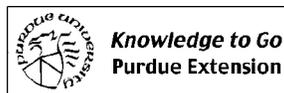


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Extension's Future: A Conversation About What Lies Beyond the Brink



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Extension's Future: A Conversation About What Lies Beyond the Brink

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This is the text of the McDowell Lecture we delivered at The Pennsylvania State University's Extension Annual Conference on November 18, 1999. We presented the lecture as a dialogue on urgent issues confronting Extension, so this publication is more discursive and less linear than you may be used to.

Mike Boehlje

The basic assumption, the basic premise, we are working with here is that people are really almost insatiable consumers of information, and, although my roots are in agriculture, we see this same thing happening in all dimensions of the public and certainly in all dimensions of Extension education.

Whether it is consumer and family science or youth programs, whether it is community development or leadership programs, it's pervasive that consumers increasingly ask for information, need information, want information.

Our clientele is increasingly more demanding of us. And in that context there are two dimensions of this information marketplace that we think are profoundly changing and have the potential to completely redefine, not only the market but the role that we might play in that market, as public-sector providers of information.

The first is the emergence of the private-sector providers. The bottom line here is that the information marketplace is increasingly being privatized. And I think we will see the

private-sector domination of this market increasing. This has the potential to profoundly change Extension programming.

And the second major theme we want you to think about is the change from distribution to access.

We are no longer trying to distribute information; we are trying to increase the points of access by which people might obtain that information. We are going to come back and develop these ideas with you, but we want you to think about how these issues will change the way we do business in Extension organizations.

So the key question is, How do we compete in this new and evolving information marketplace? First, we are going to talk a little about what information is. We are going to make the point that information, data, and knowledge are quite different. We are going to come back to that later and talk about our real comparative advantage in the public sector in terms of the information marketplace.

We are going to talk about our assessment of what customers want. We are going to talk about who our customers are and the importance they have. We are going to talk in more detail about this idea of accessing information rather than distributing information.

We are going to talk about public-sector/private-sector linkages. If the private sector increasingly grows as a major provider of information, it is going to be critical to decide how we are going to participate with them, how we are going to work with them, or whether we are going to be separatist in our approach and try to do things alone.

And finally, we are going to talk about the opportunities we think are there for us. We don't want to leave you with the impression that "Extension on the brink" means that we are on the brink of failure. We think that we have some real opportunities for moving dramatically forward, but I think that both Dave and I would say that this can't happen if we continue using the older models of Extension that we have seen in the past.

Dave King

Let's take a look now at some of the components of what we are talking about. This gets at the theoretical base for some of the premises that we bring up, so we will start by trying to define terms.

Data are those bits of information that you find in observation, the bits of information that you can get when you look very closely at some individual point of activity. We can talk about this in relationship to agriculture. It's the difference between what happens across a county as a whole versus what happens on a particular farm at a particular location.

But beyond data analysis, this has happened for years across all consumer issues, all consumer access points.

When you walk into the grocery store and you see an unusual type of food in the vegetable rack, sometimes there, right next to it at the point of purchase, is information about how to cook or eat or serve that particular unique food. The data that people gather about you as a purchaser tells them what information to put there and why to put it there.

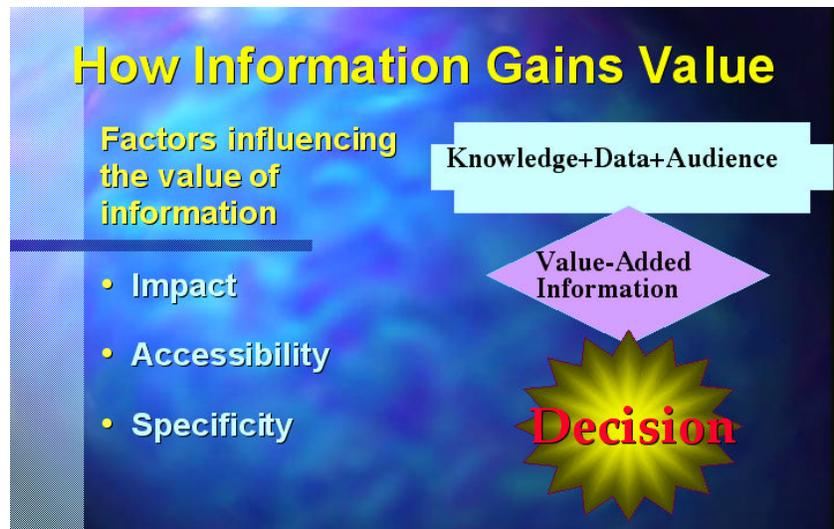
Where does that information come from? It comes from a vast knowledge base. Extension is really the keeper, in many ways, of the Land-Grant knowledge base. We're the point at which the knowledge base actually is put to use at the grass-roots level.

