Hybrid Learning in Extension: Teaching at the Crossroads
by
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...[Hybrid course] development does take time, but once it's boxed it is infinitely scalable. It should be considered an investment now that will pay future returns, but certainly worth the time and effort. We simply don't have the capacity to serve in the model we currently use.

—Todd Williver, Extension Hybrid Learning Study Group Participant

I. Executive Summary

Extension is at a crossroads. With the advent of widespread high-speed Internet connectivity, mobile devices, and advances in online pedagogy, teaching and learning is clearly undergoing major disruption. The way in which our clients want to learn is changing. To explore how Extension might respond to these new forces, EESC and the Center for Teaching and Learning (CTL) collaborated on a bold experiment in hybrid teaching, an approach that could change the face of educational programming across our organization. This paper summarizes a pilot effort to train, encourage, and support 10 Extension faculty in the design and delivery of educational programs using a hybrid (also referred to as blended) approach where instruction is a carefully designed integration of online and on-site activities. Participants in the pilot also generated ideas on adapting the campus-based hybrid learning model to Extension.

The results of the pilot effort indicate that this approach—if appropriately supported—could be highly successful across the Extension learning landscape, invigorating our teaching and increasing impact. Hybrid teaching methods and technologies can transfer well to many Extension teaching environments, and can potentially provide new efficiencies, expanded reach, convenience, leveraging of teaching capacity, adaptability and cost savings.

Successful implementation will involve conceptual, cultural and technological considerations in Extension. Key questions raised by the authors and participants include resource allocation, release time, and technology support. Broad implementation will also call for bridge-building between Extension, EESC, CTL, PACE, Ecampus and other on-campus units.

II. Introduction

We live in a hybrid world in which we seamlessly switch our attention back and forth between on-screen and face-to-face experiences repeatedly each day... just observe how many pedestrians are engaged with their mobile devices! Similarly, we routinely gather information and learn through a combination of online and on-site experiences. The growth in use of technology has fundamentally altered how people prefer to learn. As Diana G. Oblinger, President & CEO of EDUCAUSE, observes in the Chronicle of Higher Education:

“Technology is relevant at every point in the learner pathway. Leveraging it thoughtfully and effectively for learning will continue to attract significant interest... Institutions will focus on online learning and student-success strategies, emphasizing greater student engagement, clearer learning pathways, and cost-effectiveness. Growing adoption of
flipped classrooms, blended models, and competency-based learning will challenge traditional academic structures and institutional business models.”

Yet the explicit recognition of the need for, and potentials of, hybrid (blended) teaching and learning are just beginning to be fully recognized; and, in the case of Extension, they are just beginning to show up on the radar. The authors hope that the results of the Extension Hybrid Learning Study Group reported here will open the door to further exploration and adoption of this teaching methodology.

What is hybrid teaching?
A hybrid course includes both regularly scheduled on-site classroom meetings, and significant online out-of-classroom components that replace regularly scheduled class meeting time. A hybrid approach differs from just making additional online materials available to supplement a traditional face-to-face course in that it:

- emphasizes learning as an active process
- requires explicit integration of online and face-to-face learning
- emphasizes the authenticity of the learning experience
- is learning-centered rather than focused principally on the instructor
- emphasizes interaction between instructors and learners both online and face-to-face

A growing body of research strongly supports the efficacy of hybrid teaching and learning. Significantly, the U.S. Dept. of Education’s benchmark 2010 meta-analysis of empirical studies of online and blended learning concluded that student performance in courses that integrated face-to-face and online instruction was better than in purely face-to-face courses. Increasingly, standards and best practices are being identified to guide educators in the application of hybrid approaches.

In many ways, hybrid learning expands on what Extension has been doing for more than 100 years, providing access to materials and expertise in support of on-site education. Blended learning builds on the strengths of Extension. A 2009 study of technology adoption in Oregon Extension found that the use of a blended approach to program delivery, where traditional methods are used in combination with technology held interest with Extension personnel (Diem, Hino, Meisenbach, Martin and Gamble, 2009.)

