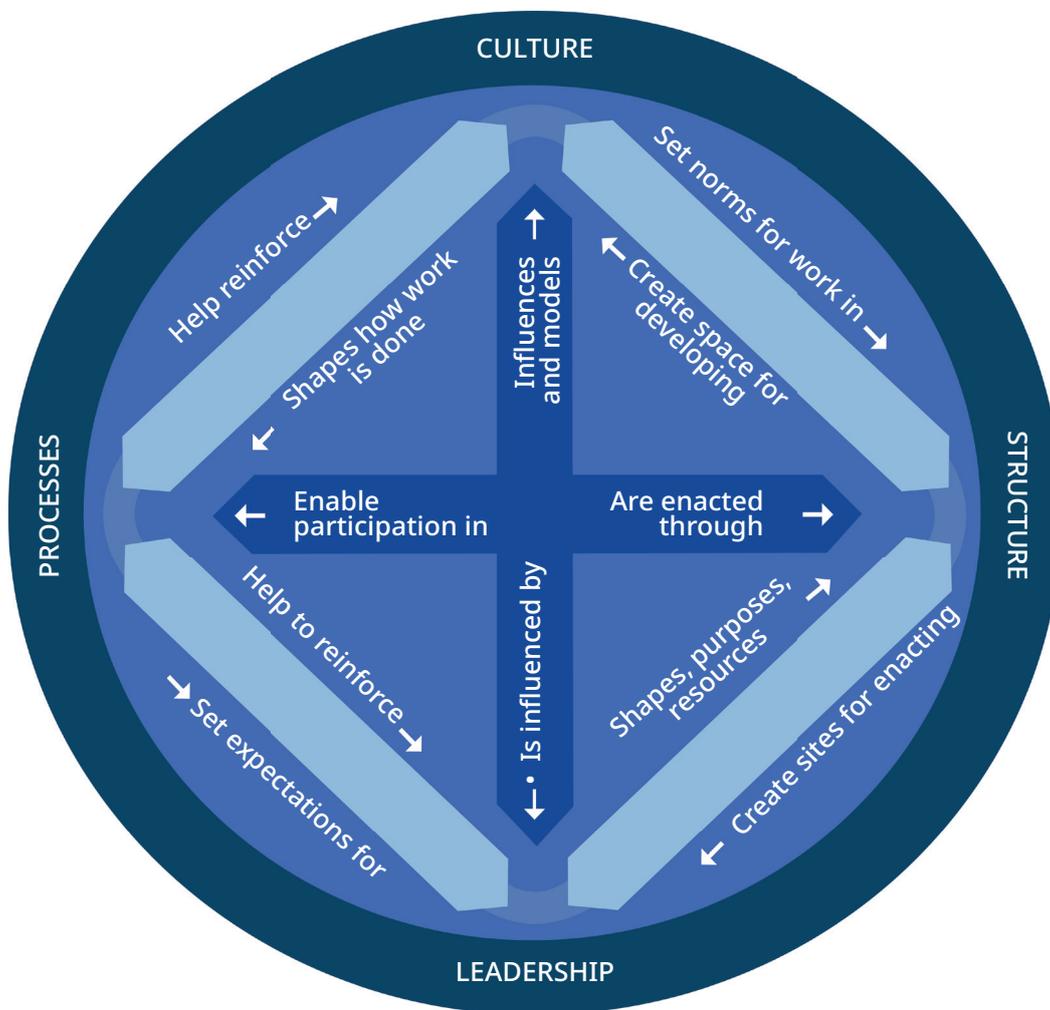
Leaders should develop to become leaders of evidence-use.

Leaders have a high degree of influence on the conditions that most seem to support research use. They were often key brokers who facilitated access to research and supported research use.

Culture, processes, structures and leadership need to be nurtured for evidence-informed improvement.

The potential for a virtuous diamond exists in most schools – that capacity for evidence-informed improvement is present yet untapped.

