



Evaluating Adult Learner Experiences at a State Fair Extension Exhibit

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LITERATURE / BACKGROUND

Informal science education (and communication)

- Science learning in everyday life (NARST); free-choice learning (Dierking, Falk, Rennie, Anderson, Ellenbogen, 2003)

Adults as **self-directed**

- Self-determination, lifelong learning (Cercone, 2008; Hiemstra, 1994; Stubbé & Theunissen, 2008)



LITERATURE / BACKGROUND

Museums as teaching and free-choice learning env'ts

- Interactives, demonstrations, research on display (Falk, 1999; Falk, 2001; Falk & Dierking, 2002)

State Fairs/Extension

- Informal learning, public engagement (Gamon & Primmer, 1995; Fairchild, Vigna, & Fassett, 2004; Tucker, Bricker, & Huerta, 2011)

Attitude change

- Cognitive, affective, and behavioral (Simonson, 1979; Simonson & Maushak, 1996; Watson, Kim, & Watson, 2016)

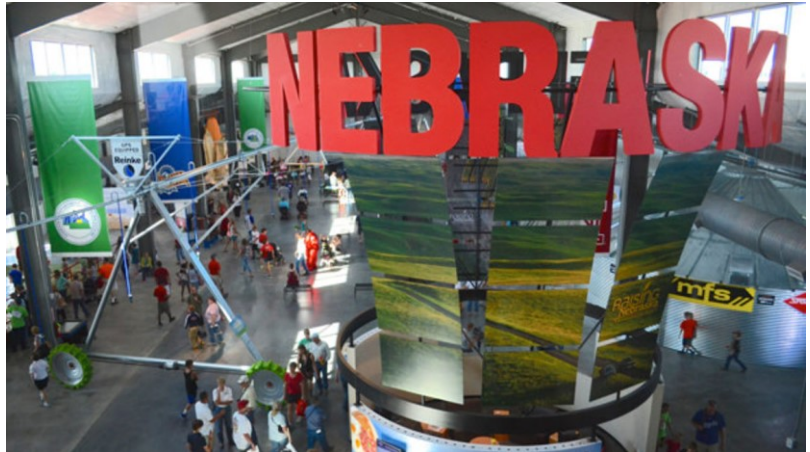


CONTEXT



Grand Island, NE

- 25,000 square feet
- Open year-round
- 2016 State fair
- School field trips
- Events/workshops



QUESTIONS AND METHODS

- Demographics and backgrounds
- Exhibit activities – least/most impactful
- Attitude change toward ag and environment
- Differences/similarities in experiences of ag backgrounds vs. non-ag backgrounds

iPad surveys (n=93)

Interviews (n=14)



DEMOGRAPHICS & BACKGROUNDS

Gender

Male 35.4% Female 64.6%

Ages

19-35 (30.4%) 36-50 (16.5%) 51-65 (22.8%) 66+ (30.4%)

Home

Nebraska 82.8% Out of state 17.2%

Race

White 100%

Education

Bachelor's or higher (48.1%) Some college or less (51.9%)



