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History and evolution of brokerage agencies in education

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Despite impressive advances in evidence-informed policy and practice, many of the same challenges remain. New challenges have also arisen, including a disdain for “experts” and a worry that science is being deliberately devalued. The chapter highlights three key changes in the debate. It looks at the evolution of education brokerage agencies and their diverse goals, audiences and methodologies. It highlights the importance of evaluating their effectiveness and impact and learning from other sectors. It ends with a call to go one step further: Just as research synthesis has moved beyond individual papers to systematic reviews of reviews, so too do the structures and processes of brokerage need to work together across institutions and systems. Only by doing so will we be able to establish a cumulative knowledge base that is quasi-universally acknowledged as well founded.

Introduction

In 2007, we published the report *Evidence in Education: Linking Research and Policy* (OECD, 2007_[1]). At the time, we made the case for the importance of using evidence to inform policy by connecting the issue to a series of recent public crises that required rapid responses from governments to ensure the health and safety of the public and maintain their confidence in policy makers. The examples we gave – the 2001 foot and mouth crisis in the United Kingdom, and the 2003 outbreak of SARS in Asia and Canada – highlight the difficulties of decision making for policy makers and the importance of time-sensitive information on which to base those decisions. This urgency sometimes meant that decisions were taken that were later reversed or revealed to be less effective than had been hoped.

The report also pointed to climate change as an example of a very public debate where the research itself might be contested, further adding to the complexity of the process. And indeed, for all examples – crises or not – the information that was readily available was often not “perfect”. As we stated: “This could be either because the rigorous research relevant to policy needs has not been conducted; or because there is a disjoint between policy and research communities such that the relevant information is not widely disseminated and so overlooked by the policy maker; or simply that the research that is available is contradictory and so does not suggest a single course of action that could be reflected in policy. Yet clearly it is crucial that policy decisions be made.” (OECD, 2007, p. 17_[1]).

Revisiting this report in the wake of the COVID-19 pandemic, the discussion seems surprisingly up-to-date. We have seen in real time the imperative of urgent decision making to protect health and lives, with a very specific impact on schools and education. We have witnessed the struggle to ascertain the quality and availability of evidence, and the tension involved in deciding between different policy solutions when research itself is emerging and contradictory.

However, time has not stood still. In the decade and a half since our volume was published, the arguments have evolved in at least three domains:

- The ubiquity of social media and the explosion of information, including fundamental questions about the nature of knowledge and expertise itself.
- A focus on practice (complementing and perhaps supplanting the initial focus on policy).
- The acknowledgement that simply providing access to evidence is not the same as ensuring its use, and it is the relational as well as structural elements that need attention.

The following sections will look at these three points more closely, building on personal reflections developed by following the discussions, policy decisions and literature across time and projects; the numerous efforts and spending in countries; and interacting with key players and institutions over time. We have benefitted particularly from open and honest discussions with researchers, policy makers and practitioners, including the OECD CERI Governing Board members, on both successes and failures.

Three key changes

The changing notions of evidence

One obvious change since our 2007 chapter is the ubiquity of social media. It has accelerated twin effects of greater access to information with less quality control. The online algorithms that sort us into groups of like-minded individuals and resulting echo chambers can serve to amplify our views while at the same time leaving us uninformed of opposing arguments. This abundance of information – or “evidence” as it is often referred to – has reshaped the policy and practice landscape in many countries.

In this context the 2007 report seems naïve in its trust in the generalised respect for evidence and objectivity of science. The quote above illustrates this well, operating as it does within the confines of a rational evidentiary system where the lack of evidence is due to either availability, access, or contradiction. The sense is that these are essentially solvable challenges and with effort we can sort out both access and availability. Contradiction is thornier, but, as with the rest of science, the belief is that with time the self-correcting nature of science will sort that out too.

However, the essential belief in science and objective truth has eroded in the last decade and a half. There are arguments that we are living in a “post-truth” world where reality has become fungible and viral reach is valued more than quality in the distribution of information. Recent elections continue to demonstrate the traction of claims that are demonstrably wrong; and although some erroneous claims are simply well-intentioned mistakes, others are deliberately misleading. A disdain for “experts” in some discourses has given rise to worries that truth and fact are losing currency, and that we could be witnessing an “evidence backlash” in which science and research are deliberately devalued (Lewandowsky, Ecker and Cook, 2017^[2]).

These are alarming arguments. If they are true, then the lack of use of evidence in education practice and policy is not simply an issue of access or availability or better processes for ensuring that available evidence is actually used. The lack of use (or deliberate misuse) can no longer be considered as failures of individual or group cognition. As a result, it cannot be fixed by providing more access, more availability, or even by building capacity. Rather, if these arguments are true, we must recognise that the nature of the challenge has changed, and that prospective solutions need to look at the issue from both cognitive and technological perspectives.

We will come back to this point later in the chapter. For now, let’s proceed with the shared understanding (hope?) that we are still playing the same game, that there is belief in the scientific method, and we can reasonably continue to push for evidence-informed practice and policy. Certainly, given greater access to information, less quality control and a more informed (and potentially misinformed) public, the need for clear, rigorous, and easily available evidence is more important than ever.

A focus on practice

Another major change has been the shift in focus from policy to practice. Our 2007 volume reflected the state of the discussion at the time, which focused almost exclusively on policy and its supporting actors, processes, structures and institutions. A search of the book for references to evidence-based (or evidence-informed, this shift in terminology was specifically addressed in our introductory chapter) *practice* reveals a few exceptions: Contributions from The Evidence for Policy and Practice Information Centre (EPPI-Centre)¹ in the United Kingdom and New Zealand’s Best Evidence Synthesis programme² both mention it, although their focus skews heavily to policy. There was also a special chapter from the Netherlands’ Minister of the Economy at the time, Maria van der Hoeven, with a formal plea: *Evidence-based Policy: Yes, but Evidence-based Practice as Well!* (Chapter 15 in OECD (2007^[1])). However overall, issues relating to the use of research in practice remain underdeveloped.

