The State 4-H Field Day, begun in 2002, is the largest and most comprehensive educational event offered by UC 4-H. The event provides culminating experience for 4-H members (aged 9 to 19) in their year-long 4-H educational experiences. In May 18-31, 2020, the event was implemented virtually with six contests focusing on public speaking, interview skills, photography skills, robotics and coding, film production, and plant science. Nearly 500 youth participated in one or more contests.

Evaluation Methods
We gathered data in three ways.
- Registration survey (n=440).
- Post-event survey (n=183).
- Standardized 4-H member’s presentation score (averaged over multiple evaluators; n=292).

We integrated these data sources and analyzed for internal reliability, statistical relationships, and identified themes in the open-ended questions.
Reasons for Attending

Prompt: Explain your motivation for attending the 2020 State 4-H Field Day.

We analyzed open-ended responses and identified five themes (n=334).

- **For learning** (48%): Self-improvement, building confidence, improving leadership and public speaking skills, challenge and personal growth.
- **For competition and awards** (24%): earning a gold, opportunity to participate at a prestigious state event.
- **For fun and spark** (17%): to share my passion/spark, enjoy the event, and because it is a favorite event.
- **For connections** (10%): meeting people and sharing their knowledge with others.
- **Because it is virtual** (10%): Able to attend now because it is virtual; when the event is in-person I cannot attend. Also, fairs were canceled so I was looking other activities.

“I want to present to an audience and help spread knowledge about livestock and agriculture. This is a stepping stone to be able to become an embryologist in the future.”

What do you anticipate as the primary benefit for yourself in participating in the 2020 State 4-H Field Day? (n=385)

- Improving my competence (57%)
- Becoming more confident (36%)
- Connecting with peers (6%)
- Strengthening my character (8%)
- Becoming more caring (1%)

Belonging

How important is the State 4-H Field Day in helping you feel connected to 4-H?

85% say very important or absolutely essential (n=383)

Sense of Belonging in 4-H

94% of youth report feeling accepted, safe, committed, and comfortable in 4-H (n=177)

“[I enjoy] the camaraderie that occurs at State Field Day when you get to see friends from all across the state and finally have a chance to talk to them again in person!”
Virtual Experience

Prompt: Share the benefits and drawbacks you experienced with virtual 4-H Field Day. We analyzed 308 responses to the two prompts and identified eight themes (n=159).

Advantages

- **Easier Virtually** (23%): easier registration, more time to prepare, improved comfort.
- **Reduced Cost & Travel** (20%)
- **Boosted Participation** (11%), able to participate in more contests.
- **Not Cancelled** (6%): Virtual technology allowed the event to take place.
- **Learning new technology** (2%): learning how to use virtual technologies.

Disadvantages

- **Constraints of Technology** (22%): Not able to make eye contact, shake hands, struggled to express oneself, and perception of not doing as well on screen.
- **Connectivity Issues** (14%): Internet bandwidth or Zoom problems.
- **Anxiety-Inducing** (7%)
- Only 1 person shared Zoom fatigue.

Virtual Delivery

The virtual experience negatively impacted my participation in one or more contests (n=179)

- Agree: 21%
- Neither: 20%
- Disagree: 59%

I did better in virtual contests than I do with in-person contests (n=180)

- Agree: 30%
- Neither: 46%
- Disagree: 24%

Preference for in-person and online contests next year, 2021 (n=171)

- All in-person: 31%
- All virtual: 16%
- Some in-person and some virtual: 48%

Recommendations for State 4-H Field Day

State 4-H Field Day should offer contests both in-person and virtually, given that youth spoke about how virtual contests boosted participation, improved comfort, and reduced expenses.

Provide additional resources, support, and training to presenters and evaluators on effective uses of virtual technologies. Help youth understand what they need to adapt in their presentations to make effective use of the affordances and constraints of technology.

“When I went to State Field Day last year … it cost my family money for gas and a hotel plus food. There were other members of my club that would have wanted to go but couldn’t because it was too expensive.”
Communication Skills

California 4-H offers a robust public speaking program for youth to practice, learn, and grow their competence and comfort to communicate and speak in front of people. Youth may participate in formal presentation events at the county, regional, and state levels and receive feedback from evaluators on standard criteria.

**How valuable is the State 4-H Field Day in improving your communication skills?**

95% say very valuable or absolutely essential (n=380)

**What did youth report as their communication confidence?**

Communication confidence (self-efficacy) is the belief in one’s abilities to communicate in a speech, writing, or through other media with effective content, structure, and delivery.

4-H members are highly confident, on average in their communication abilities (n=175)

**What do youth report as the sources of their communication confidence?**

We tested four theory-based influences on communication confidence:

(a) successful experiences (mastery experiences);
(b) observing others (vicarious experiences);
(c) positive feedback (social persuasions); and
(d) experiencing stress and anxiety while public speaking (affective states).

**Finding:** Successful experiences communicating had the greatest influence on young people’s communication confidence; as did observing others presenting, although to a smaller degree. (n=173, see diagram next page)

Three sources had a statistically significant relationship: successful experiences (large influence), observing others (small influence), and experiencing stress and anxiety had a small negative relationship (the negative relationship is a beneficial indicator). Receiving positive feedback from others did not have a strong influence.

Communication theory predicts that successful presentation experiences increase communication self-efficacy beliefs, while failure experiences lower them. Individuals with high communication self-efficacy will seek out opportunities to present and will continue to develop their skills, while those with low presentation self-efficacy will avoid giving presentations and are therefore less likely to build their presentation skills.
What relationship was there between young people’s communication self-efficacy and external evaluators’ average scores?

There was a small, although statistically significant, relationship between youth who reported higher levels of communication self-efficacy and who also scored higher on their presentation by a panel of evaluators (n=126, β=0.178; p=0.045).

**Finding:** Youth who are highly confident in their communication abilities are, on average, scored higher on their public speaking by evaluators.

**Recommendations for 4-H public speaking**

Given that successful (mastery) experiences influences communication confidence, and a relationship between communication confidence and evaluators’ scoring, we recommend broadening opportunities for youth to present and participate in 4-H presentation events, including removing seal requirements (i.e., remove requirement that youth must earn a gold to advance).

Explore what it is about mastery experiences that influences communication self-efficacy to inform the 4-H presentation program.

“Our family greatly appreciated the efforts and the support of the evaluators and the state ambassadors to make this event possible. Thank you for the inspiration.”

**Technical Details:** General linear regression model (n=173, adjusted R-Square=0.43) with mastery experiences (β=0.485, p<0.001); vicarious experiences (β=0.129, p=0.039); social persuasions (β=0.095, p=0.275); and affective states (β=-0.149, p=0.015).
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