OECD HIGH-LEVEL FORUM

KNOWLEDGE MANAGEMENT: “LEARNING-BY-COMPARING” EXPERIENCES FROM PRIVATE FIRMS AND PUBLIC ORGANIZATIONS

SESSION 1: KNOWLEDGE MANAGEMENT IN PRIVATE AND PUBLIC SECTORS: AN OVERVIEW

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1. KNOWLEDGE MANAGEMENT AND EDUCATIONAL CHANGE.

2. PRIVATE AND PUBLIC INSTITUTIONS: ARE THERE MAJOR DIFFERENCES IN ASSUMPTIONS ABOUT KNOWLEDGE MANAGEMENT AND CHANGE?

3. THREE BRIEF CASE STUDIES IN KNOWLEDGE MANAGEMENT FROM CURRENT US EDUCATION EXPERIENCE:
   - Two local school systems
   - Distance learning in higher education
   - The US Department of Education

4. MODEST LESSONS
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AN ATTEMPT TO GROUND THE CONCEPT OF KNOWLEDGE MANAGEMENT INTO THE CONTEXT OF EDUCATIONAL CHANGE: SOME INITIAL THOUGHTS – Part 1

A traditional perspective:

- Knowledge is a stable “thing” with dimensions and volume.
- Data become information in proportion to the variability within the data.
- Information is transformed into knowledge through the lens of a theory or model.
- Knowledge becomes “usable” when context is factored into the theory.
- The process of school change includes the dissemination of knowledge to the school and then implementing or putting that knowledge to use in the particular context of the school.
- This is very simplified but captures the core ideas of the stability and use of knowledge.
Information, and, therefore, knowledge is not a constant thing – it is dynamic, constantly changing. The complexity theorists ask us to remember the “telephone game.” Information is not only content – it gives order, prompts growth, and defines what is alive. Here the complexity theorists remind us of the power of DNA to guide growth.

A system (organizations, schools, eco-systems) is complex when there are strong interactions among its agents (e.g. teachers). A reasonable number of strong interactions from within and without the system creates stability and predictability. Complex adaptive systems (CAS) seek to improve (learn) from the interactions in the context of their changing environment. The fuel of their learning is information. Life needs information in order to adapt to its environment.

CAS swept into rich new and different environments experience a rush of information – a trip to the edge of chaos. This situation can create a powerful learning experience that stimulates positive change. But if there is information overload resulting in too many strong interactions a state of chaos may emerge, where there is so much information and interactivity that the system loses its bearings.
• Positive changes for CAS depend on their internal capacity of the system to absorb, organize, and use the information entering the system.

• Spillane and Thompson find that such capacity in a school or school system depends on the quality of its leadership and other human capital, the strength of its social capital -- professional norms, degree of internal trust, networks, strong interactions, -- and material resources to provide the time and wherewithal to support the improvement.
While public and private organizations can each be complex systems, adaptive or not-adaptive, there are differences associated with their purposes that may influence their management of knowledge.

1. **SECRECY**: By and large public institutions in the US are transparent while private institutions are opaque. Knowledge management in public institutions is either for the public or for the institution to support the public good. Knowledge management in private, profit-making institutions is for private enhancement or to provide the public with goods for a fee. By its very nature “secrecy” affects knowledge management.

2. **STABILITY 1**: Many public institutions must be risk averse to the point where they manage information to resist most change. Schools, hospitals, police, and fire departments must be dependable and “fair” to the point where they sacrifice potentially productive change. This is especially true when the institutions serve the most needy. Such institutions require some sort of “countervailing” power or authority to resist change that has risk. In US schools this role is played by tradition and “public opinion.”
3. **STABILITY 2:** Many private sector, profit-making institutions cannot afford NOT to take reasonable risks. This places them in some conflict when they compete with public sector institutions to serve the public good. Here the balance between regulation and freedom is critical. Two examples make the point.

- Proprietary institutions in higher education in the US. A history of many failures.
- Electrical Power in California. Read the newspapers.

4. **ABILITY TO COMPETE IN A MARKET SITUATION:** This is unfamiliar territory for many public sector organizations.

- One exception in the U.S. is the Community College, which has been nimble and adaptable as the environment changed.
- Another is the research university, which often bends the traditional rules and norms to compete in the new economy.
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• **Local School Systems:** The goal of two critical experiments in California is to create schools as active learning environments or complex adaptive systems through “continuous improvement” strategies.