Why is hybrid teaching and learning important to Extension?
Extension is at a crossroads. With the advent of widespread high-speed Internet connectivity, mobile devices, and advances in online pedagogy, teaching and learning is clearly undergoing major disruption. The way in which our clients want to learn is changing. One need only look at

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1 In this paper, the term “course” is meant to reflect the many educational programs found in Extension, e.g., workshops, trainings, field tours, etc.
the skyrocketing use of mobile devices, YouTube, Google, and social media as learning portals. If Extension is to remain relevant, it must move more boldly into this teaching and learning arena. The potential benefits of adopting hybrid teaching far outweigh the risks of not moving in this direction:

1. Hybrid education creates reusable, shareable, and possibly merchantable learning products, modules and objects. This dovetails with a dedicated push for shareable learning materials through OSU’s Open Oregon State.
2. Hybrid teaching effectively “clones” faculty by moving some learning objects online (for example, a 10-minute video lecture demonstrating a new agricultural technique), reducing the need for repeated live presentation to every learner in every location.
3. Hybrid approaches represent a natural evolution in the current practice of teaching. So-called “web-enhanced” or “technology-enhanced” teaching is the norm; hybrid approaches formalize this.
4. It provides an intermediate path for moving some programs to fully online delivery.
5. It’s a low-risk strategy for moving Extension into the forefront of teaching and learning.
6. Hybrid education has significant ROI, including it’s ability to be easily shared, reduce in-class time, and reach new and broader audiences.
7. Use of online platforms can provide learning analytics that provide insight into how clients learn.
8. OSU has the opportunity to become a national leader in the implementation of hybrid learning in Extension and the development of associated scholarship through journal articles and presentations at national conferences.

III. The Initial Cohort: Art Imitates Life

To explore the potential for hybrid teaching in Extension, in spring 2014, the authors facilitated an 8-week Extension Hybrid Learning Study Group (EHLSG) for 10 Extension faculty representing a variety of programs around the state. It began with a half-day, on-campus meeting in Corvallis followed by 8 weeks of online interaction and learning activity, and capped by a full-day of face-to-face activity on campus. A complete syllabus (“Prospectus”) for the study group can be found in the Appendices.

Activities

The study group itself was facilitated in a hybrid format, with a blend of on-site and online learning—in part so that participants experienced the strengths and challenges of a hybrid approach as learners, as well as developers.

Face-to-Face:

We “bookended” the online study with two face-to-face classroom sessions on either end of the 8-week course. The on-site sessions included:

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2 The authors have already received requests to share the results of the pilot project with other Cooperative Extension units, notably a request from Ohio State University.
• presentations and discussions about hybrid pedagogy and technology
• peer review of preliminary hybrid course ideas of each participant
• guest speakers (e.g., CTL’s Robin Pappas on assessment techniques, Linda McMahan demonstrating a hybrid Yamhill County Master Gardener training course.)
• sharing progress at an on-campus Hybrid Faculty Learning Community showcase
• presentations of completed hybrid course plans

Online:
Using the Blackboard learning management system (LMS) and other web-based tools, participants in the study group participated in a wide variety of online activities, including:
• weekly discussions
• live Google Hangouts
• readings and videos on effective practices and tools for blended learning
• sharing and peer review of hybrid course plans and sample learning modules
• testing, evaluating and sharing online technology tools
• writing online in the Extension Hybrid Learning Blog

Learning Outcomes
The study group successfully reached four learning outcomes that had been identified at the outset. Upon completion, participants reported that they were able to:
1. Describe best practices for design and delivery of a hybrid learning experience.
2. Design a plan for the delivery of a hybrid educational program, and develop a hybrid learning module (with integrated face-to-face and online content and activities) that is part of this educational program.
3. Identify potential OSU resources to support hybrid educational programs in Extension.
4. Recognize effective ways to use fundamental features of a learning management system (LMS.)

Deliverables
Each participant produced a plan and a sample module for a hybrid course that met an actual teaching need. A key goal throughout the study group was to keep the process authentic, encouraging participants to create usable plans, materials and products relevant to their actual job responsibilities. Other products included a mix map, a 2-page course design plan, a sample learning module and activity using an online tech tool. (See Appendices for examples.)

IV. Lessons Learned
The study group functioned as a valuable professional learning network or “community of practice” in which each member was an equal contributor to the learning of the group. Not only
were they there to learn about the hybrid approach, but also to assist in identifying both advantages and obstacles specific to its application on the Extension landscape. In effect, the authors of this report became learners, attending to insights and concerns fostered by class discussions, both online and on-site. (See Force Field Analysis in Appendices.)

