A new approach to scientific dissemination

Ever wanted to reach beyond the printed page and talk to a worldwide audience about your research? SciVee is making it possible.

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Scholarly communication has arguably experienced just two major perturbations in recorded history. The first was the invention of the printing press by Johannes Gutenberg in 1440 and the second, the invention and widespread use of the internet starting in the 1990s.

To date, in the realm of scholarship, the internet has merely served as a tool to distribute the printed word. Using the internet reduces the cost of publishing and has led to the creation of new kinds of business models, e.g., open access, author pay models. But having the full text of scientific discourse online opens up all sorts of possibilities. Scholars can think, blog, et cetera, and interact in ways not possible with the printed word. This has proved to be the fastest growing feature of the site. Clearly video conveys features of our science that is not possible with the printed word.

SciVee [www.scivee.tv] is attempting to leverage this new perturbation in scholarly communication without upsetting the ideals of peer review. At the heart of SciVee is the notion of a 'pubcast'. An abstract of a research article takes about a minute to comprehend, at which point you either move on or commit to spending hours understanding the paper. A pubcast is a 5–10 min video clip of the author describing the paper that sits somewhere between the abstract and full paper in content. If the full text of the paper is available online and is open access with no copyright restrictions, the contents of the paper can be easily synchronized by the author with the video to create a new kind of learning experience.

A good example of this approach can be found at www.scivee.tv/pubcast/17306029. Even for those who favor the printed word, the paper can be read online as usual. When encountering a difficult section, the author can be made to pop-up and describe that part of the paper in a way that is, hopefully, easier to comprehend.

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Our initial evaluation showed that the graduate students of today, who are comfortable in a Web 2.0 world, enjoy learning using pubcasts. The viewer can also comment on the pubcast, either directly on SciVee or by using a social bookmarking site such as Digg or Delicious. We have also begun to form communities, and start blogs.

Making a pubcast could become as compelling as writing the paper itself

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In developing SciVee, it quickly became apparent that we should let the users define what the site looks like. After making a presentation at an educational forum, a member of the audience suggested a podcast interview with the author about the paper. We discovered that the interview format was more compelling than just one author relating the salient features of the paper. The interview format has been compelling on radio and TV for many years; we had just realized that it worked for the internet as well.

It is not clear how SciVee will evolve, but we do know we are having fun experimenting in a new way. Initially, we thought graduate students would just open their laptops, turn on the webcam, and make a pubcast, uploading it in the same way they would upload a clip to YouTube. This has not happened, rather the author wishes to take as much care on the pubcast as they do on the original paper. This is time consuming and certainly a barrier when the work is complete and the author is already thinking about their next paper.

Notwithstanding, new ideas on scholarly communication emerge from these beginnings. The latest is ‘postercasts’, where a student is filmed at a conference talking about their poster, which we just tried for the first time. Time will tell whether this proves popular.

We do know that, if many years ago when we published our first work, someone had said to us you can give a talk about that work to a worldwide audience at any time of day or night, we would not have believed them. Well it is possible, and we will see if this new found freedom changes the dynamic of scientific discourse.