EXHIBIT ACTIVITIES: ENJOYMENT

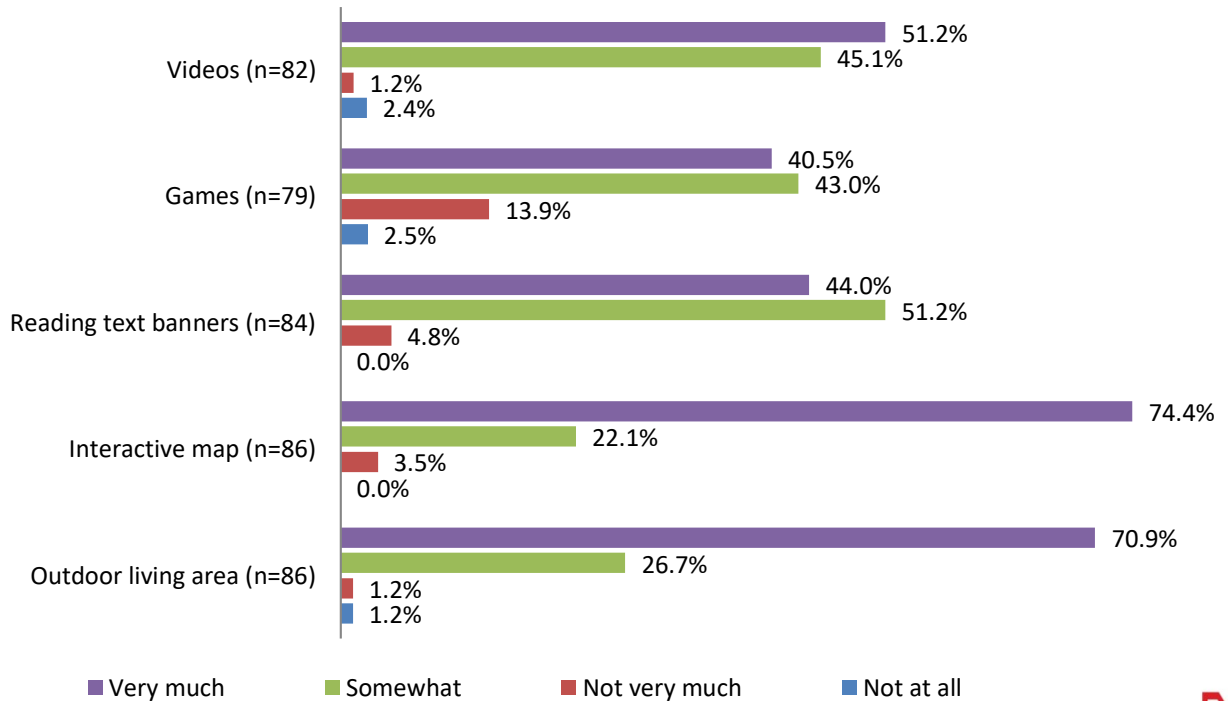


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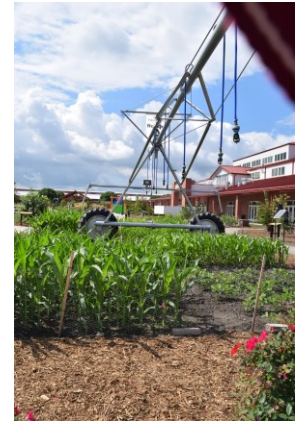
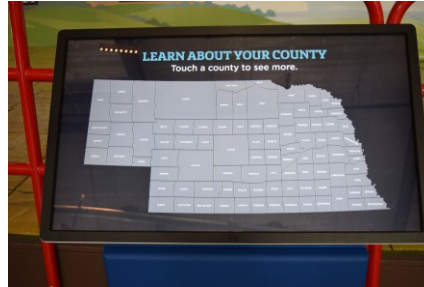
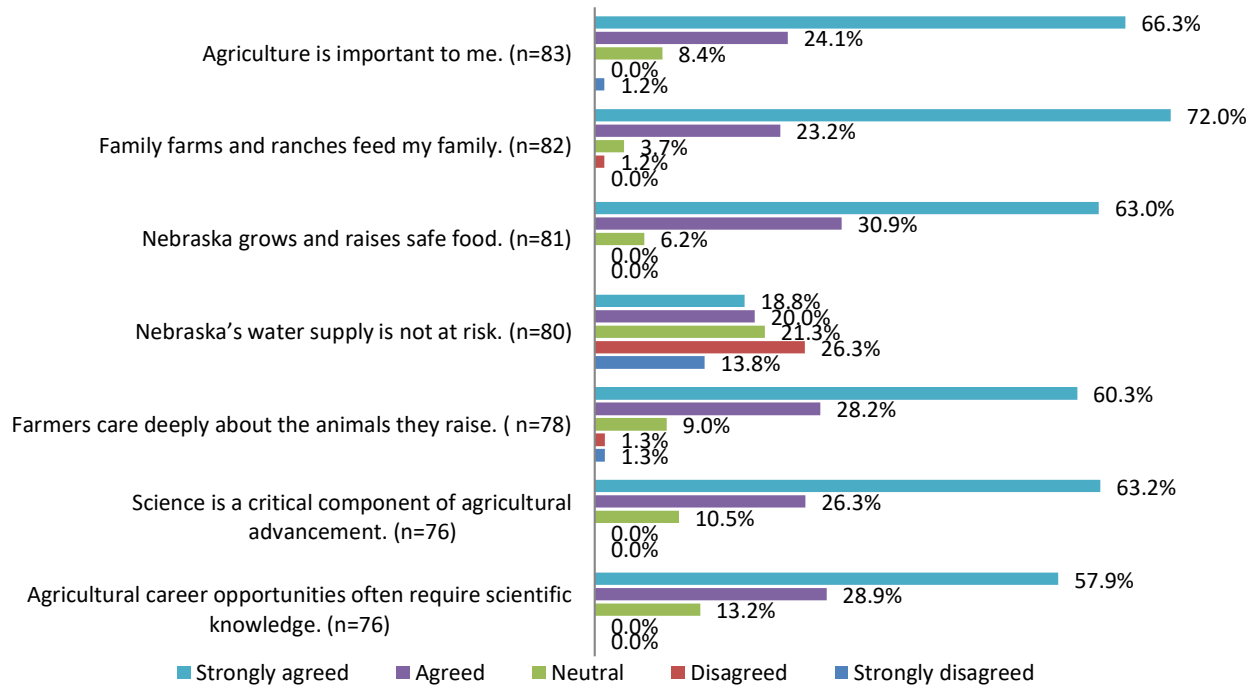


