EDITORIAL

The necessary debate on the consequences of science metrics on the definition of Science and Technology policy

The continuous changes in journal impact measurement systems should generate many types of debates. The first one should take place among those in charge of evaluation policies for academic production, researchers, publications, research group activity, and institutions that support these structures and that undergo accreditation processes, and of course, of the rankings that end up playing an increasingly influential role in the academic marketing of institutions

Frequently, decision-makers have no expertise in measurement processes derived from scientometrics and bibliometrics, and discussions are consequently disconnected between editors and researchers, developers of scientometric indicators and policy makers in institutions and countries. On the other hand, indicator developers have economic interests because they are usually associated with information companies and lobby governments and organizations that set the evaluation criteria of academics and research projects.

The various statements made by researchers and academics (San Francisco, Leiden, among others), as well as numerous articles by scientometrics researchers, have pointed out to the problems of impact factor indicators such as IFJ, SINP, SJR, CS and H, which among the best known. In all cases, these indicators are inadequate because they do not allow for an equitable measurement of real impact, the uses of knowledge and cannot account for the volume of articles to citation ratio. In fact, it is problematic to compare a journal that publishes 500 articles with one that publishes 10, and even more so to classify journals in quartiles - inequitable and wrong.

These problems are made worse if one considers how systems measure journals supported by a 50-year-old community against others with only 10 years of existence and undergoing consolidation. Likewise, pretending that journals edited by still-consolidating journals are the same as regional journals creates an asymmetry.

The unfortunate consequence of using indicators plagued with these issues in science and technology systems is the removal of incentives to scientific production. In fact, years of academic output that group invested resources end up disappearing for this reason. Clearly, the effects of decisions based on these indicators are not good for the consolidation of academic communities.

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The discussion will surely have to include these defective measurement systems, but also the consequences they have for the consolidation of national and regional academic communities. The interests of the parties involved will also need to be made explicit, and the discussion will have to offer inclusive spaces of participation, so that every actor involved can have a voice. The current dynamics of the regional academic community merits a thorough discussion of this issue and its solution.

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