

The Conference Method Of Redesign

By Alan Wilgus

It had been a long day, and the fifty-six participants had worked hard. But there was electricity in the large conference room.

As they stood around the back wall, they focused on six pieces of flipchart paper. Each flipchart reflected the thinking of a different subgroup on the ideal organizational structure. As they reported out each group's ideas, it became clear that there was great similarity in their thinking.

Based on the criteria given for forming teams, eliminating redundant and non-value adding work, and their collective vision of the future, they had eliminated two of the five levels of management while organizing teams around products rather than function. No one agonized about how management would receive this because the entire group (including the plant manager) participated in its design.

Although frightened by the day's implications, the participants left that afternoon feeling satisfied that they had made the best choice for ensuring the future success of their plant, and a closeness to one another they had rarely experienced in their work life. This closeness was the result not of some structured team building activity, but of a realization that whether a manager, supervisor, or employee they shared a common future. Despite the differences which had separated them for years, there was tremendous similarity in what they aspired to become as members of a manufacturing plant and as individuals.

The twelve-person design team hung around afterward and within sixty minutes had reconciled the differences in the six subgroup proposals. The organization had accomplished in one day what normally takes weeks (if not months) using a traditional design team process! Not only had they saved time, they had created a critical mass of support for the new structure by involving almost one-third of the total organization in its design.

How did they do it? They employed a Conference Method for redesigning organizations, whose potential is just now being explored. Compared to traditional socio-technical or reengineering efforts it saves time and money, while increasing buy-in to the change effort without sacrificing quality of design. Sound too good to be true? Well it is true. This article reviews the evolution of the Conference Method of Redesign (CMR), its application in two similar manufacturing facilities, and lessons learned.

The Origins Of The Conference Method Of Redesign

Modern thinking about organizational redesign in large part originated with work conducted by two social scientists, Fred Emery and Eric Trist. Their fieldwork in the English coal mines in 1949 formed the basis for what developed as a theory for organizational design. Trist referred to this as socio-technical systems (STS). Many important contributions have been made over the years in expanding this body of knowledge to its current form.

Stated simply, any organization can be viewed as an open system consisting of work processes, tools, and techniques (the technical system) around which people interact and are organized for a common purpose (the social system). The effectiveness of any organization is related to the choices made in the design of these two systems. These choices are dictated by economic, technical, political, and social influences externally and human values internally. Effectively designed social systems typically provide teamwork, affiliation, connection to customers, knowledge of performance, control over the process and quality of one's work, and an opportunity for growth and learning. This is in sharp contrast to the teachings of Frederick Taylor, whose concepts of specialization, simple tasks, and highly-engineered jobs often reduced people to mere extensions of the technology.

Based on STS theory, organizational design efforts today frequently take the form of a cross-functional design team who have been chartered by a steering committee (normally the senior leaders) to design a more effective organization. Within this charter is an analysis of external influences and how the organization must change in response to these influences, a customer analysis, a vision of what the company aspires to become in the future, and the guiding principles or values which will guide behavior. The steering committee develops this charter and presents it to the design team and the organization. The design team then meets over a period of six to twelve months (usually with a consultant's help) and completes a redesign proposal for approval by the steering committee. The design effort consists of two parts, as you might expect: social and technical.

The technical portion includes an analysis of current state work processes, key variances, and a process cycle-time analysis. Relationship maps or flow charts are constructed which reflect each step in the process and are highly effective in highlighting redundancies, waste, delays, and other non-value adding work.

The social analysis consists of an examination of structure, responsibilities, decision-making, skills, human support systems (e.g. hiring, training, discipline, recognition, compensation, etc.), symbols, and style. Based on the charter, the design team redesigns the organization to align the systems. Upon approval, the new design is communicated to the rest of the organization and the implementation phase begins.

In 1960 Emery and Trist pioneered an organizational planning process which they labeled the "Future Search Conference." It consisted of a multi-day conference gathering large groups of stakeholders together, often representing conflicting interests or adversarial positions. The participants' objectives were to explore and understand their similarities and differences, dwelling not on the differences but using their similarities as the basis for creating their common future. This was accomplished through a series of structured activities focusing on environmental influences, organizational responses, and reactions to both. Emery carried this initial work forward and has since refined the conference methodology. The process has been applied in many different ways since and popularized by Marvin Weisbord in his books *Productive Workplaces* (1987) and *Discovering Common Ground* (1992).

What is particularly intriguing about Future Search is the technique for involving large groups of people in planning their future rather than using a few managers, consultants, or even a twelve-person design team. Our experience has taught us that some of the best designs are never implemented due to lack of buy-in by the organization. The other fascinating aspect of this technique is speed. Many a design process has been thrown into chaos during its nine month existence due to a change in corporate direction or a take over.

What if you applied the search conference methodology to the process of socio-technical design? A few people, like consultant Dick Axelrod, were piloting the approach, but little information was available when we began our process. Of particular interest to us was our ability to incorporate the technique into the Miller design process, *Whole System Architecture*. These questions were being explored about the time an opportunity to try this new approach presented itself.