Value Proposition

Hybrid teaching methods and technologies can transfer well to many Extension teaching environments, and promises significant return on investment. In particular, hybrid learning provides:

- **Efficiency** - Participants were in agreement that producing modular, sharable, and easily repeatable learning activities would be a more efficient use of their time.
- **Expanded Reach** - Extension stands to better meet the demands of new and broader audiences, and draw more learners onto our landscape. The Diem report (2009) makes it abundantly clear that OSU Extension is under-serving a potentially vast online audience, and younger would-be clients who look at life--and learning--with a blended perspective.
- **Convenience** - The online learning component offers today’s non-traditional learners the flexibility to learn when they want, wherever they want.
- **Leveraging of teaching capacity** - The hybrid approach effectively clones our faculty through the creation of easy-to-distribute online learning modules and activities.
- **Adaptability** - The hybrid approach has promise to broaden our educational product distribution regionally and nationally. Networked faculty can easily share and modify courses to fit local parameters.
- **Cost savings**
  - Hybrid courses, once built, are easier to repeat, and require less travel and on-site facility expenses.
  - Hybrid programs reduce duplication of effort by providing a more portable means for faculty to distribute their course to others, effectively extending their educational impact at a lower cost.
  - Our study group participants were quick to point out the potential long-term time-savings and efficiency of hybrid programming. As participant Darrin Walenta stated, “It lets me clone myself” by allowing a planned hybrid 4-H training to be used in many different locations at many different times.
  - This approach frees faculty up to do other things instead of repeating expensive, on-site teaching commitments. The inherent modular nature of hybrid learning creates modules and learning objects that--like Legos®—could be fit together in many different ways, to build other learning experiences, and shared among program area faculty.
Learning objects developed in hybrid settings ---like Legos®---can be fit together to build many different learning experiences.

- Hybrid courses can fit the many shapes and sizes of Extension programs, leveraging teaching capacity, efficiency and impact.
- Unique and significant new sources of funding are available, including:
  - Open Oregon State initiative - Has offered $2,000 funding for development of open educational resource modules;
  - The potential for matriculated (credit) course development and associated E&G funds exists.

Issues and Challenges

Like any innovation, hybrid teaching will encounter hurdles, including initial resistance, misperceptions, and organizational inertia. Some challenges include:

- **Identifying the best candidate programs for implementation.** The authors suggest that program choice would be best decided by informed faculty on a case-by-case basis, guided by a firm understanding of the strengths, limitations and requirements of hybrid teaching, with advice and counsel from hybrid teaching experts.

- **Scale issues** - There is great variability in what defines a “course” in Extension. The hybrid model sprang from traditional 10-week matriculated on-campus courses. Extension learning activities cover a very different spectrum of length, locations, and classroom cultures.

Evidence from the plans and comments of participants indicate that the hybrid model could be adapted to fit a majority of Extension teaching environments; but individual Extension faculty work in this area will be necessary to provide more substantive details. For example, educational programs that rely on field settings will offer unique, but not insurmountable challenges. In fact, several study group participants built very promising hybrid plans around field-based learning. [See
A key advantage of hybrid learning is, as study group participants pointed out, the ability to “chunk” content, making it inherently easier to adapt to a variety of learning situations and scales.

- **Resource issues**
  - Release time for faculty
    - Hybrid course development has a significant upfront time commitment (depending on the scope and scale of the project.) This was noted by the pilot project participants as the major barrier for implementation of a hybrid approach. However, participants also noted that traditional in-class teaching also requires significant development time; it may be only an issue of “trading” one for the other. As noted by participant Todd Williver: “We already have a boxed Face-to-Face training that costs nothing but staff time and paper to host. Development of the hybrid course will take more time, certainly. But likely not much more time than developing the very first face-to-face training. We’ve just amortized that cost out over decades of trainings.”
  
  - Funding
    - Some out-of-pocket expenses are inevitable in hybrid development, including purchase of software and hardware. Larger, more sophisticated projects may require contracting instructional designers for multimedia module development. However, some costs will be start-up only, if hardware and software tools are made available for use on additional projects by multiple faculty statewide.

- **Cultural Issues**
  The technology adoption report (Diem, et al. 2009) reveals cultural biases and concerns that could present obstacles to wide-scale adoption:
    - a bias to serve only local audiences based on perceptions of political and funding boundaries
    - a perception that online learning cannot engage clients
    - the view that use of teaching technology is an add-on responsibility to an already full plate
    - lack of access, training or interest in learning technologies

In response, the authors hold that much has improved in the intervening five years in awareness, interest, and investment in learning technology within OSU Extension. New, younger faculty have been hired who don’t have the traditional
biases. And, hybrid teaching maintains the face-to-face engagement that many prefer (and are quite good at), offering a lower risk entry into emerging online teaching methods.