This does not mean that there was not a lively field of study in the area (e.g. Cordingley et al. (2003^[3])). The Centre for the Use of Research and Evidence in Education (CUREE)³, for example, was one of the early centres that focused explicitly – and solely – on teachers and teaching. The EPPI-Centre in the United Kingdom, the WhatWorks Clearinghouse (WWC)⁴ in the United States and New Zealand’s Best Evidence Synthesis Programme, among others, were set up to address both policy and practice from the beginning. Rather, the heavy focus on policy reflects the preoccupations of the discourse at the time and, to some extent, the areas of targeted funding.

While this has now clearly changed, the shift to foreground practice took some time. As an example, in 2010 the European Commission funded the Evidence Informed Policy in Education in Europe (EIPEE) project. It operated between 2010-11 to identify the range of activities used across Europe to link research and policy making in education and build capacity in this area (Gough et al., 2011^[4]). It was not until 2011 that this initiative was expanded to include the “P” of practice with the Evidence Informed Policy and Practice in Education in Europe (EIPPEE) initiative.⁵ This was an explicit acknowledgment that teacher practice was a key area.

Since then, there has been an almost complete shift away from policy and towards practice. One of the most dramatic examples is the creation of the UK Education Endowment Foundation (EEF),⁶ established in 2011 with a GBP 125 million investment from the UK Department of Education to help, among other things, summarise “the best available evidence in plain language for busy, time-poor teachers and senior leaders” (EEF website). Their Toolkit is aimed at practitioners, and a key measure of impact is uptake in schools and school networks. This focus on practice has facilitated the development of deeper relationships between research and practice, spurring change in schools and classrooms in England. Numerous other examples of the shift towards practice can be cited across countries, systems, and institutions.

The shift is so complete, in fact, that we are tempted to ask if policy makers have left themselves off the hook. Judging by policy documents, funding priorities and the set of initiatives emerging across the OECD, the policy side of the equation is no longer a prime focus, even though many of the issues that we struggled with in 2007 have only gained in importance. And yet a focus on policy is essential. It is policy (and politics) that has the ultimate responsibility for steering systems, setting accountability structures, and working with professional bodies to enact standards and requirements for the certification and licencing of practitioners. Policy also plays an essential role in setting priorities and guiding funding for research. Effecting meaningful change in the use of evidence across an education system requires extensive diffusion and impact on practice, as well as broad system-wide incentives, structures and mechanisms in policy. We will come back to this point a bit later in this chapter.

The complexity and importance of evidence use

Another important shift since our 2007 volume is an acknowledgement of the increasing complexity of education systems. Across the OECD, education systems have become increasingly decentralised (with some exceptions), involving a large number of additional actors, from local and state level authorities to school leaders and practitioners. These structural changes intersect (and are fuelled by) several other intersecting trends, such as more highly educated parents better able to use the power of networks and social media to advocate for their children (Burns, Köster and Fuster, 2016^[5]). These changes mean that the traditional models of knowledge governance and their focus on three key groups: researchers, policy makers and practitioners are no longer adequate.

Relevant stakeholders now include not only the traditional research-policy-practice trio and extended vertical and horizontal governance actors but also, for example, funders of research; textbook publishers and EdTech platforms; think tanks and networks of researchers and practitioners; the media; students etc. (Burns, Köster and Fuster, 2016^[5]). The links between these multiple actors are fluid and more open to negotiation. In addition, these groups are overlapping and individuals can be in more than one group at any given time (Best and Holmes, 2010^[6]; Levin, 2011^[7]).

As part of acknowledging the complexity of educational knowledge governance, there has been a growing recognition that *promoting* the use of evidence is not the same thing as ensuring its use. A number of realities intrude, including the limited time and capacity of policy makers and practitioners; the time and effort required to learn new habits and behaviours; and the interaction among different forms of knowledge when determining the best course of action (Burns, Köster and Fuster, 2016^[5]).

Linear models of research production and use failed to take these realities into account. In addition, the rich variety of evidence available (e.g. descriptive statistics, student achievement and teacher assessment data, research results, etc.) can inadvertently complicate the process. In fact, the push to increase the availability of data to support transparency and accountability has had an unintended consequence: too much information. Loeb and Plank (2008^[8]) illustrated this with the example of the California Education Code, which at the time included more than 100 000 articles and over 2 000 pages. As early as 2002, O'Day pointed out that the abundance of information may be counterproductive as “teachers and schools may metaphorically and literally close the door on new information, shutting out the noise” (O'Day, 2002^[9]). The challenge – and volume of information – has only increased exponentially since that time.

When focusing on strengthening the use of research for policy and practice, the focus is moving away from a simple “push” model of research production (by researchers) and research adoption (by policy makers and practitioners) to capturing and nourishing the interactions between and within the groups. Efforts to promote and encourage the use of research-based knowledge as a tool for improving policy and practice must thus include three dimensions (adapted from Langer et al. (2016^[10])):

- Access (do policy makers and practitioners have access to evidence in a form that is useable and understandable?).
- Skills (do policy makers and practitioners have the skills and capacity needed to make sense of the evidence?).
- Interactions (is interaction and collaboration between relevant actors facilitated?).

These questions can be applied to other actors (e.g. the media, research funders and more listed above).

The final point on interactions is crucial and speaks to the social nature of research use. It is not enough to build awareness, access and skills. Interactions contribute to motivation, key to developing and sustaining changes in behaviour. Effectively supporting use of evidence calls for an unusual combination of skills that is usually more easily acquired through accessing a network of colleagues rather than bilateral relationships. Such networks require structural encouragement and support from, for example, local districts and universities if they are to flourish (Cordingley, 2016^[11]).

This process is not automatic. The strongest incentive for policy makers and practitioners to engage with research is its promise to help them address their challenges. For practitioners, evidence use thus involves a dialogue between formal research knowledge and the local, practical knowledge of teachers (Révai, 2020^[12]). Importantly, teachers do not simply acquire and develop their own knowledge; it is through sharing and co-constructing knowledge that they also contribute to creating a collective knowledge base. Uptake of research is thus based on trust and personality as much as practical usefulness – networks, direct contacts and brokerage are important (Maxwell et al., 2019^[13]). One open question we have is to what extent these issues map across practice to policy; and conversely, which do not.

Victims of our own success?

Since the early 2000s the “evidence-based policy” (and later evidence-informed policy and practice) movement has made huge inroads in shaping public discourse and expectations. In most OECD countries, it is now expected that policy be informed by evidence, and the use of research evidence by teachers is increasingly built into teaching standards and certification. More and more funding supports mechanisms to raise awareness, ensure accessibility and build capacity in and for the use of evidence. To those of us who have spent considerable time and effort working on the issue, this shift is exciting.