Figure 10.1. The virtuous diamond of synergistic relationships



11 Organisational and network culture: A lens on leadership

What is the role of leadership in creating a “culture of research use” within and across organisations of policy and practice, according to case studies from different countries and different types of organisations?

Strong leadership within schools should set directions, develop people and help them grow professionally by creating opportunities, providing formal training and feedback, and being willing to redesign the organisation.

System leaders develop their schools as professional learning communities, building relationships across and beyond schools with the overall goal of sustained improvement of schools through system-level improvement.

Networked leadership is the leadership of relationships and interactions, spanning several organisations and sometimes also communities. Networks have been taken up strongly in policy development, but we still need to better understand the nature and quality of networks and their leadership.

The OECD asked authors about what aspects of leadership are relevant

How can strong leadership in a policy/practice organisation create a culture of research engagement in and across organisations?

What insights can recent research on networks and leadership give us about high-quality evidence use within the wider system (e.g. co-production approaches)?

What roles can drive a culture of research use (e.g. research champions) and how can leadership strategically leverage these? How can individuals in these roles be identified, and how can their work be supported and scaled up through effective leadership?

Organisational cultures, assumptions and routines can promote or prevent learning and experimentation.

Changing existing norms within an organisation is highly challenging. Simply providing access to research is not sufficient to stimulate research use. Achieving a deep and sustainable impact on the culture necessitates long-term and persistent strategies for capacity building. Leaders play a key role in fostering – or hindering – the use of research in their organisation.

We better understand the nature of relationships, and how we can support these more effectively.

Research engagement is characterised by complex social processes. Therefore, relationship-building must feature as a core component of building a culture of research engagement, examining the need for better relationships among different actors and between systems.

We know more about the concrete actions leaders can take to support research engagement.

Strategic leadership within and across organisations is needed to drive the dynamics of research production and use. Leaders need to take concrete

actions that redefine organisational culture in favour of research engagement, e.g. ensuring staff time is used optimally. Leaders also need to navigate a complex environment and take strategic, thoughtful decisions on research use to improve practice.

Leadership at different levels should be strongly connected, oriented to research engagement.

Coherent and effective system leadership at the national level, and strong connections between different levels and types of system leadership, are critical to ensuring the conditions for research-engaged schools and policy organisations. Leaders take a role in interpreting research and adapting it to the local context, in a form of “thoughtful engagement” with research.

There is scope for further research on what key roles can drive a culture of research use, how to identify individuals in these roles, and how to strategically leverage and support their work; on what is distinct in networked leadership from system leadership, and how each concept can support our understanding of the role of leadership in improving research generation and engagement.

The Chilean experience of educational networks to support research engagement

What are School Improvement Networks (SIN) in Chile?

SINs are part of a national attempt to strengthen quality and equity in public education, and enhance collaboration between schools. SINs are a support strategy for schools, comprising principals and curriculum co-ordinators from 3-15 schools. SINs implement informative processes (transferring national educational policy), collaborative processes (sharing successful or innovative practices, effectively using data and evidence), and co-operative processes (defining common objectives and conducting analysis).

SINs are highly valued by participants, strengthen their professional capital, and facilitate more collaborative work and sharing of successful experiences. However, their use by the ministry of education as a supervision strategy to disseminate national policies limits the possibility that these networks become valuable spaces for collaborative research or for research engagement.

Leadership capacities are fostered in networks.

Leading downwards: how can network leaders prioritise and mobilise meaningful practices that the network members can then implement in their own schools.

Lateral or **distributed leadership:** leaders' skills to mobilise the expertise of network members, mobilising knowledge within, between and across partners, ensuring that the interest of the leader does not interfere with the capacity building of the network members.

Leading upwards: as a direct result of their participation in the network, members can influence stakeholders.

Initiatives guided by a transparent methodology, that are coherent and with strong institutional support, can facilitate the research inquiry skills of principals, curriculum co-ordinators and teachers, which are fundamental for their research use.

