Going the Distance Part 1: Three Keys to Successfully Delivering an Extension Course at a Distance

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**Abstract:** Distance learning is common in most segments of education, and the body of knowledge is extensive. Extension can apply much of this research but uniquely educates students whose presence is voluntary. The literature suggests that successful distance-delivered Extension courses share three characteristics: course content is high quality, demand is high for the course, and the distance-delivery method is satisfactory. More studies are needed to better assess the efficacy of specific distance-delivery methods in an Extension setting, but these three keys can be used to decide whether or not to deliver a course using distance delivery.

**Introduction**

The body of knowledge for distance learning is impressive. A meta-analysis sifted through more than 1,000 abstracts on distance learning and reported that Web-supported learning was at least as good as face-to-face learning (U.S. Department of Education, 2010). Participants in Extension classes are unique in that they are there of their own volition; the course is usually not required, not for credit, and not for a certificate. Because of this distinction, Extension educators face the additional challenge of motivating students to take and complete a distance-delivered course. If Extension does not deliver high quality, user-friendly, distance-delivered courses
on subjects that are in high demand, then enrollment and completion rates are likely
to be lower than in other types of distance-delivered education. A literature review
reveals three keys to successfully delivering an Extension course at a distance, but
more studies are needed to improve distance education in an Extension setting.

**Key 1: Course Content Is High Quality**

Research-based, unbiased, high-quality content should be the foundation of any
Extension course; without that, the delivery method is irrelevant. The quality of
Extension courses is often measured based on the positive impact they have on
course participants; i.e., how much did participants' knowledge and skills in a given
area increase and was there a planned or actual change in behavior? Here are two
examples of distance-delivered Extension courses that achieved these results. In an
agritourism webinar series, 71% of participants improved their knowledge and 60%
planned to use the knowledge they learned (Rich et al., 2011). In an on-line
Extension in-service training, McCann (2007) found that although participants didn't
necessarily like the distance learning method as much, they learned more on-line
than face-to-face.

**Key 2: Demand Is High for the Course**

Demand for a course should be assessed before it is developed for distance delivery.
Demand for a specific course can be gauged by examining historical demand for the
face-to-face version, surveying potential students, and conducting a more general
needs assessment. VanDerZanden, Rost, and Eckel (2002) developed an online
Master Gardener course because of the popularity of the face-to-face Master
Gardener Program in Oregon. (Nearly 1,000 new Master Gardeners were trained in
1999 in the face-to-face version and due to a shortage of classroom space.)
Langellotto-Rhodaback (2010) successfully delivered the Oregon Master Gardener on-
line program to 133 students in 2009.

A needs assessment can also be used to assess demand for a course, and the
results should be heeded. Stevenson et al. (2011b) found that a free, online, bio-
security course was underused. Only 5% of the 1,500 4-H Volunteer Livestock
leaders-target audience took the online course, and of those, only one in five (17
attendees) passed the quiz. Stevenson et al. (2011b) blamed the underuse on
insufficient promotion, difficulty of the delivery method, and a lack of reward for
course completion. But perhaps the reason was that demand was low. A needs
assessment conducted prior to course development indicated that only 46% of the
target audience surveyed sought information on the topic (Stevenson et al., 2011a),
let alone were interested in voluntarily completing a course on the subject.

A few Extension courses are required. One is The National Pesticide Applicator
Certification course. A required course easily generates demand and may be a good
candidate for distance delivery. Fishel, with others, used several distance methods to
deliver pesticide applicator courses, including: the Internet (Fishel & Ferrell, 2009),
Articulate ® (Ferrell & Fishel, 2007), and Polycom® (Fishel & Langeland, 2011). The
"captive audience" (Fishel & Langeland, 2011) in this course is absent in most
Extension courses (Brown, 2001). Developing a course for distance delivery is often
time and resource intensive, therefore demand for the course should be assessed
before the course is developed, except when the course is required, such as in the
case of pesticide applicator courses.

Key 3: Course Distance Delivery Method Is Satisfactory

Finally, the distance delivery method used should be accessible, easy to use, flexible,
and low-cost; and it should facilitate learning, teaching, and interaction. A simple
comparison of the costs and benefits should be done between the distance-delivery
method and the face-to-face delivery method (Figure 1). Technology and
development costs for a distance-delivered course will likely be higher than a face-
to-face course, while delivery, travel, and classroom costs will likely be lower.

Figure 1.
Costs and Benefits of a Distance-delivered Course Compared with a Face-to-Face
Course
Assessing the Success of a Distance-Delivered Course

Two methods for assessing course content quality are: the score on a peer review of course content and pre- and post-course surveys measuring change in knowledge and behavior. Second, demand can be assessed before and after a course is offered. If a needs assessment indicates demand is low for a course, then course development is a waste of resources.

After the course is delivered, the following questions can help assess the demand for the course: Did the course reach the desired number of people and target audience? Did annual participation numbers grow? Did the majority of students who started the course, complete the course? If affirmative, these are good indications that demand was high for the course. Finally, the efficacy of a particular distance-delivery method should be assessed. Was the distance-delivery method satisfactory? Did students learn as much as they would have in a face-to-face course? Was it accessible, easy to use, flexible, and economical? Assessing these three aspects of a distance-delivered course can help determine if it was a success.

Discussion

The three keys to success discussed in this article can help determine whether to "go the distance." However, with an overwhelming amount of distance-delivery methods available, it's important to remember, as Moore (2007) puts it, that "if a course is taught on an 'island' in Second Life with per-unit learning objectives no better than those found generally in courses offered through Web 1.0 technology, we still have an inferior course, albeit more entertainingly presented." There is likely no silver
bullets among the various distance-delivery methods, but if Extension can teach a
broader, more diverse audience while saving money, then distance delivery is a
viable addition to Extension's teaching modus operandi.

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