

**San Jose State University
School of Library and Information Science**

LIBR 200-12/13: Libraries and Society

FINAL EXAM — SPRING '05

1. Discuss the merits of the statement, “all knowledge carries equal weight.”

The statement that all knowledge carries equal weight would imply that we somehow have a way to "weigh" knowledge against some uniform objective measurement. However, that is absolutely impossible because the worth of knowledge could be judged only by the individual user, and even then the worth and weight of the knowledge depends on varying circumstances. But exactly that uniqueness is what makes all knowledge of equal worth – in the same way that all people are created equal and are different at the same time. And this people whose diversities are equally valuable create the knowledge that carries equal weight.

At first glance, there is the obvious difference between the knowledge of writing the novels and knowledge how to fix a broken bone. The practical knowledge of healing, cooking or agriculture is clearly and empirically crucial for human survival. All knowledge of Hamlet would not help anybody to land a damaged plane or bring a ship to harbor. This would apparently show that knowledge could be measured toward some specific objectives – knowledge how to grow or prepare food or how to fly a plane. But knowledge is much more subtle than technical, practical aspect of knowing "how things work."

As James Burke (1978) shows through his book and TV series, the connections between bits of knowledge and how they will be used and developed by humans is not always an apparent and

straightforward road. Things that have no apparent value or seem dead wrong could be a beginning of a mayor road of discovery. The knowledge pursued and accumulated through medieval alchemy was the beginnings of modern chemistry. In 1776 Luigi Galvani observed an unusual connection between the twitching of frog's legs and the discharge of electrical sparks with which he was experimenting. His observation led him toward a theory about "animal electricity." Although in retrospect, we know that his "knowledge" was erroneous, his experiments were important stepping stones toward the general knowledge of electricity.

However, it would be wrong to weight knowledge only in the terms of being part of the some bigger practical knowledge. The worth of the knowledge is given and weighed by people. Their ideas, creativity, and use have equal weight as their creations. The retired manager of Herman Miller Inc., a furniture company, Max De Pree (1997) explains the essence of his management philosophy which is based on respect of every human being with the statement that "each person is made in the image of God" and that we are all "God's mix" making us, our creations, potential as well as knowledge we possess uniquely equal.

Reference:

De Pree, M. (1997). *Leading without power: Finding hope in serving community*. San Francisco:

Jossey-Bass, Inc.

Burke, J. (1978). *Connections*. Boston: Little, Brown and Company.

2. Given what you know about today's information world, which of the authors studied in this course are/were visionaries and why?

It would really be difficult to decide who is more visionary, Drucker (1994) or Crawford and Gorman (1995). The appeal of Crawford and Gorman is in their argument that nothing really changes by the change of technology. To an aspiring librarian, it is comforting to think that the change of technological environment does not change the "eternal mission of libraries – to collect, preserve, organize, and disseminate the records of the knowledge and information of human kind" (Crawford and Gorman, 1995, p.183). However, Drucker (1994) shows that this time in history it is not only technology that is changing, but the whole social concepts with which we lived the last few centuries are also changing and, with that, the whole concept of our social organization. And regardless of the comfort provided by Crawford and Gorman, I am afraid Drucker is right in his assessment.

If we are analytical observers of our everyday life, it is clear that technological changes we are seeing are going beyond better microprocessors, better communications, or better health care. The society itself is undergoing dramatic shifts. The way we live, the way we work, and the way we understand other people is dramatically different than that of our parents. All fundamental frameworks in which we used to describe ourselves change together with new technology. The better access to the information and knowledge, and the speed with which some information could be spread or disseminated changes the dimensions of our world.

The new society that all this technological changes are enabling, the "knowledge society" as Drucker labels it, creates new values that are based on knowledge and skills one acquires and keeps acquiring during one's lifetime. Educated person will not be any more somebody how earned a degree but one "who has learned how to learn, and who continues learning, especially by formal education, throughout his or her lifetime" (Drucker, 1994, p.7). There is no more a definite set of the skills or one definite learning period when we learn what we would need to take us through life. The real advantages developed countries have are not any more monetary (capital) or industrial – it is the way of acquiring knowledge and the educational system. Drucker argues that, although industry would not disappear, this is not any more where power resides. The knowledge – knowledge how to learn is where the hope for humanity is. And besides schools and educational system in general, the libraries are inevitable knowledge points of future society.

Reference:

- Crawford, W. and Gorman, M. (1995). Successful libraries make their own luck. In *Future libraries: Dreams, madness & reality*. Chicago: American Library Association. Chapter 12.
- Drucker, P. F. (1994). The age of social transformation. *The Atlantic Monthly*, 274(5), 53(18).

3. Doctors must take a professional oath to “...do no harm” and lawyers take an oath to “...hold inviolate the confidences and secrets of the client.” Are librarians professionals in similar vein?

Yes, we are professionals in the similar vein; like doctors and lawyers, we are in the position to "do harm." As Crawford and Gorman (1995) formulate it, librarians "collect, preserve, organize, and disseminate the records of the knowledge and information of human kind" (p.183) and that puts us in a position to control the access and flow of information and the knowledge associated with that. In ethical terms, we should abide by the concept of the omission – what we should not be doing to people. The Hippocratic Oath compels doctors to "do no harm" and lawyers to not "inviolate the confidences and secrets of the client", is not telling them what superogatory (in addition to "duty") actions they should be doing. What we should do (the commissions) is much more controversial question that intersects the issue of enabling somebody to do something versus trying to make them to do what we think they should be doing (for their own good).

