



## Library Assessment Conference Career Achievement Awards 2012

### Remarks by Awardee Donald W. King October 30, 2012

I want to discuss the National Science Foundation's evolutionary involvement in publishing and libraries.

In the late 1960s they funded a wonderful study on scientific communication by Bill Garvey at Johns Hopkins University. One result which was extensively cited up to the 1990s was that articles were read only an average of about 15 times. Hal Bamford at NSF felt that this was a huge waste of paper and started pushing electronic journals. This was in the late 1960s and early 1970s. They were already funding some scientific societies with computerized photocomposition so that text was captured electronically. About 80 percent of publishers had fewer than three journal titles and could not afford photocomposition equipment, so Bamford came up with the idea of central Editorial Processing Centers that would be shared by small publishers. While at Westat, I was contracted to assess EPCs. The results were used by several publishing groups.

A little later (mid-1970s) I was awarded a contract to develop Statistical Indicators of Scientific and Technical Information Communication. To do this I felt it was necessary to evaluate a system of authors, publishers, secondary publishers, libraries and readers. The total system cost at that time was about \$5 billion in the U.S..

A survey of scientists suggested that articles are read about 600 to 900 times (depending on the field of science) which concerned me because of Garvey's findings. I drove up to Baltimore to discuss this with Garvey and he explained his method. His team sent tables of contents to scientists and asked them to indicate the articles they had read. However, they did not project data to the populations surveyed or take into account reading that would occur after the survey. He said they were interested only in comparing among fields of science.

We also observed that about 75 percent of articles are authored by university-based scientists, but they accounted for only 25 percent of the reading. This led to my conducting readership studies outside of universities which ultimately included the use, value and Return-On-Investment in special libraries, as well as public and academic libraries later.

Over the past fifty some years, I have been blessed to work with hundreds of fabulous colleagues, particularly with Ed Bryant in the 1960s, Nancy Roderer on the early NSF studies, José-Marie Griffiths from the early 1980s to now, and Carol Tenopir since the mid-1990s. Much of my success is due to all of them.