To: Classroom Connect
From: Dale Basler, Physics
teacher, Appleton Area
School District, Wisconsin
Re: Podcasting Physics
Date: May 2007

Q: What will visitors find on your Web site?

They will see a weekly index of podcasts that I provide for my students. Most of them are audio programs, but I've recently branched out into video. Each podcast is a summary of what we've done in class that week and an intro to the following week's work. The site includes podcasts that students can play or subscribe to using iTunes (or whatever other podcast player they have). There are also links to notes for each show.

Q: There are also some links to simulation sites.

The sites I've linked to are much better than playing video games. One of the most popular sites is the cannon launcher. The best is the Spaced Penguins game. It gives kids a really good idea of gravitational field strength. I have no clue why it is penguins, but students have to slingshot a penguin to a little spaceship. The penguins go past stars and planets. The game shows that massive planets and stars have a bigger pull of gravity.

Q: Why podcast?

I think it's a good way to offload some of the rote memorization and review out of class time so I can spend more time doing discussion and inquiry. For some classes you have to work through the problems. Some students need to see a podcast once, while others can review it many times.

The other reason for a podcast is that physics students are very active. A lot of my students are involved in extracurricular activities and have very busy schedules. A podcast is something that they can control. They can watch a podcast on their own time.

Q: What do you need to produce podcasts?

You need a headset. An average one costs about \$35. It's just a USB headset with a headphone and microphone together. I use **Audacity** (audacity.sourceforge.net), which is a free audio editing software. Now that I do video, I'm using **Camtasia Studio** (www.camtasiastudio.com), a screen capture and video editing program. I got a 30-day free trial, showed people in my district what I could do with it, and now they're going to buy it. If you can find a free trial, you should make something you are proud of and then administrators might be impressed enough to buy the program for you.

Q: What reactions have you received from students and teachers?

Surprisingly, not a lot of students are big podcast listeners. This was new to them. I started putting tips for quizzes in the podcasts to get them into it. I don't do it for the freshmen

material because I just couldn't keep up. But I do it for the upper-level physics courses. The reaction has gone from, "What are you doing?" to kids coming in on Monday and asking, "Hey, where's the podcast?" They download them on their video iPods.

Q: Has podcasting made any difference in student test scores?

The ones who are using podcasts are better prepared, but I don't think I can quantify that. For some students, listening to podcasts gets rid of some of test anxiety because they've had more review.

Some fellow teachers kind of dismiss it because they don't know what a podcast is. But others have been very interested in it. I'm starting to put together a rundown of how I do my podcasts and I might do a little workshop after school for our district.

Q: You sound professional. Have you had training on announcing?

I don't have any extra training aside from being a teacher. I also have done podcasts for the Wisconsin Society of Science Teachers. Those were the first ones I completed and I got some of the bugs worked out.

Q: What is the purpose of Periodicity, the Wisconsin Society of Science Teachers podcast site?

If you search "periodicity" using Google, it's the tenth site on the page. My co-host Brian Bartel and I started this podcast last summer. Podcasting is something that should be done because it's a great way to talk to society members and show them that the leadership is human.

At first we just were talking about science news stories. Now we interview people on science topics using **Skype** (skype.com). One of my colleagues put it best. He said the best thing about this is that even if nobody is listening, you've had a chance to talk to really cool people. We've talked to Nicholas Wade, a *New York Times* science writer, Steve Squyres, principal investigator for the science payload on the Mars Exploration Rover Project, and Chris Mooney, who wrote *The Republican War on Science*.

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BaslerCast: Physics

www.aasd.k12.wi.us/Staff/baslerdale/Ppodcasts.asp

Periodicity: The WSST Podcast

www.wsst.org/podcasts.asp

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