# Increasing Student Engagement Using Multi-Media: Online Modules, Interactive Gaming, YouTube, & More

### **Presenter Contact Information**

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#### **Show and Tell of Available Resources:**

#### **Social Media**

Facebook: Penn State Pesticide Education Program

Twitter: @PSUpested

#### 1) Web Site

Web Site: <a href="http://extension.psu.edu/pests/pesticide-education">http://extension.psu.edu/pests/pesticide-education</a>

- Sections on web site specifically for Applicators, Educators, Youth
- Under Educators, resources, lessons, and request forms for resources can be accessed
- 1) Resources and Lessons under Educators, then select Ag and Science Teachers or Elementary Teachers
- 2) Poster Request Form available under Educators, Poster Request Form
- 3) Presentation Resources under Educators, Ag and Science Teachers, Educator Presentation Resources

Engagement: Enables resources, suggested lesson plans, instructions, and tutorials for activities to be accessible to a wide audience.

#### 2) Videos

YouTube: <a href="https://www.youtube.com/user/PSUPested">https://www.youtube.com/user/PSUPested</a>

YouTube link can also be accessed directly off of our web site.

SchoolTube: http://www.schooltube.com/channel/psupested/

- Videos developed based on needs, whether training for applicators or program facilitation for volunteers.
- Professional videographer typically used for our videos, but high quality camera a possibility.
- Videos can be close captioned to meet ADA requirements and for learners in other languages.
- If trying to reach a general audience, consider the video titles adding tags to the videos.

Engagement: Takes learners "to the field" even when still in the classroom. Creates audiovisual resource to introduce and review information. Explains, and in some shows step by step suggested approaches for providing outreach programming to volunteers.



## 3) Online Modules

Contact Kelly at kdo5011@psu.edu for guess access to the modules.

- Online Modules developed as pesticide applicators seek online opportunities to prepare for pesticide certification or to earn pesticide recertification credits.
- Our goal of online modules was to create an interactive experience, not just a talking Power Point.
   Modules offer graphics, animations, task reviews, and other experiences in which the participant must engage to progress through the module.
- Much time and energy spent in determining software and initial development process. Our approach is to have a content specialist work with an instructional designer to create the module. Modules are now able to be developed more quickly once a systematic process is in place.
- In addition to online modules for applicators/learners, our Pesticide 101 modules are designed for educators who teach pest management and pesticide safety. Pesticide 101 modules include an overview of content, hands-on activities for learners, and additional resources for teaching the topic.

Engagement: Creates a resource that can be accessed anytime by learners to gain knowledge and prepare for practical application, for teaching content, and, in some states, provide pesticide recertification credits.

# 4) Interactive Gaming

Available on our web site. Click on **New Online Games** on the left side of the home page.

- Games can be played in teams or single player mode.
- Currently in development of games that are suitable for high school age learners.
- Can play directly off the computer, can use audience response system (ARS) technology, or smart phones.
- Gaming software can be purchased, but other online gaming options are also a possibility. If purchasing software, be sure to ask for educational pricing because the cost is significantly lower.
- The particular software (C3 Cloudworks) we use can be played with or without Internet access.

Engagement: Interactively involves leaners with reviewing content in a fun, competitive way. Online games can be used for learners of all ages as long as content is audience appropriate.