

White Paper for Electronic Publishing of Extension Scholarship

Increasingly, UNL Extension information and programs are being developed for electronic publishing through Web sites, audio and video podcasts, and other formats. Formal review processes have been used for numbered Extension publications for years, but Extension has never formally developed and applied standards of quality and review for electronic scholarship. The process outlined in this vision statement will help ensure that the expanded use of electronic technologies enhances how we meet Extension's intent – to discover, integrate, apply, and teach research-based information relevant to the audience. Electronic publishing offers many opportunities for reaching new audiences and we want to ensure that excellence and clientele trust is maintained and expanded.

This vision for electronic publishing of Extension materials provides:

1. A process for peer-review and development of research-based electronic scholarship.
2. Action Team involvement to ensure the content meets Extension goals and provides for measurable outcomes.
3. Recognition of electronic scholarship that meets established criteria and leads to transformational learning.

The Charge

In spring 2008 Dean Dickey called an Extension committee to envision a process for the electronic publication of Extension scholarship and the recognition of that scholarship. This initiative grew out of faculty discussion at the 2007 Extension Fall Conference where three issues were identified: review, recognition, and recovery (access).

This Committee's charge, as outlined by Drs. Dickey and Birnstihl, was to address the electronic publication of Extension scholarship:

1. To establish a review process, including criteria for what to review, for electronic publishing.
2. To conceptualize criteria for archiving electronic publications such as podcasts, Web tools, spreadsheets, etc., including what, where, and for how long.
3. To help promotion and tenure committees understand what constitutes electronic publishing and to recognize it as part of Extension's scholarship.
4. To develop a strategy for including electronic scholarship in e-ARFA reporting.

Committee members include co-chairs Beth Birnstihl, Associate Dean and Director of Extension, and Roger Terry, Director of Communications and Information Technology; Gary Brewer, Entomology Department Head; Tom Franti, Extension Specialist, Biological Systems Engineering; Jessye Goertz, Extension Educator; Connie Hancock, Extension Educator; Lisa Jasa, Communications Specialist; Tim Lemmons, Extension Educator; Jennifer Nixon, Extension Educator; Charles Shapiro, Extension Specialist; Deborah Weitzenkamp, Extension Educator, Carroll Welte, Extension Educator; and Susan Williams, Southeast District Director.

Scope of Materials Constituting Electronic Publications

The committee looked at a number of questions: Should the reader be able to expect the same level of quality from all Extension information products — local or state distribution; print, Web or DVD; and short- or long-term duration? Is the broad accessibility of the Web considered when information is posted? What process can help facilitate the review and publication of Extension scholarship through various media?

The committee determined that the electronic publishing process should be specific enough to address existing media formats and broad enough to add new media as they become available. Formats would include: Web sites (development of and contributions to); audio and video podcasts; DVDs; stand-alone, in-depth Powerpoint programs; interactive online tools, curriculums or training sessions; and integrated, multi-faceted electronic materials on a given subject.

Extension materials which authors could submit for review, approval and production through this process would:

1. Contribute to the goals of the Action Team and UNL Extension and provide measurable outcomes.
2. Represent research-based scholarship
3. Lead to transformational learning to motivate behavioral change, based on principles of instructional design.
4. Have a long-term, statewide use as opposed to more news-oriented, short-term materials. The latter might include news releases (TV, radio, print), meeting announcements, personal columns, and other formats that may not follow this same peer review process. These contributions may need to be recognized separately.

This model is based on the existing publications model. Authors would submit Extension materials for review. Peer-reviewed and approved content would be identified (number, statement, and graphic element) and recognized by promotion and tenure committees, similarly to how printed Extension scholarship is recognized. Materials would include indepth programming or provide indepth curriculum with measurable outcomes.

Process for Development and Review of Electronic Materials

Through discussions, the committee outlined a process for developing, reviewing and publishing content. Action Teams are incorporated into the process to help ensure strategic development of Extension materials to meet identified audience needs and Action Team program priorities. The role of Action Teams here reflects their recommended role as outlined in the Extension Publication Guidelines at <http://www.extension.unl.edu/web/Extension/PubsGraphicsWeb/PubGuidelines> under *Before you start writing numbered Extension publications*. Facilitation of content development and review through this process could be greatly enhanced by development or acquisition of an online tool.