But are we victims of our own success? “Evidence-informed” is now also a buzzword, disconnected from its original intended meaning. Policy often prioritises particular forms of evidence (for example, media-friendly rankings, achievement and assessment data) that are important politically but do not represent the

depth and breadth of information necessary for making strategic choices for the long-term development of education.

The gap between the intended and actual meaning of “evidence-informed” is not entirely surprising: When a wide range of data becomes available, it becomes easier for individuals to pick and choose the indicators that will paint a more favourable picture (Blanchenay, Burns and Köster, 2014_[14]). And as one of our interviewees for that case study remarked: “One cannot blame them for being rational” (2014, p. 32_[14]).

The misappropriation of the terms has been noted elsewhere and in other sectors, notably the medical field (Greenhalgh, Howick and Maskrey (2014_[15]); see also Box 3.1). In education there is clear scope to question how and when these terms are used and for what purpose. Is the ultimate goal improving student learning? If not, who or what benefits? Questioning the aims for both the production and use of evidence is important, and especially relevant with the increasing presence of private interests and education markets in our systems (including but not limited to EdTech) (Burns, 2022_[16]).

Lubienski (2019_[17]) takes these concerns a step further, asking whether instead of continued strengthening of objective brokerage between research and practice (the term he uses is “boundary spanners”), we will rather witness the rise of self-interested “spinners” and influencers intent on increasing their market share in whatever solution they are selling. In this scenario the banner of “evidence-informed practice/policy” becomes a tool for vested interests and is used more as a marketing instrument than an objective exercise to help improve teaching and learning.

So what can be done? Just as there are calls for “real evidence-based medicine” (Greenhalgh, Howick and Maskrey, 2014_[15]), it is time for education to insist on a return to the original intended meaning of evidence-informed policy and practice. This requires demanding better evidence that is better explained and used without vested interests. It involves funders of research insisting on quality and useability. Objective, independent and trusted brokers – both formal agencies and networks as well as informal connections and relationships – play a key role in making this possible.

Brokerage agencies in education

This takes us to the heart of this chapter. Bridging the structural and relational gaps between internally and externally heterogeneous groups of researchers, policy makers and educators (among multiple other actors) is no easy task. Our 2007 volume was one of the first to highlight the variety of deliberate efforts across countries to invest and build capacity to use evidence to inform policy and practice.

This process of bridging the gaps and building capacity can be informal, e.g. the exchange among colleagues of research evidence and information related to a specific practice or policy challenge. It can also be formalised, e.g. the creation of ties between national research institutions and their policy/practice counterparts. These formal efforts can also be institutionalised, with the development of brokerage agencies to officially facilitate both the process of information sharing and ensure a certain level of quality control.

What term to use for this process – knowledge mediation, translation, brokering – is still contested. In our 2007 volume, we used “brokering” and “brokerage agencies”, in part to try and distinguish the formal element of the process from the informal networked approach that had previously been the default. In order to link directly to the discussion from 2007 we will continue to use the same terms in this chapter, but it is important to note that these terms were and are contentious. They strike some as being too connected to business and financial institutions, far removed from education and social policy goals. Others criticise them as being too Anglo-Saxon, a reflection of a broader movement concerned with inputs and outputs concentrated primarily in certain countries (e.g. England and the United States). Certainly, they can be difficult to translate to other languages.

The belief that this is a primarily Anglo-Saxon movement (in education, at least) – is important to address. England and the United States did indeed play a driving role, backing up research efforts with substantial public contributions and funding. Canada and New Zealand have also been very active. However, not all English-speaking countries took this up at the same time (Ireland and Australia, for example, came to the table later). By the time of the 2007 publication, there was a variety of international initiatives included as chapters in the book. Notably (but not exclusively), in the Nordic countries and the Netherlands (examples from Denmark, The Netherlands and Singapore). In addition, European countries such as France, Germany and Switzerland highlighted the importance of research and evidence in decision making while using their own vocabulary and sets of relationships and structures. As part of the German Presidency of the European Union, the conference “Knowledge to Action” was held in Frankfurt in March 2007, bringing together researchers and policy makers in education from around Europe. Reducing these efforts to the label “Anglo-Saxon” is thus not only inaccurate, it potentially limits the kinds of initiatives and efforts considered.

As noted in Chapter 1, systematically mapping the diverse set of national and international actors and initiatives is key to understanding the history of brokering and brokerage agencies as well as the multiplicity of approaches across contexts and traditions. Including formal institutions as well as networks and the broad web of contributors that are an integral part of this process in different systems is also essential.

The diversity of brokerage and brokering

Brokerage agencies work to generate, assess and communicate research findings to and between interested parties. Brokerage agencies can be designed to aid a particular ministry to increase effective communication regarding the research and policy/practice interface, evaluate proposed changes and recommendations, and assess the implementation of these programmes. However, most brokerage agencies have a broader agenda and seek to collaborate with as wide a community of researchers, practitioners and policy makers as possible to broaden the relevance of their work and findings.

A number of different initiatives exist to both bridge the divides as well as assess the quality of evidence available. Since our 2007 publication, the numbers of brokerage centres have increased, with explicit aims to improve the links between research and policy as well as, crucially, practice. Our review identified three specific elements of the process (Burns, Köster and Fuster, 2016^[5]):

- Knowledge *production* (e.g. directing funding and support through grants and sponsorship, performance measurement and target setting, and experimentation in policy implementation).
- Knowledge *mediation and dissemination* (e.g. personnel movement and training on the individual level; organisational and inter-organisational knowledge sharing).
- Knowledge *utilisation* (e.g. mandating the use of certain methodologies or tests, linking funding to research strategies in schools etc.).

Brokerage agencies are distinguished in their goals and functions (funding and relationship to Ministry, degree of autonomy, target audiences and activities) and the methodologies they use and promote. The section below sets out some examples of how this has played out in practice as illustrative examples.

The goals and functions of brokerage agencies can be broken into a number of subsections.