Client Background

We had been working with a major textile company for almost two years. A leader in the textile industry, their Grey Division manufactures cloth used for making sheets and pillowcases. The Division consists of fourteen plants spread over North and South Carolina. Each plant was similar in that it transformed cotton and polyester into cloth; however, they were different in the type of fabric, technology used, physical plant, and size.

The company attributes much of its success to a visionary leadership style which has continually challenged the organization to improve. On the heels of a massive technical modernization project, they committed to redesigning their plants from traditionally managed to team-based.

Most plants consisted of approximately three hundred employees, although a few had as many as eight hundred.

The Miller Consulting Group was hired to help the company redesign their plants and began with a traditional approach that we have successfully applied over the last ten years. Using a cross-functional design team we completed the pilot plant after nine months. The Division steering committee was impressed with the results and gave the green light to begin work in three other plants. Over the next few months the design efforts progressed well. However, there were issues that became quite troubling, such as:

1. How can we avoid "re-inventing the wheel" by utilizing ideas from the initial plant redesign efforts? Given the similarities between plants, must we start each new design with a blank sheet of paper?
2. Future designs will become increasingly constrained as the Division steering committee approves design team recommendations applicable to all plants across the Division. For example, based on the recommendation of the initial design effort, a gainsharing program and elimination of individual incentives was approved. This redesigned compensation system would apply across the Division, meaning that future design teams would not even consider this area.
3. Given these issues, how do we ensure that plants continue to experience ownership and commitment to their design?
4. How do we accelerate the process while at the same time reducing costs? Even by redesigning three plants at a time it would take at least two more years at our current pace. Clearly our current redesign process must change if we are to adequately address our client's concerns.

What emerged in a series of planning meetings over the next few months was a means of redesigning the remaining ten plants using the Future Search methodology. We proposed that subsequent plant designs consist of a series of three conferences involving fifty to eighty plant personnel. Participants would include the entire group of managers and supervisors, customers and suppliers, and a representative number of associates from each functional area. The manager/supervisor group would attend all three conferences, as would a design team, but participation by other employees would rotate to involve as many different people as possible. Conferences consisted of a series of design tasks completed by subgroups of eight to twelve people.

A ten-person design team was designated and trained; however, their role was different than a traditional design effort. The design team's job was to gather, edit, and compile data from flip charts generated during each conference; reconcile differences; present conference results to those not participating and seek their input; serve as subject matter experts during each conference; assist their subgroup in understanding the design process and design tools employed; actively participate in subgroup activities (not necessarily as the facilitator); and review the design proposal for alignment prior to presenting to the steering committee. Select members would serve on the implementation team following the design phase.

Managing a conference of this size required ground rules. Ours were:

1. All participants have an equal voice.
2. The focus is not on solving problems as much as sharing perceptions and increasing understanding.
3. Challenge assumptions.

4. Avoid defensiveness.
5. Accept responsibility for conference results.

Subgroups were self-managed in the sense that they provided their own leadership, facilitation, and time management. We proposed to pilot this method simultaneously in two plants. Part of our strategy also included working ourselves out of a job. The company was looking for an alternative to using Miller consultants for future redesigns and incurring the associated costs. Our solution was to train two Division people to be conference managers. They would watch me conduct the pilot in the first plant and then co-facilitate the same conference a week later in the second pilot plant (I was there if they needed me). Conceptually, what we proposed made sense, but would we get the results we wanted? We were about to find out.

The Vision Conference

Although it is patterned after a Future Search conference, the Vision Conference differs significantly. Under normal circumstances this conference would concern itself with reviewing past history, scanning the present environment, and creating a desired future state. The vision that emerges then becomes design criteria for the two subsequent conferences. This work had already been accomplished by the Division steering committee, and what resulted was a comprehensive mission statement. A copy hung somewhere in each of the fourteen plants. However, no one really knew what it meant since they had not been involved in its creation. Each plant needed to examine the existing mission statement and translate it into something meaningful to them -- into a plant vision.

The conference was divided into three parts. The first focused on the future. In mixed subgroups (cross-functional and cross-hierarchical), participants reviewed the Division mission statement and identified the top six organizational values. Examples of organizational values include customer focus, mutual trust, share responsibility, etc. The groups reported out and quickly came to consensus. Next, they reconfigured into groups reflecting organizational levels (e.g. plant leadership team, supervisors, salaried support staff, and front line worker) where each group was asked to describe specific behaviors they would demonstrate if they were acting in accordance with each value. They then described what they would expect to see behaviorally from the other groups.

As each group reported their findings, what was most striking was the similarities. Senior leaders believed they should behave in ways that were identical to the expectations of the other groups. These similarities were reflected between the other levels as well. The day ended with the table groups selecting different organizational values and doing a short role play of their applications in the plant. This was fun for the group and helped further define their vision of the future.

