

Linking Research and Practice in Education: The Views of Expert Researchers in the Field

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Abstract

The existence of a gap between educational research and practice, resulting in research that makes only a limited contribution to the improvement of professional practices in education, has been a topic of much discussion. There is widespread agreement among researchers that practice in education should be informed by research evidence. At the same time, other authors have voiced concerns about giving evidence-based practice too prominent a place in educational settings. In this article, we assess the views of expert researchers in the field of education regarding the linking of research and practice in education. Individual, semi-structured interviews were undertaken with twelve experts from Pakistan and the UK, contrasting countries where the issue of the utility of research for educational practice has been much debated. In both countries, there was a strong consensus among the researchers that there are important gaps between research and practice in education. The interviewees made a range of suggestions as to how these gaps might be filled, and we examine these suggestions.

Keywords: Educational research, Educational practice, Evidence-based practice, Translational research, Knowledge mobilization

Background and literature

Should there be closer links in education between research and practice, and, if so, how should these be arranged? These are questions that have been asked for a very long time (Lagemann, 2000). Indeed, the first ever Professor of Education, Ernst Christian Trapp (at the University of Halle, Germany, 1779), emphasized the essential role of research in his early account of the

discipline of education. There has been growing agreement among researchers and others that practice in education should be informed by evidence (Wiseman, 2010). This move is widely seen as being rooted in the medical field where evidence-based practice has received much consideration since at least 1990 (Guyatt et al., 1992). While there are questions about the extent to which medical practices can be applied to education, there has certainly been a global movement to improve existing systems of education through approaches which more comprehensively use existing knowledge in ways that are both robust and innovative. Consequently, there is value in determining views about the existing use of research in educational institutions, such as schools, by the professionals who work there, to explore the current situation about evidence-based research and its practice. This should help the development of the process of education so that it improves its outcomes (Fishman et al., 2013).

The term ‘translational research’ is used to characterize research which is undertaken and then exploited so as to attempt to improve practice. Such research has long been undertaken in the sciences, in medicine and in engineering (Mitchell, 2016) and has now become a contemporary movement for researchers in other fields, including education. According to Boström et al. (2013), collecting data about best practices can facilitate policy formation for research-based practice. Indeed, some would claim that the main purpose of educational research is to make links between research and practice.

The existence of a gap in education between research and practice has been commented on for some time (Robinson, 1998; Nuthal, 2004) and it is widely held that the impact of educational research on practice, and their mutual relationship, can be improved (Jacobs et al., 2012). At the same time, while acknowledging the importance of education to economic and social wellbeing, in presuming that research should support improvement in the performance of education systems, it may be that policy makers are expecting too much from research-informed practice.

The strength of the relationship between research and practice can be usefully understood by the term ‘knowledge mobilization’ (Levin, 2013, 2). Polanyi (1998) argued that the findings made in research can be coded as knowledge. Teaching practice is based on personal and practical knowledge which in turn may be rooted in research-based knowledge (Weiser, 2015) but is often not. There is a complex relationship between research and practice, resulting in knowledge mobilization and its transformation into practice (Cain, 2015).

‘Evidence-based practice’ or ‘research-based practice’ are comparatively recent terms, though there has been a long history, particularly in the USA, of educational research with a focus on pedagogy for effective teaching. Pring (2007) discusses the means/end model of education development that reflects evidence-based research. Certainly, in other fields, notably medicine, there is a policy of conducting research into practice so as to gather evidence of what works best and, most importantly, after understanding this putting it into practice (Goldacre, 2013, p. 7).

However, the actual use of research in educational practice is still patchy. Cain (2015) reported that UK teachers use research findings rarely, whereas they use widely held educational ideas more frequently. Weiser (2015) showed that there was considerable difference in the use of research by teachers and schools and that the worth accorded to research also differed among teachers. Davies et al. (2015) conducted research on in-service and pre-service programmes on the use of research and its impact on students’ learning; perhaps unsurprisingly, they found that the quality of the teaching had the most significant effects on students’ learning.

