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Why Networks?
Why Now?

In his thought-provoking book *The Wisdom of Crowds*, James Surowiecki (2004) outlines the case for why the many are smarter than the few. He cites, as an example, the global response to the Severe Acute Respiratory Syndrome (SARS) disease epidemic, a response that can be held out as model of efficiency and success. The discovery of the SARS virus—the new virus that caused the disease—was, as Surowiecki describes it, a remarkable feat. And, as with any remarkable feat, our immediate question is, Who did it? As it turns out, that's an impossible question to answer. Why? Because it took a combined effort from labs all over the world to (a) spot the virus, (b) prove that the identified virus made people sick, and (c) differentiate it from a range of other possible viral candidates that had to be ruled out as the cause of the disease. Ultimately, no single person discovered the cause of SARS. The World Health Organization (WHO) attributes the discovery of the virus to a group of labs working collectively. Any one of those labs working on its own might have taken months or years to identify the virus but together they did in just a few weeks. What makes the collaboration especially noteworthy is that no one was officially in charge of it. Although the World Health Organization (WHO) orchestrated the creation of the network of labs, there was no central dictate telling each lab what to do. As Surowiecki (2004, p. 161) describes it:

> The collaborative nature of the project gave each lab the freedom
> to focus on what it believed to be the most promising lines of

investigation, and to play to its particular analytical strengths, while also allowing the labs to reap the benefits—in real time—of each other's data and analyses. And the result was that this cobbled-together multinational alliance found an answer to its problem as quickly and efficiently as any top-down organization could have.

The *Wisdom of Crowds*—and the case of SARS specifically—points to the promise and potential of collaborative mechanisms, like networks, for taking up problems of practice, whether in health or in education. Of course, it's not as simple as "together is always better." As we will show later, there are some very important preconditions that need to be in place. But under the right conditions (and this book is devoted to unpacking and understanding what those are), the many can indeed be smarter than the few and networks can be powerful organizational forms for school improvement.

> The world is becoming a networked environment. This is having a profound impact on the way we organize at the local, national and international level (Church et al., 2002, p. 1).

For decades, numerous school improvement models have attempted to reform the thinking and practices of practitioners with the explicit intent of increasing student success in schools. Introducing reforms into classrooms and schools generally has accomplished superficial changes to practices and outcomes that have not translated easily into sustainable improvement for student learning (D. Hargreaves, 2003). Professional networks increasingly are being promoted as mechanisms to intentionally create the level of deep learning necessary for practitioners that can lever the kinds of changes that make a difference for students.

IT'S ABOUT LEARNING

The Organization for Economic Cooperation and Development (OECD) study on sustainable flexibility (OECD, 1997) points to the changing nature of work and life in the knowledge society of the twenty-first century. In this society, lifelong learning is a cornerstone of the flexibility necessary for highly skilled and educated citizens to take on new tasks and continuously adapt to new and changing environments. As we exit the industrial age, characterized by a "finite" conception of resources, a "controllable" conception of information, and a "sequential and task-specific" conception of learning, the notion of networks takes on increased relevance (Allen & Cherrey, 2000). Specifically, networks provide an operational construct for educational provision and a new vehicle for achieving change.

In this knowledge society, practices for facilitating knowledge creation and sharing are considered to be the key tenets of educational provision. Knowledge will be, and perhaps already is, the most critical resource for social and economic development (Hakkarainen, Palonen, Paavola, & Lehtinen, 2004). Change-directed improvement comes from creating new

knowledge or adding value to existing knowledge rather than simply appropriating existing knowledge resources. A fundamental challenge for education, then, is to organize work with knowledge in a way that facilitates ongoing knowledge building and sharing among members of the community. As Hakkarainen et al. (2004) remind us, members of the community need to develop competencies that allow them to function as "knowledge workers."

In *Working Laterally*, David Hargreaves (2003) describes the demands of knowledge creation (and the associated competencies that support it) in terms of innovation. Knowledge creation (or transformation) is, in a word, innovation. Young people need to be innovative to succeed in work and life, and education can both model this requirement and support its development. For teachers, innovation is about learning to work differently in order to work better. Most innovation is the creation of new professional knowledge about their work.

