The Journal of Extension

Volume 45 | Number 2 Article 8

4-1-2007

The Virtual Extension Specialist

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April 2007 // Volume 45 // Number 2 // Feature Articles // 2FEA6

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Abstract
This article describes a new view of the Extension specialist for the 21st century--The Virtual Extension Specialist. The Virtual Extension Specialist is vastly different from its human counterpart, yet relies on human interaction and utilization to establish itself in its virtual Extension environment. The story of WoodPro, a living, breathing, virtual Extension specialist, is presented here not only as a view of the future of Extension, but as a wake-up call for the traditional, human Extension specialists still out there.

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Introduction

In their daring work on the future of Extension, authors King and Boehlje (2000) attempted to usher in a brave, new world for cooperative Extension with a proposal for the creation of an entirely new, Web-based Extension system they called *e-CES*. And though *JOE* in the subsequent years has carried many articles describing excellent Extension products delivered in Web-based applications (Harrison, Kanade, & Toney, 2004; Lehtola, Nelson, & Brown, 2004; DeVaney, 2004; LaBorde, 2003; Kraft, 2004; & Jackson, Hopper, & Clatterbuck, 2004), the acceptance and adoption of *e-CES* concept has been slow to materialize.

The implications for Extension raised by these two prescient authors remain as valid today as ever. In fact, the opportunities have become clearer as trends among Internet information providers have become apparent. Extension professionals today, armed now with more than a decade of exposure to the World Wide Web, should more easily be able to grasp the concept that our Extension niche still exists for us and that it more than ever depends on adaptation of Internet technologies to build on and reinforce that niche.

However, capture of that niche does depend, as King & Boehlje (2000) suggested, on breaking traditional thought patterns about our role in the crowded field of information providers, how we manage our store of knowledge, and how we execute our Extension mission. This paper describes a new view of the Extension specialist for the 21st century--The Virtual Extension Specialist.

Traditional Extension on the Internet

By now, everyone knows that Web sites that reflect a mirror image of the university's organizational structure are not real popular. For most of the history of the Internet, public organizations seemed to feel that Internet sites were simply glorified directories for their units and programs. Directory information for an organization's services is certainly one useful component of a Web-based approach to constituent interaction. However, that is just one (and perhaps a minor one) of the multiple products an Extension organization can offer its constituent base.

The next product offering most Extension programs grasp is typically to advertise its programs and short courses. Again, this is another useful product offering, but one that perhaps has delivered far less than it promised. The root cause of this letdown is that the Internet has cheapened the value of information traditionally offered by Extension programs by offering an array of similar

information, free of charge in most cases. The typical Internet user, during a search engine inquiry into any specific topic, may in fact discover that State U. is offering a short course next month on her area of interest but, during the same Internet search, may discover many Web sites that offer the same information, right at her fingertips.

So the really aggressive Extension specialists have leaped into the fray and developed tools (or on-line courses) that could be delivered on-line to their constituents. The specialized nature of these Extension tools often finds a large and willing user constituency, and Internet-based Extension tools may in fact be the most popular and representative face of Extension today. Here, however, we reach the outer limits of traditional Web-based Extension programming. For the Virtual Extension Specialist, however, this is just the beginning.

Definition of the Virtual Extension Specialist

The Virtual Extension Specialist:

- Defines the Extension program though a Web site, instead of creating a Web site as another component of the Extension effort;
- Takes on the identity of the Web site, instead of using a Web site to reflect a real-world identity;
- Taking on that identity, becomes intimately familiar with the skills necessary to refine and improve its personality;
- Uses the Web site as a primary contact to establish secondary personal interfaces;
- Becomes a lead navigator (King & Boehlje 2000) for a constituency or group of constituencies through the on-line universe of information;
- Abandons and/or converts paper information documents to on-line files and makes this personal knowledge base transparent to the constituency;
- Focuses on keeping the knowledge base current;
- Continually evaluates the Extension effort through the progress and popularity of the Web site and the personal contacts developed through its use;
- Keeps track of all potential program evaluation sources, such as emails, on-lines polls, and Web statistics;
- Continually builds the Web site as a matter of duty to the Extension program; and
- Is a member of the Extension and information profession in general, not constrained by information sources generated solely by the home institution.

WoodPro: A Living, Breathing Virtual Extension Specialist

Penn State WoodPro was born in September, 2002. Its precursor was a traditional wood products Extension program that had been essentially retired about 5 years earlier and had largely been relegated to a few small wood products short courses, with an average constituency of a few hundred attendees a year, at most. WoodPro's creator, new both to Extension service and to the institution's home state and faced with the daunting task of energizing a large but largely disinterested industry constituency, gambled that a Web-based Extension program would bring him into contact with his targeted group.

Two months were dedicated by the non-Web-savvy creator learning the language of the as-yet unborn and unnamed infant. Prior to its birth, it was conceived as an information portal for the wood products industry and modestly designed to deliver this information through a simplistic matrix interface. Upon its birth in September 2002, WoodPro proudly boasted six pages of content, and an overwhelming crowd of 29 visitors paid their respects to the site that month.