To some extent, a new paradigm for teacher education programmes has arisen, with a basic theme of translation of research (and accompanying transformation of theory) into practice. The borrowing of the metaphor of translational research from medicine means that schools are now sometimes considered as clinics where theory is translated into practice (cf. Dinham, 2013). It has been hoped by some that such translation may in turn provide new directions for research to determine practices in the classroom, including pedagogical ones, that lead to improved learning outcomes (Davies et al., 2015). A different point is made by Kriewaldt and Turnidge (2013) who are of the view that in the partnership between universities and schools, the role of theory and practice is bidirectional in nature, as reciprocal relationships were found in the creation and transmission of knowledge of theory and practice in both places.

Mizukami, Reali and Tancredi (2015) conducted research on Brazilian elementary school teachers’ use of online mentoring. They developed an intervention in an online continuing teacher education programme which was aimed at the development of mentoring activities for teachers to enhance their professional skills and to prepare them for classroom practice. The researchers found that the programme proved useful with respect to its effect on the professional skills of novice teachers. It broadened their knowledge and enhanced their professional growth by facilitating collaboration with their peers. More generally, digital technology has an important role to play in linking teachers’ classroom practice with research (Laurillard, 2008). With this in view, the MESH

(Mapping Educational Specialist know How) guides were developed to improve knowledge mobilization among teachers for the improvement of their teaching skills (Leask & Jumani, 2015). MESH guides provide educators with a review of educational research that can build up practice; MESH is therefore a form of translational research (La Velle, 2015).

Cooper, Levin and Campbell (2009) address issues that are concerned with the quality, relevance and availability of research for practice in educational policy making. Teachers generally report high levels of acceptance of research, but low levels of active engagement with it, in terms of spending time reading research or discussing it. Research must be relevant and accessible to teachers if it is to be used by them, yet research findings are often written only for academics or other specialized audiences and published in research journals that are not accessible to teachers. Researchers have been criticized for this, but teachers have also been criticized for their lack of commitment towards existing research (Cooper et al., 2009). Researchers have emphasized that teachers give value to professional, interpersonal relationships that are useful for their collective consideration of research (Cordingley, 2004). More generally, there is a problem in that research is traditionally conducted *on* teachers, who are not seen as co-researchers but ‘only’ as practitioners (Leask & Jumani, 2015). Consequently, there is typically little or no genuine collaboration between researchers and teachers; thus, knowledge is not co-created between them.

In an attempt to address these issues, Broekkamp and Van Hout Wolters (2007) proposed adoption of one or more of the following:

- a research development diffusion model, in which practice-oriented research expands on fundamental research;
- an evidence-based practice model, in which practitioners either conduct research themselves or use recommendations put forward by a representative group of practitioners;
- a boundary-crossing practices model in which people from different domains jointly undertake research;
- a model of knowledge communities, where a network of people, sharing common interests, benefit from each other’s expertise and produce new knowledge.

De Vries and Pieters (2007) argued that a prime reason for difficulties in translating the results of educational research into practice is the fundamental differences in the approaches adopted by researchers and practitioners. Practitioners develop certain beliefs as they see things improved by following certain practices, thereby finding solutions to the problem at hand. However, researchers

look for systematic change by following theoretically validated explanations rather than relying on experiences – they categorize generalizable facts rather than beliefs about the way things work. This contrast can be attributed to the basic differences in the kind of knowledge that practitioners and researchers seek. Researchers aim to possess generic and explicit knowledge based on logical evidence while practitioners endeavour to hold contextual and tacit knowledge and pursue evidence that researchers would characterize as anecdotal (De Vries & Pieters, 2007). For practitioners, lack of time, the influence of middle management and a tendency to work in isolation are other practical issues (Hargreaves, 1999). De Vries and Pieters (2007) recommend that communities of practice having common activities, interests and shared practice could contribute to bridging the gap between research and practice, and suggested four types of communities: knowledge-creating schools; school-university networks; virtual theme groups; and face-to-face theme groups.

