

# The Experiential Learning Process: A Value-Added Pedagogical Practice for Faculty of Higher Education in Rwanda



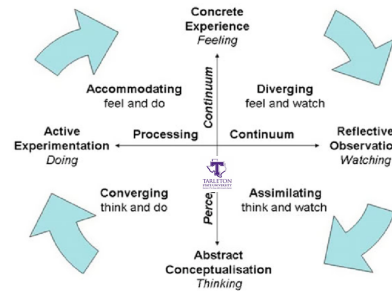
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## Introduction

- “Sound educational experience involves, above all, continuity and interaction between learner and what is learned” (Dewey, 1986, p. 10).
- Traditional instruction models are taught via abstract means, not concerned with future potential changes, and are often seen as an archaic approach to education, interspersed by inflexibility, instructorist approaches, and behavioral learning components punctuated by exam-focused curricula (Dewey, 1986; Girvan, Conneely, & Tangney, 2016).
- Progressive instruction is founded in the philosophical supposition that “. . . an intimate and necessary relation between the processes of actual experience and education” (Dewey, 1986, p. 20) must exist.
- Classrooms should provide real-life situations where learning activities can be experienced through social engagement (Gutek, 2014; Williams, 2017).
- As faculty embrace experiential learning, a survey of the Higher Education Research Institute (HERI) indicates that a considerable number of faculty (45%) continue to embrace lecture as their sole instructional model (Rosenstein, Sweeney, & Gupta, 2012).
- Faculty continue to model pedagogic practices that are behavioral in nature, increasingly, a number of higher-education institutions are embracing the experiential learning model.
- But what impact can faculty ensure when obstacles such as class structure, class size, time constraints, increased curriculum requirements, resistance, and lack of expertise by faculty in teaching from an experiential learning perspective become a concern (Wurdinger & Allison, 2017)?

## Theoretical Frame

- Dewey hypothesized that meaningful and relevant experiences are essential for true learning to occur (1986).
- As such, this study was viewed through the lens of Kolb's experiential learning model.
- Kolb's recurring model allows learners to take part in tangible experiences, whereby they reflect through observation, creating theories to explain those observations, and through active experimentation, thereby increasing satisfaction in the learning process (Baker & Robinson, 2016).



## Methodology

The purpose of this study was to determine the perceptions of faculty who participated in professional development (PD) in tractor safety training. Objectives included:

- Determine the demographics of those participants in the professional development.
- Determine the perceptions of those who participated in the professional development regarding their willingness to incorporate their new knowledge in their course instruction at RICA.
- Faculty at the Rwandan Institute for Conservation Agriculture (RICA) participated in a 2.5 day professional development workshop over tractor safety training.
- The Case Study research included survey questions to determine perceptions of faculty that participated in the tractor safety PD. According to Mills and Gay (2019) Case study research “. . . is a qualitative research approach in which researchers focus on a unit of study known as a bounded system (e.g., individual teachers, a classroom, or a school)” (p. 403).
- Specifically, an instrumental case study approach was utilized as a result of the questions that were used in the survey were pre-developed prior to participant selection (Stake, 1995).
- Questions:
  - What was the most important aspect of this training regarding mechanical agriculture?
  - How has this training changed your understanding of small-scale production agriculture in Rwanda?
  - After participating in this training do you feel more prepared to safely operate agricultural equipment, if so, which areas of this training better prepared you to do so?
  - Has this training added to your understanding of practical mechanical agriculture, if so, how?
  - Do you feel this new knowledge will be useful for you when teaching your courses here at RICA, if so, how?

## Results

Objective 1:

- For objective 1, 83.3% were male, with 16.6% female, with 16.6% in the ages of 25-29, 66.6% between the ages of 30-39, 16.6% of those who participated were between the ages of 40-49, while 16.6% were 50 or over. The educational level of respondents were identified as 42.8% holding a Ph.D., with 57.1% of the faculty held their MS degree.

Objective 2:

- Do you feel this new knowledge will be useful for you when teaching your courses here at RICA?
  - Ted stated that “Now I can show my students how any farming operation can be done more efficiently and in a shorter time when it is mechanized”.
  - Eric identified that “At some point, I think student[s] will need to know how the machines and other equipment are used and it will make so much sense if the faculty teaching the course is the one who is also showing them how these works”.
  - Cindy stated that “Yes, it will be useful in teaching scenarios/topics/areas practical tasks in the production enterprises that require the use of tractors and the implements”.
- After participating in this training do you feel more prepared to safely operate agricultural equipment, if so, which areas of this training better prepared you to do so?
  - Cindy identified: “Experiential learning: After the 1<sup>st</sup> person was taught how to do some by the instructors, they were then responsible for teaching the next person how to do it. This helped me to immediately put the new skill learnt into practice. . .”
  - James stated: “Yes it has. Thanks to learning by doing, I can turn on and turn off a tractor, check oil, lubricant and water; I can hook up some equipment to a tractor. I can also drive a tractor and operate it. . .”



## Conclusions / Recommendations

- Results indicated that a majority (100%) of the sample studied were in agreement on the value of the professional development in enhancing their ability to incorporate experiential learning practices in their instruction.
- Sam said it best when he identified that “The main purpose of RICA is to improve food security in Rwanda. [As such], RICA instructors should be conversant with agricultural machinery before they teach students how to operate them”
- Universities that are adopting the experiential learning model in their curriculum should be better prepared in this regard. As a considerable number of faculty (45%), continue to embrace lecture as their sole instructional model, (Rosenstein, Sweeney, & Gupta, 2012) professional development in learning practices should be embraced in faculty on-boarding policies at the university level.
- Professional development in mechanical agricultural operation should be extended, so that faculty teaching from an experimental model approach can rely on additional experiences for course development.