Relationship with the Ministry

One important aspect is the relationship of the institution with the Ministry in terms of autonomy of funding, operations and position in the education system more broadly. Some agencies or programmes are principally funded by the Ministry and are embedded with the Ministry itself. One example of this is New Zealand’s Best Evidence Synthesis programme,⁷ which traditionally provided hands-on guidance to those wishing to conduct a synthesis of available evidence (this function has now ended, and the focus has

shifted to brokering evidence already available). The Dutch *Knowledge Chamber (Kenniskamer)* was similarly located within the Ministry and designed to respond to Ministry goals and priorities.

Other agencies are principally funded by the Ministry/Government but maintain their independence, often located with or near the Ministry to facilitate alignment and coordination with policy goals. For example, the Japanese National Institute for Educational Policy Research⁸ is independent yet located in the same building as the Ministry of Education. The Norwegian Knowledge Centre⁹ is funded by the Ministry but is an autonomous institution, and in 2019 it moved from Oslo to the University of Stavanger as part of a more general decentralisation effort by the government of Norway. The Swiss Coordination Centre for Research in Education¹⁰ is a stand-alone institution funded by the Swiss federal government and the Swiss Conference of Cantonal Ministers of Education. The now defunct *Canadian Council on Learning* was, similarly, federally funded but independent (geographically and formally) from the various federal and provincial ministries.

Still other brokerage agencies are formally and financially independent from the Ministry although, naturally, the Ministry and local administration remain important partners. The Education Reform Initiative¹¹ in Turkey, for example, is an independent organisation supported by leading foundations, located in Sabancı University. England's EEF is an independent charity established by the Sutton Trust.

Target audience

While most brokerage agencies aim to affect both policy and practice in education, some specialise more in one or the other. As mentioned earlier in this chapter, the original emphasis was very much on policy and policy making, shifting heavily in the last decade to practice.

Brokerage agencies generally have a commitment to disseminating research results to as wide an audience as possible, aiming to support both top-down and bottom-up change to the system. Initiatives focused on evidence-informed *policy* are aimed at decision makers, providing access to evidence, supporting rapid reviews on topics selected by policy makers, and building capacity within ministries and local administration to design, collect and use education data and evidence. They also connect to researchers and (at least, theoretically) practitioners as well as to a lesser extent, other players in the ecosystem including international organisations, textbook publishers, and, notably, the media.

For *practice*, the audiences have evolved to include school leaders, teachers, inspectors, school boards, parents and more. The efforts are largely similar to those in the policy sphere though adapted, e.g. providing access to research results in the local language (e.g. the Netherlands' Initiative for Education Research (NRO)'s knowledge portal¹² for practitioners that provides access to research, summaries of key research in accessible language, and even tailored help in Dutch through their "knowledge roundabout" [kennisrotonde]). Other efforts include developing rapid reviews on topics selected by practitioners (including co-creation of research questions with practitioners themselves) and building capacity within schools and teacher education institutions and communities of practice to design, collect and use education data and evidence. There are also increasing efforts to scale up the level of intervention and coordinate between networks of schools, for example, in the EEF's Research Schools Network,¹³ launched in 2016.

It is also worth highlighting efforts to connect the media to high-quality evidence and experts. For example, the Science Media Centre¹⁴ connects journalists, scientists and press offices to relevant medical and scientific research and expertise. Building on this model, the UK's Education Media Centre¹⁵ targets not only media but also the broader public seeking to understand the evidence base for claims about education made in the media.

Ensuring quality and building capacity

In order to deliver on their mission, brokerage agencies also work to ensure the quality of research and provide tools and capacity building to evaluate what works and what does not work in education. An important first step in this process is the creation of a database of quality education research as well as providing clear goals and criteria for conducting and evaluating educational research. These criteria serve as a baseline for conducting reviews of research that can then be used to provide systematic evidence as to the effectiveness of particular policies or classroom practices.

A key component to this quality-mark process is the transparent exchange of findings: reviews must be widely available on the various brokerage agency websites to all users (i.e. not hidden behind a paywall or for members only). In addition, methodologies used by the review process must be defined in detail and any data must be publicly available where possible. Centres are increasingly requiring reviewers to commit to updating their work on a regular and pre-defined basis, to include new evidence and maintain a state-of-the-art synthesis on each topic.

Methodologies

The methodological debate about what constitutes good evidence and what kinds of evidence (and burden of proof) required to guide decision making is an old, and fraught, conversation. The 2007 volume addressed this specifically by highlighting the importance of multiple methods and showcasing a conversation between two leading methodologists in the field, Thomas Cook and Stephen Gorard (2007^[18]). Despite their relatively broad agreement on key elements – that multiple methods are important and needed to answer the different types of questions policy makers and practitioners could have, and that causal evidence is needed to understand whether something works or not – the evidence arguments are still alive and well today.

In the randomised controlled trials (RCT) camp, the WhatWorks Clearinghouse¹⁶ (United States) works in collaboration with a number of other institutes and subcontractors to provide information and databases of research syntheses of replicable high-quality interventions, with a particular focus on RCTs. The EEF¹⁷ has developed a toolkit to provide policy makers and practitioners an accessible summary of the RCTs and the effectiveness of particular interventions, including the costs and strength of the evidence. Also fully committed to the RCT gold standard, the Campbell Collaboration¹⁸ extends beyond the education sector and focuses on systematic reviews from multiple social interventions, including justice, well-being, demography, development and, of course, education. This is a sister organisation to the Cochrane Collaboration,¹⁹ which has been producing systematic reviews in health care since 1994.

Deviating from a strict emphasis on RCTs, the EPPI-Centre²⁰ in England has been conducting systematic reviews that bring together different types of evidence, including developing a structured methodology for combining qualitative and quantitative evidence to input into the reviews. In a similar vein, the Norwegian Knowledge Centre²¹ works with a broad set of additional actors in parallel review processes to make sure the views and priorities of practitioners are included in their summaries of evidence. And, most uniquely, the Swedish Education Act considers “teacher knowledge” as separate but equal to knowledge derived from formal research processes, although the mechanisms for combining these disparate sources of evidence are not clearly specified.

Despite these diverse initiatives, there is still serious disagreement about what counts and what should count as evidence, and the kinds of evidence that meet the standards required for decision making. Many of the same arguments set out in our 2007 volume still hold. So too does our basic proposition that *there is no single best method for or type of evidence-based policy [and practice] research* (OECD, 2007^[11]). Using different methodologies for different questions – and combining methodologies to understand not only *whether* something works but *how* and in *which contexts*, is key. But how to do this in a way that

insists on the rigour of evidence and the quality of the research (including its relevance to the specific policy or practice question) is still hotly debated.

