

Fostering Creative Change in an Educational Institution

Mike Vail

Thursday, July 13, 2000

I have to tell you that I struggled a little bit with the topic of this session even though I think I gave Al the original idea for it. It fits very nicely into the concept that Jim and Suzanne have been talking about with learning communities. It's an innovation. It's an idea. It's an environment in which we really want to be able to work. Think for a moment. What kind of an ideal situation would you choose in which to work? You would probably choose one where your ideas were valued, where you had freedom to make suggestions, to talk about the situation and to collaboratively draw people together to create solutions to problems that you all recognized.

And so one of the things that I want to do with this session is to step back a moment, or step back one level, from the level we've been working at today to talk about the social system in which we are trying to create change. Now let's think about what it means to be a person who is trying to create change in others.

First of all, I'm a teacher. And even though I said yesterday there's no such thing as teaching, I am a teacher. How many of you have assignments as teachers? One of the goals of being a teacher is to create lasting change in your students. Wouldn't you agree? Some of you have administrative responsibility and administrators are forever trying to encourage improvements in the learning environment. So administrators are change agents as well. Now in case we've missed everybody, or anybody, the next category is preachers. Are preachers change agents? Of course, because you're trying to spread the

gospel so that the Holy Spirit can create change in people's lives. So we all serve as change agents in our roles or in our jobs.

Now what does it mean when we say change and what is the body of knowledge that has given us information about the change process? There's a whole body of research from anthropology, sociology, and rural sociology. Rural sociology was one I found interesting because rural sociology research took place in multiple cultures. They basically researched changes in agricultural practices. For instance, if a new type of seed for growing food was introduced in a culture, how did acceptance of the new seed get diffused or spread throughout the new system? They also studied health in various cultures. For instance, what if we just had people wash their hands more often? How can we get that idea across to all the people and how does it affect the health in the community?

In education we often talk about change. The interesting thing about change in education, for those of you that think things should happen quickly, is it takes 50 years for the average new innovation to become mainstream in education. That's a long time—50 years.

In communication, research centered around how information is passed from one person to another or one group to another. In marketing, the research is dealing with how you sell products or market them. Organizational theory has provided research as well and that is where the ideas that Jim and Suzanne were talking about today come from.

What are the steps that occur in social change? The first step is that you need to have an invention. An invention in this case is not just a new product like a light bulb or a

microwave oven or a palm held computer. The innovation or the invention can also be a new idea or a process that you're trying to get people to adopt.

The second step in the process is diffusion. Diffusion means to spread the innovation or the invention throughout the system. After the innovation has been diffused, we have to consider the positive or negative results of adoption or rejection of the invention by the system. These are the steps in social change.

The elements involved in defining change are: First, the invention or innovation and all of its characteristics. The characteristics will determine how the change is accepted and also how long it takes for the change to occur. This innovation is communicated through channels from the change agent to the system as a whole. We'll discuss how you go about passing information to the system and how you persuade people to accept your position. The other important thing is that all of this takes time.

So now we have an innovation that's communicated through channels over time among members of a social system. The characteristics of the system also affect how the invention is accepted. There are four elements listed in your handout and we will describe each of them, one at a time. How do the characteristics of the innovation affect its diffusion within the system?

The first characteristic that's critical is how the system perceives the relative advantage of this new innovation. Notice I didn't say the actual advantages of the innovation but the perceived advantages of the innovation. Is it a lot better than what we're doing now? Does it give me a lot of improvement in the performance of my task? What is its relative advantage over the current practice?

Next we have to consider compatibility of the new innovation with the existing system. Is it radically different? Is it a learning community versus an autocratic community? How much different is it? If it's very different than what we do today, it's going to take longer for the innovation to become adopted.

Then we also have the complexity of the innovation. If I want to get people in a society to wash their hands more to improve health, that's pretty simple. If I want a teacher to change from marking students' papers with a red pencil to using a green pencil, that's pretty simple. But what if you want to change a complex learning environment to a learning community? When we looked at that earlier today, you know that that's a fairly complex situation and an innovation that's going to take some time.

