

College of Agriculture Department of Communications and Agricultural Education

DEVELOPING THE NEXT GENERATION OF WATER ADVOCATES

Dr. Gaea Hock, Katelyn Bohnenblust, Zachary Callaghan Kansas State University



INTRODUCTION

- In January 2015, a team of state agencies developed the Long-Term Vision for the Future of Water Supply in Kansas to address the issue of water depletion in our state.
- The Education and Public Outreach Supplement of the Vision specifically states,
 - "Increase awareness and knowledge of Kansas youth on water-related issues through K-12 education and beyond-the-classroom opportunities"
 - "Develop partnerships between industry, community, and educational institutions that will promote and train for water-related careers" (A long term vision..., 2015, p. 72).



A LONG-TERM VISION FOR THE FUTURE OF WATER SUPPLY IN KANSAS

Developed based upon input from the citizens of Kansas

- One action item states, "Collaborate with youth-related organization leadership on water-related educational opportunities and establish sessions and experiences focused on water" (A long term vision..., 2015, p. 75).
- National FFA recognizes the need "to include literacy and advocacy as foundational skills for their student members" (National FFA Organization, 2015, para. 1).
- The idea for a training program to prepare youth for this challenge was the dream of a western Kansas girl.
- The Kansas Youth Water Advocates Conference was developed as a way to train youth about water topics and get them the skills needed to speak about them.

PLANNING

- Several meetings with KDA staff
- Identified undergraduate to help plan
 - She received the Morse Scholarship from K-State Libraries (\$3,000 scholarship) to work on this project
- Brainstormed conference schedule and format
- Reached out to potential speakers/presenters
- Promoted the event and recruited participants
- Developed the instruments and received IRB approval

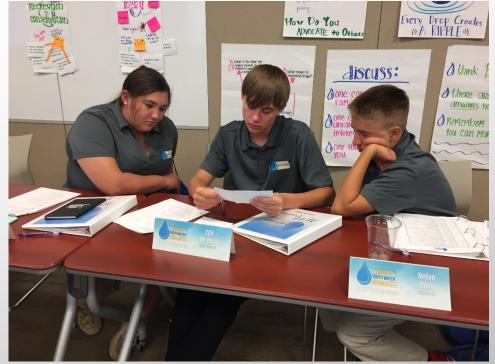




METHODOLOGY

- Eleven students attended the KS-YWAC July 12-14, 2017 in Manhattan, KS.
 - Grades 9-12 from nine different high schools across the state.
- The conference included both water specific and communication focused sessions.
- Students completed a water-focused knowledge assessment and a public speaking self-efficacy assessment before and after the conference.
- The post-conference knowledge assessment had seven additional questions than the pre-test.
- Students also completed a post-conference satisfaction survey.





RESULTS & FINDINGS

- Knowledge assessment
 - Positive improvements from pre (M = 8.64, SD = .41) to post-conference (M = 12.18, SD = .66) when looking at the same 15 questions on each instrument.
 - The average score increased by 23% (from 58% to 81%).
 - The 22 item post-assessment resulted in a 79% average (M = 17.27, SD = .95).
 - A paired-samples t-test was statistically significant at the .05 alpha level (t(10) = -9.63, p = .00)
- Self-efficacy
 - A paired-samples t-test indicated there was a significant difference in the scores from the pretest (M = 4.39, SD = .31) to the posttest (M = 5.18, SD = .44); t(10) = -8.70, p = .00.
- Conference satisfaction
 - The post conference satisfaction survey reported a mean of 4.56 (SD = .37) with a maximum of 5.

- Students commented:
 - The most useful aspect of the conference was *"the inclusion of both water issues and leadership development."*
 - The favorite part of the conference was *"learning the water differences in western and eastern Kansas, while also bonding with many students who share the same passion."*



LONGITUDINAL DATA

- The two instruments (knowledge and efficacy) were sent out three more times to measure longitudinal change and track the work the advocates completed throughout the year
 - October 5 responses
 - Presentations at the State Fair, Governor's Water Tour, Water Congress, Governor's Water Conference and to other FFA chapters and classrooms
 - January 7 responses
 - Presentations at civic groups, elementary school, FFA alumni, college public speaking course, and public speaking competitions
 - April 4 responses
 - Presentations at a "greener living" event, in ag class, and Kansas Youth Institute

CONCLUSIONS & IMPLICATIONS

- The KS-YWAC provided an opportunity for eleven high school students to learn about their state's water resources and develop their own speaking and presenting skills.
- Students were satisfied with the conference and it increased their knowledge of water-related topics and public speaking self-efficacy.
- Several students utilized the knowledge and skills they gained from the training to present at a variety of events throughout the year

RECOMMENDATIONS

- More research is needed to increase the effectiveness of this program and how to best extend the influence throughout the advocate's full year of service.
- Continue the program in an effort to train more students about Kansas water resources



RECOMMENDATIONS FOR TEACHERS

- The three-circle model of agricultural education encourages the extension of classroom learning to supervised agricultural experiences and FFA leadership events.
 - Encourage students to conduct exploratory SAEs to learn more about important agricultural topics.
 - Partner them with community members who work in the agricultural industry.
 - Solicit support from state agencies who work to enhance a sector of the industry.
 - Engage with cooperative extension and area research stations.
 - Participate in Farm Bureau events at the local and state level.
 - Design educational assignments that encourage students to research local issues.
 - Conduct research that can be used to compete in the FFA Agriscience Fair
 - Compete in FFA CDEs and LDEs that allow students to extend their learning beyond the classroom.
 - Integrate local agricultural issues and advocacy efforts in the chapter's Program of Activities and National Chapter Award application
- *This information was published in the Agricultural Education Magazine, Sept/Oct 2017



NEXT STEPS

- Students serve as a member of the Kansas Youth Water Advocates team for a year
 - They receive mentorship to help them fully develop their knowledge and skills.
- Held the Western Kansas YWAC, March 23-24, 2018, Garden City, KS
- Currently in discussion about the best option for this program in the future





QUOTE FROM FOUNDING YOUTH WATER ADVOCATE

- "This past year I have seen my future unfolding before me. I have realized that what we do today will impact what happens tomorrow. If we as FFA members take action, we will not only be able to impact agriculture in our communities, but in the state of Kansas. We will not only play an active role in creating our future, but we will ensure the future of agriculture for all."
 - - Grace Roth, Holcomb High School

FOLLOW US ON SOCIAL MEDIA

Kansas Youth Water Advocates



ks_ywac



ks_ywac

