



## Enhancing Agricultural Mechanics Laboratory Awareness with Snapchat: A Snapshot of Agricultural Mechanics Safety Concerns

### Introduction

The agricultural mechanics laboratory provides students with an environment where they can engage in hands-on learning (Wells et al., 2013). However, learning cannot take place unless agriculture teachers provide a safe learning environment for students to develop agricultural mechanics-related skills (McKim and Saucier, 2011). Phipps et al. (2008) indicated that agriculture teachers are responsible for identifying safety hazards, providing daily safety instruction, and maintaining safe working conditions for students. McKim and Saucier (2011) further suggested that accidents in agricultural mechanics laboratories can be reduced ensuring that the teachers who oversee those facilities are competent in laboratory management. Could the use of Snapchat help secondary agriculture teachers become more competent in identifying and reducing hazardous conditions as they emerge?

Snapchat has been a popular social media tool used among teenagers and young adults, and often used to share pictures and videos among friends (Poltash, 2013). However, Snapchat need not be limited to social use only and can be used by agriculture teachers in the post-secondary classroom, specifically the agricultural mechanics laboratory to enhance laboratory awareness. This innovative idea aligns with the American Association for Agricultural Education 2011- 2015 Research Priority Areas Technologies, Practices and Products as well as Efficient and Effective Programs (Doerfert, 2011).

### How it Works

Agriculture teachers can use Snapchat to actively engage students to begin analyzing snapshots or videos of potential safety concerns in the agricultural mechanics laboratory. The teachers can post a snapshot or video to the “my story” section of their Snapchat account. Students are then able to respond to the “story” and identify the potential safety concerns contained in the snapshot or video. The snapshots and video can be archived within the camera roll of the users’ smart phone. This allows the teacher to keep a copy of the photos and videos shared for identifying potential safety concerns. Students can screenshot pictures so that they may retain a copy as well. Students do not have the capability of saving the teachers’ videos. Table 1 outlines the process needed to create a Snapchat account and begin engaging students to identify potential safety hazards in the agricultural mechanics laboratory.

**Table 1.** Steps to Snapchatting in the Agricultural Mechanics Laboratory

Step	Activity	Description
Step 1	Create username and password	Users will create a username and password to gain access to Snapchat’s features.
Step 2	Add the instructor and fellow students	Once logged in, students must friend the instructor and fellow students to share ‘snaps’ for the course.
Step 3	Set snap timer	Instructor and students will set their snap timer to 10 seconds to allow ample time to view pictures.

Step 4	Snapchats within the lab	Instructor will take a picture or video highlighting a skill being performed in the agricultural mechanics laboratory and post to their "story" so all students can view.
Step 5	Student responses	Students must respond to the instructor with a picture or video response that identifies the potential safety hazards
Step 6	Instructor grading	The instructor will analyze student responses. A snap back with a thumb up or down will indicate a right or wrong answer.

**Results to Date**

This innovative idea was field tested in an agricultural mechanics teaching methods course at Iowa State University. The instructor and teaching assistant looked for any safety violations being committed by students as well as setting up potentially hazardous situations for students to recognize. A picture is taken of those violations to be shared with class members later and the safety issues are then rectified. If the hazardous situation has the potential for immediate danger to the operator or others, then the picture will be skipped, and proper safety procedures will be followed. The students have actively participated in the Snapchat stories and have added laboratory management and safety discussions that have been overlooked in previous classes. The students have mentioned that at times it can be difficult to see the picture that is being shared due to the size of their smartphone screens.

**Future Plans/ Advice to Others**

Safety and privacy of users should always be considered when using the internet. Users can only receive snaps from users that they add. Similarly, users can adjust settings within Snapchat so that 'friends' are the only ones who can view their stories. The researchers are considering partnering with beginning teachers to share pictures and videos of potentially hazardous conditions that the teachers are have encountered at their schools.

**Costs/Resources Needed**

Participants wanting to utilize this product must have a smartphone, or other tablet with wireless connectivity. Beyond the cost associated with owning a smartphone or tablet all the additional costs associated with this educational technique are minimal. Snapchat is available at no cost to smartphone users but requires an active email address. Additional costs may incur if smart phone technology is utilized, as individuals would be subject to additional charges from their service providers. The researchers and participants utilized smartphones and/or tablets for this project. However, an iPod touch can also be used for Snapchat.

**References**

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**Submitted by–**

OP McCubbins, Ryan Anderson and Trent Wells  
Iowa State University  
Ames, IA