In this way, mobilising knowledge ceases to be a linear process created by higher education institutions and filtered "downward"; instead, it is an associative and collaborative practice.

Collaborative endeavours are engendering cultural change, towards valuing collaboration over competition.

Strengthening evidence-informed practice across a place-based network of schools in Cumbria, England: Strategic choices and operational dilemmas

What is the Western Excellence in Learning and Leadership (WELL) initiative?

WELL aims to improve educational outcomes for all in the west of Cumbria (United Kingdom), particularly disadvantaged youth. A core focus is strengthening the use of evidence by schools and teachers, through a partnership with the Education Endowment Foundation (EEF) and its Research School Network.

WELL works with all 121 state-funded primary and secondary schools in communities within the 10% most deprived areas of England. WELL offered support to schools in raising educational standards; closing achievement gaps between more and less advantaged students; and improving pupil well-being.

Evidence-informed improvements at scale require sophisticated forms of system and network leadership. Network leaders must be seen as more than implementers of proven interventions.

- Leaders work productively with tensions within the network and can respond to system complexities.
- Leaders facilitate collective sensemaking by acknowledging ambiguities while also learning, collectively, how to move forward.

- Leaders adopt an ecological approach, "big picture" meta-analytical thinking together with firm ethical foundations, and recognise the need for innovation and a radical distribution of leadership.

Various dilemmas arise in leading evidence-informed practice at scale.

- What should count as evidence? Relying only on "what works" approaches carries strengths but also risks.

- How can evidence-use compete with other time-consuming obligations of staff? Strategic leaders should focus on school engagement, working flexibly and responsively within a clear process and set of tools and encourage a collective process of learning and reflection on where and how evidence can add value.
- Funding was given for an additional Research School, thereby increasing local capacity for, and access to, evidence-informed professional development.
- As a condition for receiving grants, school leaders attended training on the EEF's Putting Evidence to Work: A School's Guide to Implementation.
- School leaders undertook an internal review to identify a problem they wanted to address and an associated evidence-based intervention.

WELL increased access to sources of evidence, and many schools began making evidence-informed changes. This was achieved by activities of funding, training and review.

Research engagement and use in education policy in Ireland – The role of culture and leadership

How is research used in education policy in Ireland?

Ireland has an advanced research and innovation system, but relatively underdeveloped research for policy support systems. Examples of research use in policy and practice are typically fragmented and lack coherence and co-ordination. Central decision making is shaped as much or more by political interests, values and professional identities as it is informed by research.

What affects the possibility to develop research-informed policy?

The “two-communities theory” assumes that effective research use is hampered by officials and researchers operating within distinct institutional settings with their own principles, cultures, incentives, values and ways of working.

Four dimensions are particularly influential for embedding a shared culture of research engagement and use: incentives, values, communication and collaboration. These dimensions are interdependent, so any reform requires systems thinking together with leadership approaches that are collaborative, connected and inclusive.

Policy makers are required to engage with the values of many stakeholders, and use research to inform policy rather than to determine it.

Senior officials acknowledge the “messiness” of making education policy and the importance of pragmatic brokering between the analytical (research) and normative (value) dimensions of policy making. Mutual understanding of how values influence researchers and policy makers can lead to more realistic expectations.

Incentives and rewards influence researchers' and policy makers' attitudes and behaviours towards research use.

In Ireland, existing academic incentives are incompatible with the interests of policy makers. The alignment of incentives depends on institutional culture - Irish educational researchers working in research institutes report higher levels of research uptake by officials compared to researchers working in universities.

Knowledge-brokering mechanisms are important for synthesising, communicating and translating scientific knowledge for policy makers.

Some Irish officials see the school inspectorate system as fulfilling an intermediary role, to synthesise and translate scientific knowledge for policy makers. However, the inspectorate is not designed to conduct systematic or meta reviews. One mechanism to promote a shared language is structured mobility programmes, where policy makers and researchers are seconded into each other's communities.

