## Putting Our Money Where Our Needs Are: The Governmental Role in Information Science[1]

When I was asked to comment on the past, present, and future role of government in the field of information science, I thought back to my early days as a fledgling research investigator. At that time the field was not yet called "information science." The avant-garde called themselves documentalists. And I was called a *radical* when I founded the Documentation Club at Columbia Library School.

### It's Not What You Know—But Who You're With

Having completed two years of research at Johns Hopkins University, I tried to obtain support to continue work on my own. I was shocked to find that government agencies rarely recognize the status of unaffiliated individuals. They are the stateless persons of the research community.

I often wonder whether many young scholars today are similarly frustrated by such bureaucratic blindness.

Many years after I first attempted in vain to gain the support of the National Science Foundation (NSF) for my research ideas, I learned by accident of the granting mechanism of the National Institutes of Health (NIH). By then I had acquired an institutional affiliation. That I had myself established the institution didn't seem to matter. So if you are an unaffiliated individual, get yourself incorporated under a suitable institutional name.

Having received a grant for three years, however, ISI® unfortunately was caught in the hassle raised by the Fountain Committee investigation. NIH bureaucrats ruled that grants could only be given to non-profit organizations. Consequently, NIH transferred funds to the NSF which administered the final stages of ISI's *Genetics Citation Index* experiment. Having turned down the opportunity to support citation index research before, NSF now had the project in its lap. However, NSF declined the opportunity to publish and distribute the prototype *Science Citation Index®* free of charge when ISI suggested it. At that point ISI made the risky decision to publish the data on its own.

### The Main Need—User Education

In spite of my own disenchantment with past government involvement in information science, I hope that the NSF and other government agencies will continue to support promising research investigations. However, the most important thing that government could do to help satisfy society's information needs, and the needs of the information profession

is to support the education of users.

Of the millions spent by government agencies on information activities, painfully little has been spent to educate scientists in the use of information retrieval systems.

Consider the ramifications for the information profession and the information industry, if NSF were to support a series of part- or full-time faculty appointments in several dozen universities to provide formal instruction in scientific communication and the use of modern Information Retrieval (IR) systems.

## One Million = Ten Thousand

Where full-time appointments could not be made, subsidy of even half of an incumbent faculty member's salary and overhead might produce dramatic results. A budget of $1,000,000 per year, over the next five or ten years, would enable $25,000 per year to be granted to 40 universities. Instruction could be given to 10,000 or more graduate students per year--about $100 per student. The existence of these new faculty positions would stimulate other universities to inaugurate similar programs.

These instructional programs will inevitably tie into the various networked on-line IR systems that will be available through most university libraries or computer centers. The program would also provide an important stimulus to many graduate students to enter the field of information science. Support for such programs could also be provided by non-governmental philanthropic organizations, or by universities themselves.

## A Need for Partnership

In the meantime, the various commercial organizations that offer instructional services will continue to do so. But they can only provide a limited program of education for their customers. We certainly would not leave to IBM the job of training all of our future computer scientists. The job of educating users should not be left, therefore, to the information industry. That is not their proper role unless they are in the business of providing educational services. Indeed, if government or academia does not fill the vacuum that exists in this area then hopefully private entrepreneurs will.

## A Modest Proposal

As a final suggestion on potential roles for government I have said many times in the past that the government could provide direct subsidies to users of information systems.[2,3] There is no need to report them here, but, hopefully, my suggestion for a National Information Funding Authority[4] will receive the attention of the National Commission on Libraries and Information Science and other interested groups.

1. This article is a reprint, as follows: Garfield, E. Putting our money where our needs are. *Bull. Amer. Soc. Inform. Sci.* 1(1):10 passim, June/ July 1974. Reprinted in *Current Contents® (CC®)* No. 39, 25 September 1974, p. 5-7.

2. Garfield, E. "The role of government, professional groups, and private enterprise in science communication." Paper presented at a meeting of the Scientific and Technological Communications Committee, National Academy of Sciences, New York, 16 December 1966. (See also reference 4 below.)

3. ----------------. Since information isn't free, why not direct stipends to prime the information pumps? *CC* No. 43, 25 October 1972, p. 5-6.

4. ----------------. "A Bill to Establish a National Information Funding Authority." In: *Federal Information Systems and Plans--Implications and Issues. Part III. Hearings before a Subcommittee of the Committee on Government Operations, House of Representatives, Ninety-Third Congress, Second Session, January 29, 31; and February 5, 1974.* (Washington, D.C.: Government Printing Office, 1974), pp. 890-91.--This report includes, as part of testimony before the Subcommittee, the text of the paper cited in reference 2 above.