Twitter As a Professional Development Tool for Physicists
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Abstract

Social media is ubiquitous in popular culture and is used by individuals and businesses to build a brand and interact with customers, but it is also becoming an increasingly important element of formal collaborative work, for universities and other institutions. Twitter is a microblogging platform that allows users to post short messages, which are then available to others. It is easy to use and has a high potential to facilitate collaborative work, because it is easily accessible, does not require any special knowledge or equipment, and allows for quick and efficient communication. This article discusses the potential of Twitter for professional development, and provides some examples of how it can be used to facilitate collaborative work.

Professional Development

AAPT and related organizations do a wonderful job of facilitating the conversation between physicists about how to be better at our jobs. Whether it’s through something like the New Faculty Workshop, a regional or national meeting, The Physics Teacher, or online forums like COMPADRE, there are numerous ways for physicists to get involved in the never-ending search to find better ways to help more people learn more about physics. Twitter allows us to continue that conversation and extend it from a series of discrete news points to a continuum of interconnected conversations.

This is also true for me. I began using Twitter as a professional tool after the 2011 AAPT Summer Meeting in Omaha, NE. During that meeting, I met a number of colleagues who used Twitter, and, unlike past conferences, the dialogues did not start shortly after we all returned to our home institutions. Through Twitter, I began a conversation with a colleague about how to revise our advanced lab class, and look forward to collaborating with her on a project which will allow our students to collaborate on research. I get (and am able to share) advice on textbooks, course structure, ideas for innovation, and how to deal with the myriad issues that come up when teaching.

This can be especially valuable for new teachers. Twitter user and physicist John Burk (@Occam88) sent out this question: “please welcome my new physics lab and 1st yr physics teacher @gwadlund to twitter! What’s the best piece of advice u’ve got 4 a new Teacher?” [4] He got numerous responses, ranging from the immensely practical, to the wise and insightful, to the seemingly phantasmal for this post:

"I'm planning a professional development seminar. What are the most important things you'd like me to focus on? #pdchat #teacherchat #scienceeducation"

AAPT

I'm presenting a poster on professional uses of Twitter for Physicists. Anecdotes or comments are welcome. How does it help you? #AAPT

Many of the following results are from the conversations that followed that question.

Networking

Physics departments at many universities are large, and even large departments can be split into numerous small groups by subfield. As a result, many of us have few, if any, colleagues we see on a regular basis who share our research interests. Conferences and meetings fulfill some of the need for meeting with potential collaborators, colleagues, and other interested parties, but those meetings can be cost- and time-prohibitive, and the questions that arise are typically restricted to a plenary session on a platoe to a small group meeting session.

In addition to these informal professional development collaborations, there are ongoing efforts to create a more structured network. An example of this is the Global Physics Department (@Global_Phys), run by Andy Randquist (@Randquist), and held on Wednesday nights during the academic year. In the Global Physics Department, physics faculty gather online to listen to a speaker discuss pedagogical or other issues affecting the teaching of physics. The presentations are recorded and archived online at http://globalphysicsteacher.com.

At Conferences

As mobile technology continues to spread, the utility of networks such as Twitter in the dynamic environment of a conference increases. Anyone with a smartphone can develop an app containing scheduling information, and other logical info, but in many ways this replaces the paper copy of the conference program that used to be ubiquitous. Twitter allows for real-time interaction of conference goers – and those who were not able to attend – no matter where each person is.

AAPST15 – Every conference that I have attended for years, from professional meetings such as AAPT or APS, to purely social ones, now comes with its own hashtag. Everyone tweeting about the meeting is asked to use the same hashtag, and then all of the conversation is findable using one search. There is usually someone associated with the conference who is tweeting “official” information about the meeting, important announcements, or trying to create awareness of particular events, along with a “social media team” [of which I am one for this meeting].

#ittweeps – Twitter is a fantastic tool for arranging dinners, meetups, or other gatherings, especially of people who don’t know each other.

At AAPST15: a poster presentation by @abbottg: "Prove it to me: Uncovering student misconceptions about light through a physics lab experiment"

#AAPT – For all those registered for AAPT14, if you like your Twitter handle on your badge email it to marketing@aapt.org

#live tweeting – is when a conference attendee tweets highlights of talks. The tweets are usually accompanied not just by the conference hashtag, but also a session identifier for reference: for example, Fascinating poster on using Twitter for professional development highlights numerous uses. AAPST1514 P1724G. Sometimes there will be an attached photo of one of the slides of a talk which is of particular interest. These live tweeting can spark a conversation, creating a active discussion rather than the passive one of a bunch of people sitting in a room listening to a speaker.

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Twitter has become a valuable tool for professional development, and it can be used to facilitate collaboration between physicists. It is easy to use and has a high potential to facilitate collaborative work, because it is easily accessible, does not require any special knowledge or equipment, and allows for quick and efficient communication.