

**Multistate Agricultural Literacy Research Committee (W2006) Meeting
September 19, 2016
Tanque Verde Ranch
Tucson, Arizona**

Members Present:

Debra Spielmaker, Utah State University (chair)	debra.spielmaker@usu.edu
Kellie Enns, Colorado State University (vice chair)	kellie.enns@colostate.edu
Denise Stewardson, Utah State University (secretary)	denise.stewardson@usu.edu
Cory Forbes, University of Nebraska-Lincoln	cforbes3@unl.edu
Gaea Hock, Kansas State University	ghock@ksu.edu
Michael Martin, Colorado State University	Michael.j.martin@colostate.edu
Kathryn Stofer, University of Florida (via phone)	stofer@ufl.edu
Brian Warnick, Utah State University (admin. advisor)	brian.warnick@usu.edu

Guests Present:

Paige Wray, Utah State University	paige.wray@usu.edu
M'Randa Sandlin, University of Hawaii	msandlin@hawaii.edu
James Christiansen, Texas A & M University	j-christiansen@tamu.edu

Members Absent:

Jennifer Keshwani, Nebraska Cooperative Extension	jmelander7@unl.edu
Ania Wieczoreli, University of Hawaii	ania@hawaii.edu
Cary Trexler, University of California, Davis	cjtrexler@ucdavis.edu
Carl Igo, Montana State University	cigo@montana.edu
Monica Pastor, University of Arizona Extension	mpastor@cals.arizona.edu
Robert Martin, Iowa State University	drmartin@iastate.edu
Kerry Schwartz, University of Arizona	kschwartz@ag.arizona.edu

Agenda Items and Minutes

Debra Spielmaker, committee chair, called the meeting to order at 8:45 a.m. and reviewed the meeting agenda (see attached).

Denise Stewardson, secretary, took roll call using the currently posted Participant List from W2006 (NIMSS website: http://nimss.umd.edu/Igu_v2/homepages/member.cfm?trackID=16496). Members/guests present and absent are noted above. Members gave brief introductions of their professional positions and research interests.

Motion by Kellie Enns to approve minutes of the September 14, 2015, meeting in Corvallis, OR; seconded by Gaea Hock. Motion passed.

The National Information Management and Support System (NIMSS) has an updated website (it moved from .edu to .org): www.nimss.org.

Committee agreed to submit a May 2017 meeting request for approval in San Luis Obispo (National AAAE meeting).

Spielmaker gave a report on updates on agricultural literacy Wikispace page: <http://agliteracy.wikispaces.com/home>

Authors of agricultural literacy questionnaires gave permission to post their research instruments to this site. Zotero—used to cite influential publications—is included on this page. Multistate research is also posted under W2006 Publications (poster presentation, dissertations, etc.).

Corey Forbes is looking for literacy assessments for adults, age 18 and older (doesn't appear to be much available). Michael Martin is also looking for standardized instruments.

Spielmaker reported on research being conducted at Utah State University by graduate assistant—agricultural literacy in college students.

Spielmaker will add any members to the Zotero account to add relevant literacy information. (Katie Stofer made specific request.)

Michael Martin reviewed his contributions to the agricultural literacy definitions page in Wikipedia: https://en.wikipedia.org/wiki/Agricultural_literacy *Committee is invited and encouraged to add pertinent information to this page.*

Priority 1 of the AAAENational Research Agenda <http://aaaonline.org/National-Research-Agenda> is being used and circulated in research.

Summaries of Research and Development in Agricultural Literacy (WCC-106, 1999) are posted on Wiki page.

Review of report submitted to AES by Spielmaker:

- Short-term outcomes
- Outputs
- Activities
- Milestones

Brian Warnick, W2006 administrator, stated that a more detailed report needs to be sent to Agricultural Experiment Station official reporting. Discussion: Current Research Information System (CRIS) reports might include sharing individual reports to combine into single report for multistate OR make single report and then have individuals pull their respective pieces for their CRIS reports. Warnick needs report within 90 days of W2006 meeting.