Understanding what works and what does not (and under which conditions)

Brokerage agencies can and do play a key role in bringing together the disparate communities and bridging the gaps in the use of evidence in policy and practice. They have provided resources and tools for researchers, policy makers, and educators to openly engage in the discussion of what works in education and allowed for capacity building in each of those domains. Increasingly they also work to synthesise discrete findings by different agencies and evidence producers to contribute to a cumulative knowledge base.

Formal brokerage agencies have been around on the research side since the 1970s, and we continue to see high-profile public investments in new organisations (e.g. Australian Education Research Organisation,²² incorporated in 2021). Despite the focused funding, these agencies tend to struggle with a series of standard challenges (OECD, 2007^[1]; Blanchenay, Burns and Köster, 2014^[14]), including how best to:

- Incorporate all stakeholders into the process.
- Address the tension between the time required for solid research and the necessity of quick results for policy making.
- Disseminate findings to all stakeholders, including media, parents, and students.
- Ensure sustainability and stability of funding.

This last point is particularly challenging. Of the six education-specific brokerage agencies highlighted in our 2007 publication, only two are still fully active: the What Works Clearinghouse in the United States and the EPPI-Centre in England. New Zealand's Best Evidence Synthesis programme still exists but funding for new syntheses has been discontinued; the programme now illustrates evidence in action through videos that show what transformative action is possible when evidence is used. The remaining three brokerage agencies are no longer active:

- the Canadian Council on Learning (closed)
- the Danish Clearinghouse (closed)
- the Dutch Knowledge Chamber (hibernating).

We might assume that the initiatives that were discontinued were simply not delivering as intended, as clearly any intervention funded by public money should be evaluated for its impact and effectiveness. This would imply that their funders and constituents were able to understand what was successful, under which circumstances, and what interesting and useful measures of impact would look like.

However, it is also possible that the decisions were made for political as well as practical reasons. We have not yet touched on this point in this chapter, but evidence does not take the politics out of policy making. Indeed, previous OECD work on systemic innovation found that decisions about whether to continue to fund a particular initiative are often taken before results of a programme evaluation are available, and that the evaluation step is the most likely to be skipped or omitted if there are time or financial constraints (OECD, 2009^[19]). Among the examples above, funding cuts were more related to changes in government rather than impact or performance measures.

Although we have been discussing evidence-informed policy and practice, we ignore politics at our peril. Budget timeframes and grant agreements often are set to two- to three-year cycles, which research suggests is not long enough to see the effect of a particular reform in its entirety (Borman et al., 2003^[20]). Our work on education governance points out that deciding whether an initiative should be considered a

success or failure is a serious empirical, political and ethical challenge, particularly in a fast-paced world where expectations are likely to rise faster than performance (Burns, Köster and Fuster, 2016^[5]).

How, then, to resolve these tensions? Evaluating the functioning and impact of brokerage agencies is clearly important, and yet under-specified. So too is developing a clear understanding of how these agencies might work together to create a cumulative knowledge base, one that is both useful and used. But how these efforts are prioritised, sustained and funded are political as much as empirical questions.

Learning from other sectors

One way to address these long-standing challenges is to look for inspiration from other sectors. Annette Boaz's contribution to this volume (Chapter 6) does precisely this, highlighting original research mapping intermediary organisations and mechanisms across sectors. Learning from other sectors – both their successes and failures – is an important way to move the discussion forward. Box 3.1 highlights a set of critical observations in evidence-based medicine.

Box 3.1. Learning from other sectors: A crisis in evidence-based medicine?

Despite the advances in evidence-based medicine, Trisha Greenhalgh and colleagues have highlighted five unintended consequences that are affecting the quality of patient treatment (Greenhalgh et al, 2014, order slightly changed from original):

- The evidence-based “quality mark” has been misappropriated by vested interests.
- The volume of evidence, especially clinical guidelines, has become unmanageable.
- Statistically significant benefits may be marginal in clinical practice.
- Evidence-based guidelines often map poorly to complex multi-morbidity.
- Inflexible rules and technology-driven prompts may produce care that is management-driven rather than patient-centred.

The authors argue for a “renaissance” in evidence-based medicine with the goal of providing useable evidence that, combined with context and professional expertise, will help patients receive optimal treatment.

Although comparing education to medicine is not always straightforward or, indeed, helpful, the criticisms of Greenhalgh, Howick and Maskrey (2014^[15]) are (perhaps surprisingly) pertinent. Certainly, it is clear that the terms “evidence-based” and “evidence-informed” are now applied broadly by many educational actors to suit their own purposes. The link to the ultimate goal of using evidence to help improve student learning is not always clear. We argued earlier in the chapter that the rise in awareness of the terms and the popularity of the discussion has had mixed consequences, including, to some extent, becoming victims of our own success.

Similarly, many scholars have made the argument that the volume of evidence in education is unmanageable. How does a policy maker or practitioner make sense of the sheer amount of (often contradictory) evidence at their disposal, particularly in a field like education which does not have a knowledge base that is quasi-universally acknowledged as well founded? Better tools to highlight quality research and improve the accessibility of reviews (as a way to summarise across multiple studies and findings and continuously update the cumulative knowledge base) are useful, but clearly they have not solved the problem. It must also be admitted that education is not immune to the challenges of large-scale

datasets that can overpower studies, revealing significant differences that have little real-life relevance (Orben and Przybylski, 2020^[21]).

Likewise, just as evidence-based medical guidelines often map poorly to complex multi-morbidity (the coexistence of multiple health conditions), strict recipes for learning and teaching cannot capture the complexity of the social and educational environment (Thompson and Wiliam, 2008^[22]). Research evidence is just one of many sources of information used by policy makers and teachers in their practice (Farley-Ripple et al., 2018^[23]; Cain et al., 2019^[24]).