From the very first, WoodPro had a life of its own. The creator became the slave as WoodPro consumed more and more of his time. Interestingly, though, a symbiotic relationship began to develop between WoodPro and its human Extension specialist. The process of learning and capturing information for Extension purposes both fed WoodPro and was fed by WoodPro. Even the name, which was selected as a shortened version of the Wood Products Productivity Program, quickly came to be identified with the Web site and the human Extension specialist synonymously, even though the human was in actuality nothing like a real wood pro.

In order to stem this rising tide of false reputation, the human quickly moved to recruit other human resources into the WoodPro identity. In this way, WoodPro soon became a model of the university-wide resource suggested by Patton (1987), with faculty in Penn State's School of Forest Resources, Department of Industrial Engineering, Department of Agricultural Engineering, Department of Agricultural Economics and Rural Sociology, College of Business, and even the

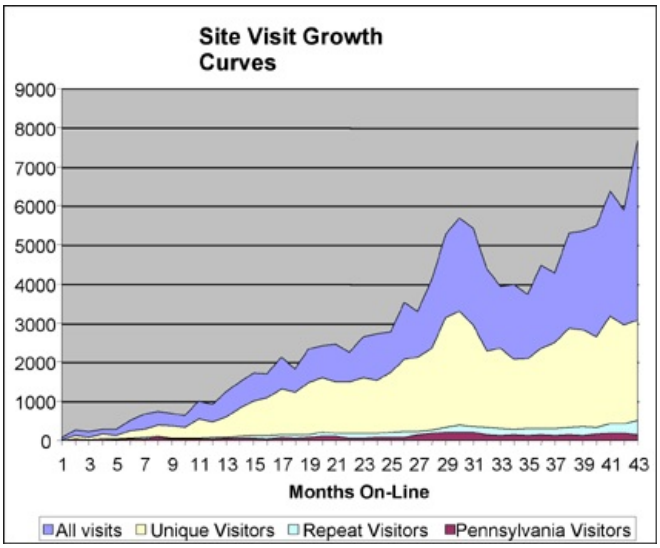
Pennsylvania Technical Assistance Program contributing to its growing persona.

Shortly after the birth of WoodPro, the human Extension specialist spent several months on the road, traveling to companies that were perceived to be WoodPro constituents. In these early months of WoodPro, the face-to-face contact with constituents was found necessary to stimulate the first early traffic to the WoodPro Web site. The human specialist found on these early visits that the potential constituents found themselves thoroughly unimpressed by his presence at their company or meeting. However, the Web site address was always introduced to these potential constituents in hope that future dialogue might be established.

Also of note in these early days was a common comment from fellow Extension humans that the Web site interface was not appropriate for Extension audiences in general, citing reasons similar to those described by Howell & Habron (2004). To a certain extent this has proven true with the traditional wood products Extension constituency, those lower level industry employees who typically attended local short courses. However, as WoodPro grew in stature and maturity, it began to attract a larger, more diverse constituency to its information offerings, confirming the predictions of "new customers" by King and Boehlje (2000) and illustrating the tendency for gradual adoption illustrated by High and Jacobson (2005).

WoodPro site usage statistics (Figure 1), which reflect a significant growth trend from its early life, include a slow but gradually increasing audience from what was originally perceived to be its intended audience, the wood products employee of Pennsylvania. Still, this traditional constituency is dwarfed by the larger, worldwide constituency that now visits WoodPro every month.

Figure 1.
WoodPro Site Visits Since Inception, Illustrating the High Number of Visits from All Sources (Yellow, Blue, and Turquoise curves) Versus Pennsylvania "Traditional" Constituency (Maroon)



Assuming the Role of Lead Navigator

As its quest for virtual knowledge grew, WoodPro became quite proficient in identifying sources for useful information and weeding out the deafening background noise of the World Wide Web that many information hunters find so distracting. In order to capture and share this proficiency, WoodPro developed focused navigation pages that manifested itself in many different forms--as an on-line e-newspaper; an Extension educator support page; industry links, associations, and calendar pages; even as a site specialist for navigating a large government agency. As this role of lead navigator grew, WoodPro became inextricably associated with those World Wide Web sites navigated and referenced, and the new "core constituency" (those visiting the site more than once a month) continued to grow to its current rate of over 500 per month.

Conversion of the Work Environment

Microsoft optimistically calls its Windows interface the "desktop." For most of its users, it is more like a window that is occasionally used to transfer actual desktop work into an electronic format. Not for our virtual Extension specialist, WoodPro. It has learned over time to create, file, and present all its work through the virtual desktop of its human counterpart. Its human accomplice specialist has learned that all knowledge-creating materials in the virtual environment must reside on the virtual interface, the Web server.

Therefore, any document that resides in paper files or non-digitized bulletins and documents does not really exist in the brave new world of virtual Extension. Furthermore, any electronic documents that are not stored and served to the Web site also do not exist in the virtual Extension environment. Therefore, the virtual Extension specialist considers every document fair game for posting to the Web site.