Some authors have expressed concerns about giving evidence-based practice a prominent place in educational settings (e.g., Hammersley, 2005; Biesta, 2010). Biesta (2010) proposed the idea of value-based education as an alternative to evidence-based education. He focused on epistemological, ontological and application dimensions of the debate and identified deficiencies in the notion of evidence-based education for all three dimensions. For instance, he reported: a knowledge deficit in the epistemological dimension as we cannot have certainty about the relation between actions and consequences; an effectiveness deficit in the ontological dimension because open, recursive systems operate in the process of social interaction; and an application deficit in the practice dimension, given concerns about the effects of contemporary science on culture. Greenhalgh and Wieringa (2011) questioned the translation metaphor and argued that it curtails our perception of the linkage between research and practice. They criticized the summarizing, packaging and transmission of scientific knowledge to practitioners, which seems analogous to a physical and somewhat simplistic process of translation.

Penuel et al. (2015) have presented an alternate framework for research-practice partnerships as one of ‘boundary crossing’; here, there are ‘boundary practices’, which entail researchers *and* practitioners needing collaboratively to steer across these boundaries. Ozga (2004) had previously argued that there is a need for close relationships between practitioners and researchers, with practitioners needing to be equipped with skills regarding the understanding and

interpretation of research findings so that they can translate evidence into interventions for their classrooms.

Much of the literature about the utility of educational research for practitioners focuses on the Global North. Yet the need for high-quality practitioner practices is worldwide. In Pakistan many institutions have been working under the umbrella of the Higher Education Commission (HEC) for teacher education in Pakistan. These institutions have been contributing to links between research and practice. Teacher education programmes have been reformed after the education policy of 2009 and a large associated USAID project. The previous one-year B.Ed. has been replaced by a four-year B.Ed. (Hons) and outdated primary teacher certificate, certificate of teaching and oriental teacher programmes for primary and elementary teachers have been abolished. After the passing in 2010 of the 18th Amendment to the Constitution of Pakistan, a curriculum framework for teacher education was provided in each of its five provinces. For example, the Directorate of Staff Development (DSD) is an institution which is working in all provinces for staff development to prepare professionals in the fields by building their capacity. In their programmes, teacher training and development through new courses is essential. In addition, provincial institutes of teacher education (PITES) are also available for teacher training throughout Pakistan.

But involving these various organizations so as to change practice is a big challenge. Hathaway (2005) is of the opinion that the lack of qualified teachers and poor teacher training lead to problems which have been faced by the education system in Pakistan since its inception. If an effective teacher is the most important agent for promoting quality education and student achievement in the classroom (Haddad & Chaiyasook, 2006), then a community of capable teachers is likely to lead to high mutual commitment, with a sharing of knowledge and practice for success. Pakistan has failed to meet the challenges set by UN Education for all its goals (UNESCO, 2015); this is at least partly due to the acknowledged low quality of school teachers, something that is more prominent in the public sector (Pakistan Government, 2009).

The UK too, particularly England, has gone through major changes in teacher education, and the diversity within the present arrangements is compounded by the fact that Scotland has an education system that is wholly distinct from that of England, Northern Ireland and Wales. An early, 1992, article was titled ‘The political rape of initial teacher education in England and Wales: a *JET* rebuttal’ (Gilroy, 1992) and the pace of change has only accelerated since. Perhaps the

biggest change that is relevant to the theme of this article is that whereas once initial teacher education took place only within universities, now it can, and often does, also take place in England within schools – school-centred initial teacher training (SCITT). In addition, even on the university route, the one-year Postgraduate Certificate of Education (PGCE), that has changed the least over the last thirty years, students now spend only 60 days in their university (and 120 days in schools), whereas the opposite (120 days in their university and 60 days in schools) used to be the case. Furthermore, the government, through the Department for Education and Ofqual (The Office of Qualifications and Examinations Regulation), exercises far tighter control than it did over such matters as criteria for admissions to such courses and graduation from them, to the extent that at the time of writing, a number of universities in England are threatening to withdraw from initial teacher education unless the latest proposed changes from the government are removed.