• The Bay Area School Reform Coalition (BASRC): BASRC is a regional organization funded primarily by philanthropic organizations. BASRC emphasizes the use of incentives and supportive networks to move self-selected schools in a “bottom-up” strategy to adopt “inquiry and inquiry processes” focused on school improvement in student achievement. The strategy of the coalition is to help the schools (complex systems) create an environment where they have the capacity (human and social capital) and resources to be effective CAS. BASRC will also try to control the policy environment so that too much information will not throw the schools into chaos.

• San Diego: The San Diego school district is a top-down strategy using leadership, incentives, and clear benchmarks of quality in a concerted and ambitious attempt to implement and instill into the culture of every school a powerful instructional model based on rich and continuous knowledge of student work and of exemplary adult practice. This experiment is a rough replication of the work of the district academic leader, Tony Alvarado, in District 2 of NYC, where he moved a district of 25,000 students from less than mediocre to high learning levels over a period of roughly seven years. (See Elmore)
2. **How will distance learning for higher education promoted by private organizations play out?** One effect may be to draw public institutions into the private market place. This is already happening in the U.S. through the creation of private offshoots of public universities. A second possible effect is that the existence of high quality distance learning instructional material will threaten and/or substantially change weak existing institutions. This might be a very positive benefit. Still another effect could be to stimulate a set of quality standards that could influence existing institutions – this could lead to greater regulation throughout the entire system. Such a set of standards could draw on:

- Peer reviews of the quality and nature of the content of the distance learning curricula.
- Consumer review of usability.
- Performances of users.
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3. **U.S. Department of Education:** As the IT revolution swept through the 90s the Department of Education changed from a complex system to a CAS, not as quickly or as early or as completely as much of the private sector, but indelibly and permanently.

- As in many organizations the uses of IT evolved from duplicating business processes, to making processes more efficient, to changing processes. The changing processes resulted in knowledge moved from being private and contained in separate units to being much more public within the organization. Improved communication through the internet and the effect of changed processes led to greater use of teams and impermanent structures.

- In one part of the organization the change tracked the private sector. To run the student loan system ($35 - $40 billion in new unsecured student loans yearly with a portfolio of almost a quarter of a trillion dollars the Department spun off and implemented a PBO (a performance based system that had more flexible rules and regulations and more closely approximated a private sector organization than other parts of the Department).
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• The transformation of the Department into a smoothly functioning CAS is not completed – when it is many of the routine administrative tasks of the agency – keeping records, giving and overseeing most grants, and human resource management within the agency will be much more efficient and routine enough to be carried out by the Treasury or outsourced to the private sector. Moreover, most now believe that there is little evidence of the power of regulations to control complex human behavior such as teaching or managing adults. Knowledge that is useful is much more powerful at changing behavior in positive directions.

• If the Department is to survive in the long run the change in internal functioning will force it to alter its mission. Over time a stable mission will be one that focuses on gathering and processing and making available to the public (teachers, parents, students, etc.) knowledge that is personally usable to them. This will require the Department to both manage the knowledge of its business more thoughtfully and also to recognize that its business is the management and transmission of knowledge to improve education outside of the Department.
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EXPERIENCE: Part 3 cont.

• The structure of the “new” Department might draw from private sector institutions that are heavily involved in the business of information management. This might have two parts:

• A front-office that develops and facilitates networks of teachers and others, and prepares and delivers information tailored to the needs of the users.

• A back-office that gathers and processes information in a rapid and thoughtful manner for the front office: Examples of such activities are already being tried:

  • Data gathering on the web -- in the case of higher education data this reduced the time from initial gathering to web publication and access to the data from 3 years to 3 months.
  • Data harvesting through wrapper technology of data from state data banks. Experiments now in progress.
  • Preparation of packets of information in response to frequently asked questions (FAQS).
  • Fast turn around evaluations that provide rapid useful information.
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MODEST LESSONS:

• It is possible and potentially theoretically useful to apply some of the emerging concepts of knowledge management to the area of understanding educational change and improvement.

2. It may be theoretically useful to marry the concepts of knowledge management with complexity and chaos theory.

3. Public and Private institutions may have very different incentives organizing the way they manage knowledge – for example, the private sector is often able to take far greater risks because the public (and especially the most needy) do not depend on it for their personal security.
• We are beginning to have evidence that schools and school systems benefit from thoughtful applications of strategies of continuous improvement and the development of powerful interactions among agents (teachers and others).

• Over the long run the business of many governmental agencies may evolve primarily into the management of knowledge to improve the quality of the social sector that they serve.