

**Utilizing Assistive Technology and Agricultural Learner Centered Teaching**

Dr. Adrienne Robinson

Dr. Wanda Newell

2401 Lakeview Road, Apt. 902

North Little Rock, AR 72116

501-960-8365

robinsonam@uapb.edu

newellw@uapb.edu

**Introduction (LCT strategy)**

In simple terms, any technology that helps an individual with a disability to carry out a functional activity is defined as assistive technology. Assistive technologies are primarily used to improve functional outcomes for persons with disabilities. A broad range of devices, services, strategies, and practices are designed to accomplish this overall goal.

It is important; for the benefit of continued advancement in agricultural, that extension specialists gain or increase their knowledge of assistive technology. The knowledge and utilization of assistive technology; within extension, will not only further increase outreach services but add to better productivity. This study will incorporate the learner-centered teaching approach of inquiry learning with technology implementation.

**Connection to Literature**

Central to any AT system is the individual with a disability who is trying to perform an activity in a specific location. The selection or design of an AT system will involve selecting or designing a device or strategy that will enable the individual to safely and effectively carry out the desired task (Virginia Cooperative Extension).

Even with the incorporation of technology to assist with farming, farmers in the United States are twice as likely as other workers to experience a disabling injury and six times more likely to suffer a fatal injury (Mathew et al., 2011). For agricultural workers with disabilities, many solutions exist, including manufactured devices or structures that modify work practices, and do-it-yourself plans (Agrability, n.d.).

By means of AT awareness and implementation, one has the potential to overcome physical difficulties and barriers through the use of appropriate workplace accommodations and supports (Driscoll et al., 2001). Even with federal and state governments supporting access to assistive technology devices and services, the majority of the general population remains

uninformed of AT and unaware of how to acquire AT devices (H.R. 4278 (108th): Assistive Technology Act of 2004, 2004).

### **Implementation of LCT Strategy**

The proposed project employs a three-fold strategy that will be implemented on July 6, 2020. A pre-survey will be distributed to Extension Specialists to assess their knowledge and utilization levels of Assistive Technologies within their field of work. After receiving the pre-survey results, a training video will be developed that introduces the possibilities and merit of incorporating assistive technology in extension outreach service and trainings. The video will also provide recommendations on accessible AT and devices. The training video will be accessible to Extension Specialist through email and YouTube. After reviewing the video, Extension Agents will be asked to complete a post-survey that gauges their intentions to use the information they learned about assistive technology in their service and training programs. The post-survey will be sent out 2 to 3 weeks following the availability of the training video.

### **Results**

At the time of abstract submission, the results had not been collected. However, the pre survey was sent out August 17, 2020. After pre-survey results are received by September 4, 2020, the training video was completed and sent out September 19, 2020 Post survey was sent out September 24, 2020. The results and discussion will be covered in the presentation.

### **Future Plans**

The future plans for the project are to establish regular trainings with Extension Specialists for the purpose of creating AT device modules and increasing knowledge that can be used for professional development in-house training and for external use with Extension clients.

## References

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