Another important characteristic of our innovation that affects how it is diffused in the system is its trial-ability. Can the individual break it into small parts and try it in their own situation without completely adopting it? Here's an example. If I'm designing a lesson for students in the classroom and someone has told me writing and distributing objectives to the students prior to the lesson would improve learning, then I can try it on one or two lessons. I don't have to do it for every course and every lesson in order to decide if it was a good procedure or not.

The next important characteristic of the innovation is its observability. If my colleagues can observe that I have adopted an innovation, then I must be more committed to adopting it before a trial period. If instead of carrying a notebook day planner for my schedule and notes, I start carrying an electronic palm held organizer, people know

immediately that I'm using this small computer. My commitment to using that computer has to be stronger than in some other inventions because people can see it.

If we talk about changes in attitudes as a new innovation, whether people think I'm racist or not, they may or may not be able to observe my behavior and how my behavior changes as my attitudes change. So accepting a new idea or innovation will depend on its observability in the system.

We said that the innovation has to be communicated in the system through some kind of channel. How do I choose the channel that I use to inform people about a new idea? If I need to introduce the innovation to a lot of people, some kind of mass communication works well. Mass communication doesn't mean just television, radio and newspapers. Mass communication can be a lecture session or a seminar like you are involved in this week. We have a person who is talking to you as a group about a new idea, so we're raising your awareness about some new concepts or innovations during this mass media situation.

Persuasion does not take place in mass situations. The best way to persuade someone about the value of an innovation is in interpersonal interactions, or face-to-face communication. Not only do I, as a change agent, talk to you in that situation about the innovation but you can question me directly about the innovation, so choose interpersonal channels if you need to persuade someone.

What are the time elements in diffusing an innovation within a system? The first thing we must recognize is that the individual who is making the decision has to take time to process the information and go through what we call the innovation-decision process.

The individual's personality and their tendency toward change will determine how quickly they are able to make a decision about a particular innovation.

The other thing that is going to determine the time it takes to adopt or reject an innovation is the social system itself. What is the rate of change in the social system? The rate of change is determined by the collective personalities of the people who make up that system. Let's take a look more closely at the innovation decision process.

The first stage in the diffusion process occurs when an individual become aware that the innovation exists. Some people even call this awareness-knowledge, the very lowest level. You hear about a new idea at a conference like this one, curriculum development for instance. After you gain some knowledge about that particular innovation, you go through the persuasion stage in which you begin to form favorable or unfavorable attitudes toward the invention or the innovation. At this time, during the persuasion phase, you will also test your ideas with other key opinion leaders within your system.

Next, you make a decision. You have information. You've formed your attitudes and you decide to adopt or reject the innovation. Rejection is a valid decision at this point. It's just as valid as adopting. You'd think you were finished after you decided to adopt or reject the idea but there's a fourth step in this process. You try to find confirmation from your colleagues and other social systems to see if you really made the right decision.

Let's look at adopter categories for a moment. Remember I mentioned that people have a tendency, or a relative tendency, toward change. You have all seen this bell-shaped curve before—it's actually a mathematical or statistical model. In a bell-shaped curve most people on any particular test tend to be grouped toward the middle. That's why you

have an average or mean of test scores. If you take a standard deviation away from the mean, you have about 60-80% of everybody in the population. If you use enough people, you end up with this nice bell-shaped curve.

Now let's look at the left-hand side of this curve for a moment. The first adopter type is called innovators. That's about 2.5% of every population. Innovators are people that are usually outside the main stream of the system, but you know who they are. They're the ones who quickly adopt or try every new idea that comes along. Innovators are important to the system because they make other people in the system aware of new ideas. They tend to look outside their own social system for new ideas. They read different kinds of journals than the normal population. They're looking for something else to try. Innovators account for about 2.5% of the population.

The next group is called early adopters and they make up about 13.5% of your social system. Early adopters characteristically include people who are called cosmopolite. Cosmopolite people tend to have a broad worldview. They aren't limited to their social system. They tend to look outside to see what else is happening and how things can be changed in their own system. The other thing that's important about early adopters is that they are more mainstream than innovators. They're accepted and looked to by a majority of the people in the system.

