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A Conversation on Guidelines for the Process of Facilitating Systemic Change in Education

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The International Systems Institute held its sixth annual conversation at Asilomar on November 14–19, 1993. At that meeting, seven participants self-selected themselves into a conversation group that met intensively over 4 days to develop some guidelines or principles for the process of facilitating systemic change in education. This is a report on how that group functioned and what it produced. The trigger questions addressed included: What are the major stages in the systemic change process? Can you do systems design with only a part of the "system"? How important is *scale* (e.g., number of people, schools)? What is an educational system? Can you use the same design process in any culture? How can one best create the idealized design? What are the major goals, obstacles, guidelines? Can we design the process without knowing the product? and Are there big differences between working within the system and outside the system? A large portion of the effort focused on guidelines for facilitating the first two phases of the systemic change process: preparing for design and designing the new system.

KEY WORDS: process; facilitation; systemic; change; education; design.

1. INTRODUCTION

The International Systems Institute held its sixth annual conversation at Asilomar on November 14–19, 1993. At that meeting, seven participants (Christiane Benoit, James Cotello, In-Sook Lee, Koichi Nishida, Nicole Racine, Charles Reigeluth, and David Salisbury) were interested in developing some guidelines or principles for the process of facilitating systemic change in education. Those seven participants self-selected themselves into a conversation group that met intensively over four days to work on developing such guidelines, with occasional input from Bela Banathy and Paul Hood. This is a report on how that group functioned and what it produced.

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2. METHODS

The first thing the group did was to self-organize and develop its own work process. We identified different roles and decided who would perform each. The roles included: someone to keep the conversation on the agreed-upon track, someone to make sure all people expressed their ideas, someone to record the progress and results of the conversation, someone to guard against belittling ideas, and someone to keep the team spirit at the highest possible level. The initial idea was to rotate roles, but we ended up sticking with the roles that each felt most comfortable with.

There was a suggestion to use simulation as a tool for building a design process. However, it was decided that we first should have clearer ideas of the systemic change process. Then, at the end of the week, we could conduct a simulation. However, time did not allow conducting a simulation.

The next thing we did was to come up with some trigger questions to guide our conversation. They were as follows.

1. What are the major stages in the design process (change process)?
2. Can you do systems design with only a part of the "system"?
3. How important is *scale* (number of people, schools; how to cope with changing scale)?
4. What is an educational system?
5. Can you use the same design process in any culture?
6. How can one best create the idealized design?
7. What are the major goals, obstacles, guidelines?
8. Can we design the process without knowing the product?
9. Are there big differences working within the system and outside the system?

We agreed to discuss the trigger questions first, and then let the rest of the process emerge. After discussing the trigger questions, we decided to develop some guidelines for the design process.

3. RESULTS

The following is a description of the results of our conversation. It begins with the results of our discussion of trigger questions 2–5, which provide a conceptual base for the discussion of the systemic change process. Then it presents the results of our discussion of the process itself, which responded to questions 1 and 6–8.

3.1. Discussion of Trigger Questions 2–5

These trigger questions were discussed in the following order: 3, 2, 4, 5.

3.1.1. Trigger Question 3: How Important is Scale?

This question concerned how much impact you have to have in order to have a systemic change. The following are the dimensions of scale that we identified.

3.1.1.1. Number of Students. This is influenced by the number of schools involved in a district and the grade or age levels of students involved.

3.1.1.2. Borders. This concerns the involvement of other systems concerned with human development, including social services, health services, and justice services. It also concerns Banathy's (1991) four levels of involvement with such systems: communication, cooperation, coordination, and integration.

3.1.1.3. Size of Community/District. This concerns the population of community involved in the change effort.

3.1.1.4. Range of Stakeholders. This concerns how many stakeholder groups are involved in the effort, including teachers, students, parents, taxpayers, employers, administrators, school board members, government agencies, and policy makers.

3.1.1.5. Dimensions of the Educational System (or Systemic Components). This includes such diverse dimensions as classroom, building, district, state, nation, special (such as charitable institutions), and context (such as the local community and larger society).

3.1.1.6. Ages of Learners. This includes k-12, pre, and post (including lifelong learning). We chose only k–12. This category is closely related to trigger question 4 (what is an educational system?).

3.1.1.7. Context. This includes inner city, suburban, and rural. This category is closely related to trigger question 5 (can you use the same design process in any culture?).