It's a broad knowledge base, a broad set of pieces of information, and it is built from many perspectives.

This knowledge base is, in fact, the kind of thing that, when combined with data, combined with those observations at the specific location, creates information.

When we start looking at how this information gains value, I think you start to see why the environment that we are working in is shifting. Right now, we assume there are at least three major factors or questions that influence the value of information. Is it the kind of information you need to accomplish something? Can you get access to it? And is it specifically what you need?





If you have knowledge combined with data, you get information. If you then combine information with an audience that has a need, an audience that is trying to make a decision, you get value-added information. When you have knowledge and data coming together with an audience that needs to make a decision, the information gains immense value at that point. When information gains value, as Mike will say later, you will find a lot of competitors trying to participate in that marketplace.

Mike Boehlje

What we are saying is that when information has value, the private sector becomes interested in providing it. The more value they can capture, the more incentive they have to be providers. It's exactly the reason why we see some of the changes in the information marketplace today.

Dave King

Let's take a look at the attributes of information. We have at least six basic attributes. Information must be objective, accurate, complete, understandable, timely, and convenient. Going down that list, you can see how information starts to gain value as those attributes have more impact on users' needs.

As you start to look through those attributes, ask yourself, "Where are we?" "Where are we competitive?"

Mike Boehlje

We're going to come back to these concepts because they build the base for some of the conclusions we make about Extension's comparative advantage. But let's return to our audience, our customers, and ask some fundamental questions about them.

Our customers are the drivers in this information marketplace, and certainly I do not want to assert for a minute that our Extension organizations are not customer-driven. I don't want to assert for a minute that we are not customer-responsive. I don't want to assert for a minute that we aren't aware of customers. However, I do want to ask if we are customer-driven *enough* to successfully compete in the information marketplace.

The key question in the private sector is not "Are you customer-driven?" or "Are you customer-responsive?" It's "Do you anticipate, do you anticipate where your customers are going to be?"

And one of the challenges I think we increasingly have in Extension is that information sources that anticipate, that are not just responsive, but that actually anticipate, are significantly ahead of those of us who are merely responsive. We must catch up. In our judgment, the only way we are going to be able to accomplish this is to complete the process we have only started. To do this, we must first understand our customer in even more depth than we do right now.

We have done a pretty decent job in our Extension programming of segmenting our customers in terms of audiences. That's why we have people who deliver to youth and other people who deliver to farmers. We have done an audience segmentation. This is, again, a more-than-respectable "first cut" at audience segmentation. But we haven't cut deeply enough. We haven't segmented the segments.

In my area of agriculture, for instance, the issues that a part-time farmer faces in terms of information and even the most effective delivery system or the most convenient access points are vastly different from those of a full-time farmer. We need to think harder and with more urgency about how we are going to put systems in place so information flows to those different segments of customers. We cannot afford to be comfortable with our traditional claim to having an "audience focus."

We need to think seriously about the issue of personalized messages to individual customers. This is exactly what e-commerce and the Internet are doing in the private sector. Right now they have the capacity to provide individual people with information uniquely focused on their individual set of circumstances.



My vision of the future is that we will have personalized message machines that you and I will carry around with us, and that those personalized message machines will allow those we permit to do so to get unique messages to us specifically focused on what our needs are. We need to segment our audiences more precisely, of course, but we also need to segment the messages we prepare for them.

