

EDITOR'S COMMENTS

Information Systems Literacy and the Responsibilities of Business Schools and Universities

When I was appointed editor-in-chief of *MIS Quarterly*, I began receiving invitations to speak at conferences, to give research seminars, and to be a visiting professor. The invitations have taken me to different places in North America, Asia, Africa, and Europe. Seeing the varieties of peoples, cultures, and nations that form the settings where information systems are the object of teaching, research, and practice has broadened my perspective as a scholar in the information systems discipline. In my view, the diversity of these settings serves to highlight the significance of the themes that are common across them. These common themes have also been useful for jolting me out of my editor's mindset, where my tendency has been to focus on individual research papers, and for reminding me of the larger context that makes our information systems research meaningful and useful.

One theme is the relentlessly growing need (not just demand) to expand university-level education in information systems. I am referring not only to the education of students who are majoring in information systems as a means of gaining employment as a network manager, database administrator, systems analyst, or other information systems professional. I am also referring to the education of all university students, whether they are undergraduate or graduate students and whether they are majoring in information systems or another discipline. Literacy in information systems involves not just acquiring a competence in separate technological and social topics, but also acquiring the imagination needed to visualize how the technological and the social inevitably transform each other and, more importantly, how we can deliberately enact them in ways so that they support and benefit, rather than undermine, each other. The lack of literacy in information systems leads to misunderstandings, for example, that knowledge about how to use Oracle is the same as knowledge about how to design and manage a database or that knowledge about computer science and statistical modeling is equivalent to knowledge about information systems. Blunders and failures in the use of information technology, in corporations and other organizations, can be traced to illiteracy in information systems. A responsibility of business schools is to combat illiteracy in information systems among our future managers, executives, and consultants. An effective means of eradicating illiteracy in information systems is for the MBA curriculum to include, in its required core, a course in information systems. As simple and elegant a solution as this is, there are still some business schools that have failed to do so. The absence of information systems in the core curriculum of a school's MBA program can provide sufficient grounds for questioning its ranking relative to other business schools.

Another common theme I see emerging across the varieties of peoples, cultures, and nations where information systems are the object of teaching, research, and practice is the growing importance of doctoral education. Twenty-five or thirty years ago, there were few (or arguably, no) people with doctorates in information systems. At that time, professors of information systems in business schools were drawn from other disciplines, such as accounting, operations, management science, and computer science, simply because doctorates in information systems had not yet come into existence. (The University of Minnesota's doctoral program in MIS, which many scholars believe was the first doctoral program dedicated to MIS, was founded in 1968.) Today the story is different. Not only do doctoral programs (many of high quality) in information systems exist, but also the state-of-the-art knowledge in the information

systems discipline seems to be best captured by recent graduates of these doctoral programs. Doctoral education requires mastery of bodies of knowledge and also, perhaps more importantly, socialization into the research culture of information systems scholars. This, in turn, calls for the next generation of information systems scholars to be taught and socialized by the current generation of information systems scholars. It is a responsibility of business schools offering doctoral programs in information systems to hire information systems professors who can teach and socialize information systems doctoral students. Professors from contributing disciplines such as management science, operations, accounting, management, strategy, marketing, and computer science can and should participate in the education of information systems doctoral students. However, the absence of information systems scholars (professors who have actually published information systems research) in a school's information systems doctoral program, and especially on the dissertation committees of information systems doctoral students, can provide straightforward grounds for questioning the school's pedagogy and even its own understanding of information systems.

The last common theme is the importance of the organizational structure that supports the information systems faculty. Based on my own experience and my observations of colleagues at other institutions, I have come to believe that a business school that houses its information systems professors in their own department does a better job of promoting a sense of community and collegiality among them, where the result is greater productivity in their teaching and research. At the other extreme are organizational structures where the information systems faculty form a minority in a department that they share with faculty from another discipline or where the entire business school itself is organized as a single large department. Whatever the organizational structure, the overall goal of promoting literacy in information systems among all students—and, in particular, among those who are our future managers, executives, and consultants—makes it the responsibility of business schools not only to hire, but also to give equal attention to managing and developing their information systems faculty. The same responsibility pertains no less in situations where the information systems faculty are located in a school of engineering or a school of science.

Individual-level efforts to do good research and teaching in information systems are not enough to promote information systems literacy. Also necessary are the understanding and active support of the business school or other unit of the university that houses the information systems faculty. I have observed a natural selection process in which better information systems professors move to those institutions that genuinely understand, appreciate, and support information systems scholarship. In fact, I recommend to all information systems doctoral students and assistant professors that they take note of these better institutions. It is these schools that will be at the forefront of bringing about information systems literacy in our society.

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