These are all well-known challenges, and it is important to continue to address them. In addition, we must also consider the last point: That *inflexible rules and technology-driven prompts may produce care that is management-driven rather than patient-centred*. Greenhalgh, Howick and Maskrey (2014^[15]) highlight the “well-intentioned efforts to automate use of evidence through computerised decision-support systems, structured templates...[which] can crowd out the local, individualised, and patient-initiated elements of the clinical consultation”. They argue that mechanical reliance on rules can stifle “the development of a more nuanced clinical expertise that embraces accumulated practical experience, tolerance of uncertainty, and the ability to apply practical and ethical judgement in a unique case”.

This sounds surprisingly familiar. While education has not hitherto relied on the intense use of computerised decision-support systems, we are seeing increased digitalisation of education as part of a move away from a traditional industrial model and towards a more student-centred approach (Schleicher, 2018^[25]). Collaborative tools and technologies such as classroom analytics and AI-powered assessments are expected to help teachers to teach more effectively, reducing the amount of time spent on administrative and management tasks and allowing them to orchestrate their teaching more effectively (OECD, 2021^[26]).

Unfortunately, digital technologies do not yet seem to deliver on these promises. Facer and Selwyn (2021, p. 8^[27]) provide an overview of the challenge, including “seemingly ‘automated’ and ‘data-driven’ processes [that] actually require considerable amounts of behind-the-scenes work from teachers in order to ensure the continued functioning of systems as well as the production of data and other inputs.” They further argue that the “unbundling” of teacher’s work into discrete units to be automated also unintentionally reduces teacher professionalisation, fragmenting the role into disconnected work processes that require little conceptual ability (Facer and Selwyn, 2021^[27]).

CERI/OECD has spent a considerable amount of effort arguing for the importance of understanding teaching as a knowledge profession (Guerriero and Révai, 2017^[28]; Révai, 2020^[12]; Ulferts, 2021^[29]). Thinking through how formalised pedagogical knowledge interacts with practical experience and teacher judgement helps conceptualise not only the skills required for quality teaching but how initial teacher education and ongoing professional development might help improve them. Despite this, and connecting to Greenhalgh, Howick and Maskrey’s (2014^[15]) point about management-driven rather than patient-centred care, there is also increasing concern that emphasis on rigid accountability mechanisms work against the development of teacher expertise, undermining practical experience and teacher judgement. This has an impact not only on the quality of teaching but also the status and attractiveness of teaching as a profession (OECD, 2020^[30]).

We can learn a lot from the efforts taken in other sectors to address some of the weaknesses in education. But we must also insist on developing education-specific solutions to our long-standing challenges.

Building a cumulative knowledge base

Unlike medicine, education is conspicuously weak in its ability to continuously develop and refine a body of knowledge that is quasi-universally acknowledged as well founded. Designing and supporting an

effective educational R&D system is one step to achieve this. Brokerage agencies can play a major part in designating the most recent authoritative additions to the knowledge pile and connecting between them.

While ensuring the quality and effectiveness of individual agencies and initiatives is important, it is not enough. Just as research synthesis itself has moved beyond a focus on individual research papers to systematic reviews of reviews, so too do the structures and processes of brokerage need to work together across institutions and systems to support a cumulative effort.

For this to work, action must be taken on multiple levels. On the level of individual brokerage agencies, we must continue to ensure that:

- The quality and effectiveness of brokerage efforts can be sustained and improved (building knowledge, capacity and relationships in the local community and language takes time and sustained effort, so too does change in behaviour).
- Outreach and interactions must be increasingly scaled up to include more actors with multiple needs and in diverse contexts (i.e. going beyond the early adopters and the excited champions to support a broad set of actors, and covering both practice and policy).
- The methodologies and processes of brokerage must continue to evolve and improve, addressing thorny questions (e.g. how best to combine disparate sources of information; what aspects of synthesis can be automated or not, how to go beyond engagement to quality use of research, etc.).

In addition, brokerage agencies and networks need to collectively:

- Link to and build on the work of other brokerage agencies and networks, connecting across different languages, research traditions and contexts to the extent possible.
- Work together to continue to advance the science of evidence synthesis, quality use of research in policy and practice, and long-standing methodological and relational challenges.
- Think through measures of impact and effectiveness of their interconnections and joint collaborations.

Collective work is essential to developing a cumulative knowledge base and to ensuring that quality research is supported and widely available in useable form. It is also a necessary precondition to the elaboration of a body of knowledge that is “quasi-universally acknowledged as well-founded”. For this to happen, the knowledge must be supported across contexts; have been tried and adapted as necessary so that a core element is clearly generalisable and (potentially) a certain set of adaptations set out for different contexts. Ideally, this would be cross-sectoral and cross-disciplinary, connecting education research to the broader social sciences and beyond. But even if it remains education-specific, there is important work to be done connecting different research traditions, brokerage agencies, and types of impact.

Brokering the brokers

Previous efforts to bring brokerage agencies together on a regional level include the European Commission-funded *Evidence Informed Policy in Education in Europe (EIPEE)*/ Evidence Informed Policy and Practice in Education in Europe (EIPPEE) initiative.²³ Between 2010 and 2013, EIP[P]EE brought together 36 partners from 23 different countries across Europe. A further seven organisations from four countries outside Europe joined the project as international affiliates. Many of the lessons learnt from this initiative still resonate today, including (Gough et al., 2011^[4]):

- Although there was a high level of interest and activity, very little empirical research on which interventions worked (and in what context) was identified.
- Most of the activities were concerned with producing or communicating research, with little focus on the use of the research itself and even less on the “entire evidence to policy system”.

- Most brokerage initiatives were governmental in nature and focused on the national system. Very little collaboration and coordination existed at a trans-European level (other regions were not covered).

Although the European Commission funding ended in 2013, this initiative continued as the EIPPEE Network, with large-scale international conferences and seminars bringing together national actors and the international EIPPEE partners. The opportunity to exchange ideas and share challenges with other leaders in the brokerage field was as welcome as it was rare, demonstrating the dearth of cumulative activities in this space.

One of us (TB) was a partner of the EIPPEE network throughout this time. A consistent observation was the tension between the two major goals of broadening and deepening the initiative. *Broadening* and opening to new partners required raising awareness and building capacity for new members to participate in the discussions. *Deepening* and building on the collective expertise of existing members required the space and time to address difficult challenges and engage in expert methodological discussions. This tension was solved by creating two different activities: 1) EIPPEE network meetings and conferences, which took place over a full day or two and included as broad a set of actors and agencies as possible, and 2) EIPPEE partner meetings, which were often held just before or after the network meetings and addressed shared challenges and solutions of experienced brokers.

