

Multistate Agricultural Literacy Research Committee (W2006) Meeting
September 14, 2015
LaSells Stewart Center
Oregon State University
Corvallis, Oregon

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
Gaea Hock, Mississippi State University	gaea.hock@msstate.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:

Katie Bigness, Cornell University (via phone)	kse45@cornell.edu
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Members Absent:

Jennifer Keshwani, Nebraska Cooperative Extension	jmelander7@unl.edu
Ania Wiczoreli, University of Hawaii	ania@hawaii.edu
Cory Forbes, University of Nebraska-Lincoln	cforbes3@unl.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 8:40 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/lgu_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. It was noted that Katie Bigness (CU) will join as a member of the project. Brian Warnick (USU) was introduced as the project's appointed administrative advisor.

Minutes of the May 19, 2015, meeting in San Antonio were accepted by acclimation with no objections.

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

Brian Warnick informed committee members that it is critical to report impacts from committee; not everyone has to work on the same project at same time—we may work within committee

objectives even individually within states--but our work **MUST** be reported within the scope of W2006. A coordinated effort is needed to report activities, outputs, impact. USDA Current Research Information System (CRIS) reports are required if members are part of Agricultural Experiment Stations (AES), but reporting also needs to be communicated to each other. (Deadlines are at discretion of each institution.) Minutes of meetings are due within two weeks, and an annual report required.

Spielmaker reiterated the need to synthesize research related to project objectives. Warnick recommended doing this for the annual report due June 15, 2016. Even researchers who are not funded by AES are encouraged to contribute reports. Spielmaker asked that each committee member report at our face-to-face meeting and submit progress and updates. An annual report for W2006 will be compiled.

As a point of clarification on committee structure, officer elections for W2006 will be held in October 2016 (since the original project was approved October 2014).

Spielmaker reviewed the following reporting requirements:

- **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."

She also explained the CRIS reporting process for USDA. If a committee member does not have reporting requirements via NIMSS, members still need to report to Spielmaker (committee chair) for the annual report.

The portal for CRIS reporting is the Research, Extension, and Education Project Online Reporting Tool (REReport) link:

<https://portal.nifa.usda.gov/portal/front/login?service=http%3A%2F%2Fportal.nifa.usda.gov%2Fportal%2F>

Spielmaker and Warnick volunteered to work with Sarah Lupis (Western System Administrator for NIMSS) to make sure objectives are correctly listed on NIMSS with appropriate committee members identified. Spielmaker will contact non-listed "members" to encourage them to officially join the project.

Discussion ensued regarding the difficulty of meeting in Special Interest Groups (SIGs) at the American Association for Agricultural Education (AAAE) meetings due to conflicting interests

of committee members. Gaea Hock organizes SIGs at the national meeting; she will work to avoid conflicting meeting times to assure members' participation.

Kellie Enns will not be at AAAE meeting in Kansas City (May 2016). Mike Martin will chair the Ag Literacy SIG in Enns' absence.

Lupis provided a link to the committee to report progress: <http://www.waaesd.org/research-reporting>. Spielmaker encouraged members to review the Prezi at this link.

Spielmaker briefly reviewed the W2006 list serve and membership list. Warnick asked if committee members had identified their multistate objectives on which to work. Spielmaker affirmed. That list is available on SIG minutes from San Antonio meeting (May 2015). Spielmaker briefly reviewed the multistate objectives.

Discussion ensued regarding the recent AGree Plan for Food and Ag Research Reform: [Food and Agricultural Education in the United States](#). As stated in AGree's mission: "AGree seeks to drive positive change in the food and agriculture system by connecting and challenging leaders from diverse communities to catalyze action and elevate food and agriculture as a national priority." (www.foodandagpolicy.org). Spielmaker encouraged members to look at the website to review stakeholders, mission, and vision. The aforementioned report did not mention AAAE's efforts in agricultural education; Agriculture in the Classroom was noted for its effort in agricultural literacy.

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?