Pakistan has 1.3 million school teachers compared to 450,000 in the UK (UNESCO, 2015); in both countries, raising the quality of education will have benefits for very large numbers of students. Linking teacher education with classroom practice results into better outcomes in education (Leask & Younie, 2013), and good advice to trainees, based on research to guide implementation, is a vital constituent of teacher education quality (Aktar, 2011; Leask & Jumani, 2015).

In the context of the relationship between research and practice, Hammersley (2014) argued for the need to analyse the way in which research evidence is communicated to practitioners and the process of converting research findings into interventions. There is a substantial gap between educational research and practice in Pakistan as most schools only come into contact with educational research when they are approached for data collection. A well-established professional community can share past and present experiences, and when supported by high-quality research, such communities can greatly contribute to its members' professional development. Bhatti (2015) has described how practice is always context-based, which can lead to difficulties in the broad application of research findings. In Pakistan, large-scale studies are usually funded by governments, NGOs and international organizations using research models that end up only publishing reports that, even if they have implications for implementation, rarely lead to any changes in practice. A different approach is for new knowledge to be disseminated through the national system via teacher trainers. More generally, BERA (2000) recommends best practices in

writing research reports if these are to have influence, which includes making sure that their conclusions are disseminated in ways that reach their intended practitioner audiences.

From the literature review we concluded that researchers have been working for some time on the need for research-practice connections in different ways and within various contexts. But there seems to have been little work undertaken to determine what more than a single expert feels needs to be done to enable better use to be made of educational research for the benefit of practice. The research on which we report here therefore focuses on this issue. Our particular interests are in Pakistan and in the UK and, as we describe below, our research participants are therefore drawn from these two countries, one of which is generally categorized as ‘developing’ and the other of which is from the Global North. So, the present study attempts to explore the fruitfulness of links between theory and practice after obtaining the views of expert researchers in the field in these contrasting countries, in part so that we could see whether there were differences in the views expressed in Pakistan and the UK. While these two countries are different in so many ways (e.g., language, wealth, colonial history, the importance accorded to religion by most people), including, as indicated above, in relation to education, there are similarities in terms of the limited extent to which academic research is used in schools. Accordingly, it is something of an open question as to whether or not one would expect to find similarities or clear differences in the views of expert researchers in the two countries regarding the linking of research and practice in education.

Methods

All of the experts we interviewed were recruited by us because they had a research and/or policy interest in the links between research and practice. For reasons of confidentiality, we do not provide either the names or the positions of our sample but all were at professorial level or occupied significant management positions in universities. All of them had worked within education research for many years, and had a particular interest in school education.

Semi-structured interviews were undertaken to explore possible ways in which research and practice in education might be better linked. A total of twelve individuals were interviewed, five in Pakistan, all in the Punjab (where the majority of Pakistani educational researchers are based), and seven in the UK. Interviews were conducted face-to-face by the first author at places determined by the interviewees (usually their place of work). The typical duration for each interview was about 30 minutes (with a range from 20 to 45 minutes). Interview questions were

provided to interviewees before the interview and this article focuses on the discussion that resulted from two of these questions:

- How should closer links between research and practice be arranged so that research can support productive interventions?
- How can the role of practitioners in the process of knowledge transfer in education be recognised and developed?

Additional, related questions (including probes) were asked once the discussions had started. Semi-structured, face-to-face interviewing was chosen as it particularly appropriate for exploring the in-depth knowledge and views of articulate participants, due to its flexibility and interactive nature (Al-Balushi, 2009). The interviews allowed us to obtain the subjective viewpoints and in-depth experiences of these experts. All interviews were conducted in English, audio-recorded, transcribed by the first author and then repeatedly re-read before and during the analysis. Before the interviews, participants were given a full explanation as to the nature of the research and the format of the interview and written consents were obtained. Audio-recordings and interview transcripts were stored securely and checked to ensure that they contained no identifiable features.

