Field Experience at the K-State Riley County Research and Extension

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Overview

- Land-grant University System
- Cooperative Extension System
 - K-State Research and Extension
- Scope of Work
 - Stay Strong, Stay Healthy
 - 4-H Verde Clovers club
- Learning Objectives
- Activities Performed and Projects Developed
- MPH Foundational Competencies
- Conclusion



Land-grant University System

- 1862 the Morrill Act signed into law by President Abraham Lincoln
- 1890 the second Morrill Act
- 1994 the Elementary and Secondary Reauthorization Act
- Jonathan Baldwin Turner of Illinois: "In order for a democratic government to work, it requires educated citizens"
- 1914 the Smith Lever Act, creating the Cooperative Extension system (Collins, 2015; Herren & Edwards, 2002)



Cooperative Extension System

- To improve access to education, bringing land-grant university knowledge and resources to people where they live and work (Rasmussen, 1989).
- To identify the problems and needs of ordinary people, bring these problems and needs to the attention of researchers, and deliver non-formal education to solve these problems and needs (McDowell, 2001).
- Approaches: service, content transmission, facilitation, and transformative education (Franz, 2014).







(https://www.ksre.k-state.edu/boardleadership/about-ksre/land-grant.html)





K-State Research and Extension

Five grand challenges







K-State Riley County Research and Extension







- 240 hours on site (May September 2017)
- Virginia Barnard, MPH Family and Consumer Sciences Agent
 - Stay Strong, Stay Healthy
 - 4-H Verde Clovers club
 - Tobacco Free Parks campaign



- Evidence based eight-week exercise program for older adults.
- Goal: improve health and quality of life of the participants.
- How: hour long strengthening exercise sessions twice a week





Stay Strong, Stay Healthy

 "Regular physical activity, including aerobic activity and musclestrengthening activity, is essential for healthy aging. (...) by engaging in each recommended type of physical activity, can reduce the risk of chronic disease, premature mortality, functional limitations, and disability." (ACSM/AHA)





- 2008 Physical Activity Guidelines for Americans
 - aerobic, muscle-strengthening, flexibility and balance exercises recommendations.
- Muscle-strengthening:
 - muscle-strengthening activities that involve all the major muscle groups (legs, hips, chest, back, abdomen, shoulders, and arms) at least 2 days a week.





- Exercise class structure:
 - Warm-up (5 to 7 minutes of instructor-led activity)
 - Strengthening exercises (work to 2 sets of 10 repetitions of each exercise)
 - Cool-down (3 to 5 minutes of instructor-led activity)



- Tasks and products:
 - Collect pre- and post-assessment data
 - Assist exercise sessions
 - Correct exercise form
 - Supplemental material
 - Level 1
 - Level 2
 - Behavior change activities
 - Goal setting
 - Action planning
 - Coping planning





- Is this enough?
 - "All older adults should avoid inactivity. Some physical activity is better than none, and older adults who participate in any amount of physical activity gain some health benefits."





- 4-H: opportunity for youth ages 7-19 to learn more about:
 - o citizenship,
 - leadership,
 - life skills.





- Verde Clovers "Salud, Saber, Sentir y Vivir"
 - o Fall semester of 2016 create a multicultural club
 - Spring semester of 2017 official 4-H club







- 4-H Verde Clovers Camp
 - July 19-21
 - 10-12 youth
 - Civic Plus, Meadowlark Hills, KSU Insect Zoo, Ahearn Fieldhouse, Vanier Football Complex
 - Physical activity, nutrition, and STEM activities





- 4-H Verde Clovers Camp
 - Learn by doing
 - An opportunity to exercise citizenship, leadership, and life skills







- To understand the community needs, and how K-State Riley County Research and Extension addresses those needs.
- To understand the U.S. social system and how it impacts underserved populations.
- To advocate for environmental system changes (tobacco free parks program).



- To understand the community needs, and how K-State Riley County Research and Extension addresses those needs.
 - o K-State Riley County Research and Extension Office
 - 2017 Riley County Fair



- To understand the U.S. social system and how it impacts underserved populations.
 - \circ Race, sexual identity, age, disability, SES, geographic location \rightarrow impact health
 - Greater obstacles to health
 - 2015 Community Needs Assessment for Riley County (Gregory, Coleman, & Jolley,
 2015):
 - Community growth → more disparities
 - "Invisible" population



• To advocate for environmental system changes (tobacco free parks program).



- Smoking leads to diseases and disabilities, harming nearly every organ of the body (U.S. Department of Health and Human Services, 2014).
- Discarded cigarettes and other forms of tobacco are toxic and hazardous to the environment (Pennsylvania Department of Health, 2016).
- Self-enforcing policies depend on adequate signage.