NETWORKS: A POWERFUL ORGANIZATIONAL TOOL

The question of how networks "work" in the service of the kind of educational reform that Hargreaves (2003) describes is one that for a long time was best answered in the tentative terms of "promise." The route is undoubtedly complex. Judith Chapman and David Aspin (2003) suggest the following possible pathways of function:

- Networks can offer a means of assisting in the policy implementation process by linking policy both horizontally and vertically.
- Networks can provide a process for cultural and attitudinal change, embedding reform in the interactions, actions, and behavior of a range of stakeholders.
- Networks can provide an opportunity for shared and dispersed leadership and responsibility, drawing on resources in the community beyond education.
- Networks can be capacity building insofar as they are able to produce new knowledge and mutual learnings that can feed back to and inform public policy.
- Networks can move attention away from a preoccupation with micro-level change at the individual site and function at the meso level to strengthen interconnections and spread innovation across all levels—micro, meso, and macro.

The educational landscape is populated by networks of many forms. In the United Kingdom, government-sponsored networks have developed to encourage and support continuous cooperative learning at all levels of the education system. In North America, the growth of organic networks of teachers and administrators has taken place over the past twenty years

without a formal government-sponsored infrastructure. Some networks join teachers and/or schools together at the national, state, or provincial level. The National Writing Project, for example, is a teachers' national network of writing (Lieberman & Wood, 2002). In British Columbia, Canada, the Network of Performance Based Schools (NPBS) links schools with an "Assessment for Learning" focus (Katz, Earl, Ben Jafaar, 2008). Other networks are bound by jurisdiction, such as the Consortium for Educational Change, a network of school districts in Illinois created to improve student achievement by assisting member districts and schools to become collaborative, high-performing organizations. Likewise, the Bay Area School Reform Collaborative (BASRC) is a network of schools in the San Francisco Bay Area that collaborate to achieve equity-minded school reform (Center for Research on the Context of Teaching, 2003). The York Region District School Board in Ontario, Canada, has organized approximately twenty-two networks of elementary schools, each with a shared focus and geography.

Despite the considerable theoretical and intuitive promise of networks, and their increasing prevalence and popularity as an organizational form, there is little systematic research about the way networks work in educational contexts or about what to emphasize to foster successful and productive networked learning in education. Over the past few years, we have been engaged in a development and research agenda that has worked to fill this gap. We began in England, a forerunner in considering networks as an integral part of their policy landscape in education. In 2002, the National College of School Leadership established a four-year development and research initiative to support the implementation of networked learning communities (NLCs) in English schools and to learn from their experiences. We engaged in a large evaluation study of the Networked Learning Communities Program. NLCs were conceived as groups of school working together to enhance the quality of professional learning and to strengthen capacity for continuous improvement. The initiative was the largest of its kind in the world and comprised 132 networks that encompassed 1,500 schools, 43,000 teachers, and 690,000 students.

Our goal in this evaluation was not an outcome evaluation (i.e., did the program work or not?), but rather a forward-looking learning opportunity with a view to informing the field about the key features of NLCs and how these features work in practice. The study was timely given the proliferation of learning networks of various sorts around the world. What was particularly important was that we had the kind of data that allowed us to connect the features we identified to teacher practice and to student achievement—both critical outcomes for any school improvement methodology.

Armed with our empirically validated learning about the high-leverage practices of networks that make a difference for teachers and students, we became intentional about building and supporting learning networks of schools. We pushed forward with a development and research program in

several school districts, taking our learning, translating it into practice, and then engaging in research designed to learn and feed forward into the next iteration of this work. The results of these efforts (which still continue to unfold) form the substance of this book.

As we noted in the Preface, an authentic narrative for exemplification of ideas and structured reflection opportunities run throughout the book. Below is the first installment of each.

Educational leaders face real-time issues in schools. Their ability to recognize an authentic need for improvement is an important start to responding appropriately.

Joan is the principal of Selkirk Elementary School, which has 634 students. According to the large-scale assessment results, the school is average. Selkirk has close to average numeracy results: the percentage of students reaching the standard in Selkirk is 2 percent greater than the state average and 4 percent greater than the district average. The literacy results are also close to average: the percentage of students reaching the standard in the school is 3 percent below state average and 7 percent below the district average. Most of the students attending the school are from families that are established in the community. About 10 percent of the families at the school have arrived in the country in the last five years. Most of the parents work in the trades or in professional jobs. There is a positive school culture, with most teachers choosing to stay in the school—the newest teachers in the school arrived at the same time as Joan, three years ago.

When Joan received the school's large-scale assessment results, a cursory look showed that the scores had not improved from last year. She was especially disappointed in the literacy results from the primary division because not only were they still just below the district average, but they had not improved at all in the last three years despite her school's improvement efforts.

Time for Reflection

Think of a professional situation when you worked in a group where the outcome was beneficial and another situation where it was unproductive. What do you think was the difference between the two situations that contributed to the success or failure of the collaboration?