- Peer review was defined as a rigorous assessment by professionals selected by unit administrators. Individuals who accept the responsibility of a peer review are expected to provide a thorough evaluation of the content; an author's respectful consideration of all reviewer comments is also an expectation.

Process*

1. Author develops short proposal of content/project and checks Extension guidelines and/or visits with a CIT Communications Consultant, depending on the complexity of the project, to determine how to develop the most effective presentation for the material and audience.
2. Author develops content for the audience and specific format.
3. Specialists and educators provide technical review of content.
4. Author reviews comments and revises as necessary
5. Author completes a submission form and forwards content for further approval. The form collects information key to the resource, including 1) what Extension action team goals and outcomes are addressed and 2) how the project will extend the work of the action team. (A single form would be used for either print or electronic submissions.)
6. Unit Administrator reviews electronic product; if approved
7. Extension Administration reviews electronic product; if approved
8. Content is reviewed by CIT to meet technical and quality standards of UNL, Extension and the given format.
9. All content is identified with the name of the author(s), date posted to the Web, and an identifier indicating that it was peer-reviewed.
10. Electronic scholarship is released to the public and promoted to key target audiences.
11. Electronic scholarship is assessed for impact.

**The order of some of these steps may need to be changed, depending on the media. For example, it's not hard to make minor changes in text of a Web page at a late stage; however, it may be much more difficult to add video to a DVD or podcast if it hasn't been previously shot. DVDs might be reviewed at two times: 1) a design preview would include a story board or script, outline of the piece, assessment of audience need, and occur before video development begins; and 2) another review would occur at the rough or final cut stage for quality, minimal changes or corrections.*

Review

This system incorporates a three-point review system

1. Content/technical review by peer specialists and educators (similar to that for publications); with some formats, story boards and scripts would need to be reviewed before the project could be initiated;
2. Design preview with a CIT communications consultant to discuss how to develop the most effective presentation for the media and material; and
3. Technical review specific to the medium and standards for that medium.

Review Criteria

General criteria for electronic publishing of Extension scholarship differ little from requirements for printed publications. The peer and administrative reviews would consider the following criteria. Additional criteria address attributes specific to the format.

General Criteria for Extension Scholarship

All electronic publications would:

- 1) Support an Action Plan Model; authors must indicate why/how the content supports an Action Plan in document record.
- 2) Address issues and information needs of clearly defined and important target audience(s) as identified through client or audience assessment; is published in a format appropriate to this audience.
- 3) Be authored by individual or subject matter team appropriate to the scope of the project (For example, an integrated Web site covering a systems approach would require a diverse project team).
- 4) Include at least one Extension specialist or educator.
- 5) Offer high quality content that is research-based, peer-reviewed, acknowledges the intellectual property of others and is authorized by Extension.
- 6) Communicate clearly and effectively at a level appropriate to the primary audience; photos, graphics and illustrations enhance and further communicate points in the text.
- 7) Be peer-reviewed and authorized as an Extension product to ensure recognition of scholarship.
- 8) Meet branding, accessibility, and format standards.
- 9) Include publication date and author name(s) on all electronic products.
- 10) Include an Extension disclaimer if commercial products or services are referenced.
- 11) Include plan for assessing audience use and feedback.
- 12) Be applicable statewide or if not, coverage limits are clearly communicated.

Action plan teams may want to conduct an assessment of audience information needs and interests which could be used as a foundation for a number of Extension publications and programs specific to that subject matter.

Format-Specific Criteria

Format-specific criteria cover technical, quality, and usability aspects. These would be similar to the criteria used for different series of numbered Extension publications (NebGuides, ECs, etc). Templates will need to be developed to help ensure consistent branding and quality in the various formats.