There was - and continues to be - a need for building and sharing cumulative knowledge on brokerage, brokering and the processes of quality research use. Despite the lack of funding support, a core group of institutions and individuals met once or twice a year for EIPPEE partner meetings until interrupted by the COVID-19 pandemic in 2020. The warm reception to the new CERI/OECD project when it started in 2021 was an additional indication of the interest and appetite for this kind of initiative.

We have argued – hopefully uncontentiously – that brokerage agencies play a vital role and there are valuable formative lessons to be learnt from their individual and combined experiences. They are potentially a fundamental mechanism in aligning supply and demand, and there are valuable formative lessons to be learnt from their experiences to date.

Despite this, and despite the extensive funding that has gone into the creation and support of such agencies, the monitoring and evaluation of the work and impact of these centres is limited. There is even less work on understanding how these agencies might work together to create a cumulative knowledge base (although see Gough, Maidment and Sharples (2018^[31]) for an example from the United Kingdom). This is a serious failing.

Concluding note

This chapter set out to revisit the discussion of evidence-informed policy since the publication of our 2007 volume, with a specific focus on brokerage and brokerage agencies. It has argued that although there have been many impressive advances in the field in the last decade and a half, many of the same challenges remain.

In addition, new challenges have arisen, including quality control on social media and a perceived disdain for “experts” and a worry that science and research is being deliberately devalued. Fabricators of “fake news” and alternative claims (for example, contradictory evidence on climate change) often do not aim to logically challenge the science; rather, they seek to erode trust in facts to the point where they no longer matter. This allows “people to choose their own reality, where facts and objective evidence are trumped by existing beliefs and prejudices” (Lewandowsky, Ecker and Cook, 2017^[2]).

Addressing this challenge – and other future challenges as yet unknown – will require new forms of intervention. Lewandowsky, Ecker and Cook (2017^[2]) argue that the best approach is “technocognition”, an interdisciplinary approach that uses findings from cognitive science and design to combat misinformation as well as technological solutions such as algorithmic fact checkers, automatic alerts for suspected disinformation, and increasing the variety and kinds of suggested content (i.e. broadening what is received as “you might also like”) to extend the filter bubble.

If we are to build a cumulative knowledge base of quality education research to inform policy and practice, we must address both existing and emerging challenges. We must continue to learn from the successes and failures of the rich work that has been done. We must insist that the “evidence-informed” quality mark is used to support better education and improved student learning, not misappropriated by vested interests. We must continue to fund and deliver high-quality and relevant research that is useable and accessible, and that can be synthesised across individual studies. We must solve the difficult methodological challenges involved in combining different types of evidence and knowledge. We must also broaden our understanding of how this process plays out in different contexts and the important role of funders in prioritising and supporting research quality and synthesis.

In addition, we need to continue to focus on efforts to understand quality research use for policy makers and practitioners alike. The attention to practice has been important and useful, but work on evidence-informed policy needs to be brought back into the mix to effect system-wide change. While we continue to build a good understanding of what works between and across agencies (that is, how can brokerage efforts be most effective), we must also insist on deepening collaboration to systematically build a cumulative knowledge base. That is, we must push for larger efforts to “broker the brokers”, building and scaling knowledge about what works in brokerage itself. These must extend beyond Europe and the OECD to include efforts from across the world.

And lastly, we must design teacher education and public servant training to hone the capacity to critically engage with and use research of various kinds and from multiple methodologies. This is an essential step in defending scientific literacy as a basic democratic right (Chalmers et al., 2018^[32]), key to asserting the importance of and trust in science and the scientific process in education and beyond.

References

- Best, A. and B. Holmes (2010), “Systems thinking, knowledge and action: Towards better models and methods”, *Evidence and Policy*, Vol. 6/2, pp. 145-159. [6]
- Blanchenay, P., T. Burns and F. Köster (2014), “Shifting Responsibilities - 20 Years of Education Devolution in Sweden: A Governing Complex Education Systems Case Study”, *OECD Education Working Papers*, No. 104, OECD Publishing, Paris, <https://doi.org/10.1787/19939019>. [14]
- Borman, G. et al. (2003), “Comprehensive school reform and achievement: A meta-analysis”, *Review of Educational Research*, Vol. 73/2, pp. 125-230, <https://doi.org/10.3102/00346543073002125>. [20]
- Burns, T. (2022), *What Schools for Tomorrow? Futures Thinking and Leading for Uncertainty*, CSE Leading Education Series #8, Centre for Strategic Education, Melbourne, https://drive.google.com/file/d/13Tt4GGQE_JLk9PWnUdEU-tZCoC93zqT1/view. [16]
- Burns, T., F. Köster and M. Fuster (2016), *Education Governance in Action: Lessons from Case Studies*, Educational Research and Innovation, OECD Publishing, Paris, <https://doi.org/10.1787/9789264262829-en>. [5]