Dave King

In order to do that we have to ask some questions. We have to step back a little bit. There are some broad-stroke questions. Who are our customers? I'll give you Rule Number One: Know Your Audience. If you do nothing else, if you know nothing else, know your audience. Who are your customers? What do they want? What *specifically* do they want? *When* do they want it? And *how* do they learn?

This is a process that we have looked at in the past. It's been the kind of thing that some people have called "needs assessment." It really is much more complex than that. It's a very complicated matrix of needs, wants, and motivations. If I know what you need but *you* don't think you need it, that doesn't do me any good at all. I need to know what you want and what's going to motivate you to access whatever information we might have.

Extension brings a couple of over-riding strengths. You know these very well. These are our hallmarks: science-based objectivity and over-all accuracy.

But let's take this back to the list of attributes that we discussed earlier. How do we compete? We are okay on "objective," "accurate," and "complete." (Most of the time we are pretty much complete.) "Understandable"? We try very hard to be understandable, and we are probably doing okay there. Are we "timely"? Are we "convenient"? We probably have been in the past, but that's a floating target. I would say that--today--we are relatively unsuccessful at being timely and convenient. What our customers really want is real-time learning.

You've heard people say they want "just-in-time learning." But that's not really the case. What they want is real-time learning. It's a subtle but different aspect. What really drives audience satisfaction is immediate access, immediate access to the information exactly when it is needed.

What we are talking about here is a completely different perspective on the teaching and learning process than we have had in the past. What we are really driving at here is

audience/learner/customer satisfaction. This is much more than process. Now we have the goal set on a satisfied customer, a satisfied member of the audience. And it takes a much more complicated and comprehensive understanding of who that person is to get there.

The real question that comes to mind, then, is, Can we have the kind of personal contact it takes to go out and get those pieces of data about every individual? Do we have the ability to have that personal contact? Can we provide information to customers in that timely, credible, useful fashion? I think that's a big question we all have to ask ourselves.

Mike Boehlje

When you think of personal contact, though, what we have traditionally thought about is one-on-one, face-to-face contact with our customers. And what we need to acknowledge is that technology may actually be profoundly altering the definition of personal contact. Personal contact does not necessarily require face-to-face contact.

Let me give an example from the private sector, where they have "gotten personal" with individual customers through the World Wide Web. It's Amazon.com. If you are willing to provide them with some information concerning some of your personal interests, they accumulate a database based on your buying behavior. When they have the kind of new release that they think you are interested in, they automatically notify you.

It's automatic messaging, personalized to you. It's not an ad in the paper that you might run into. Not something that you *might* see, not a general description. It's a personalized message to you that says, "Did you know that we have this new release that you might be interested in? We just put this particular book that is in an area in which you have bought books from us previously on sale for you."

The point is that we need to acknowledge that we can become very personal with this technology without having the face-to-face contact. What that really means is that maybe we aren't as constrained in terms of the human resources as we thought.

Every time we get into discussions about how we need to have more personal contact with our customer, we immediately say we don't have the resources to do it. And maybe we don't have the human resources to do it, but it could be that we have a profound opportunity for technological substitution for human resources. This quite possibly may be more personal in some cases than the kind of systems we have in place today.

Dave King

The face-to-face contact we have all experienced over the years probably includes that kind of personal contact. But we have to ask ourselves whether or not it needs to be there in every single instance. If we go back to Rule Number One, Know Your Audience, what you'll find is that the audience is expanding. And that's where this issue really comes into play. The definition of personal contact is going to be defined by the audience, not necessarily by those of us who visualize a certain relationship with our learners.

You will see competition from the private sector all the way through this process. And we can see the potential for information gaining value. We do have to put the brakes on for a second and ask some questions. For instance, What about the core of information that we will need to continue to provide, whether it has "value" or not?