This conversion of thought was described by King and Boehlje (2000) as the necessary process of changing from distribution to access. The virtual Extension specialist does not distribute information from a carefully guarded repository; it provides access to the largest, richest, most content-focused knowledge base that it can develop within the scope of its Extension mission. Creating this environment is a skills challenge to the traditional Extension specialist at the beginning of the virtual transition, but one that is more easily overcome with the passage of time, the improvement of virtual programming tools, and the dedication of the virtual specialist.

Currency Is Relevancy

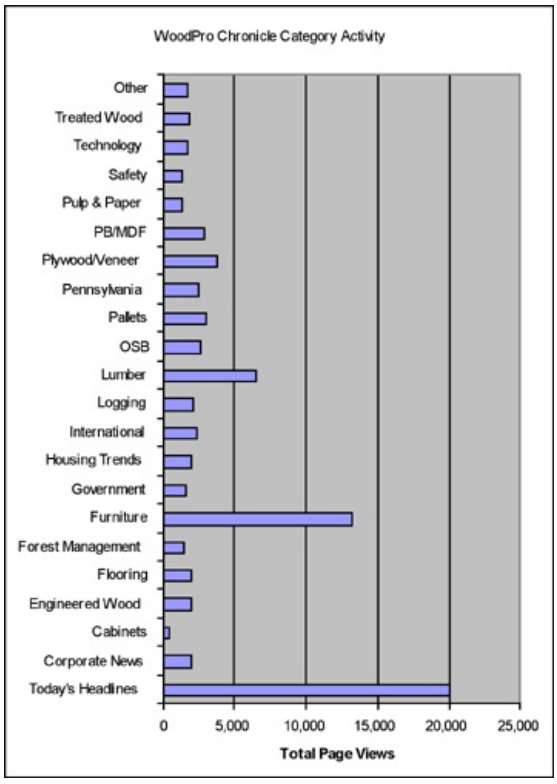
WoodPro's growth is a direct result of its efforts to remain current with rapidly developing issues and new sources of information. Internet users soon grow weary of turning up the same search results to the same search topic. WoodPro takes advantage of this boredom of repetition. By providing several features that change regularly, WoodPro gives its constituents reason to return again and again to the site. WoodPro takes care to demonstrate the currency of its offering by highlighted dating of the most-used and changed features and links.

If It Doesn't Fit the Traditional Extension Evaluation Model, Is It Extension?

Facing program review by university program administrators, WoodPro found that a large portion of its virtual Extension efforts were not easily adapted into the preferred program metrics. It became evident, however, that many of the "new" metrics were even more information-rich than the traditional metrics. For instance, because WoodPro's Extension "bulletins" were created and posted on-line by title, the page view statistics accurately reflect the number of Extension constituents who found the bulletin through content-specific searching and at least scanned each particular bulletin. This is a more accurate reflection, the virtual Extension specialist would argue, than the number of hard-copy Extension bulletins printed and distributed. How many of these traditional bulletins are thoughtlessly picked up by expo attendees, with never another thought given to them?

Of course, the steady increase of Web site traffic is certainly a verifiable indicator of Extension program health over time. However, for those administrative traditionalists who like to see personal feedback on program assessments, the virtual Extension specialist can always fall back on a tabularized report of email comments sent in by its virtual constituents. Web site traffic always provides the virtual Extension specialist a ready pulse on the current interests of its constituents (Figure 2).

Figure 2.
Categorical Topics Viewed by WoodPro Constituents Since Inception



The Virtual Extension Specialist Knows No Bounds or End to Its Work

WoodPro, even though identifying itself as the Pennsylvania Wood Products Productivity Program, is utilized by the general public, researchers, and Extension specialists the world over. While the overriding mission is to promote the welfare to the local industry, the virtual Extension specialist recognizes that the sheer volume of virtual program constituents could easily distract him from its local constituency.

In order to maintain a fair sense of mission, WoodPro sends out its human Extension counterparts on regular missions to the local constituency, has them hold locally-focused conferences and programs, and offers Pennsylvania companies exposure on the Website. In this way, the virtual Extension specialist stays true to its local constituency and mission while providing virtual Extension support to its worldwide virtual constituency.

Finally, the virtual Extension specialist can never rest on its Web pages. WoodPro's original six pages of content now number over 100, with several thousand links providing WoodPro constituents their wood industry-specific interface to the world. Every day, every action of the human Extension specialist is evaluated in light of its value to the virtual Extension program.

For this reason, WoodPro actively seeks to groom future human collaborators for its mission. And future collaborations could come through a newly created virtual collaboration environment, eXtension, a nationwide effort to move the profession of Extension closer to that brave, new world envisioned by King and Boehlje. The Extension mission for WoodPro will end only when wood products themselves become irrelevant to the virtual constituency.

Likewise, each and every virtual Extension program of the 21st century will be evaluated by its current relevancy to the needs of its constituency. Programming dates must be kept current, on-line registrations must function conveniently and correctly, agricultural alerts must contain status updates and real-time geographical tracking, on-line questions must be answered promptly. The virtual Extension specialist must present the constituency with the most timely, most useful, most fun way to acquire information in the realm of that extension program.

Such is the face and the challenge of 21st century Extension missions and specialists. The future is now.

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