EXHIBIT ACTIVITIES: TIME

Exhibit Area	Mean
Grain Bin Theater (n=84)	2.5
Soybean Reading Rail (n=80)	2.2
Trusted Voices Video (n=81)	2.4
Control the Flow-Pivot Game (n=78)	2.4
Raising Animals for Food-Livestock Row (n=83)	3.0
Plant Banners (n=80)	2.6
Corn Reading Rail (n=81)	2.5
Nebraska Walkable Map (n=87)	3.2
Agri-House (n=83)	2.7
Drive a Combine (n=83)	2.7
Soils Exhibit (n=82)	2.6
Quiz Bowl Game (n=81)	2.2
Outdoor Living Area (n=83)	3.0

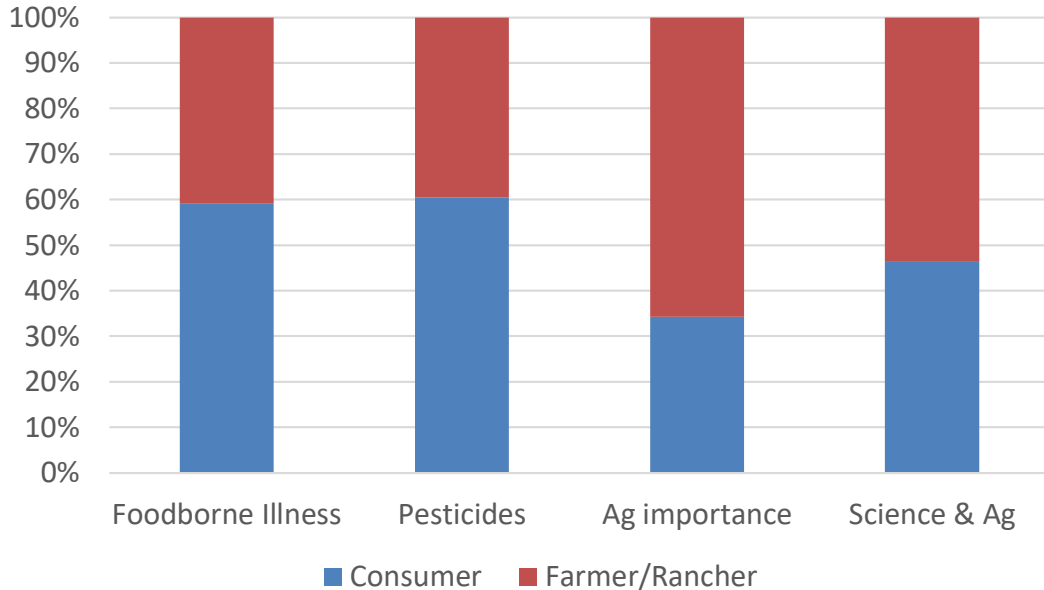


ATTITUDE CHANGE



NON-AG VS. AG BACKGROUNDS

Consumer/Farmers, Ranchers, & Industry



FUTURE RESEARCH

- Interview themes and narratives
- School field trip surveys
- Mobile eye tracking

Implications

- How can instructional opportunities be designed for bringing in and engaging more diverse non-ag audiences?
- Content testing and focus shifting: food safety, hydroponics, others?
- Delivery: mobile exhibits, virtual reality, electronic field trips





Questions?

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