Next we have the early majority, people that tend not to be the first to get on board a new idea, but they don't want to be the last in the system to adopt the idea either. Next is the late majority. These are the people that sit back and say, let's see what happens first and when it's safe, then we'll try that new idea.

The last type we call resisters. Resisters are people that are a change agents best friend. Resisters are never going to accept that new idea but as a change agent, you need to identify them to find out what the arguments will be against your idea. You need to know who resisters are and you need to use them, but understand you cannot get 100% acceptance of any new idea.

Here is an S-shaped curve. Researchers have proven that this curve is descriptive of how things happen in many different situations, In this drawing the height of the curve represents the total number of people in the system who have adopted the new idea over time. As you move from left to right, the chart indicates the time since the innovation was introduced. Over time, people will tend to adopt your idea. If we overlay the bell-shaped curve and you take the sum of all of the people who have adopted the idea, that produces your S-shaped curve. This curve is a little misleading. The top of the S should get closer and closer to 100% but as we said it never really gets there.

What are the characteristics of the social system that affect how change takes place? We need to define the social system as a collection of units. Units can be people, departments, different companies, or whatever you want to choose, but are a collection of functionally differentiated, identifiable units that are engaged in joint problem-solving with respect to a common goal. The attendees for this conference were chosen, presented with a common goal and are now working jointly to try to solve some of the problems that we've identified. So this group represents a social system. Units can be individuals, departments in your institution, schools within the region, districts within the region, or they can be the regions themselves in terms of the total church.

How is the social system structured? When I think of structure in an organization or a social system, from North America or from the United States, I see an organizational chart. It has the rector or the principal at the top, the dean next, then department chairmen, and under that the faculty. That type of organizational chart is a formal structure of the social system. But social systems also have informal structures. The informal structures are usually clusters of people that may cross-hierarchical lines or they may cross departmental lines in a school. In a church, they may be comprised of different age groups, or different Sunday school classes, but it's a cluster of people outside of the formal structure of the institution.

You also have to consider the social norms of the system. In other words, is it a conservative, Wesleyan holiness group or is it a Unitarian group? How will they accept change? Is it traditional or modern? If you're trying to create a modern institution or organization, your tendency is to look for innovations to help you improve the institution. If you're trying to create a traditional institution, you probably hear "this is how we've always done it, so why do we need to change?"

Also, your opinion leaders have very strong impact on how your social system functions. Now I want you to think for a moment about the schools that you're involved with or the districts where you serve. If your opinion leaders fall in the early majority or early adopter categories, change will take place more rapidly in your organization than if the opinion leaders are in the late majority or resister category.

Who are your change leaders and how are they perceived by the social system? If I were running a company and had a new idea that I wanted to spread in my company, I might hire a consultant and make them responsible for implementing the new idea. How do you

think the people who work for me are going to perceive that new change agent? Not very well. So the change agent needs to be an integral part of the social system, preferably one that is well respected, and then change takes place more effectively.

Just as a review. The elements in diffusion that we have talked about are that an innovation is communicated through channels, over time, among members of a social system.

There are different types of innovation decisions that can be made. The first one is an optional decision. As an individual, if I use a red pen to mark my students' paper, or a green pen to mark my students' papers, it's my choice. It really doesn't affect anyone else and so I can adopt those kinds of changes optionally.

There are also collective decisions that are made within a social system. The individuals make them, but the individuals get together and agree that they will adopt the innovation.

The third type of innovation decision is an authoritative decision. Authoritative decisions are forced on an individual by someone in a super-ordinate power position. Do authoritative decisions ever occur in your system? Authoritative decisions are made by people in power for people who work within their system.

While we value the individual and his right to choose, most innovation decisions are either collective or authoritative decisions. You can be a part of different social systems at the same time. You can be a citizen of South Africa and a member of the Church of the Nazarene. Those are different social systems. Even in the church things are structured differently.

Well, what do I do if I'm a change agent and I want to make a collective innovative decision occur within that group? The first thing is some kind of stimulus that will create dissonance in the group in order for change to have an environment in which it can happen. We've recognized a problem. That's the stimulation. And so we must initiate a process by which we try to solve that problem.