Spielmaker requested information from members' annual AES reports so she can submit a committee report. Other committee members who are not part of AES also need to send a report of their research and efforts to Spielmaker. Deadline: December 1, 2016. Report must include short-term outcomes, outputs, activities, milestones. Hock suggested Spielmaker create a Google document to allow members to add their reports.

Spielmaker will also send link to previous Google document so that members can update their progress toward research objectives. This is the link <https://goo.gl/forms/bCiYOKqFpxxbGJb93>

Reporting of in-progress research activities and planned completion dates should be included.
Spielmaker will add this piece to the Google document.

Discussion: Collaboration and support of a National Center for Agricultural Literacy (NCAL) with National Agriculture in the Classroom Organization (NAITCO). How might collaboration between NALC work with W2006 and other entities (FFA, etc.)? NAITCO is exploring a national center that will increase agricultural literacy programmatically, beyond a single institution. Spielmaker can present objectives of this group for opportunities for other entities to take on this research.

Discussion: Doesn't this collaboration mirror SPECA grants? Grants require AITC collaboration for K-12 projects. SPECA is underfunded. How will small pool of funding from USDA-NIFA be better shared to achieve objectives? Funding for graduate assistantships would be helpful with research. Concern over reducing workload for administrators; perhaps award scholarships to graduate students to address such. Consequently, projects (for approximately two years) may fund students to progress work on the W2006 objectives. Sub awards may reduce reporting requirements and time for administrators. Awards may also be available to professors.

10:00 AM: Break to organize Fishbowl Discussion

Participants:

Committee members (see attendee list)

M'Randa Sandlin, University of Hawaii; Dr. James Christiansen, Texas A & M University

Research Objective 1

Assess agricultural knowledge of diverse segments of the population:

- What are the points of acquisition of agricultural knowledge?
- What decisions are made based upon assessed knowledge?

Spielmaker:

Using K-W-L charts to assess agricultural literacy (research underway)

Using farm field days for students in grades 3-4 to assess impacts on agricultural knowledge (master's research by Paige Wray)

Knowledge (related to high school NALOs), attitudes, and decisions made related to agriculture and food (dissertation proposal in development)

Sample of students registered for a general education course at USU

Hock:

Graduate student used two instruments: Nourishing the Planet for 21st Century (commercial curriculum) and Frick's agricultural literacy survey instrument (1995). Used control group school classrooms (one class at each school) with pre- and post-surveys; second group received classroom instruction over two-week time frame with instruments; third group had experiential learning lessons with instruments. Compared groups' performances on instruments.

Forbes:

Corn as a Model: four-year project (currently end of first year); develop a new 3rd grade science unit as a model organism to teach core life science standards in genetic and variation
 NGSS presents opportunities for student learning regarding traits and inheritance, similarities and differences 6-8-week unit; lessons piloted in Lincoln, NE; continue to work with same teachers for iterative study and refinement
 Future: rollout of lessons to larger population (statewide, regionally, nationwide). Funding from NE Corn Board to develop online simulation to illustrate variance in populations. Research: What are students' understanding of the core ideas? What are levels of gain over time?

Martin:

GMO: No further data collection; results in poster form and publication. *Martin will send citations to Spielmaker.*

School learning vs home learning: Analyzing student data using unique model using school-based agricultural literacy and health education (e.g., Does agricultural literacy affect test scores?)

Martin: will serve as editor of agricultural literacy edition of *The Agricultural Education Magazine*.

Research Objective 2

Asses attitudes and perceptions and motivations concerning agriculture of diverse segments of the population:

- How are perceptions, attitudes, and motivations developed?
- What decisions are made based upon assessed attitudes, perceptions, and motivations?

Hock:

Hock will send student's poster citation to Spielmaker for posting to the Wiki page.

Martin:

Study looking at how students in environmental and organic studies look at agriculture. Students struggle to feel part of agriculture despite the fact that they are taking agriculture classes.