V. What Will Adoption Of A Hybrid Teaching Model Cost?

Hybrid teaching will require some level of re-allocation and/or development of support systems and access to tools in the areas of training, development and delivery. Extension does have access to some relevant resources, but it will also require building relationships with other on-campus organizations, sharing resources, and some dedicated funding.

Some costs include:

○ Startup costs include, but are not limited to, design and development time, possibly in the form of release time for faculty to develop the hybrid curriculum and associated online and on-site activities.

○ Faculty will need access to tools to develop and deliver online modules and activities. Some of these tools are available at no charge through OSU (e.g., Canvas), while others will have purchase costs associated. For example, Adobe Presenter, software to develop narrated Powerpoints, cost $150. Equipment needs might include inexpensive video cameras and microphones for capturing microlectures, field events and the like. Some of these tools already exist in some counties, or could be purchased by our organization to share among faculty at a reduced cost.

○ Course maintenance and LMS user support may require a small amount of FTE to assist in oversight of registration for LMS-delivered programs. However, much of this could fall to existing on-campus resources, once relationships are in place.

Available Extension Resources

○ EESC has some expertise in development of online learning modules, however it is limited by current staffing and wide-ranging commitments to Extension and AES.

○ ECTU is dedicated to supporting technology use across the organization, and might be a consideration for supporting the use of an LMS (Canvas) by Extension, or perhaps for other online development tools mentioned above.

○ Leveraging existing on-campus resources such as EESC, PACE, CTL, Technology across the Curriculum and Open Oregon State could bring valuable tools, resources, and expertise to bear on this effort. However, current funding models present a challenge to collaboration with PACE or Ecampus on Extension
hybrid course/module design and production projects.

○ Teaching funds
  ■ There is potential for access to ENG funds if matriculated courses are developed.
  ■ Enrollment fees could be collected from some programs.
  ■ Grants are increasingly looking for broader impacts that would be well served with the addition of hybrid course and materials development capacity.

○ Training on hybrid program development will need to be streamlined and offered regularly. This effort has been spearheaded by the collaboration between EESC and CTL outlined in this report; however, larger implementation will require more robust training that goes beyond a pilot effort, including regularly scheduled trainings on hybrid pedagogy and the use of the newly adopted OSU LMS (Canvas.)

○ Course delivery marketing, maintenance will require:
  ■ a direct link of Extension to LMS training support systems
  ■ open access to the OSU LMS for non-matriculated users. (Note: The capacity of Canvas--OSU's newly adopted LMS-- to be accessible by non-ONID users is still under discussion at the time of this writing.)

VI. Extension Administration - Suggested Actions

1. Support continued pilot of hybrid course development through funding additional 8-week Extension Hybrid Learning Study Groups, with the next offering in Winter 2015.
2. Include hybrid teaching in any future strategic planning for the support of teaching expertise in Extension.
3. Encourage and support mentoring of other Extension faculty by participants in hybrid study groups.
4. Recognize, encourage, and reward hybrid teaching efforts by early adopters and new faculty. Modeling by example will play a key role shaping the adoption curve for hybrid teaching.
5. Provide continued financial incentives for participation in hybrid teaching, including mini-grants and release time.
6. Resolve technical support issues by re-thinking the associated roles of EESC, ECTU; and leveraging of other OSU support providers, including PACE, Ecampus, and CTL. The authors urge that an instructional designer/course developer be hired for Extension and housed at EESC.
7. Market the hybrid concept organizationally through newsletter articles, webinars, blogs, awards and other forms of recognition.
8. Encourage scholarly work in the area of hybrid learning in Extension settings. OSU Extension stands to be a national leader in this innovation if support and resources are brought to bear.

VII. Next Steps
Authors (Kahn & Hino) will:
1. Seek approval for a second cohort for Winter 2015.
2. Conduct a 2-hour workshop on Hybrid Teaching at the Extension Conference in September 2014.
3. Conduct literature review for hybrid teaching in Extension.
4. Revise this report and submit it to the Journal of Extension.
5. Continue to provide support, training and counsel for those faculty who undertake hybrid programming. The authors are well aware that attending an 8-week workshop “does not a hybrid expert make.”
6. Provide regular updates, blogs and other communications to the organization about hybrid teaching opportunities and developments.
7. Continue to foster the relationship between Extension, EESC and CTL.

VIII. Conclusions
This pilot project demonstrates that the hybrid teaching model has great potential for implementation within OSU Extension. As with any emerging technology, it will be necessary to nurture its adoption carefully and incrementally, provide the necessary resources for its success, and communicate its impact across the organization and beyond.

