ABSTRACT


The purpose of this research study was to determine the effectiveness of on-line distance training for Extension Educators, Extension support staff, and 4-H livestock volunteers learning retinal imaging techniques. This study focused on the use of asynchronous on-line materials to disseminate retinal imaging technology and techniques to the Extension Educators, Extension support staff, and volunteers. The on-line retinal imaging tutorial was used to examine adults' ability to gain knowledge about the OptiReader™ device, retinal imaging techniques, and the retinal imaging software.

A significant difference was found when comparing participants' pre-test and post-test scores by a paired t-test. This significance indicates that the participants were able to learn from the retinal imaging tutorial. Most of the demographic variables had no significant impact on the knowledge gained from pre- to post-test. These results indicate that the tutorial is accessible to a wide variety of people involved with 4-H. Additionally, the results showed no significant difference in participants' scores based on prior retinal imaging training. In the researcher's opinion, this indicates that the on-line tutorial is as informative as face-to-face training and can compliment, but not replace it. Prior research shows that hands-on training with the OptiReader™ device is essential to developing proficiency at collecting high quality images in a minimal amount of time.

The results of the current study imply that other on-line distance education training courses may be successful with Extension Educators and 4-H volunteers. Since the materials can be accessed repeatedly and at the learner's pace, on-line
courses can deliver information in a timely manner to a broad audience. On-line courses may also be used to compliment face-to-face training to make the live interaction more effective and less time consuming.