We concluded that the issue isn't categorical: whether the change is systemic or not. Rather it is variable (in both a quantitative and qualitative sense): To what degree is it systemic and on what dimensions? In general, the larger the scope on each of the above-described dimensions, the greater the degree of "systemicness" of the change effort.

3.1.2. Trigger Question 2: Can You Do Systems Design with Only a Part of the "System"?

Our conclusion was, no, you should have a broad and systemic view but can go for a gradual change toward that view. You could start with just one school, but change should be followed in other areas affecting the success of restructuring in that school, such as the district level and state level whose regulations may be incompatible with the school's new system. To use Senge's (1990) term, leverage is important. A small change may ultimately have an impact on the entire system.

3.1.3. Trigger Question 4. What Is an Educational System?

We arrived at its definition as "an organized entity to prepare learners with capabilities for life.

3.1.4. Trigger Question 5. Can You Use the Same Design Process in Any Culture?

We decided to hold this question until we came up with a process model.

3.2. Discussion of the ESD Process (Trigger Questions 1 and 6–8)

3.2.1. Trigger Question 1: What Are the Major Stages in the Design Process (Change Process?)

We arrived at a distinction between design process and change process. There are systemic and nonsystemic change processes. Within a systemic change process, one phase is a design process. And design represents one kind of change. Some research about stages of the change process are valid for both systemic and nonsystemic change. One example is the existence of an uninformed optimism stage followed by an informed pessimism stage. Perhaps the main distinction between design and change is "intention" by humans. Change can be either intentional or accidental (haphazard). Intended change is design, though there is a broad range of the amount of care and attention that goes into a design effort.

We agreed to use the term "ESD process" (educational systems design) to refer to the process of systemic change in education. Then we decided to use Reigeluth's (1993) ESD process model (which was developed at an earlier ISI conversation) as the departure point for our discussion. It is summarized as follows.

1. Assess the readiness of the community.
2. Get an outside facilitator.
3. Get commitment from all the stakeholder groups.
4. Select an approach for the change effort.
5. Select participants for the coordinating council and design team.
6. Prepare the participants.
7. Relate with nonparticipants.
8. Find common values and analyze learner and societal needs.
9. Develop core ideas and goals.
10. Develop an image, and design a system of functions.
11. Design an enabling system.
12. Analyze the feasibility.
13. Plan the implementation.
14. Implement the design.
15. Document and market the new system.

After some discussion we came up with six stages of the ESD process.

1. Preparing.
2. Designing.
3. Planning for implementation.
4. Implementing.
5. Improving continuously.
6. Evaluating (happens in each stage).

These stages should be considered as a "cycling back" process, not a linear one. We did not discuss the last four components, but we discussed the first two in some detail. A summary of the results of that discussion follows.

3.2.1.1. Preparing. First we identified elements for the "preparing" stage, and then we organized those elements.

3.2.1.1.1. Identifying the Elements. The following elements were identified for the "preparing" stage.

Providing Powerful Instigation (Reasons for Design): There is a paramount need for powerful instigation for change, because a systemic change process is far more difficult and painful than piecemeal change. It may take many forms, such as a court order, an educational crisis in the district, or an influential instigator. Important instigators include sponsors, who possess and provide power, such as money, and advocates, who speak persuasively for systemic change but don't necessarily possess power (Conner, 1993). There should be multiple and cascading sponsorship (multiple sources and levels).

Building the Capability for Design: This includes training, empowering stakeholders, bringing in an expert in facilitation and group process, and mediating roles. Training in systemic thinking and design literacy is important. It is important for all to understand that design is not the same as improvement.

Enhancing Commitment: Commitment can be measured by people's willingness to contribute money, time, and public support for the change effort.

Building Stakeholder Involvement: There should be a large *number* of people involved from the early stages. They should represent all the groups that have a stake in the educational system, including community leaders and conservative elements in the community and school system (who often are union leaders and board members). It is valuable to include open-minded opinion leaders from every group of potential resisters. All these people must come to feel a sense of shared ownership.

Creating Readiness: Readiness for systemic change can often be measured by the number of activities or projects people are willing to drop in order to engage in this effort.

Forming Teams: A design team or teams (less than 10 people) and a coordination group (as many as 25–40 people) should be formed with broad stakeholder representation. Team building is very important.

Building Leadership: The amount of leadership and the kinds of leadership are both important considerations. They should be kinds of leadership that empower and facilitate rather than dictate. This kind of leadership must involve opinion leaders in all major stakeholder groups.