Mike Boehlje

The private sector is only going to provide information where it can capture value, and there is a whole set of public policy issues where there is no value incentive. In fact, if the incentive is there it might be for the private sector to provide misinformation in that debate. In most public policy issues there is no incentive for a private-sector firm to be able to provide information because they cannot capture revenue from that information. They are going to give a perspective that's consistent with their own value systems, their own corporate policy, whatever it might be.

For example, environmental issues are very important issues. Private firms, generally, unless they can capture value, are not going to be providing information on environmental issues.

Food safety information, now that's an example that is kind of interesting. There are some private-sector food marketing firms that are saying that selectively providing some relatively disinterested food safety information with the products they sell is a way to provide comparative advantage and gain market share over those companies that cannot guarantee food safety.

They are saying the food safety issue is so important to consumers that they are going to work harder even though it's not required by regulation or law to be able to guarantee the food safety of their products. And they do it through not only labeling techniques, but they do it through "trace-back" and identity preservation. This is one public policy issue where it could be that there is some value created here for the part of private sector.

Another example. One of the things we are facing right now in agriculture is this question of financial stress. How many banks are going to provide information to their customers about bankruptcy laws and their potential use? Bankruptcy in the corporate world is a legitimate financial management strategy for those under financial stress. And yet you would not expect the private sector to provide information to their customers about this.

A very critical role for the public sector is to provide that kind of information so that our customers or clientele can make some reasonable choices.

So our judgement is that even though we are moving rapidly to private-sector domination of certain facets of the information marketplace, there is still a critical role for us to play. It may be, however, in more public-good issues than in the past.

Dave King

Now that we have talked about information, let's take a look at the other critical issue: access to information. It's critical that we move to an access environment, but there are some issues here also.

Mike Boehlje

Access to information is one of the problems with privatization of information markets, because private sector providers of information will not necessarily provide open access. They are only going to provide that information to those people from whom they can capture value. That value must create a strategic competitive advantage for them in terms of their customer relationship. They must gain market share, sales, whatever it might be. This activity must be a way in which they help their customers becoming increasingly more successful.

One of the real concerns here is that the privatization of information markets may, as a matter of fact, narrow the access to information. The private sector is going to only focus on where they can capture value, in our judgement. So they are going to be very discriminating. It's critical for us as we think about the fundamental role of Land-Grant institutions to provide open access, to level the playing field, to make sure there is equal access by all, whether it be to education, to R & D, or to information. We must maintain some role in that activity to make sure that there aren't groups of people left behind.

Dave King



One way to deal with this might be by creating linkages between public and private information providers, as Mike and I discussed in our October 1998 *Journal of Applied Communications* article, "Extension on the Brink: Meeting the Private Sector Challenge in the Information Marketplace" <<http://www.agcom.purdue.edu/AgCom/EXTonBrink>>.

So what does Extension bring to the table when we look at the possibility of public and private linkages? What role can we play in that process?

We could be a wholesaler. We could basically manage the knowledge base to whatever degree possible, helping it expand when possible but then feeding that information to the private providers that have a retail interaction with our former customers.

Or we can continue to be a retailer of information. We have to be very careful in defining our market niche at that point, though. We have to go out and understand what it is we are most competitive at. We have to look for our most competitive niche.

There is another concept in here, knowledge management. Knowledge management is a concept that surfaced in some of Peter Drucker's writings in 1988. It's taken the corporate world a while to actually start using some of those concepts, but they are starting to show up now.

As we look at the potential of the knowledge manager, perhaps we in Extension are a more effective manager of the knowledge base. Maybe we need to be not just a keeper of the knowledge base, but an actual manager of the knowledge base. If you take a look at where we have a competitive advantage, it's in the access to knowledge, as I said. If we are the keeper of the knowledge base, then we have primary access to it.

The private sector, on the other hand, has a couple of competitive advantages. Certainly, one is data gathering. If we can continue with the analogy of Amazon.com, they're right in your face, gathering information about you. And you are willing to give it to them. You are in control at that point. And an empowered consumer is an effective consumer. I think because of that the private sector then also has an advantage in creating valuable information out of the combination of the data they have gathered and our knowledge base they are working from.