Following the Drucker's (1994) article about social changes, the knowledge would become next source of the power, and the control of the source of that power would be the very important position. One can easily fell into the trap of desiring to "do good" and with all good intentions coming out of "knowing what is the right thing" actually become a controller and dispenser of the "truth." One must over be aware of the difference between two paradigms in training and learning as described by Ellerman (2000) in his World Bank memo about the Bank's educational division. One is "training as the transmission or dissemination of messages." The best methodologies are known, goals are not the question and only what needs to be done is dissemination. The other paradigm is the approach that "puts the client-learner in the driver's seat

(active learning) and which sees the role of the teacher as the indirect role of helping to foster that active learning capacity" (Ellerman, 2000). The example would be the difference of a father teaching the child the "right" new words ten minutes a day or teaching the child how to use dictionary. In later case the child can find his own time and the way to learn the words independently of the father's time and teaching methods (Ellerman, 2000).

The ALA Code of Ethics ask librarians "not to advance private interests", to uphold professional standards and to respect people's privacy. This is all things that come into the categories of the omission – we do not want to do harm by our actions and we should never assume that we know what the "truth" is.

Reference:

Crawford, W. and Gorman, M. (1995). Successful libraries make their own luck. In *Future libraries: Dreams, madness & reality*. Chicago: American Library Association. Chapter 12.

Drucker, P. F. (1994). The age of social transformation. *The Atlantic Monthly*, 274(5), 53(18).

Ellerman, D. (2000). *Getting the Bugs Out of the Knowledge Bank Idea*. Unpublished manuscript, Washington DC. Retrieved May 6, 2005 from

<http://www.ellerman.org/Davids-Stuff/Memos/Insect-Theory.pdf>

4. Imagine an adaptable library computer system where individual patrons can, to their liking, “adjust” the interaction style (buttons vs. menus; touch screens vs. command lines, etc.), colors, screen size, font size, language and vocabulary of the system. What are the potential benefits and drawbacks of such a system in a public and an academic library?

Davies (1974) observed in the context of voluntary libraries that as "bookish people seek out their own kind, the number of people interested in books would usually be over-estimated." (p. 14) I often find that it is the same with technology. People that know technology and are comfortable with using computers want to control that environment. They like individually adjustable interactive programs and assume every else likes the same. That includes the creators of the programs and interfaces so they carry that assumption to their interface design – the more options the better. Unfortunately that is not the how the majority of the population approaches technology – the proverbial problems with making TV video players work as we desire is the epitome of the problem. Many researches like one done by Bishop et al. (2000) fund out that 90% of the people use default settings and never learn and do not want to use advanced features. They are interested only in end results and wish to get there with the least pain and effort. Interacting with the interface is not why we use the interface.

Advantages of the individually adjustable interfaces are rather obvious. By the ability of the program to be individually configured, it would better serve individual needs and style of the user. The performance of the program could be maximized and the user would go home happy. However observation of the users finds out that simplicity and easiness of use is what most of the people desire from interface programs. Nielsen (1993) and Roy Molich, a well-known industrial designer theorist, has suggested the following guidelines when designing the interfaces:

- *Simple and natural dialogue:* Dialogues should not contain information that is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility. All information should appear in a natural and logical order.
- *Speak the users' language:* The dialogue should be expressed clearly in words, phrases, and concepts familiar to the user, rather than in system-oriented terms.
- *Minimize the users' memory load:* The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.
- *Consistency:* Users should not have to wonder whether different words, situations, or actions mean the same thing.
- *Feedback:* The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.
- *Clearly marked exits:* Users often choose system functions by mistake and will need a clearly marked “emergency exit” to leave the unwanted state without having to go through an extended dialogue.
- *Shortcuts:* Accelerators—unseen by the novice user—may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users.
- *Good error messages:* They should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

- *Prevent errors:* Even better than good error messages is a careful design that prevents a problem from occurring in the first place.
- *Help and documentation:* Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, be focused on the user's task, list concrete steps to be carried out, and not be too large (Nielsen, 1993, p.20).

These guidelines take into account what Bishop et al. (2000) find -- that people have well established systems, ways and means to acquire, assess and use information and that they are not willing to surrender the comfort of the known for the sake of few gadgets. The goal of a well-designed interface should be to minimize the need of the user to interact. Their research finds in particular that people did not use, or did not notice advanced searching features. To use an advanced feature, it is necessary to learn how the program works, and researchers are finding over and over again that people are quite unwilling to read instructions, familiarize themselves with the interface, and do all other smart things to be able to use the system to its fullest.

Bishop and his colleagues find that people are unwilling to disrupt "familiar routine" for sake of the more options. The key to the Microsoft success is not necessarily in "adjustability" of their programs, but understanding of people's inertia in learning new tricks - all their programs share similar interface, commands and shortcuts. The attempt to anticipate any possibility sometimes makes a system so unfriendly for casual users that it is simply abandoned following Mooer's Law: An information retrieval system will tend not to be used whenever it is more painful and troublesome for a customer to have information than for him not to have it (Austin).

Reference:

Austin, B. (June 2001). Mooers' Law: In and Out of Context. *Journal of the American Society for Information Science and Technology (JASIST)*, 52(8). Retrieved May 17, 2005 from

<http://spot.colorado.edu/~norcirc/Mooers.html>

Bishop, P. at al. (2000). Digital libraries: Situating use in changing information infrastructure. *Journal of the American Society for Information Science*, 51(4), 394-413.

Davies, D. W. (1974). *Public Libraries as Culture and Social Centers: The Origin of the Concept*. Metuchen, NJ: The Scarecrow Press, Inc.

Nielsen, J. (1993). *Usability Engineering*. Boston: AP Professional.