- Cain, T. et al. (2019), “Bounded decision-making, teachers’ reflection, and organisational learning: How research can inform teachers and teaching”, *British Education Research Journal*, Vol. 45/5, pp. 1072-1087. [24]
- Chalmers, I. et al. (2018), “Key concepts for informed health choices: A framework for helping people learn how to assess treatment claims and make informed choices”, *BMJ Evidence-Based Medicine*, Vol. 23/1, pp. 29-33, <https://doi.org/10.1136/ebmed-2017-110829>. [32]
- Cook, T. and G. Gorard (2007), “What counts and what should count as evidence”, in Burns, T. and T. Schuller (eds.), *Evidence in Education: Linking Research and Policy*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264033672-en>. [18]
- Cordingley, P. (2016), “Knowledge and research use in local capacity building”, in Burns, T. and F. Köster (eds.), *Governing Education in a Complex World*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264255364-9-en>. [11]
- Cordingley, P. et al. (2003), “The impact of collaborative CPD on classroom teaching and learning”, in *Research Evidence in Education Library*, EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. [3]
- Facer, K. and N. Selwyn (2021), “Digital technology and the futures of education: Towards ‘non-stupid’ optimism”, UNESCO, <https://unesdoc.unesco.org/ark:/48223/pf0000377071>. [27]
- Farley-Ripple, E. et al. (2018), “Rethinking connections between research and practice in education: A conceptual framework”, *Educational Researcher*, Vol. 47/4, pp. 235–245, <https://doi.org/10.3102/0013189X18761042>. [23]
- Gough, D., C. Maidment and J. Sharples (2018), *UK What Works Centres: Aims, Methods and Contexts*, EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London, <https://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3731>. [31]
- Gough, D. et al. (2011), *Evidence Informed Policy in Education in Europe: EIPEE Final Project Report*, EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. [4]
- Greenhalgh, T., J. Howick and N. Maskrey (2014), “Evidence based medicine: a movement in crisis?”, *British Medical Journal*, Vol. 348, p. g3725, <https://doi.org/10.1136/bmj.g3725>. [15]
- Guerriero, S. and N. Révai (2017), “Knowledge-based teaching and the evolution of a profession”, in Guerriero, S. (ed.), *Pedagogical Knowledge and the Changing Nature of the Teaching Profession*, OECD Publishing, Paris, <https://doi.org/10.1787/978926427069>. [28]
- Langer, L., J. Tripney and D. Gough (2016), *The Science of Using Science: Researching the Use of Research Evidence in Decision-Making*, EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London. [10]
- Levin, B. (2011), “Mobilising research knowledge in education”, *London Review of Education*, Vol. 9/11, pp. 15-26. [7]
- Lewandowsky, S., U. Ecker and J. Cook (2017), “Beyond misinformation: Understanding and coping with the “post-truth” era”, *Journal of Applied Research in Memory and Cognition*, Vol. 6/4, pp. 353-369, <https://doi.org/10.1016/j.jarmac.2017.07.008>. [2]

- Loeb, S. and D. Plank (2008), “Learning what works: Continuous improvement in California’s education system”, Policy Brief, Vol. 8/4, Policy Analysis for California Education, Berkeley and Stanford. [8]
- Lubienski, C. (2019), “Conclusion: The future of research use”, in Malin, J. and C. Brown (eds.), *The Role of Knowledge Brokers in Education: Connecting the Dots Between Research and Practice (1st ed.)*, Routledge, <https://doi.org/10.4324/9780429462436>. [17]
- Maxwell, B. et al. (2019), *Teaching Assistants Regional Scale-up Campaign: Lessons Learned*, Education Endowment Foundation, London, https://educationendowmentfoundation.org.uk/public/files/Campaigns/TA_scale_up_lessons_learned.pdf. [13]
- O’Day, J. (2002), “Complexity, accountability, and school improvement”, *Harvard Educational Review*, Vol. 72/3, <http://www.hepg.org/her-home/issues/harvard-educational-review-volume-72-issue-3/herarticle/48>. [9]
- OECD (2021), *OECD Digital Education Outlook 2021: Pushing the Frontiers with Artificial Intelligence, Blockchain and Robots*, OECD Publishing, Paris, <https://doi.org/10.1787/589b283f-en>. [26]
- OECD (2020), *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/19cf08df-en>. [30]
- OECD (2009), *Working Out Change: Systemic Innovation in Vocational Education and Training*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264075924-en>. [19]
- OECD (2007), *Evidence in Education: Linking Research and Policy*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264033672-en>. [1]
- Orben, A. and A. Przybylski (2020), “Teenage sleep and technology engagement across the week”, *PeerJ*, Vol. 8, p. e8427, <https://doi.org/10.7717/peerj.8427>. [21]
- Révai, N. (2020), “What difference do networks make to teachers’ knowledge?”, *OECD Education Working Papers*, No. 215, OECD Publishing, Paris, <https://doi.org/10.1787/75f11091-en>. [12]
- Schleicher, A. (2018), “Educating learners for their future, not our past”, *ECNU Review of Education*, Vol. 1/1, pp. 58-75, <https://doi.org/10.30926/ecnuroe2018010104>. [25]
- Thompson, M. and D. William (2008), “Tight but loose: A conceptual framework for scaling up school reforms”, in Wylie, C. (ed.), *Tight but Loose: Scaling Up Teacher Professional Development in Diverse Contexts*, Educational Testing Service (ETS), Princeton. [22]
- Ulferts, H. (ed.) (2021), *Teaching as a Knowledge Profession: Studying Pedagogical Knowledge across Education Systems*, Educational Research and Innovation, OECD Publishing, Paris, <https://doi.org/10.1787/e823ef6e-en>. [29]

Notes

- ¹ For more information, see <https://eppi.ioe.ac.uk/cms/>.
- ² For more information, see <http://www.minedu.govt.nz/goto/bestevidencesynthesis>.
- ³ For more information, see <http://www.curee.co.uk/>.
- ⁴ For more information, see <http://www.whatworks.ed.gov/>.
- ⁵ For more information, see <http://www.eippee.eu/>.
- ⁶ For more information, see <https://educationendowmentfoundation.org.uk/>.
- ⁷ For more information, see <http://www.minedu.govt.nz/goto/bestevidencesynthesis>.
- ⁸ For more information, see <http://www.nier.go.jp/English/index.html>.
- ⁹ For more information, see <https://www.uis.no/en/research/knowledge-centre-for-education>.
- ¹⁰ For more information, see <http://www.skbf-csre.ch/en/>.
- ¹¹ For more information, see <http://en.egitimreformugirisimi.org/>.
- ¹² See <https://www.nro.nl/en/knowledge-practice>.
- ¹³ For more information, see <https://educationendowmentfoundation.org.uk/support-for-schools/research-schools-network>.
- ¹⁴ For more information, see <https://www.sciencemediacentre.org/>.
- ¹⁵ For more information, see <https://www.educationmediacentre.org/>.
- ¹⁶ For more information, see <http://www.whatworks.ed.gov/>.
- ¹⁷ For more information, see <https://educationendowmentfoundation.org.uk/>.
- ¹⁸ For more information, see <http://www.campbellcollaboration.org/>.
- ¹⁹ For more information, see <https://www.cochrane.org/>.
- ²⁰ For more information, see <https://eppi.ioe.ac.uk/cms/>.
- ²¹ For more information, see <https://www.uis.no/en/research/knowledge-centre-for-education>.
- ²² For more information, see <https://www.edresearch.edu.au/>.
- ²³ For more information, see <http://www.eippee.eu/>.



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