Martin and Enns are publishing article for *Journal of Agricultural Education*; they are creating a framework using perceptions of student focus groups.

Environmental education SIG is looking at focus on agriculture and food; American Education Research Association (AERA).

Survey from CO Department of Agriculture in agriculture and biotechnology forum; asked consumers' perceptions (professional survey group chose adult population in Colorado~1000n), "What are trustworthy sources of information?" in regards to "food" and "agriculture." *Martin will share survey link with Spielmaker.*

Stofer

GMO survey results will be reported at next W2006 meeting.

Objective 3:

Evaluate agricultural literacy to measure the program impact:

- What is effective programming?
- What is the impact of effective programming, both short-term and longitudinal?
- What knowledge, attitudes, motivations exist for individuals that participate in agricultural literacy initiatives?

Spielmaker

2015 Agriculture in the Classroom State Reports (descriptive research completed, available online at www.agclassroom.org)

Farm Field Days as a Learning Model for Agricultural Literacy (needs assessment, descriptive analysis research poster at WRAAAE)

Developing Agricultural Literacy Outcomes: A Synthesis of Research-based Expectations (content analysis...)

Evaluating Farm Field Day Events as a Model for Increasing Agricultural Literacy

Program Evaluation using Concerns-based Adoption Model and Stufflebeam's Context, Input Process Product (CIPP) model for evaluating an agricultural literacy intervention based on the NALOs

Development of online tools for preservice program evaluation (research currently underway; awaiting IRB approval)

Martin

Historical review of Seed to Table—educational arm of Slow Food. Researching the impacts of school gardens

Miranda

Ania Wieczoreli collected longitudinal data (2001-2014); nutrition piece looking at how people's diets have changed. 2007-2010: asked how Hawaiian people's diets changed, responses skyrocketed regarding what people were avoiding in their diets

Summary by Spielmaker: Remember to submit all progress on objectives.

Election of officers:

Motion by Hock to re-elect Spielmaker as committee chair of W2006 until September 2017; seconded by Enns. Motion passed.

Motion by Enns to elect Martin as vice chair of W2006, effective immediately through 2017; seconded by Hock. Motion passed.

Motion by Martin to re-elect Denise Stewardson as secretary of W2006 until September 2017; seconded by Hock. Motion passed.

Enns will continue to chair the Agricultural Literacy SIG for AAAE.

Enns noted that the W2006 committee submitted a proposal to write the narrative for Priority 1 of AAAE's [National Research Agenda](#) updates.

Research Priority 1: Public and Policy Maker Understanding of Agriculture and Natural Resources

- What methods, models, and programs are effective in informing public opinions about agriculture and natural resource issues?
- What methods, models, and programs are effective in preparing people to inform policy makers on agriculture and natural resource issues?

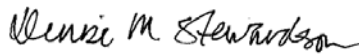
Next meeting: May 16, 2017 in San Luis Obispo, CA.

Meeting adjourned at 11:45 AM.

Respectfully submitted,



Debra Spielmaker, Chair



Denise Stewardson, Secretary

**W 2006 Multistate Agricultural Literacy Research Committee
Draft Meeting Agenda – September 14, 2015**

September 14: 8:30 AM – 12:00 PM
Weyerhaeuser Conference Room
LaSells Stewart Center
Corvallis, Oregon

- Introductions & Agenda Overview
- Approval of the May 19, 2015 Meeting Minutes
- Comments and Reporting: Brian Warnick (our new W2006 Administrator)
- **Short-term Outcomes:** Quantitative, measurable benefits of the research outputs as experienced by those who receive them. Examples include the adoption of a technology, the creation of jobs, reduced cost to the consumer, less pesticide exposure to farmers, or access to more nutritious food.
- **Outputs:** Defined products (tangible or intangible) that are delivered by a research project. Examples of outputs are reports, data, information, observations, publications, and patents.
- **Activities:** Organized and specific functions or duties carried out by individuals or teams using scientific methods to reveal new knowledge and develop new understanding.
- **Milestones:** Key intermediate targets necessary for achieving and/or delivering the outputs of a project, within an agreed timeframe. Milestones are useful for managing complex projects. For example, a milestone for a biotechnology project might be "To reduce our genetic transformation procedures to practice by December 2004."