But the rewards are legion: Hybrid teaching offers an opportunity to reach larger, untapped audiences; to release faculty from time-consuming and repetitive teaching chores; to bring efficiency through the sharing of modular teaching resources, and to engage Oregonians in a manner that better reflects their lifelong learning preferences. It also offers OSU an opportunity to once again demonstrate national leadership in adopting innovation to better serve its clients.

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3. Sample Mix Maps
4. A Sample Hybrid Course Plan
5. Technology Tool List
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7. Force Field Analysis
8. Video: Interview with EHLSG Participants
9. Day in the Life
### 1. Extension Hybrid Learning Study Group Participants & Projects

<table>
<thead>
<tr>
<th>NAME</th>
<th>COUNTY</th>
<th>POSITION</th>
<th>Hybrid Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Bennett</td>
<td>Jackson, Josephine</td>
<td>Forestry</td>
<td>Land Stewards</td>
</tr>
<tr>
<td>Amy Grotta</td>
<td>Columbia</td>
<td>Forestry</td>
<td>Exotic Woodboring Insect First Detector Training</td>
</tr>
<tr>
<td>Anne Harris</td>
<td>Hood River, The Dalles</td>
<td>Open Campus Coordinator</td>
<td>Building Lifetime Career Satisfaction: Who are you…really?</td>
</tr>
<tr>
<td>Mike Knutz</td>
<td>Yamhill</td>
<td>4-H Youth, After School Program, County Leader</td>
<td>n/a</td>
</tr>
<tr>
<td>Keeley Moxley</td>
<td>Klamath</td>
<td>Open Campus, livestock, master gardeners,</td>
<td>OSU/KCC College Success</td>
</tr>
<tr>
<td>Jason O'Brien</td>
<td>OSU</td>
<td>Statewide Coord of Master Naturalist Program</td>
<td>Oregon Master Naturalist Certification Plan</td>
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<td>Bob Parker</td>
<td>Baker, Grant</td>
<td>Forestry</td>
<td>How to Manage Your Forest</td>
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<td>Alex Stone</td>
<td>OSU</td>
<td>Horticulture</td>
<td>Willamette Valley Farm Biodiversity Courses (Online and Hybrid)</td>
</tr>
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<td>Darrin Walenta</td>
<td>Union</td>
<td>Extension Agronomist</td>
<td>Private Pesticide Applicator Pre-License Training Course</td>
</tr>
<tr>
<td>Williver</td>
<td>Lincoln</td>
<td>4-H Program Coordinator</td>
<td>4-H Volunteer Leader Training</td>
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### 2. Extension Hybrid Learning Study Group 1.0 - Prospectus
Facilitators:
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Jeff Hino, EESC, jeff.hino@oregonstate.edu (541) 737-0803

Description
The participants in the Extension Hybrid Learning Study Group (EHLSG) will each plan
the redesign of an existing Extension course, workshop or other educational program as a
hybrid learning experience incorporating best practices adapted from the OSU hybrid
course development pilot program. The EHLSG will focus on the processes and products
of successful hybrid learning development through two face-to-face meetings
complemented by online resources and activities on the EHLSG Blackboard site during
the eight weeks of the study group. Activities will include reading, discussions,
blogging, planning, developing a hybrid learning module development and making
presentations.

Characteristics of Participants
The members of this learning community are pedagogical innovators who are committed
to enhancing teaching and learning through OSU Extension and are exploring the
potentials of hybrid delivery in their disciplines.

Measurable Learning Outcomes
Upon completion of the study group, participants will be able to:
1. Describe recognized effective practices for design and delivery of a hybrid
learning experience, for example, methods to foster student engagement in a
blended learning environment.
2. Design a plan for the delivery of a hybrid educational program, and develop a
hybrid learning module (with integrated face-to-face and online content and
activities) that is part of this educational program.
3. Identify potential OSU resources—including the Center for Teaching and
Learning, Technology Across the Curriculum, EESC, Ecampus, eXtension—and
other online resources—such as Merlot—to support hybrid educational programs
in Extension.
4. Recognize effective ways to use fundamental features of a learning management
system (LMS) or other online sites for basic elements of hybrid course delivery,
for example, posting announcements and facilitating online discussions.

Expectations
EHLSG participants will actively engage in all face-to-face meetings and online activities
of the study group; members are encouraged to visit the EHLSG website (Blackboard)
site to participate online at least twice a week. Each participant will develop and share:
1 - A plan for the design and delivery of a hybrid educational program.
2 - A hybrid learning module that is part of this educational program.