Thematic analysis was undertaken using the approach of Evans and Lewis (2018) and a total of thirteen themes were identified. The findings below are reported under ten of those; those for the themes ‘Need for incentives’, ‘The interests of academic researchers’ and ‘The appropriateness of the methods used by researchers’ are not discussed here, partly for reasons of space and partly because the interviewee responses connected less closely to the focus of this article. Interestingly, a point to which we return in our Conclusions, no consistent differences were found between the responses of interviewees from Pakistan and interviewees from the UK, so we make so attempt to categorize responses by interviewees’ countries and only occasionally indicate, when it is helpful, whether a quotation came from someone from Pakistan or someone from the UK.

Findings

Contextual specificity of educational research

All of the interviewees agreed that it is hard in educational research to provide recommendations to improve practice that work everywhere. As one interviewee put it: “If we expect to find a pedagogy that works in all schools for all children, that is not going to happen”. This implies that the research community would be well advised to spend more time finding out what works *where*

(and perhaps where it does *not* work). Another interviewee stated: “If we visit a classroom, almost everything we see is probably based on research done by someone which certainly works, but we could not simply do a piece of work and say this is going to improve practice for everyone and we cannot generalize that research findings”. It is widely acknowledged that in some branches of science, particularly the physical sciences, research is generalizable; however, social science research is generalizable to a substantially lesser extent. While classroom research can help particular teachers to improve their own practice, it is harder, and may not always be feasible, to produce research-informed guidance that can be applied universally, as a medical treatment might.

Creation of communities

Nine of the interviewees stated that researchers and practitioners should come together and find some common platform where they could discuss issues of mutual significance, findings and practices, as a result of which they might initiate working together. It was felt that there should be close collaboration between researchers and practitioners, and practitioners were seen as having a lot of knowledge to be shared. It was felt that the focus should be on the creation of better standards, on-going learning and community partnerships. As one interviewee stated: “The key thing is context, creation of small communities and researchers and practitioners coming together as units to work on collaborative projects”. Another interviewee commented that “Both researchers and practitioners should have equal interests in serving. The problem-solving and inquiry-driven mechanism should be developed to identify key problems”. It was widely felt that policy makers, researchers and practitioners should have a shared concern to create a dialogue about existing problems. It was also stated that stakeholders must be on board and should be briefed about the productivity of research.

Bringing researchers and practitioners closer

According to eight of the interviewees, the people who work in the domains of research and practice are different sets of people and they work in isolation from each other. The only way to be able to link researchers and practitioners is to bring those people close together to understand each other’s perspectives. For instance, almost all of the interviewees agreed with the assertion of one of them that “the research people need to know [is] what problems practitioner[s] are facing and what problem[s] they need help to solve them, and researchers may keep on working [on] idealistic academic topics for research but along with that they must also undertake research on

those points and those problems where the practitioner[s] are more interested”. Many interviewees agreed with the assertion of one of them that “whatever academic researchers do they must arrange for dissemination”.

Seminars and use of popular media

Nine interviewees agreed with the interviewee who stated: “Use of informational technology, such as in the field of engineering and some other subjects where scientist[s], industry, and government, and the people from multiple stakeholders come together and they talk with each other, can be a good example to follow”. One interviewee even argued that “Such people are much closer to the practice domain as compared with pure academic[s] because they use popular media as outlet[s] of their findings so they write articles in newspaper[s], they write articles in magazines – whatever the popular media that goes to the public – and also they collaborate with the politicians and the other opinions makers”. Another interviewee pointed out that “The people who do research in [the] social sector domain perhaps they do it because of their business, for their living; their business model is different from the universities so academic[s] do not do those efforts and in many cases people in academia find their research faulty and superficial which doesn’t have a rigour, but still that is liked more by the practitioners, perhaps because their language is the language practitioner[s] understand more”. In general, it was held that this is one reason why research doesn’t get implemented into practice and doesn’t get into policy as researchers hope.

