

Capturing the Scientific Impact of Social Media

A survey of UK academics indicates that the true value of research is being overlooked by traditional measures of impact, which largely ignore the importance social media can have in informing people about advances.

By **Katherine Wright**

Assessing a person's scientific achievements typically involves calculating impact. This measure accounts for the influence particular findings have on other studies, for example. But most research audits fail to account for all ways scientific work leaves a footprint. Looking to help solve that issue, Katy Jordan of the University of Cambridge, UK, has now studied how researchers use social media to communicate their work and how they perceive the impact of those efforts [1]. Jordan hopes that the results will help universities improve assessments of the legacy of a researcher's work as well as help universities update social media training, which is now

commonplace in many institutions.

Researchers often need to demonstrate the impact of their work to obtain promotions or to secure funding. When trying to account for the impact of a given result, official assessments typically use measures such as where a result was published and how many citations it accrued over a given period. But those measures only consider the publishing side of a finding's significance, neglecting other forms of a result's scholarly influence and societal impact.

The traditional measures also ignore a work's influence during its development, focusing instead only on the final outputs of a project. But Jordan notes that scientists often report preliminary results in the hopes of getting input from the community, creating impactful feedback loops that can lead to a change in a project's course. "[Scientific dissemination] is a two-way street, with academics sharing milestones along the way and then drawing on the expertise of the wider community to take the next steps," Jordan says. "It's much more dynamic than the one-way flow [assessment bodies] consider."

For her study, Jordan analyzed the answers of 107 academics to a survey on social media use that asked the participants to describe their most impactful research-related social media interactions. While most of the participants were UK-based, institutions from 15 different countries were represented in the survey's participants, who ranged from postgraduates to tenured professors.

In survey responses, researchers described using social media



Academics are increasingly using social media to share their work with others. But the value of those interactions is largely ignored in assessments of the impact of research.

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to test out project ideas, report interim findings, crowdsource information and data, and advertise for research participants. Specific online encounters included tweets that led to paper requests, posts that sparked new scientific collaborations, and blogs that produced invitations to give public lectures or participate in panel discussions. In one case, a respondent said that an interaction on social media led to a senior civil servant from the UK's Cabinet Office—a government decision-making body—visiting the respondent's facility to explore how the work there might inform and shape policy.

These interactions are influencing and benefiting society in many ways, Jordan says. But they have no impact according to current metrics. To solve that problem, Jordan thinks that assessments should widen their scope to consider the influence of not only a project's outcome but also its interactions across a project's lifetime. "This isn't a call for yet more ambiguity about what impact is but for more open-mindedness about what researchers achieve," she says.

That possibility is particularly well illustrated by one of Jordan's favorite survey responses, which involved a blog. An academic relayed writing a post about their work, which discussed a specific historical event (the identification of the event was withheld for the sake of confidentiality). With help from blog readers, that person was able to share information and photos with the descendants of the people involved in the event. The

person was also able to source other related images and obtain new details about what happened.

That outcome is clearly important to everyone involved, Jordan says, but it didn't officially generate impact. "There's a huge amount to be said for asking universities to demonstrate their value to wider society, but it may be time to rethink how we measure this [impact]."

"The study demonstrates that there are a range of benefits to be reaped from social media presence," says Marta Wróblewska, a social sciences researcher at the SWPS University of Social Sciences and Humanities in Poland. She is particularly taken by how strategic many of the survey respondents were about their social media use. "They appear to know very well what results can be achieved via the [different] platforms in terms of sourcing knowledge, sharing their work, or finding research participants," Wróblewska says.

Katherine Wright is the Deputy Editor of *Physics*.

REFERENCES

1. K. Jordan, "Academics' perceptions of research impact and engagement through interactions on social media platforms," *Learning, Media, and Technology* (2022).