Social media and new trends in publication and data metrics

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The Scientific and Technical Information (STI) community had an excellent meeting of the minds when International Council for STI (ICSTI) and National Federation for Advanced Information Services (NFAIS) decided to hold their annual meetings back to back last February in Philadelphia. On February 22, 2014, ICSTI held a two part workshop covering: "Science and Social Media: the importance of an on-line Presence" and "New Trends in Publication and Data Metrics". On February 23–25 the NFAIS Annual Conference explored "Giving Voice to Content: Re-envisioning the Business of Information". The NFAIS Conference is covered in more detail elsewhere in this issue. What follows are summaries of six presented papers from the ICSTI Workshop. Together, they provide highlights of some of the many tools and techniques that are changing the way science is communicated. What is interesting and valuable about this set of papers is the picture it gives of the many developing areas where the impacts of social media and collaboration are being felt. The common theme of these presentations is the pervasive changes and potential for change brought on by social networking and the capturing and repurposing of many different kinds of data.

The first paper by Tanya Lewis, a staff science writer for *LiveScience*, highlights how she uses social media as a writer of science news. For her it is not only an input to her stories, but also a way to increase interest and readership in her work.

The paper by Newell and Newman on using tweeting to hook users into a scientific web site clearly shows the power of social media and how linking science to fun can increase the use of scientific information tools – and with very low cost and high return.

In the final paper of the on-line presence sequence, Laurel Haak gets to the bottom of some basic issues about "presence" in the on-line world through her description of the evolving tool on persistent researcher identification. ORCID is a tool to assure you know exactly who you are sharing with through disambiguation of names and assuring proper attribution. Along the way, the researcher is rewarded for participation in the ORCID system through networked data related to people, institutions and publications.

The three papers in the "Trends in Data Publication and Metrics" keep us involved in the network through tools for data discovery, scientific collaboration, and finally standards for measuring impacts. All three papers are driven by enabling more open data systems and the need to understand the impacts of their use. The paper by Megan Force and Daniel Auld describes the *Data Citation Index*, a Thomson Reuters product that begins to uncover the networked use of scientific data sets. It is through citation that traditional impact factors have been measured. Creating a tool that can do for data sets what citation

indexing has done for publications opens a new world for understanding the impact of scientists who commit to data curation as part of their scientific contributions.

The next paper by William Gunn describes a tool and scientific environment which facilitates collaboration by serving an individual need, and then extending that functionality to incorporate social features. From keeping an individual reference library, to assisting in writing research papers, to finally providing alternative indicators of scientific impact (altmetrics), the Mendeley tool has been a leader in encouraging scientific collaboration. And speaking of altmetrics, the final paper by Todd Carpenter of National Information Standards Organization (NISO) puts full focus on this new world of impact evaluation as NISO has launched a project to explore, identify and advance standards for alternative metrics. These impacts are enabled by social media. Whereas true scientific collaboration and impact have always been present, now that more scientific collaboration has been captured by social media it has gone from tacit to explicit knowledge.

The papers in this collection range from extended abstracts to longer explanations of ongoing projects. They are all practical in intent and can provide ideas for change in organizations managing scientific and technical information.