How an open scientist can use Twitter

Science communication today does not only mean transferring scientific knowledge from scientists to the public. It also includes transferring knowledge from non-scientists to scientists. In other words: scientists and non-scientists communicate and collaborate in trans-disciplinary teams. Both groups profit from each other: Non-scientists have direct access to the latest scientific results, and scientists get feedback from practitioners regarding their ideas and their work. For example, an educational researcher can profit from communicating with teachers and students who can share their daily teaching and learning experiences. As second example, a mathematician working in the field of geometry may get inspired by a discussion with architects and engineers.

Today it is very easy for scientists to be connected to people outside their institution and to share experiences with other scientists and non-scientists using web 2.0 applications. Researchers who call themselves “open scientists” publish their daily work using web 2.0 tools like weblogs and wikis in order to discuss with and to get feedback from other scientists and non-scientists. But publishing in web 2.0 environments does not lead to interesting discussions if no audience is there. Open scientists have to “attract” discussion partners. One tool that allows scientists to attract partners is Twitter, a service for exchanging ideas, thoughts, and links to interesting scientific discussions in weblogs and wikis.

What is Twitter?
Twitter is a microblogging system that allows for sending messages consisting of a maximum of 140 characters (“tweets”) into the public domain. People read tweets of twitterers they are interested in by “following” them. Twitter is a platform that can be used in many different ways. People often publish what they are thinking, doing, or planning at that particular moment, and their followers may answer directly to those tweets by addressing the response using the “@” symbol in combination with the name of the recipient. In addition, one user’s statements may be “retweeted” by another user to his followers using the “RT” prefix. In this way, messages can spread on the web very fast. Tweets may consist of “private” information or information regarding special topics – there are no restrictions regarding content. Tweets may also contain links to other websites such as weblog articles, wikis, and multimedia resources. Twitter software like TweetDeck helps manage several streams of information and filter messages based on user-selected criteria.

How to communicate in Twitter?
The neuron metaphor developed by the educator Jean-Pol Martin helps to explain how one should communicate using Twitter. Imagine you are a “neuron” connected to other neurons (your followers in Twitter). If you have an idea or thought you consider worth sharing, just “fire” it (write a tweet). Do not hesitate because you think that it may be erroneous or uninteresting for others. Just send it to your followers. Other neurons in the network may respond, add information, or correct your message, “firing” to their follower-neurons and so on. Over time, topics, meanings, and knowledge may emerge in the system based on the individual interactions. You have to see yourself not as the “middle of the universe”, but as part of a large system consisting of an endless number of interconnected neurons. Send your information into the system and benefit from the “knowledge of your network”.
How can open scientists use Twitter?

• Twitter is a great environment to get information about interesting links and resources. Just have a look at Twitter a few times during the day and see what others are doing or writing. But: It is important not to try to catch up with all the information you have missed in the meantime – this would distract you too much from work. Just see what is happening “at the moment” and get inspired. And don’t be annoyed by private information in Twitter; it is sometimes really surprising that you share the same private interests with other scientists!

• If you have a provocative, new, or interesting thought or question – just twitter it. You may proceed with your tasks while the network is “working”. Have a look at Twitter to see whether one of your followers (or others) has answered your tweet, has added valuable information, or has shared interesting links with you. It is no big effort to tweet what you are doing, and the network may be a really valuable source of information if others answer your tweets.

• Imagine you have created a weblog article or a wiki page (besides your Twitter communication) in order to start a discussion with scientists or non-scientists. You may now send the link via e-mail to colleagues and people who may be interested in the topic. But perhaps there are many other people who would be important discussion partners on this topic but whom you neglected to send an email? Perhaps there are potential discussion partners you do not know? Just publish the link as a tweet in Twitter (in addition to your normal sharing routine) and be surprised by who joins the discussion.

For Twitter to have an effect, you should have enough followers. Do not hesitate to connect with people you are interested in or who may be interested in your work. Build your network of neurons and start firing ideas!

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