Role of government

Seven of the experts believed that educational institutions, including universities, should initiate, with the participation of government, a national agenda for research in education. This means that major problems and questions in the field of education should be jointly agreed between the government and relevant parties. One interviewee from Pakistan suggested that there should be a kind of permanent unit in the government, along the lines that the earlier Manpower Commission fulfilled. In Pakistan it was felt that the provinces needed to play a significant role because education is a provincial responsibility; it was also suggested that there was a role for the private sector.

Governance of research by practitioners

Some experts agreed that practising teachers do not take educational research seriously and that it was easy to see why – rarely does it offer much that helps them. Seven interviewees mentioned that research is rarely attended to by policy makers. As one put it, “Educational research is largely ignored by policy makers – two main reasons: the endless exploratory and descriptive studies, usually based on collated opinions, offer little of any use; secondly, those who determine policy assume that, because they once went to school, and university, that qualif[ies] them to be ‘experts’ on education. Try that on a dentist! Just because I visit my dentist regularly does not qualify me to tell the dentist what treatment to pursue”. Finally, it was felt that the answer must lie in rooting research in what actually happens in school and university learning. Four interviewees suggested that those who undertake research must be drawn from practitioners. It was argued that in medicine, engineering, and a number of other fields, research is directed by experienced practitioners.

Lack of interest among academic researchers

Two senior research experts in Pakistan elaborated that most education PhD students in their experience are not interested in research. They felt that after research had been conducted, it should be disseminated but that arrangements for doing this were not strong; only a few relevant journals are published and they all are printed occasionally with very few readers. One interviewee mentioned an example from the chief editor of a research journal in Pakistan: “researches were published regularly after three and six month[s], but none of the teachers or researchers are interested to use it. He [the chief editor] offered to all teacher educational institution[s] to purchase at a meagre price and keep it in their organisation but none of the institution[s] borrowed or purchased it. Lastly, the journals were sent to the libraries of teacher education but he is afraid that none of the teachers read those; that are his personal observation[s]”. It was also stated that Pakistani universities get many international journals but these are not often used even by teacher educators, generally only being used when somebody is undertaking a dissertation. Another interviewee stated: “There is no flow of research, no arrangement for dissemination of the research and no arrangement for reading”.

Relationship between research and practice

Nine of the experts considered the relationship between research and practice to be a key factor for the effectiveness of research. It was widely held that, as one interviewee stated, “the

relationship between research and practice is needed for developing collaborative research opportunities so [as] to work in a community to undertake inquiry. This is possible through teacher education in a university”. Some interviewees added that, as one put it, “The role of teacher educators or university teachers is very important” and it was agreed that in order to develop such inquiry in a community, there should be feasible conditions for collaboration and positive attitudes towards research in teachers.

Suggestions made by the experts to facilitate the relationship between research and practice included:

- Collaborative opportunities between university academics and school teachers in classrooms;
- Building long-term partnerships;
- Creating learning communities;
- The provision by government of continuous professional and research development of teachers.

Getting all stakeholders on board

Nine interviewees suggested that all the stakeholders related to education – which includes teachers, parents, textbook developers, curriculum developers and others in the business of education – must be on board so that everyone can benefit from the recommendations that flow from the outputs of research. Four interviewees, all from Pakistan, felt that, as one mentioned, “Actually the state of affairs is that most of researches are just shelved; people are not interested in production, recommendation and methodology of research”. One interviewee pointed out that “whenever a research is conducted, most of the researchers rush for attainment of the degree or earning funds from the relevant agencies/organizations”. Another interviewee even disclosed that “In Pakistan, a large percentage of projects are still pending and all amounts are outstanding against the people who have been granted that research grant because people are not actually aware of [the] practical utility of the research”.

Collaborative research

All of the interviewees agreed that collaborative or team-based research could be more beneficial than individuals undertaking research on their own. At the same time, as one interviewee put it, “It is also necessary for the researcher to conduct the research in his own field and personally [be]

involve[d] in its practical aspects”. It is important to have this balance between autonomy and collaboration so as to attain productive interventions.

