

Observations on Evaluating Science

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Abstract

This talk will discuss observations on the direction science is currently taking. While the number of publications and journals is constantly rising, one could ask whether there is a correlation to new scientific insight. Alternatively, whether this is just a result of misguided incentive schemes and science as a whole might take a wrong turn. Following the 80s trend to economize large parts of society, "papers" have become the product of science, and the goal is to achieve productivity gains. As of today, the scientific system shows more and more defects. For example, there is a replications crisis in some parts of science. Universities' cost to access all relevant literature has also increased tremendously over time. Counter movements have been started, particularly Open Access and now Open Science. Funding agencies are switching from article counts to "impact in society." In general, what is requested is "quality" instead of "quantity." What remains open is the meaning of "quality" and how to measure it. We will try to identify some cause-effect relationships, shed some light on recent developments.