The total estimated time commitment for full participation in the EHLSG is 30 hours. The specific requirements and timeline of the EHLSG are described in the previously distributed pilot program MOUs.

Communication

In addition to face-to-face meetings, the General Discussion forum on the EHLSG Blackboard site is a good place to raise questions related to activities and hybrid learning in general. It is also an excellent place to report useful hybrid learning resources or post links that may be helpful to other EHLSG members. The EHLSG Blog is another forum for communication and reflection; notably, unlike the Blackboard discussion forums, the blog is public, and a great way to reach out to the Extension community at large. Continued blogging after the conclusion of the study group is encouraged.
3. Sample Mix Maps

Max Bennett

Mix map - or mixed up? Land Stewards

To explain my hybrid map, it might help to briefly explain the structure of the current Land Stewards program. The current program is 12 weeks long, meets f2f weekly, and is mostly field based. Each week has a thematic focus, e.g., weeds, water, wildlife, tree care. Most classes are site visits to owner properties that are used to illustrate application of stewardship practices to the weekly topic. A essential component of the class is the preparation of a personal property action plan, which is presented to fellow participants during the last class meeting. My proposed hybrid version also would be about 12 weeks long, with 4 f2f meetings spaced 3-4 weeks apart. Online modules are to be completed in-between f2f classes and are used to introduce basic concepts and vocabulary for each theme (water conservation, weed management, etc.). The modules consist of readings, videos, and other resources and, ideally, a brief self-assessment quiz at the end. The homework assignment after each module is to assess the resource on their property. For example, for weeds it would involve walking around the property and noting the type and location of noxious weed species. The results of the assessment would be shared with the instructor. Classmates would interact online and in person about their goals and vision for their properties, what they are learning and getting excited about, and what questions they have. They would also present their plans to each other in the final class meeting. For a county or regional training, 20-30 participants would be a reasonable number.
The First Detector training will be a relatively short program, comprised of several fairly short asynchronous learning modules followed by a single, 2-3 hour face-to-face session. First, participants will complete three online modules each of which is accompanied by a quiz. Because the objective of the online modules is for participants to be able to recognize host trees, target pests, and signs/symptoms of infestation, the modules will be very visual - likely a narrated slide show. Jing might be a good tool for third module. The face-to-face session serves several purposes. 1) to contextualize (is that a word) the information to the participant’s local region. 2) to apply identification skills to a field situation. 3) to be able to learn/share information and skills with fellow trainees as well as instructors. Finally the participants can loop back to the asynchronous modules to refresh and reinforce their knowledge. I expect about 20 people per face-to-face session, though the number of people that could access the asynchronous modules is limitless.
4. A Sample Hybrid Course Plan

Pesticide Label Hybrid Learning Module
For Hybrid Private Pesticide Applicator Pre-License Training Course
Darrin L. Walenta, Extension Hybrid Learning Study Group Participant, June 4, 2014

Learning Objectives
Module 4 will focus on pesticide label comprehension and will be designed to engage the learner in various activities which will engage the learner in a new educational platform much improved over the traditional “read the manual and memorize the information for the exam” approach. Specific learning objectives include:

- Learners will develop working knowledge of pesticide label information, content organization and how to interpret label instructions.
- Develop learner’s ability to think critically about the importance of label instructions, information and precautions that protect human/animal health and safety and the environment.

Content
Will cover all aspects of pesticide label content including parts of a label, precautionary statements, hazards, signal words and symbols, personal protective equipment (PPE), first aid, directions for use, registered uses, storage and disposal, etc.

Online Learning Activities
Learners will engage in a variety of online activities for Module 4 which will be available through the online hybrid course approximately 4 weeks prior to the face to face session.

- Learners will utilize interactive online content for introduction to label comprehension basics. Interactive tools will need to be designed and developed for this module. Such tools include: 1) a demonstration pesticide label embedded with live links to allow the learner to choose sections or components of the label for more in-depth detail via video, etc.; 2) Instructional or case study video which demonstrates how a pesticide label is utilized during various stages of pesticide application process: before purchase, mixing/loading, application and storage/disposal of the pesticide and/or pesticide container.
- Learners will be encouraged to utilize other resources currently available online for further study or use as future reference tools: pesticide stewardship (http://pesticidestewardship.org/Pages/default.aspx), searchable pesticide label databases (http://www.agrian.com/home/), pesticide information online (http://cru66.cahe.wsu.edu/LabelTolerance.html), Oregon Department of Agriculture (http://www.oregon.gov/ODA/PEST/Pages/index.aspx), pesticide safety, etc.
- Learners will be encouraged to participate in an online discussion forum (with fellow learners and the instructor) to assist with their individual study by posting questions and observations related to pesticide labeling. Information exchange will enhance interaction between learners...
and instructor prior to the face to face session and identify any additional educational needs which should be incorporated into the face to face session.

