

**Teaching by Facilitation: Highlighting Non-formal Learning in a Laboratory Setting**

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### **Introduction/Need for Innovation**

Burrows (1997) defines facilitation as "a goal-oriented dynamic process, in which participants work together in an atmosphere of genuine mutual respect, in order to learn through critical reflection" (p. 401). Facilitation is described as a collaborative relationship between teacher and student (Johnston & Tinning, 2001). Regmi (2012) acknowledges facilitation as a dynamic process with advantages such as providing relevance of learning, reflecting on personal experiences, and utilizing individual learning styles. Non-formal educational facilitation has been acknowledged as a need within the agricultural leadership major and is reflected in required coursework (Pennington & Weeks, 2006). The agricultural leadership undergraduate degree program at Oklahoma State University includes Facilitating Leadership Education Programs as a required course (Oklahoma State University, 2021). Agricultural leadership faculty within the Agricultural Education, Communications, and Leadership (AECL) department typically teach a course on non-formal educational facilitation. In spring of 2022, the course was folded into an agricultural education teaching methods course temporarily due to limited Full Time Equivalents (FTE's) in the agricultural leadership faculty. This innovation could be implemented by other institutions to address degree requirements for agricultural leadership students.

### **How It Works**

Undergraduate agricultural leadership students at Oklahoma State University enrolled in AGED 4103 Methods of Teaching Agricultural Education for the spring 2022 semester to meet the Facilitating Leadership Education Programs course requirement of their degree plan. Lectures were based on effective teaching methods within an agricultural education context. Agricultural leadership students attended lecture alongside preservice agricultural education teachers and took part in lessons regarding understanding learners, learning theory, teaching approaches, and learning styles. The innovation highlighted within this course involved the agricultural leadership students being assigned to an accompanying lab section devoted to facilitation-based teaching methods and taught by a Graduate Teaching Assistant (GTA) with prior facilitation and classroom experience. Students met once per week for one hour and forty-five minutes per meeting. Topics addressed in the class and included in the course syllabus were assessing learner needs, understanding adult learners, delivering training, using visual aids, creativity, utilizing technology within educational settings, training across cultures, writing appropriate learning objectives, developing an instructional plan, and delivering a theory-based leadership workshop. Additionally, the lab was taught from a workshop perspective utilizing various facilitation techniques. These techniques included active training strategies (Lawson, 2016), cooperative learning structures (Kagan & Kagan, 2009), quantum teaching principles (DePorter et al., 1999), and processing pinnacle applications (Simpson et al., 2006). By teaching the principles of the lab through active facilitation, students not only learned facilitation concepts through experiential learning applications (Lawson, 2016; Kolb, 1984), but they saw them demonstrated firsthand. Additionally, the GTA leading the lab made use of facilitator "timeouts" in which they paused the lesson and called attention to a facilitation technique being implemented within the lesson. The lab led students through the process of designing a theory-based workshop based upon an appropriate needs assessment and culminated with students delivering team-led workshops grounded in leadership theory and evaluated by their peers and the corresponding GTA.

### Results/Implications

Students delivered 1.5-hour theory-based leadership workshops. The mean score for these workshops when evaluated was 144.67 points out of possible 150 with the range of scores being 142 to 146. General feedback from students regarding their facilitation experience included positive comments regarding how the instructional plan was developed, the sequence of lab content, and the time taken to explain various facilitation techniques. Students also expressed an appreciation for the way feedback and coaching was delivered. When asked about their perception of the facilitation-based lab section, students shared positive feedback regarding the lab and its contents. Through the Student Survey of Instruction (SSI), agricultural leadership students were asked to provide any comments on the course. One student stated: "I felt like my assignments and workload for lab were relevant to my field of study and added value to my experience. [GTA] was the perfect instructor for this with his previous experience in FFA and AGED for facilitation." Students were asked through the SSI to provide any comments on instruction and their learning experience. One student stated: "I feel as though everything I truly learned that is valuable to my specific educational track was in the lab." Another said: "I really enjoyed my lab time and felt that I learned the most during my lab time." Additionally, comments were received regarding future improvements to the course as well. One student commented: "I hope future students can partake in a course that is more specific to Ag Lead that doesn't make it feel as though it were [an] afterthought addition to the course." This student continued, "I also wish I would have been able to take a course like this earlier in college. A facilitation-type course would have made me feel more secure in my decision to be an agricultural leadership student way before graduation rather than the semester of [sic]." Implications of these results include the betterment of the facilitation of this course in the future through implementation of feedback provided by students as well as affirmation that teaching by facilitation is an effective way to deliver content within the context of this agricultural leadership lab.

### Advice to Others/Resources Needed

This innovation demonstrates teaching by facilitation is an effective way to deliver content for agricultural leadership students. It is encouraged that departments assess the needs of their students prior to implementing this innovation within their program of study. Additionally, it is advised that lecture content be modified to include examples appropriate for agricultural leadership majors, and opportunities be given for agricultural leadership students to discuss lecture topics as a group within the context of facilitation rather than conventional agricultural education. Direct costs of the innovation include a .25 FTE Graduate Assistant salary for assisting with the lab. In terms of resources needed, it is recommended for the lab instructor to have prior facilitation training and/or be given adequate resources to effectively demonstrate facilitation techniques. Such resources may include but are not limited to *The Trainer's Handbook* (Lawson, 2016), *Kagan Cooperative Learning* (Kagan & Kagan, 2009), *Quantum Teaching: Orchestrating Student Success* (DePorter et al., 1999), and *The Processing Pinnacle: An Educator's Guide to Better Processing* (Simpson et al., 2006). Additionally, adequate knowledge of the Experiential Learning Model as described by either Kolb (1984) or Lawson (2016) is recommended.

### References

- Burrows, D. E. (1997). Facilitation: A concept analysis. *Journal of Advanced Nursing, 25*(2), 396-404. <https://doi.org/10.1046/j.1365-2648.1997.1997025396.x>
- DePorter, B., Reardon, M., & Singer-Nourie, S. (1999). *Quantum teaching: Orchestrating student success*. Allyn & Bacon.
- Johnston, A. K., & Tinning, R. S. (2001). Meeting the challenge of problem-based learning: Developing the facilitators. *Nurse Education Today, 21*(3), 161-169. <https://doi.org/10.1054/nedt.2000.0526>
- Kagan, S. K., & Kagan, M. (2009). *Kagan cooperative learning*. Kagan Publishing.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Lawson, K. (2016). *The trainer's handbook* (4th ed.). John Wiley & Sons, Inc.
- Pennington, P., & Weeks, W. G. (2006). Agricultural leadership: Oklahoma State University's new major for undergraduate students. *North American Colleges and Teachers of Agriculture, 50*(4), 42-46. <https://www.jstor.org/stable/pdf/43766172.pdf>
- Regmi, K. (2012). A review of teaching methods - lecturing and facilitation in higher education (HE): A summary of the published evidence. *The Journal of Effective Teaching, 12*(3), 61-76. <https://files.eric.ed.gov/fulltext/EJ1092144.pdf>
- Simpson, S., Miller, D., & Bocher, B. (2006). *The processing pinnacle: An educator's guide to better processing*. Wood 'N' Barnes Publishing.
- Oklahoma State University. (2021). Academic Catalog 2021-2022 Edition. Agricultural leadership, BSAG. <http://catalog.okstate.edu/ferguson-college-agriculture/agricultural-leadership/bsag/>