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Reviewed by Dr. Sharon Friesen

Jane Gilbert is a chief researcher with the New Zealand Council for Educational Research. Catching the Knowledge Wave is a welcome addition to the growing body of literature on knowledge, technology and school reform. But for some, Gilbert’s challenges to long-held ideas about knowledge and education will be unsettling.

I first heard about this book through an online discussion forum. The author of the discussion post was sure that Gilbert misunderstood the work being done in schools in the name of information literacy. She maintained that Gilbert’s criticism of “digital busy work” (p. 120) demonstrated little understanding of the concept of information literacy.

For some educators, the introduction of computers into the classroom has become synonymous with the Internet. Students spend time learning about the Internet, cutting and pasting information into digital worksheets, copying information from web sites into notebooks or searching for information for the ubiquitous ‘research report.’ That is, they are taught to be consumers of information.

Gilbert criticizes schools for developing such low-level ‘information literacy’ programmes. Her remarks about digital busy work affirm that,

Something is going on in elementary schools across North America that might strike the detached observer as insane. Millions of dollars are being poured into high-tech equipment that is used mainly to produce the kinds of ‘projects’ that in an earlier day were produced using scissors, old magazines, and library paste. …the computerized cut-and-paste work is believed to be teaching students computer skills that will insure their futures in the 21st century. (Bereiter, 2002, p. 1)

I was hooked. I wanted to read this book. Someone had dared to question the amount of effort and time dedicated to low-level skills such as gathering information to produce yet another report. “What really matters in the new age,” Gilbert argues, “isn’t information at all. What is really significant is the relationships between people, and between people and organisations, that are made possible by the new modes of communication” (pp.120-121).

Gilbert calls this dialogic literacy—the ability to build on other people’s ideas and collaborate to solve problems, address issues, pose new problems or questions. And it goes far beyond the simple search for
information that currently consumes so much of students’ time in school.

Gilbert argues that if schools are going to continue to exist in a knowledge society, they have to change. These changes, she contends, “do not represent the usual process of adding to and improving existing ideas: rather they represent a paradigm shift—a radical break with the past that requires us to stop and completely rethink much of what we do” (p.10).

While many writers echo this sentiment, Gilbert helps readers consider the current underpinnings of school and why speeding up the current process, measuring it, or pouring more of what we currently understand as knowledge into it, will not help us create an education system for a knowledge society.

Gilbert shows how schools still follow constructs and models of knowledge that flow from Plato through the Industrial Revolution to the present. “The industrial revolution came about because of a revolution in knowledge” (p.26): the development of production-line methods of manufacturing and the bureaucratic model of management. In Gilbert’s view, public schools were created, primarily as an efficient method of educating the masses in order to supply workers for assembly lines.

Like the raw materials on a production line, students are organized into batches (or year groups). They progress through a series of steps or stages (known as classes). They follow a curriculum organised as a step-by-step, linear progression from easy to more complex, and which is, apart from a few optional add-ons, much the same for everyone. Students receive this standardised curriculum in bite-sized pieces, in a pre-set order. (p.57)

In outlining the factors that have shaped our current education system, Gilbert omits two very important additional influences: Prussian military thinking and the impact of the monastery. In particular, Prussian-based education systems were created to inculcate ideologies of nationhood in order to: 1) “shape citizens’ loyalty, 2) to provide the state with trained public administrators and military personnel, and 3) to mobilize society for economic purposes and industrial development” (Benavot, Resnik & Corrales, 2006, p.22).

Gatto (2003) contends that we “have adopted one of the very worst aspects of Prussian culture: an educational system deliberately designed to produce mediocre intellects, to hamstring the inner life, to deny students appreciable leadership skills, and to ensure docile and incomplete citizens in order to render the populace ‘manageable’.” The addition of these influences to the ones that Gilbert already outlines helps us understand what keeps the current system in place and consistently confounds any attempts to reinvent an educational system for a knowledge society.

Gilbert contends, correctly, that a school system built on factory production-line models (and, by extension, on militaristic and monastic ideals) no longer serves today’s society in which change, not standardization, is the norm.

Gilbert does not shy away from acknowledging what many academics decry: knowledge is “the primary source for all future economic growth” (p.25). Particular ideas about knowledge formed the source of economic growth in the Industrial Age. And now, she argues, the world has changed—and outmoded conceptions of knowledge, minds and learning no longer serve a world which needs new understandings of knowledge, itself.

In our current system, knowledge and information are nightmarish synonyms for inert “stuff” that can be stored and recited. Minds are containers that store the “stuff” and learning is the process by which the “stuff” gets stored there. In Gilbert’s terms, knowledge is usually thought of as a noun.

Today, she argues, knowledge needs to be understood as a verb: not something people have, but something they do.

And thus, Gilbert says, schools do not need to be improved. They need to be changed. “Doing more of what we do now, doing it more efficiently, and doing it to a higher standard will not get us to where we need to go”
Where To From Here

“If schools are to usefully prepare students for life in the world outside education” then they need to shift their emphasis to “developing students’ capacity for knowing—in all kinds of situations with all kinds of people” (p.76). Educators at all levels must change what they understand knowledge-in-schools to be. For in a knowledge society, what people learn, how they learn, and what they do with what they learn all matters in ways we currently fail to understand.

And as if the task of deconstructing the economic drivers of knowledge and schooling were not large enough, Gilbert also deconstructs ideas of social democracy in contemporary schooling: being equal and different. “Equality is—and must continue to be—a key goal of any public education system”; however, “we need new ways of thinking about equality, ways that do not involve sameness, or one-size-fits-all approaches” (p.102). It is on this point that Gilbert frames her central argument, “one that takes knowledge society ideas into account, but uses them strategically in ways that aim to preserve education’s traditional links with social justice and social cohesion. A key argument in this approach is the idea that knowledge matters” (p.15).

Gilbert charges her readers to consider what is needed to create a knowledge-age education system in which all students not just acquire knowledge but do something with it. We should be presenting knowledge to students not as something monolithic, fixed and finished, but as an organic process that is always developing and always in process (p.175).

Gilbert contends that the work of creating an education system for a knowledge society has “to happen in individual classrooms, led by individual teachers” (p.205). And I agree.

But I would also add a caution. Schools are inherently conservative organizations, slow to respond and adapt to changes in the larger society. For the past seven years, the Galileo Educational Network has been working with school leaders, classroom teachers and their students, to create images of learning for today’s world.

And we have come to experience first hand that innovations in teaching and learning have exactly the abrasive effect on the status quo that is called for by Gilbert. However unconsciously, bureaucracies raise systemic barriers to change. And these barriers frequently make targets of precisely the teachers and schools that are most needed to provide leadership in changing times: the innovators.

While talk about educational change is commonplace, it is far less clear that systems designed for one world can actually reform themselves for another. Gilbert’s book could make a powerful starting place for leaders at all levels—government, school district, school and classroom—to debate what all of us must do differently, and why.

Our children and their world require no less.

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