The frequency of collaboration between researchers and policy makers is a key variable in explaining the use of educational research in policy making.

In Ireland, some educational researchers actively seek out opportunities to interact with policy makers. However, common practice includes privileging certain research and granting selected researchers access to policy makers, and while practical, this risks marginalising other potentially useful sources of research.

Networked leadership approaches based on partnership and collaboration seem more suited to build and strengthen trust and create a shared cultural mindset, both of which are conducive conditions for the systematic and inclusive use of research in education policy.

Important initiatives by government and the academy to better connect research and policy are underway and there is optimism that this dynamism will inspire and strengthen reciprocal initiatives in education planning and decision making.

Creating a culture of research engagement in the education sector of Stavanger Municipality, Norway

School development in Norway

Schools in Norway are state-funded and face a low level of competition. Through the Education Act, all county and local municipalities have an obligation to work continuously on quality development. According to the national core curriculum, school development must be research-informed, with school staff taking an active part in the professional learning environment.

Stavanger Municipality

Stavanger municipality has 50 public primary schools. It is in an international region, concerned with development and research, with a relatively high level of education. The municipality established in 2022 a Research Department and a research strategy, for a stronger research-based public service development. Schools in Stavanger all have one to three hours per week for professional development, where all teachers gather for professional learning. The schools work with universities to carry out research and try to ensure that the research is also useful for the municipality and the schools.

Some systematic factors are crucial to establishing a research-oriented practice in schools.

These include schools having incentives to collaborate rather than compete; national policies that emphasise research engagement; school leaders being trained to facilitate professional learning and engagement with research.

And some local factors are important as well.

These include activities that facilitate research engagement; appropriate arenas for research to meet practice; and local initiatives for relevant researcher positions that can be useful for schools.

Stavanger Municipality has established an inter-organisational system for learning through partnership.

The partnership develops local competence in schools to raise both their quality development and research orientation. It established platforms for leaders and schools to learn from one another and actively use research literature. One example is the inter-municipal leadership network, where leadership groups from different schools meet regularly to disseminate research, share experiences and collaborate on joint assignments for learning.

Through their close contact with the university, schools increasingly use research-based approaches. The partners from the university also learn from the process, which informs their teacher training. Productive interactions in partnerships depend on equality between the partners, established through clarified expectations and definitions of roles as well as trust. Relationships must be nurtured over time, which also requires sustainable funding. Finally, the size of the partnership is also significant.

Establishing a research-oriented culture in schools necessitates proactive principals to develop a professional learning community for all teachers.

Stavanger Municipality has established learning arenas for the management groups in the schools, which include learning networks, principals' meetings and school leaders' gatherings – the focus of which evolved from more administrative meetings to learning meetings where participants read research. The emphasis is on modelling collaborative cultures, creating and sharing knowledge, and investigating approaches to learning to establish a professional learning community. More active use of research in schools requires conscious municipal supervisors and school leaders who lead by example.

The role of research in developing the Welsh government's education policy and the practice of educationalists

What happened in Welsh policy making in the last decades?

The importance of research in developing and evaluating policy and practice has been central to the Welsh government's Education Department since its formation in 1998. However, the role of research in policy has changed over the years with changes in government and ministerial responsibilities; shifting circumstances; parliamentary scrutiny; and challenges from stakeholders.

- Phase I: the selection of government ministers, special advisors and civil servants with a background in university-based education research helped establish a culture of research use. The government's education strategies of 2001 and 2007 aimed at increasing the use of educational research.
- Phase II: In 2011, the Welsh Minister for Education published a 20-point plan, influenced by the central UK government's "deliverology" approach, aiming to encourage education leaders and teachers to adopt practices proven to be effective, using top-down targets.
- Phase III: A new educational strategy of 2014 focused on a What Works approach, but was less managerial, as it placed a greater emphasis on supporting teachers, as well as education leaders supporting each other. This collaborative systems-based approach was further formalised with a 2017 strategy focusing on creating a self-improving schools system.