Conclusions

The interviews showed widespread agreement that there is a substantial gap between research and practice in education and the interviewees believed that researchers have been trying to address this gap in many ways. In common with our interviewees, we would hold that research must be relevant and accessible to teachers for proper use. Almost inevitably, research findings are often written for academicians and other specialized audiences and published in research journals that are not accessible to teachers. Teachers report that they are willing to participate in research, but the literature shows that teachers give value to professional interpersonal relationships that are useful for their collective consideration for research (Cordingley, 2004). Indeed, Edwards (2000) argued that educational research results are not applicable when the context, including teachers and institutions, is changed.

The interviewees in this study emphasized the need for more communication between researchers and practitioners, as also recommended by Vanderlinde and Braak (2010), amongst others. This may help bridge the gap between research and practice in education, for instance by the formation of research communities. Such research communities can perform for the benefit of educational research and practice (Buysse, Sparkman, & Wesley, 2003). According to the experts in this study, the people who work in the two domains of research and practice are different sets of people and they work in isolation from each other. Likewise, Grm and Savec (2013) are of the view that researchers and practitioners work in different domains and that is why researchers are too often unable to understand the problems faced by the practitioners.

The use of information technology for linking research with practice was also suggested by the interviewees in this study. Comparable recommendations were also made by the Flemish Educational Council (2007) and by Laurillard (2008). In this way, different stakeholders may gather at common points for debate and discussion, which may result in collaboration not only between the experts in different fields but also between institutions, across the globe. The platforms of conferences, workshops, seminars or discussion groups can also bring people together to explore the many research areas belonging to various social sectors and lead towards comprehensive recommendations (La Velle & Kendall, 2019).

In such ways, researchers and practitioners can learn from research and from one another and create situations where research is more likely to be utilized for policy making. Thus, there should be regular seminars in universities and other places (e.g., government departments) to bring together members of these various communities (Wyse, Brown, Oliver, & Pobleté, 2018). One expert (from Pakistan) considered the implementation of research findings to be the biggest incentive for researchers. Such implementation may be facilitated by making permanent some government unit like the present Manpower Institute in Pakistan (which sits within the Federal Ministry of Education). Such a unit should have its research agenda based on the priorities of educational experts and government institutions, even at the level of provinces through public and private partnerships, as was also recommended by Elliott (2009). In the case of developing countries like Pakistan, policy makers are mostly unaware of what is actually happening in schools and universities.

Most of the interviewees indicated that research may be more effective if conducted through collaboration, which may be possible through teacher education in the universities of countries such as Pakistan and the UK where the role of university teacher educators is important. However, in order to develop such inquiry in a community, there should be feasible conditions for collaboration and positive attitudes towards research among teachers (Vanderlinde & Braak, 2010; Grm & Savec, 2013). It was suggested in this study that the stakeholders related to education should be on board so that everyone can derive benefit from the recommendations of research. This entails collaboration through something like dissemination centres in universities which can connect research departments with teacher training departments. The core thinking behind is to create knowledge through innovative learning environments (Broekkamp & Van Hout-Wolters, 2007), resulting in collaborative research that should lead to productive interventions (Nyström et al., 2018). At the same time, more empirical studies are needed in education to explore ways of better ensuring a productive interplay between research and practice. A particular focus of such research could be on practitioner experts as this would complement the sample of researcher experts in this study.

Many of the findings about linking research and practice, which we see as a contribution to knowledge, were common to interviewees from Pakistan and the UK. We had wondered whether experts from Pakistan would prioritise a different set of issues or challenges to their counterparts in the UK, and vice versa. In the event, there were very few country-specific findings.

We would not want to claim that a larger, quantitative study would find no such differences. Nevertheless, it seems to us that the experts in both countries felt that the same issues and challenges pertained to their country. We see this in itself as a contribution to knowledge, as comparative studies between very different countries typically find considerable differences in the views of those interviewed in the various countries. We therefore hypothesise that the issues in education that are to do with the various possible relationships between research and practice may be relatively independent of country. It would be good to know from studies in other countries whether this is indeed the case.

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