Activities performed:

- anticipated activities
- unanticipated activities

Products developed:

- Supplemental material SSSH
- Behavior Change Activities
- 4-H Verde Clovers Camp



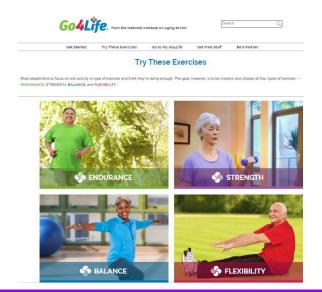
Activities performed:

- 4-H Verde Clovers camp
- Stay Strong, Stay Healthy
- 2017 Riley County 4-H Fashion Revue
- food safety during food preparation 4-H Verde Clovers club and their families
- 2017 Riley County Fair
- Riley County Food Survey for the Flint Hills Wellness Coalition
- Translating the Riley County Food Survey from English to Spanish
- Mailing nutrition and physical activity information to the WIC (Women, Infants, and Children) program families



Products developed:

Supplemental material - SSSH



EXERCISE 8: SEATED BACK/HIPS EXTENSION
A great exercise for strengthening low back and hips muscles, and help with



Repeat 10 movements for 1 set. Rest for about 1 minute and then complete a second set.

THE MOVEMENT:

- 1. Seat tall using a chair with your palms facing your knees.
- $\textbf{2.} \ \mathsf{You} \ \mathsf{can} \ \mathsf{keep} \ \mathsf{your} \ \mathsf{palms} \ \mathsf{facing} \ \mathsf{your} \ \mathsf{knees} \ \mathsf{or} \ \mathsf{cross} \ \mathsf{your} \ \mathsf{arms} \ \mathsf{over} \ \mathsf{your} \ \mathsf{chest}.$
- Slowly bend over without arching your back. YOU DON'T NEED TO TOUCH YOUR KNEES WITH YOUR CHEST.
- 4. Go back to the starting position.

MAKE SURE YOU:

- Don't arch your back, keeping a good posture
- Don't hold your breath

EXERCISE 9: SEATED ELBOW TO KNEE

A great exercise for strengthening abs and low back muscles



Repeat 10 movements for 1 set. Rest for about 1 minute and then complete a second

THE MOVEMENT:

- 1. Seat tall using a chair.
- 2. Raise one arm.
- Bring the raised arm and the opposite leg together. IF YOUR KNEE AND ELBOW DON'T TOUCH EACH OTHER IT IS FINE, just do what you can.
- Go back to the starting position and do the same movement with opposite arm and leg.

MAKE SURE YOU:

- Keep a good posture
- Don't hold your breath

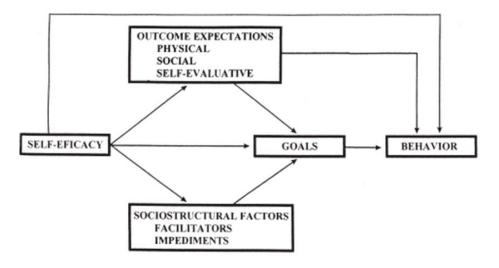


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Activities Performed and Products Developed

Products developed:

- Behavioral Change Activities
 - Goal setting
 - Action planning
 - Coping planning



Bandura (2004)



Products developed:

4-H Verde Clovers Camp

Verde Clovers Day Camp

Wednesday, July 19th

9-9:30 am Ice Breaker and Snack

10:00 am Depart for Civics Plus

10:15 - 11:15 am Tour of Civics Plus

11:20-Noon- Lunch

Noon-1:20 pm STEM with Eric

1:30 pm Depart for Meadowlark Hill

1:45-2:45 pm Meadowlark Hills Exploration/ Olympics

Thursday, July 20th

9-10:05 am Ice Breaker and Snack

10:05 am Depart for Insect Zoo

10:30-11:30 am KSU Insect Zoo

11:45-12:30 pm Lunch

12:30- 2:00 pm STEM with Eric

2:00-3:00 pmPainting on Canvas 101

Friday, July 21st

9-9:30 am Ice Breaker and Snack

9:30 am Depart for Ahearn Fieldhouse

9:45-11:00 am Ahearn Fieldhouse

11:15-Noon Lunch

Noon-12:30pm Finish STEM Projects

12:30 pmDepart for Vanier Sports Complex

12:45-2:00 pm Tour Vanier

2:15-3:00 pm Call Hall Ice Cream



- 1. Interpret results of data analysis for public health research, policy or practice.
- 2. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels.
- 3. Assess population needs, assets and capabilities that affect communities' health.
- 4. Propose strategies to identify stakeholders and build coalition and partnerships for influencing public health outcomes.
- 5. Select communication strategies for different audiences and sectors.



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Conclusion

- Put into practice MPH knowledge
- Real world public health perspective
- Memorable and useful in my future as a public health professional



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Questions?