Web Site

- Design, navigation and architecture are clear and appropriate to the topic and audience.
- Content on the home page is dynamic and updated regularly.
- Authors and contact information are clearly identified.
- Site complies with accessibility standards.
- Interactive tools are intuitive and user friendly.
- Site is integrated and linked to (and from) other UNL sites; links to external sites identify the site title, URL, and sponsoring organization.
- Content is peer-reviewed.
- Entire site is reviewed annually to ensure content is current.
- Plans for site promotion and assessment are appropriate; may include a means for user assessment and/or audience feedback.
- Site is developed in the Extension content management system to enhance access and searchability.

DVD and Online Video/Audio

- Content is well organized, well illustrated, and appropriate to the format and the audience.
- DVD is well edited and produced, a high quality product.
- Authors and contact information are clearly identified.
- Content length is appropriate to the topic.
- Online or DVD program and related printed materials (DVD label, jacket) meet UNL and Extension standards for identification.
- DVD title/description is listed on central Web site and promoted to target audiences.
- DVD/online video provides a means for audience feedback and includes a plan for assessing audience use.

Online Audio

- Content is well organized and presented appropriately for audio format.
- Production sound quality is high, presenter is easily understood.
- Speakers and contact information are clearly identified.
- Content is promoted to potential users; links are added to related Web sites.
- Assesses audience use and provides a means for audience feedback.

PowerPoint®

- Program length, slide design, colors, graphics and type are appropriate to the format.
- Presentation is a multiple use, long-term, fully developed resource; may be reviewed by and used by agencies external to Extension.
- Product includes voice-over and relevant notes to be used as a stand-alone presentation.
- Content has been edited for grammar, style and consistency.
- Presentation correctly uses UNL and Extension formats and follows identification guidelines.
- Authors and contact information are clearly identified.

Technical Implementation

New software could greatly enhance the development and implementation of this system, providing a tool to facilitate and capture reviews and responses in a timely, central location. A tool also might provide a means for automatic reporting to E-ARFA when a project is completed. Working with a group of specialists, educators and technical experts, program features and workflow as well as potential costs can be identified.

Recommendations for the Review, Recognition, and Recovery of Electronic Extension Scholarship

Web-based publishing, videos, podcasts, presentations and other electronic formats are powerful communication tools to deliver research-based education to new and traditional audiences. While formal review processes have been used for numbered Extension publications for years, Extension has never formally developed and applied standards of quality and review for electronic scholarship. In spring 2008 Dean Dickey called a committee of Extension specialists, educators, and administrators to address this issue. Following are the committee's recommendations, based on discussions held over the last year. Background and supporting material for these recommendations can be found in the attached *White Paper for Electronic Publishing of Extension Scholarship* and the *Promotion and Tenure Extension e-Publications Scholarship Matrix*.

Recommendations

The committee makes the following recommendations regarding each point of the original charge.

Charge 1: To establish a review process, including criteria for what to review, for electronic publishing.

1. A formal Peer-Review Process should be implemented for electronic publishing. It should incorporate a) product and design preview; b) content/technical review by peer specialists and educators and approval by unit administrator; and c) technical review specific to the medium and standards for that medium. (Process details are outlined in the related *White Paper*.)

- Authors determine whether to submit content for peer review.
- Authors can justify why/how the content supports an Action Plan Model.
- A product and design preview shall precede development of specified electronic publications.
- A rigorous peer review is expected by all those accepting the responsibility for a review; an author's respectful consideration of all reviewer comments is also an expectation.
- Content reviewed through this formal process will be labeled as "expert reviewed."
- Publication date and author name(s) would appear on all electronic products.

2. A *Guide to Best Management Practices for Electronic Publishing* should be developed to cover all electronic publishing. It would cover best practices for both formally reviewed and non-formally reviewed publications. Specific elements to be addressed are outlined in the *White Paper*.