Spielmaker pointed out *Table 1: Funding for Key Food and Agricultural Education Programs in the U.S., K-12* in the AGree report (page 8). In regards to Priority 1: W2006 can showcase what is effective in terms of efficiency of delivering agricultural literacy programs. It was suggested that the committee use this report when writing for Priority 1 (if the committee is granted the proposal). Another interesting item was noted: "What is not readily available is any overarching analysis of the effectiveness of components of the system (e.g. elementary education) let alone the entire agricultural education system" (page 13).

Enns reminded the committee that just as Cary Trexler stated at the San Antonio meeting, research needs to be pulled using common key words being used to define "agricultural literacy). (Trexler's years of research in agricultural literacy is not being identified by those seeking research regarding such.)

Hock asked where "careers" fall within objectives. Committee decided that—based on context—careers could fit under all three objectives.

Enns noted that the research does exist, and therefore, it is important that this committee report not just individual research, but we should be working towards a major nationwide impact statement to help influence researchers to use the language identifying agricultural literacy. Martin recommended a meta-analysis of research to identify agricultural literacy studies.

Spielmaker noted the “Ideas for Improvement” in the AGree report (page 14): “Better data collection about what works in terms of creating agriculturally literate graduates and inspiring and preparing students for careers in the field will be crucial to enabling the creating of an improved system.”

Hock requested that the AGree report be distributed via the AAAE list serve. Stewardson noted that there are faculty from our respective institutions on the AGree committee; perhaps we need to reach out to them. Spielmaker volunteered to write a personal letter to Stephanie Mercier (author of AGree report) on behalf of the committee.

Discussion ensued regarding the report’s call to action including building stronger linkages to STEM efforts, a better trained workforce, and the inclusion of food-related as well as agriculture-related work beginning in elementary schools. Martin agreed with the report’s suggestion for USDA’s National Agricultural Statistics Service (NASS) to conduct an agricultural literacy survey (page 15). AGree’s question was noted: Should the goal of NASS’ survey be to update the 1988 definition of agricultural literacy as defined by the National Academy of Sciences (page 15)?

Martin encouraged committee members to look at Wikipedia’s four definitions of agricultural literacy: https://en.wikipedia.org/wiki/Agricultural_literacy

In examining AGree’s suggestions regarding a “new Committee” (page 16), it was agreed that W2006 should be represented on such a committee. Hock volunteered to meet with Dr. Gregory Bohach, faculty member at Mississippi State University and an advisor for AGree.

Katie Stofer asked how this committee might compile available research Martin suggested that we find a way to gather information on Wikipedia. Stofer suggested a research gate. Spielmaker recommended using Google Scholar, but as Enns pointed out, agricultural literacy in AAAE efforts did not resonate with the author of the AGree report.

Enns shared: We know, internally, that we need to complete CRIS and annual reports, but internally we need to use items that will make agricultural literacy research known, e.g. Wikipedia. The W2006 annual report needs to go on NIMSS reports (Spielmaker will make sure that is posted), and Martin will keep the Wikipedia agricultural literacy page updated. The question was asked: What is the procedure for sharing our information so that it has the broadest impact possible?

Spielmaker suggested developing constructs that can be used at the W2006 Wikispaces page (<http://agliteracy.wikispaces.com/home>), the agricultural literacy Wikipedia page, and the CRIS reporting—constructs that pull the Google Scholar research. The committee looked at keywords being used in “agricultural literacy” research on Google Scholar. Enns suggested a there is a need to help people conduct literature reviews in agricultural literacy. She also suggested that

this committee create a framework to share with researchers, e.g. at national AAAE. An “innovative idea” could be developed on how to create a literature review in the general population’s search options, e.g. Wikipedia. Spielmaker suggested creating five essential constructs to demonstrate the dynamics of Google Scholar pulling the research (pivotal pieces).

Hock volunteered that she has a graduate student who can create the constructs for an innovative poster submission to AAAE.