Policy makers are expected to use research.

Standards for the policy profession from 2013, expect senior staff to be able to apply research methods to model, test and improve policy solutions; to commission, understand and use data, evidence and advice; and to base policy proposals on a review of the evidence and use evaluation throughout the policy implementation process.

But they need to be supported.

A series of meetings have provided a platform for researchers and officials to talk about policy issues, review evidence and consider evaluation plans. There have also been secondment arrangements for researchers and policy specialists, student placements at Master's and PhD levels, and policy fellowship opportunities for mid career researchers. The Wales Centre for Public Policy also aims to stimulate policy-maker demand for evidence, improving the supply of evidence, supporting

interaction between evidence suppliers and policy makers, and facilitating knowledge exchange between Wales, the rest of the United Kingdom and beyond.

A recent shift towards fostering collaboration.

- A change towards more collaboration was seen in a series of reviews commissioned by ministers and led by university professors and expert panels. The reviews arranged in-person meetings with key stakeholders, and provided for extensive formal consultation when recommendations were published.
- The dominant leadership styles and cultures of engagement in the last phase present a more co-ordinated, co-operative and distributed form of systems leadership. Over a sustained period, the Welsh government has sought to encourage and embed a partnership approach for using research evidence and methods.

12 Building a culture of research engagement: What are the success factors?

What are the basic enabling conditions of thoughtful engagement with research? Which structures, processes and tools bridge the research-policy-practice gap, and what are the implications for leadership?

The chapters in this report suggest that the key factors that influence the culture of research engagement in policy and practice can be actively shaped and supported.

For a culture of research engagement, we need a shared and deep understanding of what “thoughtful engagement” with research evidence means. Yet, this understanding is missing in more than half of the systems that responded to the OECD survey.

Building a strong culture of research use in policy and practice means developing beliefs, values, norms and attitudes that consider research evidence a major source of knowledge for decision making at all levels of the education system. This demands a collaborative and self-reflective effort from researchers, policy makers, practitioners, intermediaries and other actors.

We need to develop thoughtful engagement with research by all stakeholders involved in policy and practice decisions.

Often, research evidence remains just one source of knowledge that competes with the contextual and professional knowledge of different actors, as well as with interests and views. In addition to this complexity, research itself originates from different disciplines (e.g. curriculum research, policy evaluations, foresight research) and contexts (local, national, international) and thus needs to be translated when applied to another context. Additionally, research sometimes presents conflicting findings or unclear implications. As a result, direct implementation of evidence is hardly ever possible for complex policy questions. School leaders and teachers also face strategic choices and operational dilemmas that require thoughtful engagement with research rather than its straightforward application.

Ingredients of thoughtful engagement with research:

- Genuine *motivation* and *willingness* to challenge one’s views based on research are lacking in many systems.
- Genuine *curiosity* requires being emotionally open, curious and willing to challenge our own preconceptions. This, in turn, requires a trusting environment. Yet, *trust* in research itself and trust between researchers and policy makers/practitioners are both weak across OECD systems.

Basic enabling conditions for a culture of research engagement:

- A lack of *time* is a shared barrier to engaging with research in policy and practice across systems. Systems and leaders have a duty to ensure that research engagement is not additional work but part of “the work”.
- *Stable relationships* and *quality interactions* between stakeholders are required to develop trust and a shared understanding. These involve regularly identifying key actors and strategically investing in their interactions.
- Offering systemic *incentives* and *setting expectations* to use research is acknowledging its importance.

Connecting research production and engagement:

- Well-designed mechanisms to co-ordinate the production of education research could help address gaps in research and accessibility gaps. Synthesising evidence is one such mechanism that is still lacking in education.
- Involving practitioners and policy makers in research may make research more relevant and strengthen engagement with it. But critical voices remain, particularly about the scientific rigour, feasibility and value of such research. Collaborative research is in between research production, mobilisation and use, and may be considered as research engagement rather than production.
- National strategies, as well as other system-level co-ordination mechanisms, are needed to strengthen the link between research generation, mobilisation and engagement.

