Twitter Spans the Gap: Drawing together Offline and Online Community

Jeremiah Lewis, 2012

This summer I was a research fellow with the Social Network Innovation Lab (SNIL). SNIL studies how community members use social media to interact with each other and how social media changes the ways communities are created. Our particular interest this summer was in a community of scientists and science writers who used Twitter to organize meetings as well as to communicate during their in-person meet-ups. This community, Science City Network (SciCity)\(^1\) is a group of 122 scientists and science writers who convene monthly symposia and engage in a vigorous twitter discourse during these offline meetings. We sought to examine how members of SciCity used their interactions to find collaborators to work on projects and to find mentoring on their own research and career.

We created an online survey to get quantifiable data about how the community allowed individuals to build connections with each other and help each other on problems. After distributing this survey via twitter, in-person, and through direct contact, we received responses from 23 individuals (19% of the community). We used R, a statistical program, to explore the data and make statistical inferences from our results.

In SciCity, most people reported that they come for the intellectual stimulation, social interaction, and networking, but notably only 10% seek mentorship. Despite a professed lack of interest in mentorship, over 95% of respondents agree that SciCity is a place where they can find guidance from other members and over 55% reported that Twitter was useful for finding scientific collaborators from within the SciCity community. This dissonance, between the aims of community members and their experience as participants in the community, led us to wonder about what dimensions of the community were encouraging mentorship in a community which was openly disinterested in the general concept.

Mentorship occurs between people of different levels of experience, with the more experienced individuals tutoring and counseling the newcomers. In SciCity, there was a large group of older science writers (including former scientists) as well as a younger group of recent PhDs, just entering the field. This difference in experience created a fertile ground for mentorship.

We found that while SciCity participants did not seek out mentorship as a reason to join SciCity, they had relationships with other SciCity members, both on Twitter and in person, which they characterized as highly trusting and involving mentorship.

The final aspect of our research sought to explain what it was about SciCity that brought these diverse groups together to mentor each other. Because both experienced and inexperienced members are required for mentorship, we examined correlations between the ages of participants and their interactions with SciCity. We found that the community attracted older and younger participants for diverging reasons— the older group was interested in social interaction and the younger group was intellectually driven and career-oriented and disinterested in social interaction, even declining to connect to the community via Facebook. Old and young alike used Twitter at similar rates and with similar numbers of followers. Both groups reported a high degree of belief in the usefulness of Twitter for scientific collaboration.

From these results, we believe SciCity's diversity and frequent of mentorship stems from Twitter, the social media technology that binds the community together. Twitter brought together a hybrid community of old and young interacting on and off-line which encouraged mentorship and had many of the best qualities of both offline and online communities. It was easily accessible via the internet and thus able to bring a large group of members interested in a fairly specific field into online and offline interaction. Future research by the lab will seek to confirm this result in other online scientific communities.

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\(^1\) The community name has been changed to preserve respondents’ anonymity.