Spielmaker reminded committee members that “guiding publications” are identified on National Agriculture in the Classroom’s (AITC) Agricultural Literacy page (<http://agclassroom.org/get/literacy.htm>). The difficulty lies in determining how to categorize the information related to agricultural literacy: National Agricultural Literacy Outcomes (NALOs) (<http://agclassroom.org/get/doc/NALObooklet.pdf>), general agricultural literacy, food literacy, agri-food, school gardens, STEM literacy, natural resources.

Spielmaker suggested developing a concept map that will connect and/or compress terms related to agricultural literacy. Discussion ensued as to how to identify constructs.

Hock asked for concrete ideas to get her graduate student started. Spielmaker will revise the Agricultural Literacy Wikispaces page (<http://agliteracy.wikispaces.com/Defining+Agricultural+Literacy>) with information for a public audience and will add a link to the W2006 Wikispace page (<http://w2006.wikispaces.com>).

Martin and Enns shared instruments they are using for agricultural literacy research (these can be found at <http://agliteracy.wikispaces.com/home>). Enns explained the use of Colorado Young Farmer videos on agricultural issues. Researchers then engaged participants in discussions about the importance of agricultural literacy.

Spielmaker discussed the Liesing instruments and the availability of their use. Warnick recommended that permission be requested from at least one author of those studies.

Hock reported that her PhD student administered a true knowledge and perceptions of agricultural literacy survey to high school agricultural education students; post-survey results decreased (using Frick’s instrument). Hock will share that instrument for posting on the W2006 wiki page.

Spielmaker reported that the National Center for Agricultural Literacy program evaluation questions are in draft stage. They are being tested for reliability and plan to be available by October 2015. She also reported she has a graduate student working on evaluation of farm field days using KWL charts about field day experiences. This research will correlate to NALOs. Another graduate student is measuring agricultural literacy intervention using a Concerns-based Adoption Model (CBAM). Students’ concerns and comfort with agriculture are being measured using a pre- and post-perception instrument. This research will correlate to agricultural literacy related to STEM NALOs for teachers, grades K-5.

Spielmaker and Stewardson are evaluating pre-service teachers’ use of AITC resources; evaluation is conducted on-site with a one-year follow-up regarding the use of materials (Did

teachers use a specific resource? What was most helpful?). Hock suggested that maybe an outsider is necessary to get honest feedback (Spielmaker is the outside evaluator). In terms of program evaluation data, Extension wants numbers and impacts. Institutional Review Board (IRB) approval is needed for later evaluation.

Enns asked that, during the May 2015 meeting, committee members revisit their assessments when the broader committee is present. The committee is beginning to see various populations and their appropriateness regarding specific research methods (e.g., paper testing vs KWL) and how to clear IRB, if possible/necessary.

The committee established the following goals:

- Spielmaker: Prepare agenda for National AAAE, May 17-20 in Kansas City
- Hock: Create poster for AAAE, May 2016 (or hopefully, Southern region) regarding constructs
- Report and identify constructs
- Report in-progress research activities and planned completion dates
- Prepare more formal presentations for Agricultural Literacy Wikispace
- Invite a broader audience to participate on W2006 committee: Presentations in brief—Quick Share. Spielmaker will schedule a committee pre-conference meeting for Tuesday, 5/17/16 (10:00 a.m. – noon business meeting) and open-invitation presentation for early afternoon (2:00 – 3:30 p.m. with wider audience in “cracker barrel-style” presentations: <http://www.experts123.com/q/what-is-a-cracker-barrel.html>) with a break for lunch. Work with Missouri Farm Bureau and National AITC Organization to provide snacks.
 - Provide take-away resources for attendees.
 - Invite NCAL (National Center for Agricultural Literacy) to present evaluation instruments.

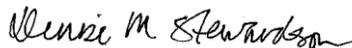
Next meeting: May 17-20, 2016 in Kansas City, MO.

Meeting adjourned at 12:10 p.m.

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.
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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.waesd.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.