3. In-service education for effective use of electronic publishing should be provided.

- Webinar-based training for faculty/staff; archived for continued access
- Focused training for new employees as part of their orientation
- Focused in-service training for departmental faculty, action team work groups or educators within a district

4. An electronic document management system should be implemented to help facilitate these recommendations. It could provide for electronic "publication" submission, coordination of the review process, on-line and accessible project tracking and record keeping, and perhaps most importantly, identification and easy on-call grouping of related subject matter components, regardless of medium and location.

Charge 2: To conceptualize a means of archiving electronic resources such as Web pages, PowerPoint® presentations, videos, podcasts, Web tools, spreadsheets, etc

Access and archiving would be addressed at two levels: 1) for the public and 2) for individuals or groups within Extension.

1. In order for faculty and staff to capture their electronic scholarship in a single location, a portfolio repository should be developed.

- Authors could designate what materials would be placed in or linked from the repository and who would have access to them. They could include Extension as well as teaching and research materials.
- The repository would include both peer-reviewed and non peer-reviewed materials.

2. All peer-reviewed electronic Extension materials should be easily searched and made available to the public.
3. Searchability and access to all electronic Extension information (including journal articles, research results, educational materials, etc.) should be enhanced so that a user can easily search and find all that Extension offers on a particular topic. Peer-reviewed and timely resources should be given preference over non peer-reviewed resources in search results.

Charge 3: To help promotion and tenure committees understand what constitutes electronic publishing and how to recognize it as part of Extension's scholarship.

1. Extension Promotion and Tenure Committee guidelines should be revised to include a paragraph describing the value and recognition of electronic scholarship.
2. The P&T Extension e-Publications Scholarship Matrix (attached) should be distributed to P&T committees for their consideration when evaluating Extension faculty electronic scholarship.
3. A process should be developed to publicly identify peer-reviewed and design-reviewed electronic publications.
4. A process should be developed to review and then revise or remove electronic publishing materials based on the recommended posting length criteria (see Matrix).

Charge 4: To develop a strategy for including electronic Extension publishing in e-ARFA reporting.

Extension materials completing the peer-review and approval process should be automatically reported to e-ARFA; implementation of this recommendation is dependent on the structure developed for the preceding recommendations.

Recommendations for Implementation

1. After the new review process has been adopted, transition guidelines need to be established for reviewing and reposting electronic publications, web pages, and other electronic materials currently posted to the Web and for reviewing other electronic media in inventory.
2. User statistics on electronic information products should be made easily available to authors.

These committee recommendations are respectfully submitted by:

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Extension e-Publications Scholarship Matrix for Use by Promotion and Tenure Committees

ePublication Format	Comparable ¹ Traditional or Paper Format	Expected Length ² of Posting On-line	Technical ³ Peer Review	Formal Design ⁴ Review
Formal Review Process				
Peer-reviewed, Extension-approved Web pages	Extension Circular or NebGuide	5 years	Yes	Yes
Development leader for a peer-reviewed, Extension-approved Web site	Book editor	5 years	Yes	Yes
Interactive course accessed on-line	Classroom or workshop curriculum	5 years	Yes	Yes
Non-interactive course modules accessed on-line	Classroom certification	5 years	Yes	Yes/No
Teaching DVD or video	Extension Circular or NebGuide(s)	5 years	Yes	Yes
Interactive program/model calculator	Computer model, spreadsheet, calculator	5 years	Yes	No
PowerPoint® on Web site <i>with notes or narration</i>	Paper or workshop presentation	2 years	Yes	Yes/No
Informal Review Process				
Web site or Web page	Information sheets, handouts	1 year	No	No
PowerPoint® on Web site <i>without notes or narration</i>	Handouts, factsheets	1 year	No	No
On-line audio or blog	New	1 year	No	No
Archived webcast	Seminar Classroom lecture	1 year	No	No

¹Comparable formats listed are generalizations only. Individual ePublications will have a range of formats, styles and characteristics.

²Maximum posting time before item is reviewed and either updated (if needed) for reposting or removed.

³Technical Peer Review means review of technical content by technical specialists other than the author(s).

⁴Formal Design Review means the media format (software, script, layout, organization, etc.) is reviewed by an electronic media specialist for appropriateness of use and design.