Negotiating the Maze of Educational Research

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In recent years phrases like "evidence based practice" or "data driven change" have become increasingly common in virtually all areas of professional practice. They certainly sound like compelling ideas but for many of us the results of research are often more confusing than prescriptive. Contradictory advice from researchers is common and can be quite frustrating. It seems, for example, that almost every week the community of health researchers discover something that contradicts what they told us only a little before. Experienced educators are able to tell similar tales of research evidence being used to justify particular reforms at one point and to attack those same reforms some time later. If research produces such contradictory results how can we ever rely on it as a basis for acting?

Part of the problem is that recommendations are sometimes being made based on the results of one or two studies and that is almost never a solid basis for action. That is not to say the studies relied on were ill conceived or poorly carried out (although that may be the case), but that individual investigations are usually very narrowly focused. Substantive knowledge is normally produced by combining findings from a range of studies to build a solid platform on which to base recommendations for change. As Noddings (2007) writes, "we do not learn a lot about the working of science simply by studying individual investigations. We must analyze *programs* of research" (p. 136, emphasis in the original).

Even when there is a large body of research knowledge in an area some questions will remain unanswered. Because education is a human enterprise it is virtually impossible for research to nail down evidence that will allow us to make prescriptions about practices in all contexts. That is not to say research does not tell us important things, but that it is limited in what it can do. Perhaps an analogy will help illustrate what I mean.

Imagine a new house is being constructed in an area and the neighbours are quite curious about what it will be like. After the workers leave for the day a couple wander over and look in the living room window and report back to others that now they know what the house will be like. Their neighbours listen with interest but then one says, "but what about the kitchen, what is that like?"

"We don't know," comes the reply, "we didn't think to look in that window."

So the next evening the person interested in the kitchen walks around to the back of the house and looks in that window reporting their findings back to the neighbourhood. Now folks have a much fuller idea of what the inside of the house is like but it is still not complete. There are bedrooms, dining areas and family rooms yet to investigate. Over the course of the next several weeks different people from the neighbourhood check out those other windows adding their knowledge to that which came before.

Each of these investigations might be likened to individual research studies that provide a limited view of a phenomenon. The combination of studies provides a much richer picture. It is still not complete, however. If we return to the house analogy, there are always corners, closets, and storage areas that will not be visible from the windows. Some things will always remain a mystery to outside investigators. Similarly, research can tell us a lot about education in various contexts but, because it is a human enterprise, there will always be aspects of it that are unpredictable and obscure.

Another problem with relying on research to tell us what to do is that figuring out what to do is often a moral or ethical problem rather than a technical one. Back to the house analogy, having information about the location and about what all the rooms are like does not fully answer the question of whether or not we should buy the house. There are at least two other key factors: personal preference and cost. In terms of the former, colour scheme, the choice of materials, and the particular arrangement of architectural features might cause one person to want to buy a house while another will choose not to buy. In terms of the latter, all the best features in the world do not really matter if the house is well beyond our budget. Knowing what the house is like will help with the decision but there are always other crucial, more intangible factors.

We face the same dilemmas in education. First, we often have different, and sometimes contradictory, priorities. Is the purpose of education, for example, to prepare people for work or citizenship or personal fulfilment? Most of us would probably say all three but where should the emphasis lie? Research might tell us what programs best equip students to be engaged and active citizens but it will not tell us if that should be the highest priority for the system or not. Most important choices in education are at their heart moral or ethical ones. Research can help us understand more clearly what those choices are and what the implications might be in choosing one thing over another but it cannot tell us what choice is right.

Even when we figure out what might be right, we have to have the ability to pay for it. Research could show, for example, that class size of around 15 is much better for student learning than 25. It may be impossible, however, to pay for a change like that and limited funds might better be spent on something else. Again, research can

help inform discussion about where scarce resources might be targeted but it cannot ultimately answer those questions.

Research can be an important tool to help improve practise in education but it is often not very well used. There are a number of reasons for this including the fact that education is a political enterprise and politicians responsible for it recognize that "beliefs drive political action and voting intentions much more than do facts" (Levin, 2005, p. 20). Therefore their policy prescriptions are often more designed to respond to those beliefs than to act on evidence. Some reasons, however, lie within the realm of the research context itself. Research is often not offered as a tool for practitioners to use in improving their schools and classrooms but rather as a hammer with which to beat them. Educators are told they are not doing a good job or that they should uncritically implement the pronouncement of researchers. As Hargreaves (2003) points out, "Research in best classroom practice is imposed on [teachers] rather than offered as a source of professional reflection and adaptation to their own classroom circumstances" (p. 80).

Debates about the forms education takes are often very intense because they go right to the heart of deeply held social values. As Barton and Levstik (2004) point out, research cannot tell us what to do about contested aspects of educational policy and practise; it can, however, "force us to think about the unquestioned assumptions that impede [those] discussions" (p. 3), and thereby enrich them significantly. For that to happen the research process has to be open to public scrutiny and engagement at all levels.

References

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