ICSTI Public Conference 2007 – Intro

Assessing the quality and impact of research: Practices and initiatives in scholarly communication

Proceedings of the International Council for Scientific and Technical Information (ICSTI) Public Conference June 21–22, 2007

Institut de l'Information Scientifique et Technique (INIST-CNRS), Vandoeuvre-lès-Nancy, France

Edited by Herbert Gruttemeier, INIST-CNRS, Vandoeuvre-lès-Nancy, France Postal address: 2, allée du Parc de Brabois, CS 10310, 54519 Vandoeuvre-lès-Nancy Cedex, France

Welcome

Bernard Dumouchel *ICSTI Vice-President*

This public conference pursues a theme that ICSTI started this year on Evaluation and Metrics. A preceding conference on a similar subject was held in January 2007 in London, associated to the ICSTI Winter Meeting. It was hosted by the British Library and was entitled: "User Behavior and Its Metrics: Monitoring the Needs of Scholarly Authors and Researchers". Today's conference addresses the main theme of assessing the quality and impact of research. It focuses on three aspects: Quality, Certification and Peer Review, Tools and Metrics, and Practices and Perspectives of Research Evaluation.

A brief word about ICSTI, the International Council for Scientific and Technical Information: ICSTI provides a unique forum for interactions between organizations that create, disseminate and use scientific and technical information. ICSTI's mission cuts across scientific disciplines, as well as international borders. It gives its members the benefit of a truly global community. ICSTI's general assembly will follow this conference and will address a number of key issues in scientific and technical information.

Many thanks to Herbert Gruttemeier of INIST for organizing this conference, to Isabelle Debano of INIST and Elisabeth Maître-Allain of ICSTI secretariat in Paris for providing the logistics, Raymond Duval, INIST Director General for kindly providing the venue and all the speakers for accepting the invitation to come and share their knowledge and expertise.

¹Published in *Information Services & Use* **27** (2007), 1–2.

Opening remarks

Jean Dercourt

Académie des Sciences

As mentioned in Mr. Chairman's introduction, I was formerly Chair of the National Committee for Research Evaluation and have ever since been involved in determining how to use public money for research funding. So I know that today, in France like elsewhere, there is a need for bibliometrics, i.e. quantitative data on which to base the evaluation of scientific research. This talk will look at who is concerned by information on the quantity and the quality, of research, why there has been an increasing demand for indicators and metrics, and how these evaluation metrics concern scientists and high-level politicians. Finally, it will look at why there is a need for specialists to use these metrics and process their results.

The categories of people needing bibliometrics are broader than in the past. First, there are the researchers themselves who want to see how they stand in their national, in our case French, and international communities. I remember that already when I was at Imperial College in London (at the time of Mrs. Thatcher), researchers were asked, by using the library services, to present themselves their bibliometric data. Second, there is the researchers' hierarchy that needs to evaluate, for promotion purposes, the quality of the researchers' work and also their ability to lead a team. It used to be that in some disciplines, it was forbidden to use 'officially' (only under the table) bibliometric data for such purpose, but now it is a must. This is why good indicators are needed and ICSTI has certainly a role to play in this. Then, there are the managers at the university level, or even at national level, who need to make hiring decisions and to fund positions. Today in France, many discussions focus on the discrepancy, for example within a high-citation domain such as Biology, between low citation rates and otherwise recognized excellence in fields like as Botany or Zoology. Also, bibliometrics can be used, as it is the case in countries France, the UK and Canada, in industrial leaders' decisions on which academic partner is best suited for a research project. And finally, the politicians at all levels (including city, county, region) and other decision makers involved in the funding choices for scientific research also need some kind of metrics. Scientific and technical information metrics are also required for the selection process following calls for proposals. In France, for two or three years now, requests for grants must contain quantitative data.

New metrics are emerging in the web environment making it possible to obtain not only quantitative but also qualitative data. New instruments and concepts are leading to new metrics, and the importance of these metrics is growing in France and elsewhere. Nowadays, there is also a need for non-scientists to have independent evaluation data and to get advice on which to base their decisions. What is needed are facts rather than opinions. The scholarly community needs to assess scientific activities and their quality, so any indicator is important and the more the better. Actually, the indicators are complex for researchers and all the more for non-scientists. This is why indicators and their results must be user-friendly and reproducible and why they need to be used with caution. Hyper-complexity might go against the feeling of reliability. It is important for research to rely on facts and this has to be done in a way that is not too complex for the user. The dissemination of indicators is as important as the dissemination of science and scientific indicators must also be disseminated at the user level. To integrate these indicators into their information systems, universities, research centers, industries and administration must be able to rely on engineers and technicians to interpret evaluation data.

There is a real need for evaluation and in some countries it is routinely done, which is not yet the case for France, although a national evaluation agency has been set up a few months ago.²

All these metrics and indicators need a seal of approval from international organizations such as ICSU, the International Council for Science, and ICSTI. At the end of the nineteenth century, metrics about anything were in total chaos but slowly they were adopted by all and metrology became an important research theme, and today, assessing the quantity and the quality of research has become a must. Conferences such as today's conference are most useful as forums to discuss the issues involved in research assessment.

²AERES, http://www.aeres-evaluation.fr.