Choosing an Approach: A design approach should be adopted rather than a "buy it off the shelf" approach, for it builds more commitment and owernship and different communities have different conditions and needs. Similarly, a stakeholder approach should be adopted rather than an expert approach for similar reasons. Less clear is whether everyone should create and adopt the same design (whole-district approach) or different groups should design different alternatives within the district (parallel-system approach).

Building Trust and Collaboration: These are essential to a systemic change effort and must be worked on throughout the entire effort.

Creating Mechanisms for Continuous Reflection/Feedback: This activity lays the groundwork for the change process itself to be systemic.

Building a Climate for Risk-Taking: Risk taking should be encouraged, and some mechanism for anxiety reduction should be created.

Preparing Oneself as the Facilitator: The facilitator should be aware of ethical responsibilities to serve the stakeholders, as well as a professional commitment to the design process. The facilitator should also carefully analyze the context—the community and its major players—including analyzing the mindsets of the stakeholders and the political realities of the school district and community. Furthermore, the facilitator must not view herself or himself as "the expert." The facilitator has to undergo a transformation during the change process for it to be successful.

Some of these elements may be more related to preparing for the implementation than to preparing for design. But this is OK, for some preparations for implementation should occur from the very beginning of the change effort.

There are two other considerations on which we agreed: (1) There is a need for allowing more diversity—we tend to place too much emphasis on consensus; and (2) it is helpful to distinguish between design literacy, which allows people to make a good judgment on an expert's design, and design competency, which concerns how to design.

3.2.1.1.2. Organizing the Elements of Design. After identifying the above-described elements of the "preparing" stage, discussion focused on how to organize those elements. We agreed that all of the guidelines and recommendations were systemic, not a chronological checklist—all of the factors must be continuously addressed throughout the preparation stage and in many cases throughout the remaining stages. However, we felt the elements could be organized into three general substages: (A) determination of whether or not to undertake the change effort, (B) activities that should be done before any teams are formed, and (C) activities that should be done by the teams that are formed.

We also felt that it is very important for a competent facilitator to be involved in all three substages.

(A) Assess Readiness (Go–No Go): Systemic change will be a difficult process under the best of conditions. If conditions are less than optimal, systemic change will be all the more difficult. It seems likely that there are some conditions under which systemic change should not be undertaken, or at the very least attention must be directed to changing those conditions before a systemic change effort should be undertaken. "Readiness" is defined simply as the preconditions necessary for a good chance of success in a systemic change effort. Although we are not sure what those preconditions are, they seem likely to include primarily factors that are difficult to change over a moderate period of time (e.g., a year), such as just having completed a bitter negotiation and strike over a teachers' contract. However, it is important to keep in mind that readiness is a continuous variable—that there are many degrees of readiness—and that readiness is never perfect—it needs to be constantly enhanced throughout the change process.

(B) Prior to Team Formation: Before any teams are formed, the advocates should work on instigation, commitment, and leadership for the change effort. These are all likely to be more successful if an experienced systemic-change facilitator is hired for guidance.

Instigation is the level of urgency with which people feel that change is needed. In the previous ISI conference at Asilomar, several techniques for increasing the instigation for systemic change were identified (Salisbury *et al.*, 1994). First, the participants should be helped to recognize the extent and severity of the current and anticipated future problems with the existing system. Second, help them to recognize that the potential gains will outweigh the pain that will inevitably occur in the change process. Third, help the participants to understand what systemic change is and when it is needed. Fourth, help them to gain a systems view of education that includes an understanding of the interrelationships among the parts of the current system and between the system and its environment. Fifth, help them to recognize that massive changes in society are creating the problems in their schools and that only systemic change can truly solve those problems. There are lots of data to support that the "oncoming crisis" exists, and such data should be convincingly communicated.

Commitment is related to instigation, but concerns the resources that people are willing to commit to the effort. Resources include money, time, and public advocacy. Commitment is needed from powerful or influential groups as much as from individuals.

Leadership is the willingness of people in positions of power or influence to assume the roles of sponsors, advocates, or agents (Conner, 1993; Salisbury *et al.*, 1994). Sponsors are those who support the effort by providing resources (primarily money and/or personnel). Advocates are those who speak out publicly

and do most of the motivating and organizing for the change effort. And agents are those who do most of the work to bring about the change.