Mike Boehlje



There is concern here, as we have already suggested. If we put these private-sector/public-sector linkages together by leveraging our comparative advantage in knowledge creation and the private sector's ability to collect the data, thereby creating information that has profound value, will they do it without acknowledging us? Can we trust that the private sector is going to be providing the objective type of information that we would?

So we're not suggesting to you that we abandon the public information activity and leave that all to the private sector and that we put all of our energy into knowledge creation. But we are suggesting that we have to maintain a role in that activity if for no other reason than to keep the private sector honest in its delivery system.

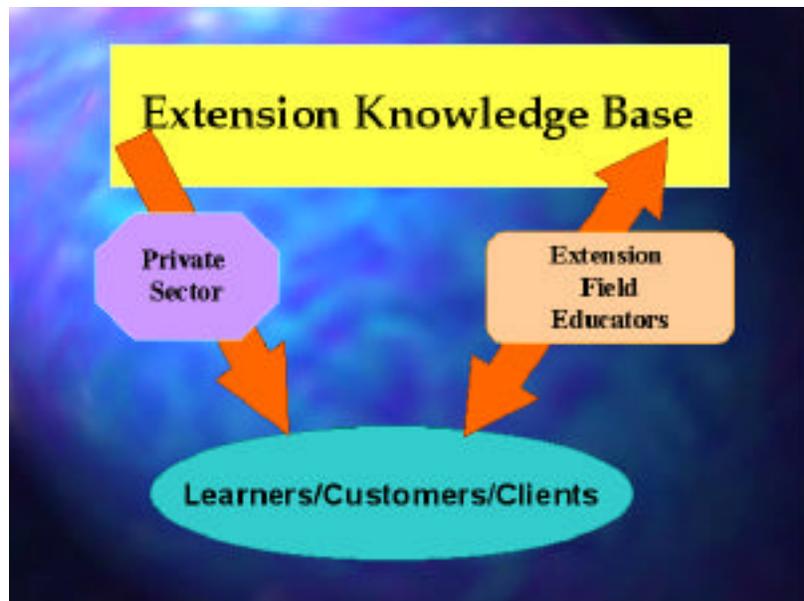
At the same time, to be very frank, we may need to be much more willing than we ever have been to think about how to create joint ventures with private-sector deliverers of information. And maybe our role is to be the wholesaler of information. Maybe they can have customer contact. Perhaps they use our knowledge base as part of that delivery system so it's a partnership. But we have to be cautious about the issue of providing objective information in the process.

Dave King

Let me recap before we offer some of the opportunities we see inherent in all of this.

To be useful in decision making, as we have tried to reinforce all along, knowledge must be integrated with data to create information. We are working from a knowledge base that looks something like this.





We have customers who are at this point in the environment. There are Extension educators and field staff who might provide some connection. There's the private sector that provides some connection.

The movement between the knowledge base on our side, on the public-sector side, is a two-way road. We gather as much as we take from the knowledge base. The private sector, however, is a one-way road in most cases.

If we look at public-sector/private-sector linkages, how do we turn them into two-way streets?

The learners/customers/clients, whether we like it or not, are accessing the knowledge base in many ways. They have a connection directly to it. Yes, there is some refinement going on in both the public and private sector, but much is also being accessed directly.

Think back to the computer industry, a little while ago, when you bought a desktop computer that had all of the external features. It had CD ROM. It had a curved keyboard. It had a 17-inch monitor. It came in a translucent case. You thought this was cool, and that's why you bought it.

Then the folks at Intel took a step back and said, "Hey, wait a second here. It's our stuff inside that's actually making this work."

And they came up with a plan so that now many people buy computers by looking to see whether there is “Intel Inside.”

Well, we have to think about that too as people start to access our knowledge base and as the private sector starts to refine our knowledge base and deliver it to the learners. We have to consider making a big deal of “Extension Inside.” That’s what it really comes down to. We are the source of the power, right?

