

## Innovations in Teaching Using Technology Grant Application

**1. Title of proposal:** *Video Feedback, Modeling and Assessment Using iPad and Swivl Technology*

**2. Courses(s) or curriculum affected:** PHED 35.450 Clinical Practice in Elementary Health & Physical Education, PHED 35.451 Clinical Practice in Secondary Health & Physical Education, PHED 35.465 Clinical Seminar in Health & Physical Education, PHED 35.320 Teaching Concepts of Secondary Physical Education II, and PHED 35.272 Technology & Assessment in Health & Exercise Science. Appropriate for several other *teaching concepts* courses also.

**3. Name of applicant(s):** Peter Rattigan

**4. Objectives of the proposal:**

- a. **Innovation-** video taping of microteaching and classroom presentations using *Swivl* technology. The *Swivl* is a “a robotic mobile accessory” ([www.swivl.com/solutions/#robot](http://www.swivl.com/solutions/#robot)), which works in concert with a “marker”, a tracking device and remote microphone, that enables an iPad or iPhone to videotape a candidate as they move and speak during their micro teaching and/or presentations. The iPad fits into the robotic base and will record the audio and video as the base swivels to follow the presenter. Presentations will be videotaped, and the video provided to the student presenter. The student will use the video to assess their performance. See below for other uses.
- b. **Scalability-** video can be used to provide feedback to a large number of students using this technology. *Swivl* also has a cloud-based app that can be purchased on an annual basis to store video and work in conjunction with presentation software to combine audio, video and presentation slides. The proposal provides two options, one for the robotic base, accessories and iPad, and one that also includes a year of “S Cloud” service. Videos can be stored in the cloud service, but also can be either put on flash drives and given to the student, or uploaded as an unlisted link in YouTube or other appropriate site, and the link provided to the student.
- c. **Adaptability-** this technology can be used in a variety of classes. In addition to the classes listed above, it can be used in most courses in the department with “Teaching Concepts of” in the title, as they include student micro teaching presentations. It can also be taken “on the road”, and used for virtual supervision/observation of student teachers. This use of technology (using Apple’s FaceTime) has been piloted successfully. The *Swivl* setup will allow this to be done more easily and without the need to have someone holding a camera. In addition, the equipment can be used to record classes that can be uploaded to the S Cloud or YouTube (as is done with lectures at CMSRU), to provide them for students to review lessons, experience the lessons if they miss a class or are off site, to provide an option for lessons if Rowan is closed (reference snow days for spring 2014), or even convert a course to hybrid or online, using alternatives to voiceover PowerPoints.

**5. Description of the specific innovation:** The *Swivl* and iPad will be used to videotape micro teaching and student presentations in classes, as well as student teaching (the department is piloting a national assessment known as edTPA in fall 2014; edTPA requires videotape evidence of teaching). For classes, the videos will then be stored on a flash drive and given to the student or uploaded to YouTube in the form of an unlisted link. Students will be given the flash drive or the link and will observe the video. They will use this evidence to self assess their teaching/presentation performance. For student teaching, the videos will be used to upload to the edTPA assessment portfolio, which is sent out to external scorers.

Use of the *Swivl* and iPad makes this process far easier because the iPad and *Swivl* robot will be on a tripod so video will be steady with no camera shake, and the marker serves as a remote microphone, producing good quality audio. These elements allow students to get a good quality video to evaluate

themselves, and will allow for quality video/audio for edTPA portfolios.

Swivl also offers an S Cloud hosting service for \$200 for one year (less per year for longer subscription). This allows unlimited hosting space with several viewing options, as well as options beyond the basic video/audio, including combining it with presentation slide shows/PowerPoints. Please note that in the budget request there are two options identified, one with the cloud service and one without.

The potential for this particular, relatively inexpensive, and robust innovation is immense. Other potential immediate and future uses are outlined in the “adaptability” section above.

**6. Required Instructional Technology support:** IT support for the project would be minimal. I will have a short learning curve to try out the Swivl to make sure it works but everything is easy to operate. I have already uploaded dozens of micro teaching videos to YouTube, however I have been using Flip cameras, and the sound quality and camera shake makes conditions for viewing the video and hearing the audio less than ideal. I will be easily able to teach others in the department how to use this technology.

**7. Plans for evaluating and sustaining the innovation:** Student evaluations and program evaluations are conducted at the end of all my classes, and surveys are conducted at the end of student teaching, in clinical practice. Specific questions regarding the effectiveness of use of this technology in helping students learn the skill of teaching will be included in course evaluations. Student performance is assessed all the time. Changes in student performance after introducing this innovation will be analyzed, primarily through reviewing student comments on their micro teaching/presentation performance, and soliciting and reviewing comments from teacher candidates in the edTPA pilot. In speaking with a nationally renowned colleague who has done considerable work with edTPA, the video self-assessment has been very effective in increasing teacher candidates’ skill in providing feedback to their students during clinical practice. This is something that can begin early in microteaching with this innovation.

This proposal includes one year of S Cloud service, with an option (line 1) without the cloud service. If the cloud service proves valuable,

**8. Budget:**

Item	Price†	Sub Total
Swivl Robot & Marker	\$299.00	\$299.00
OR – Swivl Robot Bundle Plus 1 year basic S Cloud subscription	\$499.00	\$499.00
Swivl carrying case	\$39.00	\$39.00
Swivl Camera Mount	\$49.00	\$49.00
Swivl Lightning Charge/Sync cable	\$19.00	\$19.00
Apple iPad Air 32 GB	\$569.00*	\$569.00**
<b>Grand Total</b>		<b>\$975.00/\$1,175.00†</b>

\* Prices from Swivl online store (<http://www.swivl.com/store/>)

\*\* Prices from Apple Online Store for Education (<http://store.apple.com/us-hed/buy-ipad/ipad-air>)

† Total without 1 year basic S Cloud subscription/Total with 1 year basic S Cloud subscription

**NOTE:** This proposal includes the 1 year S Cloud subscription in order to determine its value. The department can fund future subscriptions if desirable, however this technology can still be very effective without the cloud service, as described above.