(C) During and After Team Formation: When the preconditions and climate for systemic change reach a certain level, it is productive to form at least three kinds of teams: a coordinating group, a design team or teams, and task forces. The coordinating group may have as many as 25–40 people and is primarily a political group with broad stakeholder representation and influential members (sponsors and advocates). Its primary tasks are providing support, running political interference, and approving all efforts of the design team(s). The design teams have fewer than 10 people each and are the primary working groups. There may be one for each school, or there may be several for each school, with the idea that several different "schools within the school" will be formed to meet the varying needs of a diverse community with some differing values about education. Alternatively, for a homogeneous community several teams could be formed to come up with competing models, and the coordinating group would choose the best one for districtwide implementation. The task forces have fewer than 10 people each and support the efforts of the design team by performing specific tasks at their request. For example, one might be tasked to develop a new assessment system that meets certain criteria. These teams would be formed periodically depending on the need, and disbanded when each completes its task. As soon as any of these teams is formed, work should begin immediately on building involvement, capability, and leadership, and selecting an approach or process for performing its work.

Involvement is a difficult issue. The first question to address is who should be doing the actual design. There are two models: the "user-designer" approach, in which the users design their own system, and the "outside expert" approach, which is similar to the model used in architecture. Even though the "architect" has unique kinds of expertise, it is the clients that direct the expert's efforts and make the final choice. This creates the involvement and ownership that were discussed earlier. The second question relates to how to get a large number of stakeholders involved in the effort, as opposed to a few representatives of each stakeholder group. One idea is for every team to be heterogeneous in terms of stakeholder groups represented. Then, after each meeting, each member would meet with a group of people from his or her stakeholder group for dialog (two-way communication): to report what happened in the team meeting and to get reactions and ideas to take back to the next team meeting. This approach is often referred to as "pyramid groups" and can extend indefinitely by having each of those people in turn meet with others from the same stakeholder group.

There are several important kinds of *capability* that should be developed in team members to enhance the success of their efforts: certain minimum levels of competence in systems thinking, design literacy, group-process skills such as dialoguing, and conflict resolution. The facilitator needs a more complete

level of competence in these capabilities, but much of the change effort should entail continual improvement in these competences for all participants.

Leadership is related to capability but should not be confused with administrative or management skills. Each of the three kinds of teams requires a different kind of leadership. The coordinating team requires visioning, advocacy/communication, coordination, and political negotiation skills, whereas the design teams require creative and motivational leadership. And the task forces require primarily task expertise and project management skills. On all three kinds of teams, leadership can occur on a revolving basis.

Finally, each team must make decisions about the processes and *approaches* it will use to do its work. One of the more difficult decisions is about whether to try to change the whole district at once or whether to start with one or a few schools or even schools-within-a-school. We were attracted by a "hybrid" approach—a combination of the two previously mentioned approaches in which the whole system is involved in the preparing stage and the analysis of needs and values (discussed in the next section). However, within that framework, different design teams can be formed on the basis of differences in values among stakeholders, and each can design its own "school" (its own learning experiences and instructional system—see below). Then all the teams can come together to design the administrative and governance systems (see below) to best support those schools. Some of those teams (with industrial-age values) may end up designing a system very similar to what they do today. However, for this approach to work well, it is important that the different teams (or schools) not develop antagonistic relationships with each other. They should develop the attitude that all are trailblazers trying to find good ways to get to good places, and that all should benefit from what each learns in the process.

In summary, for the preparing stage, we have identified three substages: (A) determination of whether or not to undertake the change effort, (B) activities that should be done before any teams are formed, and (C) activities that should be done by the teams that are formed. A is pretty much a one-time decision (although it could be revisited later on). But B and C are sets of ongoing activities, one of which begins before the other, but neither of which is ever complete. These factors should always receive attention—sometimes more, sometimes less, depending on the progress and the needs. And this points out the importance of constant evaluation throughout the change process. It is essential to continuously diagnose the evolving needs of the change process, as well as the effectiveness of the processes being used to meet those needs. This is why we earlier characterized the sixth stage, evaluation, as happening in every stage of the change process.

3.2.1.2. Designing. Once a sufficient level of preparation has been reached, some attention can begin to be devoted to the second stage, designing. We believe that the notion of an "idealized design" (Banathy, 1991) is essential to

systemic change. The design team should start by creating an image of an ideal educational system, based on needs and shared values, and should then develop a strategic plan for getting as close as possible to that ideal, most likely in an incremental way (see Callaos and Callaos, 1994). Experience has shown that when we do not think in terms of the ideal, we inevitably end up assuming constraints that turn out to be surmountable.