Learning as an attribute of the culture and learning as a strategy are inseparable in organisations and systems with strong research engagement.

- Learning as an *attribute*: the research engagement culture of an organisation or system is characterised by a learning-centred attitude. Learning, innovation and research engagement are intimately associated.

- Learning as a *strategy* to develop a research engagement culture: organisations or systems are deliberately developing individual skills and collective capacity for research engagement (e.g. by setting expectations and standards or directly developing practitioners' and policy makers' research-related skills).

Incentives are lacking to encourage researchers to develop their understanding of policy making, schools and teaching practice. In addition, leaders should have adequate opportunities to learn how to effectively reinforce research engagement.

Tools, frameworks and approaches to bridge research-policy-practice should be better leveraged. There is scope for peer learning among countries and actors.

- *Structures and systems thinking*: Formal organisations with the specific goal of closing the research-policy/practice gap; informal networks and organisations that address specific issues in the shorter term; schemes that bring researchers and policy makers or practitioners closer to each other can all support research engagement. However, there is a need for a system-level understanding of the landscape of these structures, their respective roles and impact.
- *Processes*, e.g. learning conversations, collective evidence appraisal by stakeholders, collaborative inquiry networks, research-policy-practice partnerships, user groups.
- *Tools and strategies* to develop policy makers', practitioners' and researchers' skills; and to bring together stakeholders for evidence-informed learning or discussions. Evidence of positive impact and effectiveness is emerging, but still limited.

Leadership can drive a culture of research engagement within and across organisations, and at the system level.

Leadership is key in role modelling behaviours, enabling the necessary conditions and forging connections for research engagement.

- *Leaders as drivers of innovation*: Leadership plays a crucial role in ensuring that individuals in policy or practice organisations feel able to experiment with new approaches. Leaders need to make sure that innovation processes systematically engage with research, and that experimentation is evaluated as far as possible.
- *Leaders as role models*: leaders can model what "thoughtful engagement" with research looks like.

- *Leadership and systems thinking*: Making the link between organisational and system-level cultures requires coherent leadership across the different levels with a shared vision and a focus on research engagement. System leadership at the national level is critical to ensuring the conditions for thoughtful engagement with research in policy and practice. Systemic factors, such as a competitive school context, a strong focus on accountability, and inappropriate expectations and incentives act as obstacles to efforts to enhance research engagement. Conversely, a system level vision with sufficient resources, incentives and opportunities can strongly reinforce research use. School leaders can be more effective in building a culture of research engagement in their schools when the appropriate conditions are ensured by local and national-level leadership. In decentralised systems, local government leaders play a key role in translating national policies into appropriate local conditions. A systems approach requires strong connections between leadership at different levels.

To ascertain that we are achieving the goal of improving education systems and student learning, we need to collectively make a stronger effort to inventory existing practices and measure and systematically monitor the impact of various initiatives.

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Educational Research and Innovation

Who Really Cares about Using Education Research in Policy and Practice?

DEVELOPING A CULTURE OF RESEARCH ENGAGEMENT

In today's dynamic and rapidly evolving world, evidence-informed decision-making has emerged as a cornerstone in guiding effective education policy and practice. In particular, creating a culture of research engagement is often highlighted as a key ingredient to strengthening the impact of research. However, it is not always clear how that works in practice.

The publication provides analyses of data collected from more than 30 education systems. It delves into how systemic and organisational capacity for thoughtful engagement with research can be built into policy and practice. It also contains concrete examples of building a culture of research engagement by presenting diverse case studies, analyses, tools and processes. It is intended as a practical resource for policy makers, educational leaders, teachers and the research community to stimulate reflection and guide their efforts to developing a culture of research engagement in education.

For more information visit

<https://www.oecd.org/education/cei/education-research.htm>

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