- Knowledge and comprehension assessment of will be conducted via short online quizzes following each module component or a comprehensive quiz after module completion. Results will be available at the end of each quiz to enable the learner to evaluate their level of understanding as the individual progresses through the various module components or the entire module.

Face to Face Session
The online portion of the course available 4 weeks ahead of the actual F2F workshops (4-hour onsite workshop at each location). The overall goal for course participants will be to complete the 4 modules prior to the F2F workshop. The F2F workshop would involve a brief review of module content, thus, allowing more time to reinforce comprehension by applying concepts learned online.

F2F Activity #1
Individual label in-class exercise: each learner will be able to choose a real example of a restricted use pesticide (either Caution or Poison signal word) and will respond to a series of questions specific to that particular label but designed to reinforce key concepts and label comprehension. After all individuals have completed the in-class exercise the correct answers will be shared with the entire class and discussed in a group setting.

F2F Activity #2
Group exercise with volunteers from the audience: two volunteers will be challenged with selecting the proper personal protective equipment (required for each pesticide example from Activity #1) needed for various stages in the pesticide application process including handling, loading and application. Examples of actual PPE will be available on-site.

Assessment
Online course module assessment will be based on learner registration, module component participation, knowledge assessments (online quizzes) and participation in online discussion forum. Face to Face Session learner assessment to gauge material comprehension will involve: 1) observation of learner participation in onsite activities and discussion(interaction with other learners and facilitator; and 2) a follow-up comprehensive quiz to quantify baseline level of comprehension. In addition, an overall hybrid course evaluation will be conducted to determine:

- Usefulness of online module
- Usefulness of F2F session
- Overall effectiveness of online module and F2F session
5. Technology Tools List

Educators employ a wide variety of online tools in hybrid programs. These tools are used for many purposes including presenting content, assessing learning, and providing feedback to learners. When choosing an online tool, it's important to remember that tech support may not be available. Choosing a tool that is easy to use and that has a good reputation and track record can help your course run smoothly. If your students are unable to get a tool to work, one option is to offer a more traditional alternative, such as a paper or a PowerPoint presentation. The tools listed below have been tested and have good track records for reliability.

**Audio Tools**

2. Audioboo [http://audioboo.fm](http://audioboo.fm)

**Interactive & Reference Tools**


**Presentation Tools**


**Visual Tools**


Numeric Data from Scalar Questions

(Insert eye-ball friendly version of evaluation survey results here.)

Participant Comments

1. Please list any types of online topics, content, resources or activities that you think should be added for future versions of EHLSG:
   - How to actually use some of the other more “traditional” online delivery tools, like Adobe Presenter?
   - Maybe a more detailed tour (under the hood) of Blackboard, maybe also a tour or exploration of another online course interface.
   - Tools, tools, tools. More descriptions of how people are hybridizing- not “what” they are hybridizing.
   - I think we had the right amount of time online.

2. Please list any types of face-to-face topics, content, activities or guest speakers that you think should be added for future versions of the EHLSG:
   - Demos of in-person delivery approaches/techniques-perhaps an instructor who can describe an in-person process with actual involvement-not just PowerPoint.
   - More subject matter experts. Canvas, Screencast, Prezi, to show what’s possible. Fewer educators that created their own hybrid class unless they can generalize about hybrid. I don’t really care about the inner workings of non-English speakers at OSU.
   - Maybe more discussion time F2F. Opportunity for small groups to provide more detailed critiques and suggestions for proposed courses and modules. Sort of a “consulting” activity-taking advantage of peer knowledge and experience.
   - Develop outline for a shell or an actual shell ½ way
   - Perhaps hands-on f2f practice using the LMS. Possibly the same for actually creating something using some online tools like Camtasia i.e. doing this activity f2f.
   - “icebreaker” or casual meal (dinner) to get to know other participants to build community