Then look for legitimization of our decision. If the group makes a decision about how to structure the global academy, we have to look to someone outside of our group to legitimize the decision we have made. There are people in this system who have veto power over our decision. It may be the person who hands out the money. It might be the person who has responsibility for the whole globe and says, okay, guys, you had a nice week, good vacation, go home. But we have to look for legitimization. Was it the right decision and is it acceptable to the whole social structure? When we find legitimization, we solidify our decision and put it into action. We implement the decision that we have made.

There are two kinds of units in an authoritative innovation decision. The first is the adoption unit. Those are the individuals or the schools or the regions that are responsible for adopting and implementing an innovation. But there's another unit that's critical to that process, the decision unit. The decision unit will be a higher authority than the adoption unit that makes the decision to adopt or reject an innovation. If I want to use an overhead projector in my classroom to help project ideas on the wall for the students, and the decision unit, rector, decides not to give me any money to buy an overhead projector, then that's an authoritative decision to reject the idea. You see how that works? In authoritative innovation decisions, the individual is not free to choose to adopt or reject.

The decision-making and adopting activities are separate. If I'm the boss, I make the decision. You have to adopt it, so they are separate activities. The decision unit will always occupy a higher position than the adoption unit in the formal structure of the organization. And the decision unit can force the adoption unit to conform to the decision. They can't make you like it, but they can make you do it. Obviously, authority decisions are most usually made in formal organizations.

So what are the types of authority innovation decisions? The first one is the authoritative approach. It's a centralized decision-making power. The second one, which is more of what we were talking about this morning in a learning community, is one that's participatory. Everyone begins to share the decision-making power. At least we have input into the decision and influence over the decision process.

Here's a key principle from the research to think about. The authoritative approach produces faster change than the participatory approach. If you want it to happen quickly, force it on the group. But the change is more likely to be discontinued if it's made in this manner. Another one, the members' satisfaction and acceptance of innovative decisions is positively related to the degree of participation of the members of the social system in the decision. If you really want people to buy into a decision or a new innovation, let them participate in that decision.

Let's suppose that you wanted to conduct a seminar or a conference on your region. The purpose or goal of that conference was to pull together the different educational groups and decide on a common set of ability statements that define a minister of the Church of

the Nazarene on your region. You're going to invite all interested parties, hold a conference on your region, and come up with a definition of a minister.

Now why in the world would you do that? Well, one reason might be that it would help you in your curriculum design to understand what your educational outcomes should be. What are the characteristics of this innovation, this conference, that you're trying to produce? What are the characteristics of the conference that you have to understand in order for it to be acceptable to the whole region?

Turn to the worksheets, work through the worksheet and write down all those characteristics. What is its relative advantage? Can people try it in small pieces instead of having to accept the whole thing at once? Write all of the relevant characteristics.

Once you've decided how to describe the innovation, the next step would be to describe the social system. In the social system, you want to identify the key people and the key groups that you need to affect. And so that sheet gives you examples of what you're going to have to look at.

Once you know what the innovation is and you understand the social system that you're trying to introduce that innovation into, then you start to put together your plan. That's the last worksheet. What is your strategy going to be for making the change happen in that social system? The first thing you would do is list all of the groups that you're going to need to influence, either the individuals or their small social groups, opinion groups, informal clusters. You'll know how to do it based on your knowledge of your region.

Then you decide who's the best person to do that. That would be your change agent. And you'll look for the message and the channels that you're going to use to influence them. If you need persuasion, send somebody out to talk to them. If you need information for everyone, use mass communication channels—newsletters, church services . . . stand up and talk briefly for ten minutes about a new program that's taking place in your district, those types of things.

This information was based on research that was done almost 20 years ago. It's not the most up-to-date, modern organizational theory on change but I think it's critical for us to understand at this level why things happen and why they don't happen. It still describes a model that can be superimposed over the new concepts coming from organizational change research and allows you a structure on which to hang these new ideas. The model shows you where the new theories fit in the overall process of change. And so this is all based on the writings from communication theory and rural sociology that came out of the 50s, 60s and 70s but I think it still tells us what kind of a world we live in.