We also believe, in accordance with Banathy's (1991) work, that the design effort should begin by designing the kinds of *learning experiences* that the new system should afford, including both the kinds of things that should be learned and the ways that they should be learned. Then it should design the *instructional system* that can foster those learning experiences. Later, attention should be devoted to designing the *administrative system* that can best support that instructional system and, finally, the *governance system* (e.g., policies, financial arrangements, mechanisms for passing of authority) that can best support the rest of the system. This approach places the learner and learning at the foundation of the design of the whole system.

We further believe that a holistic approach is essential to systems design. You cannot proceed by completely designing one feature or subsystem of the system, and then moving on to another, because interrelationships are essential to the coherence of the system. We therefore recommend an approach, in accordance with Banathy's (1991) work, that begins with a fuzzy image of the new system and proceeds to add progressive degrees of clarity to that image. This can be done by identifying the goals for the new system, based on the needs and values that the system will satisfy; then identifying the functions that the new system must perform to meet those goals; and finally identifying the subsystems or components that will perform each function. Interrelationships must be carefully considered at each level of clarity. Each of these levels of clarity is discussed next.

3.2.1.2.1. Identify Needs (Societal and Individual): The process of identifying needs is a very difficult one, because it requires helping the stakeholders to see that the world is changing in significant ways that make our current educational system obsolete. If you start by asking the stakeholders to identify their learners' needs, this will usually result in a cosmetic approach to improving the existing system. To avoid this problem, you should start by asking "What kind of future do you want to create?" In the process of answering that question, needs and values will emerge. The basic values of the stakeholders become the guideposts that direct the thinking process in identifying needs. This will also help to bring about an evolution in mindsets and values about education.

All the stakeholders should engage in a process of (a) exploring the ways in which society and their community (especially the workplace and the home) are *likely* to be different 30 years from now, as we evolve deeper into the post-

industrial, global, information age; (b) exploring the ways in which they would *like* their community to change; and (c) exploring the educational implications of those anticipated and desired changes—what will be the educational needs of individuals and the community. This process gets the stakeholders to look at the big picture rather than focus on small Band-Aid issues.

The following are some questions that might be helpful to address during this process:

How has the workplace changed over the past 40 years?
How is it likely to change over the next 20 years?
How has the family changed over the past 40 years?
How is it likely to change over the next 20 years?
What kind of community would you want to create?
How have learners changed?
How has our understanding of learners changed?
What are the educational implications of those actual, anticipated, and desired changes?

3.2.1.2.2. Identify Common Values: Rokeach (1973) distinguishes between two major kinds of values: terminal (or what Banathy calls "core values") and instrumental (or what Banathy calls "core ideas"). These correspond to ends and means, respectively, similar to terminal objectives and enabling objectives. For example, a terminal value is "all children are capable of learning," and an instrumental value is "a personalized curriculum is superior to a time-based, group-based curriculum." There may be many instrumental values for realizing a community's terminal values.

Since different features of an educational system reflect different values about education, consensus on what the new system should be like cannot be attained until there is consensus on values about education. Even the most heterogeneous of communities can reach consensus on some very general and basic values, and more homogeneous communities can reach consensus on a much broader and more detailed set of values about education. More heterogeneous communities are likely to design considerable diversity into their new system, but all within the framework of the values on which the community agrees.

It is the responsibility of the process facilitator to help the stakeholders clarify their values and identify those on which there is consensus. The needs identification process just described will help to accomplish this. But at some point it may be useful for the facilitator to help the stakeholders brainstorm and discuss values by category of values, to make sure that no important kinds of values are overlooked. Lee (1994) suggests a model for this purpose (see Fig. 1). It has three value dimensions comprised of nine value categories.

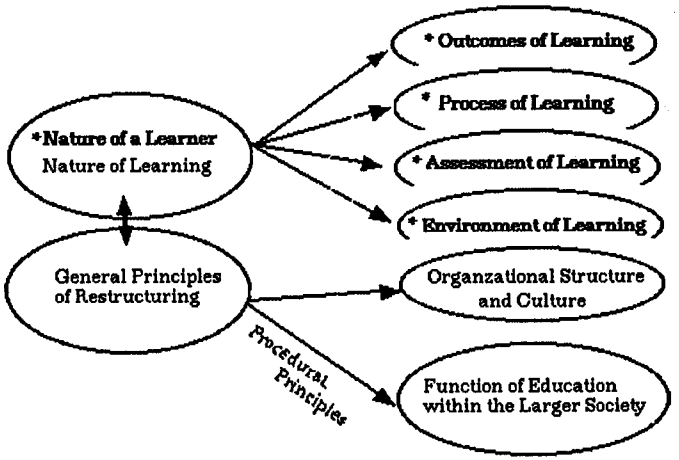

Fig. 1. A model of value categories.