3. Feel free to use this space to comment about anything, regarding the EHLSG or general observations of what lies ahead for further adoption and development of the hybrid approach within Extension.
   - I really appreciated that you modeled the hybrid pedagogy to teach about hybrid learning. It gave us the chance to experience it ourselves.
   - Great job Cub & Jeff!! Thank you for including me! J
   - Really glad I participated-but it was a challenge, given busy schedule. Gave me a valuable perspective on what a learner in my hybrid course might go through-an eye opener! For me the
most valuable were the discussions—primarily F2F but also online, as well as the experience of developing a hybrid course plan and mock module. I’d like to see a bit more on research about hybrid/flipping cost and effectiveness. Also more in-depth thinking about integration of online and F2F. The on-campus examples were interesting but the context is different…Linda’s and other Ext. examples were most valuable. I wish I had been able to participate more in the online discussions…found I was doing the minimum. My time mgmt. issue…Great start and really appreciate you two taking this on! Helped me significantly in advancing my hybrid plans!!! And that’s the bottom line…

- Keep this program going! It was absolutely great! I would have loved to have been able to devote all my time for 2-4 weeks and focus on this project!
- After talking about funding and developing really polished courses, I’m feeling like what I create may not meet OSU standards without professional (costly) help. Hmmm.
- Really enjoyed the course!
- More opportunities for Google Hangouts “virtual office hours”
- Re: Face to face meeting #2 today- listening to the on-campus folks for 1.5 hours-not so useful. Without that, it would have been a 4 or 5.
- Re: Number of Blackboard discussions- It was a good example for me that not every week needs to have a discussion board. Quite liberating to see this in practice.
- Re: Likelihood of implementing the hybrid program you have been planning- I think my program is inevitably going to have to do things differently as the popularity grows and program expands. When? Not sure.
- Re: Hours of face to face time- More hours at the start for the volume of information
- Re: Face to face group meetings- More times- 1 meeting halfway or videoconferencing would have been very helpful
- Re: Amount of content on blackboard- About right to too much-During the busy normal weeks it was tough to do quality work
- Re: Blackboard discussions and ideal amount of online interaction- maybe a different time of the year would have been better for me.
- Re: Interest in participating in follow up meetings- I want to continue the interaction with the original and future groups as it will help me continue to learn and utilize technology effectively.
- Re: Face to face meeting #1 in April- a 2nd day to think about and utilize resources to get off to a strong start.
### 7. Force Field Analysis - June 2014

Participants were asked to identify and rank forces acting both for and against the use of hybrid teaching in Extension.

<table>
<thead>
<tr>
<th>Weight</th>
<th>FOR</th>
<th>Weight</th>
<th>AGAINST</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Efficient for faculty</td>
<td>5</td>
<td>Upfront development time</td>
</tr>
<tr>
<td>4</td>
<td>Broader audience (diverse, new demographics, temporal)</td>
<td>4</td>
<td>Inertia</td>
</tr>
<tr>
<td>3.5</td>
<td>Convenient for learners</td>
<td>4</td>
<td>Limited faculty expertise in on-line delivery</td>
</tr>
<tr>
<td>3</td>
<td>Responds to changes in client demographics (i.e., younger)</td>
<td>3</td>
<td>Skepticism (administration, faculty and learners)</td>
</tr>
<tr>
<td>4</td>
<td>Reach more people</td>
<td>3</td>
<td>Not all programs are suited for hybrid approach.</td>
</tr>
<tr>
<td>4</td>
<td>Scalable</td>
<td>3</td>
<td>Technology access &amp; skills not available to everyone</td>
</tr>
<tr>
<td>4</td>
<td>Cost effective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5</td>
<td>Greater adaptability – regional and national</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Demand exists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Resource sharing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Ability to chunk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>New technology exists that supports this</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. Video: Interviews With EHSLG Participants

This video was made at the beginning of the Spring 2014 study group. Participants note their concerns and also their predictions of how a hybrid approach might positively influence their teaching productivity and impact.

[View on YouTube]
A Day In The Life Of Blended Barb

9:30AM. BARB CHECKS HER Master Food Preserver Facebook page...

Wow! Seven new "likes"! One is in K-Falls, and the other in Pendleton. Nice! I'll invite them to join us.

8:15AM Time to look at the hybrid class discussion board.

Hi Barb! I made this video on my smartphone about rusty food cans. Whaddya think? --Sandy

Hi all, check out Sandy's video on tin can safety and post your comments.

8:30AM. OK, TIME TO WORK ON MY NARRATED POWERPOINT FOR NEXT WEEK'S CLASS.

2PM: PROGRAM AREA MEETING.

Barb shares her materials with colleagues.

So you can use all my stuff and offer this class in your counties real easily!

3:45-5PM

This is the time Barb saved using a hybrid approach. Pick something you would do with an extra hour a day!