Title: National 4-H Common Measures Lesson Study

Summary: Lesson Study, a type of Community of Practice, is a way to increase an educator’s confidence and competence related to teaching and learning through professional development. This practice is supported through a cyclic and reoccurring process, and works to create an environment of goal setting and planning, lesson and activity implementation, and reflection. Lesson Study participants report outcomes of improved lesson planning, content knowledge, teaching practice, and social connections.

Situation: Since it began over 100 years ago, Georgia 4-H has been dedicated to learning and understanding how its programs help youth become responsible citizens leading healthy and productive lives and discovering critical science-focused innovations. Conventionally, this process is rooted in traditional data collection and program evaluation. Working to improve evaluation efforts, and coupling that with increased efficacy of employee professional development, Georgia 4-H piloted a focused Community of Practice, Lesson Study, with four agent cohorts.

Response: In Georgia 4-H, we believe in the power of young people. Because of this, we see firsthand how the work and passion of our organization’s faculty and staff helps facilitate growth in youth as they recognize their valuable strengths and real influence to improve the world around us. Through a partnership with National 4-H Council and the S.D. Bechtel, Jr. Foundation, Georgia 4-H, shares a commitment to supporting the faculty and staff that carry out the mission and vision of the largest youth development organization in the state. During 2018, Georgia 4-H piloted Lesson Study, a type of Community of Practice rooted in the work of John Dewey, Jean Piaget, and Lev Vygotsky, with four cohort groups. A constructivist method, these groups of 4-H faculty and staff worked collaboratively to refine or adapt existing educational resources related to their programming. Specifically, they supported trainings for District and State Officer Boards, Senior 4-H Camp, and activities that supported plant classification curriculum. As a focused Community of Practice, Lesson Study emphasizes the collaborative work among this group of 4-H professionals and helps them to revise lesson materials, trainings, and programs based on the context in which these professionals are working. This encourages making the most of existing resources, with the goal of delivering the best possible program for their 4-H group of learners.

Engaging in this practice, Lesson Study is a cyclic and reoccurring process detailed in three phases. The first phase, goal setting and planning, is where the group of 4-H professionals gather to identify educational program goals and highlight the learner and educator outcomes. Once goals are identified, the Community of Practice reviews the lesson or program materials and develops a strategy to implement the lesson or program. This process occurs either face to face or through connected technology, depending on the context of the Lesson Study group.
Following this first phase, group members enter into the second phase of the process, lesson and activity implementation. This second phase involves educators going back to their program, and implementing the lesson or program as reviewed and discussed in phase 1. During implementation, 4-H educators actively collect formative data on the learners’ knowledge, thinking, behavior, and skills, as well as the efficacy of their own instructional process and practices. This formative data is collected during the learning process and helps 4-H educators monitor progress and informs modifications to the lesson or program, if needed. For this process specifically, formative data was collected through both a youth and educator reflection tool. The youth reflection tools offers youth participating in the lesson or program the opportunity to reflect on their learning process by asking them to respond to four simple prompts:

1. Describe what you learned
2. Describe how you felt
3. Describe something you got better at
4. Describe how you helped others

Youth participating in this process, and providing responses to this reflection tool, provides 4-H educators real-time qualitative data to ensure they are on track with content and reveals information about learners' experience that might not be readily apparent during the lesson implementation process.

The second tool utilized in formative data collection focuses on the 4-H educators that work to implement the lesson. The Educator Reflection Tool, a plus delta form, is a self-assessment tool that supports the reflective process for educators. The reflection tool poses questions to better understand the what, why, and what's next for the program or lesson’s:

1. Content goals for youth (knowledge, competence, etc.)
2. Intrapersonal goals for youth (self-esteem, confidence, empathy, character, interest, attitudes, persistence, etc.)
3. Applied skill goals for youth (problem solving, critical thinking, etc.)
4. Interpersonal goals for youth (teamwork, contributions, using ideas from others, communication, etc.)

In Lesson Study, formative data collection is systematic and intentional, and gathered during or immediately after each lesson. This promotes data source triangulation and helps verify and or expand on the information that has been gathered.

Following lesson or program implementation, educators enter into the third phase of the Lesson Study process, group reflection. After implementation, lesson study members reconvene to engage in reflective practice, the heart of all communities of practice. Youth and facilitator reflections tools are reviewed and brought back to the Lesson Study Community of Practice to share. Members rely on each other to provide insights, brainstorm trouble shooting ideas, and develop plans for future lessons. Critical to the reflection, having formative data available to share during lesson study meetings provides an objective view into the teaching experience that compliments the educator’s reflection. Reflection sets them up for the next phase of implementation and allows them to adjust their practice as necessary, to keep on track with the goals and outcomes of the lesson or program. Lesson Study is a continual process whereby
implementation and reflection are repeated throughout the whole program delivery period, and educators engage in multiple iterations of the model’s three phases.

**Impact:** As a result of this Lesson Study process, 4-H educators and professionals in each of the four cohorts actively invested in their own professional development. Research demonstrates multiple positive outcomes and an improvement in educators’:

1. **Lesson Planning** - Including an improved understanding of the lesson or program and confidence in facilitating them, planning for future lessons, and being more reflective and analytical through discussing potential modification to the standard content and material.
2. **Content Knowledge** - Allowing less experienced or tenured participants to learn by working closely with more experience educators. This valuable experience and historical knowledge is shared and informal mentor relationships may be established.
3. **Teaching Practice** - Helping 4-H educators make data-driven improvements to their teaching practice, and improving abilities through reflection of formative data with colleagues.
4. **Social Connections** - Strengthening relationships with other 4-H professionals and educators which helps to reduce feelings of isolation through connecting with others who share a similar experience.

Elaborating on these outcomes, one 4-H educator responded, “The 4-H lesson study process was a unique experience for me. Throughout my career, I’ve had the opportunity to develop, pilot, and review 4-H materials, but it has never been in such an active and engaging process. Coming together with my peers after each activity to discuss our successes, modifications, and areas for improvement allowed us to make adjustments along the way, ultimately trying to make sure our program met the needs of each of our groups of learners. I definitely think the lesson study process should be used more as we develop 4-H lesson plans and resources”.

Supporting the professional development of Georgia 4-H educators proves to be an investment, commitment, and practice that yields results with an excellent return. Resulting in improvements in confidence, competence, and connection, 4-H educators and Lesson Study cohort participants work tirelessly across the state to provide caring supportive mentoring to almost 170,000 4-H youth, helping them grow into true leaders today and in life.