Seminal values are fundamental beliefs that *inspire* the image of a new educational system and *guide* the whole process of restructuring. Its categories include the following.

1. Nature of the learner and learning: This includes values reflecting the fundamental attributes a learner possesses and how a learner learns better, as well as the fundamental attributes and functions of learning. An example is, "Learning is a process that does not end and that takes time."

2. General principles of restructing: This includes values reflecting the reasons for restructuring, the nature of restructuring, and the ultimate focus(es) of restructuring. An example is, "Restructuring is a process of reexamining and challenging the assumptions upon which we practice and, when appropriate, of replacing invalid assumptions."

Strategic values are primarily instrumental values in helping restructuring *proceed* or in achieving the desired outcomes of restructuring. Its categories include the following.

3. Procedural principles: These are strategic or tactical values and ideas that are perceived to be key factors in successful restructuring, including people, structure, culture, and resources. An example is: "Through a value-laden change process, all stakeholders should develop ownership from the early stages of change."

Core values are values that further embody *seminal values* and thus are

both illustrative and specific expressions of values. Core values substantially *guide* and *influence* the choices and decisions made in the course of redesigning an educational system. Therefore, they "enhance the creation of the image and the design of the system" (Banathy, 1991). Core values can be discussed with respect to three different levels according to their scope: the learning level, the organizational level, and the societal level.

The *learning level* is comprised of values that are directly relevant to considerations of learning (see Fig. 1).

4. Outcomes of learning: An example is, "A learner develops the ability to become a productive and responsible life-long learner."

5. Process of learning: An example is, "The learning process should allow for learning based on individual uniqueness."

6. Assessment of learning: For example, "Assessment should be consistent with the process of learning. Student outcomes achieved by the learning process are the things that need to be assessed."

7. Environment of learning: An example is, "The learning environment should promote the richest opportunity for a child's success in school."

The *organizational level* is comprised of values regarding an ideal organization for fostering the learning valued by stakeholders.

8. Organizational structure and culture: An example is, "A value-laden decision-making structure exists. All stakeholders share responsibility for specific areas of decision making."

The *social level* is comprised of values of education in a broader scope.

9. The function of education within the larger society: For example, "Education is a part of the world. Education should coordinate with other systems in the larger society for life-long learning."

3.2.1.2.3. Identify Goals. The first fuzzy image of the new system is a description of the goals that it should attain. The goals should be developed and agreed upon by the stakeholders on the basis of the educational needs and values.

3.2.1.2.4. Identify Functions. The fuzzy image represented by the goals can then be clarified considerably by identifying the functions that the new educational system must perform to meet those goals. Those functions are the means to attain the ends represented by the goals, much like the instrumental values represented means to attain the terminal values. Furthermore, the interrelationships among the functions should be identified and the functions should be coordinated with each other so that there is a coherent system of functions, not just a list of individual functions. This is very important for designing a system that will work well in attaining its goals. Also, each function should be understood as having subfunctions for its accomplishment, just as the subsystem that carries out a function should be understood as having subsubsystems. It may be helpful to identify all the major functions before devoting much attention to identifying any subfunctions.

As mentioned earlier, the system of functions should initially focus on the learning experiences, then on the instructional system to support those learning experiences, followed by the administrative system and the governance system.

3.2.1.2.5. Identify the Enabling Systems. Finally, the image is further clarified by identifying the enabling systems (or specific components of the system) that will carry out each function. Again, it is important to pay much attention to the interrelationships among the components, so that they will work in harmony and support of each other, not at odds with each other. And it is important to start with the learning experiences, then the instructional system, the administrative system, and the governance system.

Unfortunately, time did not allow us to discuss the four stages of the systemic change process that follow preparing and designing: planning for implementation, implementing, improving continuously, and evaluating (which happens within each of the other five stages). We plan to work on these in the future.

4. CONCLUSIONS

All participants felt that the conversation was not only productive in that it produced a worthwhile product, but also personally rewarding in that it fostered considerable personal growth as well as enjoyment of the experience. The group members expressed a desire to continue the effort that was begun by this conversation, primarily through the activities of concretizing, elaborating, testing, and critiquing the result of this conversation, so that it would continue to live and grow. We all agree that much work remains to be done to develop a truly powerful understanding of how to facilitate a systemic change effort in education.

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