Mike Boehlje

So in our judgement Extension *is* on the brink. This could be the brink of opportunity, or it could be the brink of very, very difficult times. We think that there are opportunities in this industry, and that’s what we want to share with you in the next 10 minutes or so. We think some of the potential responses we identify might help in this profoundly changing information marketplace. In our judgment, if we continue to do things as we have in this marketplace, we might very well find ourselves redundant in 10 or fewer years.

Dave King

So, we start with Rule No.1: Know Your Audience. Know how they learn.

I had a specialist come to me and say, “Dave, I know my audience. I can take you to their house. I know their kids. I know where they go to school.”

Fine, humor me. Help me understand more about them. Help me understand why it is they do what they do. Why they learn. And where they learn.

Without question our potential audience is growing. Right now, lifelong learning is becoming a factor in everyone’s life. We’ve been involved in lifelong learning for years. Now we’re starting to see multiple audiences express the need for lifelong learning.

Our audiences’ jobs are going to change. Their employers are going to tell them they need more education. Where are they going to get it?

In order to be ready, we are going to have to position the Land-Grant and Extension knowledge base for access. We need multiple points of access, not just one Web site, not just one county office, not just one 800 number. We need multiple points of access that are tailored to individual audiences and will attract individual audiences to us.

In order to do that, we are going to have to be involved in some pretty aggressive marketing. We are going to have to put those access points out there, and we are going to have to incessantly tell people, "Here's your information. Come and get it."

We are in a new world of access versus distribution. Some say the World Wide Web is going to be the preeminent access point. And there will be toll free telephone numbers. There are going to be kiosks at malls. There're going to be a whole lot of other things.

But also, technologically, we have to look beyond the World Wide Web. It's revolutionizing things, but what's the next step? Higher education was a driver in the development of the World Wide Web. Now commercial and corporate entities have leap-frogged ahead of us. We need to keep our eyes open to figure out what the next step will be so we can take advantage and develop whatever is to come in the same way.

Mike Boehlje

The second concept we would like you to think about in terms of positioning in this new marketplace is to leverage what you have learned from your years of face-to-face contact. Figure out how you can personalize what you're doing without face-to-face contact.

Let me just give you a personal experience here that I think is valuable in terms of understanding this. On the Purdue campus we just introduced a joint program with the Krannert School of Management offering an executive MBA program. It's a fully accredited Masters in Business Administration program that includes agribusiness.

What's notable about this program is its distance delivery. It's an Internet-delivered program. I am teaching in the first year of the program. It's been a phenomenally exciting experience.

The people involved in initiating this program come out of an Extension tradition. They are people who come out of an understanding of how we work with customers, how we work with individuals, how we tailor programs. It wasn't our research faculty that brought this. It wasn't necessarily our on-campus teaching faculty that brought this program to the market.

An interesting element of this program is that we bring the students to the campus for 1 week of orientation and then they go home and work for 8 weeks on the Internet, conference telephone calls, etc. We bring them back to the campus for 2 weeks during each of the four modules of the program. They are in residency for a total of 9 weeks



during a 2-year program that gives them fully accredited MBA degrees, and yet, again, we have face-to-face contact with them for only 9 weeks.

I would tell you based on my own personal experience that I understand those students and they understand me about as well as we would understand each other if I were in front of them every day of the week. My colleagues and I talk to them regularly, either by email or audio file. We'll read their answers to question their case studies. We'll sit down and develop audio files, and we ask them, "Did you really believe this?" We can ask, "Do you really mean this?" And the impression comes through very clearly.

We have them make PowerPoint presentations to us using technology such as NetMeeting©. They make these presentations from their locations around the country. We sit in an office, and we can talk to them through conference telephone calls and see their PowerPoint presentations.

We work with them just as we would in the classroom. And, through other mediating technologies the program employs, they work with each other just as they would if they were together, face-to-face, on campus.

In this program we have students from all over the United States and Mexico. What we've done with this program is leverage how we have been able to work face-to-face with audiences, whether in the classroom or out in the countryside in Extension programs.

