

**Models of Exemplary Teaching: Short Burst Active Learning Sessions**

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## **Introduction/Need for Idea**

The first year of teaching agriculture can be challenging (Mundt & Connors, 1999). It can be difficult because teachers are trying to develop competency in several areas simultaneously (Boone & Boone, 2007). One of the most pressing needs for beginning agriculture teachers has been finding lessons to teach (Myers et al., 2005). By understanding this need for curriculum ideas, improvements can be brought about to professional development (Myers et al., 2005; Touchstone, 2015). There have been numerous calls for professional development designed to give beginning agriculture teachers innovative lesson ideas (DiBenedetto et al., 2018; Figland et al., 2019; Myers et al., 2005; Touchstone, 2015). Additionally, due to new competencies emerging in teaching, this furthers the need for changes to professional development (DiBenedetto et al., 2018). It also has been recommended that beginning agriculture teachers have professional development offerings specifically on instructional facility management and laboratory teaching methods (Figland et al., 2019). Coleman et al. (2019) recommended curriculum development workshops should be implemented for agriculture teachers. To address the recommendations, a workshop was developed for beginning agriculture teachers.

## **How It Works**

A workshop titled, *Models of Exemplary Teaching: Short Burst Active Learning Sessions*, was presented at the Florida Association of Agricultural Educators Mid-Winter Conference. University of Florida faculty were invited to facilitate an all-day workshop for beginning agriculture teachers. Experienced agriculture teachers, Career and Technical Education directors, and graduate students were invited to lead a 15-minute workshop. During the workshop, they were instructed to present a lesson exactly like they would to students in a middle or high school agriculture class. They were asked to stay within a strict time frame of 15 minutes. The beginning agriculture teachers participated as students and were not prepped about the lesson ahead of time. The lessons were presented in one-hour lesson sessions consisting of four, 15-minute sessions. The lesson topics included (a) food science, (b) integrating inquiry-based instruction, (c) low intensity laboratory reports, (d) exam preparation review games, (e) balancing feed rations, (f) making lectures more engaging, (g) creating foldables, (h) agricultural mechanics skills, (i) demonstrations, and (j) teaching animal movement without live animals.

Desimone (2009) provided a core conceptual framework for studying the effects of professional development on teachers and students guided the development of this professional development workshop (Desimone, 2009). For this workshop specifically, the features of active learning, content focus, and collective participation were implemented (Desimone, 2009). The beginning agriculture teachers participated in the lessons as students, which led to active learning. Further, the lessons were designed to be hands-on and engaging. The lessons were not explained beforehand, so they could learn as the experience was happening. The workshop provided content focus professional development by embedding agricultural content with pedagogical design features. The beginning agriculture teachers participated in the workshop together, which highlighted collective participation. After individual reflection, the beginning agriculture teachers all came together to reflect as a group which is a critical component of professional development (Borko, 2004; Ingvarson et al., 2005). According to Desimone (2009), when professional development has the components of the active learning, collective participation, content focus, duration, and coherence teacher's knowledge and skills should increase and lead to a change of instruction that leads to improved student achievement.

### **Results to Date**

A total of 25 beginning agriculture teachers participated in the workshop. Overall, the reactions to the workshop were positive. According to one participant, “The whole day was great, but I highly enjoyed the presenters.” To evaluate the effectiveness of the professional development activity the participating teachers were asked to complete an evaluation form. It included Likert-type scaled questions and open-ended questions. Fifteen beginning agriculture teachers completed the evaluation form. For the organization of the sessions, the respondents indicated a mean of 5 ( $SD = 0.0$ ) where 5 indicated a rating of excellent. For the effectiveness of the presenters, the respondents rated  $M = 4.8$  ( $SD = .12$ ). The respondents rated the overall value of the session as  $M = 4.9$  ( $SD = .12$ ). Regarding the value of the sessions, one participant said, “Honestly, if I could have workshops like this as often as possible, I would come. This is a huge blessing.” The participants wrote specific lesson ideas from the activity that they were excited to go back and use in their classroom. One participant said, “I plan to use all of [the lessons]. If not this year, next year.” The teachers indicated that the most valuable part of the day was the lesson plan demonstrations. Some participants indicated that they would use the lessons but make minor changes to them to fit their classrooms.

### **Future Plans/Advice to Others**

There are currently plans in place to conduct a similar workshop for beginning agriculture teachers in the future. This type of professional development could hold promise for other states. If it is implemented, the facilitators should recruit quality, experienced agriculture teachers to teach the lessons. The facilitators should emphasize a ridged time frame for the presenters to allow for as many presentations as possible. They also need to make sure the presenters have their materials ready. Ample space should be provided to conduct the workshop.

During the workshop, beginning agriculture teachers participated in the lesson as students. There is a difference between participating in the lesson and just observing. Videos were taken of the presenters during the sessions. We hope to be able to provide access to the videos for other new teachers in the future. Further research is needed related to how new teachers develop lesson ideas and modify them to meet the needs of their students. Future workshops could include embedded research designs to examine how professional development leads to a change in practice (Desimone, 2009)

### **Cost/Resources Needed**

The cost of this workshop is dependent on the consumable materials used for the 15-minute workshops. For this workshop, \$50 was spent at a home improvement store and a grocery store for consumable supplies. The largest resource allocated to this is the time of the various presenters. This workshop required numerous presenters who donated their time. Additional costs were required by the meeting space and consumable supplies, which were part of the conference registration fees.

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