This is essentially what we have to provide each year for our CRIS report. She said that if participants were required to bring these to the annual meeting (preferred) or email them to you and/or Denise within a couple of weeks of the meeting, you would be able to quickly compile the outcomes, outputs and activities of the committee. She said it would also increase the level of accountability for each committee member. You and I both know from years of experience on this committee that there are many people who just like to talk about what they do, but don't really do anything. The bottom line is that if there are no impacts shown by next year, they will pull the funding for the project – even midstream. I am happy to send out an email if needed. She also shared a link to a Prezi about reporting progress: <http://www.waaesd.org/research-reporting>.

- Membership & List Serve Updates
- Review of Multistate Objectives - <http://w2006.wikispaces.com/>
- Review and discuss of the recent AGree Plan for Food and Ag Research Reform. This overview article, http://farmfutures.com/story-paper-describes-5-ways-boost-lagging-k-12-ag-education-0-129979-spx_0, and referenced publication [Food and Agricultural Education in the United States](#) adds credibility (addressing needs) to our committee work. The research questions posed in this report are closely aligned with our objectives.

- Member presentations of current and/or planned research underway addressing the multistate objectives. Members should come prepared to share research questions they are investigating along with research timelines.
- Working-meeting: In small subgroups, review, evaluate and discuss frameworks and examples of instrumentation to measure the research objectives. Members should come prepared to share instrumentation they are using or considering for their research.
- Set up future collaboration time for pilot testing instruments.

**W2006 Multistate Agricultural Literacy Research Committee
Agenda – September 19, 2016**

Committee Meeting & Discussion – September 19: 8:30 AM – Noon
Boardroom - Tanque Verde Ranch
Tucson, Arizona

Committee Meeting – September 19, 8:30 AM – 10:00 Am

- Introductions & Agenda Overview
- Approval of the September 14, 2015 Meeting Minutes
- Membership & List Serve Updates
- Report on Priority 1: Michael Martin
- Review of Report Submitted to AES: Debra Spielmaker
 - **Short-term Outcomes:** Quantitative, measurable benefits of the research outputs as experienced by those who receive them.
 - **Outputs:** Defined products (tangible or intangible) that are delivered by a research project. Examples of outputs are reports, data, information, observations, publications, and patents.
 - **Activities:** Organized and specific functions or duties carried out by individuals or teams using scientific methods to reveal new knowledge and develop new understanding.
 - **Milestones:** Key intermediate targets necessary for achieving and/or delivering the outputs of a project, within an agreed timeframe.
- Report in-progress research activities and planned completion dates
- Discuss the collaboration and support of a/the National Agricultural Literacy Center

Open Fishbowl Discussion – September 19, 10:00 AM – Noon

The [fish-bowl discussion](#) will focus on the objectives of the W2006. There are three research objectives and we (researchers) need to plan to discuss/share research underway on each objective for 30 minutes (a few slides are welcome). Researchers working on each objective ([view assignments](#)) will be the participants in the fishbowl. One “empty” chair will be made available in the fishbowl for someone from the audience who wants to engage in the conversation. We may modify the format depending on the size of the group.

1. Assess agricultural knowledge of diverse segments of the population: a) What are the points of acquisition of agricultural knowledge? b) What decisions are made based upon assessed knowledge?
2. Assess attitudes and perceptions and motivations concerning agriculture of diverse segments of the population. a) How are perceptions, attitudes and motivations developed? b) What decisions are made based upon assessed attitudes, perceptions and motivations?
3. Evaluate agricultural literacy programs to measure the program impact. a) What is effective programming? b) What is the impact of effective programming, both short-term and longitudinal? c) What knowledge, attitudes, and motivations exist for individuals that

participate in agricultural literacy initiatives (formal programs, informal programs, voluntary programs)?