We are using that knowledge base to inform, animate, and personalize what might seem to many people a very impersonal way of delivering information and education. So we think that there's real opportunity here to leverage what we in Extension already know about personal contact and take it into these new delivery systems.

Dave King

Earlier this year, the *Harvard Business Review* published a report that was a fairly exhaustive review of various knowledge management systems around the country used by corporate consulting agencies. They cited Ernst and Young as one example and Anderson Associates as another. Ernst and Young hires people who capture that knowledge and internalize it. They hold the value internally. When you go to Ernst and Young, they send you, the client, to one of these people, and you pay \$3000.00 an hour to talk to that individual. They deliver the knowledge to you based on what your specific needs are.

At Anderson & Associates, their people come back and code the information to store it in an accessible form. As a client at Anderson, you get access to that database, to that well of information, at \$600.00 an hour.

Those are two different ways of coming at it. The bottom line from the *Harvard Business Review* study is you can't do both. Any consulting agency that's tried to do both or combine those methods of managing the knowledge has failed miserably financially.

What we're suggesting here is that maybe we need multiple systems. We need the Ernst and Young model on one side, and we need the Anderson model on another. We manage them differently, but work with them in parallel fashion. They carry similar value, but in fact they are different. What we're suggesting, then, is that we must do both.

Mike Boehlje

Another point. Our expectation is that more of our information delivery system will be done in team activities and team efforts. That's not new.

What we think is going to be critical in terms of this process is trying to reduce the focus that we constantly have when we do team work of trying to find out what the contributions of individuals were to that team activity. We see this problem on the research side of the university, as well, where in joint-authored publications we have to show who is the primary contributor. That's not the way that the private sector does it.

We need to consider looking at team contributions and evaluating individuals on a team basis rather than on an individual basis. It's also the issue of rewarding team output rather than rewarding individual output.

Another dimension that is really important and that is a challenge to many of us in Extension is being open to simultaneous experimentation. These markets change so rapidly that in a period of rapid change it is difficult to figure out what the right strategy is for the future. This is true of any industry or any economic system under profound structural change.

What should happen is that to really protect ourselves, we try experiments. We try two or three or four options. We say, "We don't know exactly what's going to take us to the future, but here are three alternatives." We should go down those three paths simultaneously, using not full-fledged commitments but experimental commitments. It's



the idea of seizing the freedom and opportunity to experiment before we choose an alternative. This approach is not profound, and yet it's not generally part of Extension programming.

Then, down the road, when we have gathered information, we choose which strategy, which approach, which technique, is going to fit us the best.

That also means that we change our perception of the consequences of failure. If we are going to truly believe in experimentation we also truly believe that some of those experiments will not work. The question is not that they did not work. It is what did we learn?

So a critical issue for us is also to document and reward the learning process as well as the performance process. We have to think about documentation not only for accountability purposes, we also have to think about, "What did I learn out of this process?" Documenting our learning, as opposed to our customers' learning, is frequently not part of the documentation systems we have in place.

Dave King

The competition in learning is intense. Consider Phoenix University, Jones' International, and all learning institutions from a private sector that are moving in because of the fantastic growth in the potential audience.

Just as Mike says, we need to take these experiments and run them simultaneously. Run experimental linkages with private providers. Go out and "dance with the devil" for a while and see what happens.

Be very careful about our brand identity. Be very careful to remember that when we provide information in this public/private linkage, we bring to it the "Extension Inside" concept, so that we are maintaining the overall value of the knowledge base. But work toward a simultaneous test. Check it with more than one partner. If one experiment doesn't work, back off and continue with another.

I think if we leave you with one thought to remember today, it will be this. "Learn as much as you teach."

Mike Boehlje

We welcome the opportunity to respond to any questions that you might have. What we are talking about here is in a development process, and we are interested in reactions. Are we really off the wall? Are there some elements of this that need further expansion? Do we need to go back and start from scratch? Let's talk about it for a little while.

Authors' Note: We still welcome your reactions and questions. Join the discussion of the issues we raise on our discussion site, available at <http://www.agcom.purdue.edu/AgCom/EXTonBrink>.

10/2000

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