The second day began by focusing on the past and present. Taking a page out of the Future Search process, mixed subgroups identified those things they were proudest of and sorriest for in their relationship with the company. The purpose was to acknowledge those things about the company that were good and that they wanted to bring into the future and to admit what practices should be left behind. Again, the similarity was striking as groups presented their work. Managers openly admitted that in the past they were often insensitive to employee needs and turned a deaf ear to their ideas and suggestions. Employees talked about just "doing their eight and hitting the gate" while ignoring quality problems. Those practices left behind, or sorries, often represented the loss of something valued in some way. We discussed as a group the stages of loss and actually had a brief ceremony during which the sorries were eulogized and laid to rest. This was an important step in letting go and moving forward.

During the Vision Conference, key customers and suppliers participated in each activity either as a member of the leadership team subgroup or as a member of a mixed group. Their perspective was valuable in creating a plant vision and identifying opportunities to improve service and relationships. While they were identifying current and future requirements, the rest of the groups

were identifying potential obstacles which might prevent them from realizing their vision and actions they could take to prevent those obstacles from happening. By the end of the Vision Conference, participants, perhaps for the first time, recognized that there was far more that brought them together than separated them.

Between Conference Activities

At the conclusion of each conference the design team sprang into action, gathering flipcharts and consolidating information produced during the conference. They conducted employee presentations and asked for additional input from those employees not in attendance. This not only kept the rest of the organization informed but provided a forum for their reaction and ideas. The output of each of the first two conferences became input to the next. For example, the Vision Conference provided design criteria for the Technical and Social Conferences. The Technical Conference output was necessary for redesigning the social system.

Preparations began immediately for the next conference. Workbooks were assembled, reference materials were gathered, and examples of what others had done was collected. Just the logistics to support the effort required detailed coordination from all parties involved.

The Technical Conference

Approximately three weeks after the Vision Conference ends the Technical Conference begins. In terms of amount of work involved, the Technical Conference is the hardest. Again, the key to a successful conference lies in detailed preparation. To allow for both self-management within subgroups as well as successful task completion, all involved need clearly defined tasks, examples, and supporting worksheet materials.

To prepare for this conference we enlisted the help of each of the plant industrial engineers, who provided two items which expedited the technical analysis: a cycle-time analysis reflecting the entire manufacturing flow from inputs to outputs, and a plant floorplan depicting the facility design, equipment layout, and material flow. In addition, examples of work completed by earlier design teams were made available to the Technical Conference attendees, not for the purpose of asking them to "rubber stamp" it but to use it as a point of departure. (At the outset we feared the subgroups might think we were manipulating the direction of their thinking through use of the examples. However, as similar as their technology might be, the steps in their processes were often radically different. It never became an issue in either pilot plant.)

The Technical Conference was divided into two parts:

1. Analysis of the current state technical system, and
2. Redesign or creation of the ideal state.

The first day was spent analyzing the current state. Subgroups were configured based on functional area with management personnel equally distributed. As a large group, we reviewed the state changes within their manufacturing process (how the material is transformed at each step from input to output). This focused them on the core process rather than on what people do (which may or may not be related). After a brief explanation and demonstration of process mapping, each subgroup began to identify the steps in their part of the process and prepare a "relationship map," which traces the flow of activity and also identifies delays, transportation steps, decisions, and inspections. Using this tool, subgroups quickly identified opportunities for improvement. For example, if routine manufacturing decisions had to be elevated two levels, it became obvious that work cycle time would be reduced by placing decision making in the hands of those closest to the process.

Once process maps were prepared, the subgroups reviewed the plant layout and material flow. The purpose here was to identify wasted movement. The groups quickly began to identify improvement opportunities and recorded them on flipcharts. Groups in both plants completed this portion of the analysis in two and a half hours!

The afternoon was spent analyzing key variances and cycle times. The last part of the day was spent reporting out to the large group each subgroup analysis. Beginning with the introduction of raw materials, each subgroup took its turn in sharing their findings. This resulted in tremendous learning. In a traditional organization, few people (managers included) actually understand their entire work process. At the end of the day, although tired, all involved were excited by the learning that had taken place and by realizing opportunities to improve.

Day two shifted from current state to the future. We began with a review of the Vision Conference and identified design criteria applicable to our technical system. In an effort to break people out of their "current state" mind-set and free their minds for creative thought, we brought in a member of the corporate R&D department who presented examples of state-of-the-art textile manufacturing facilities from around the world, many of which were fully automated. There were also examples of applications of the principles of "Just In Time" manufacturing techniques. This presentation not only expanded the participants' thinking, it scared the heck out of them! After the R&D representative left we spent a few minutes as a large group sharing our fears. We took a minute and reached back to one of the "obstacles to success" we identified during the Vision Conference, and guess what it was ? "Fear of change." We acknowledged that it was all right to experience fear of change as long as it didn't paralyze us and prevent us from thinking creatively.

The first subgroup activity was to generate an environment for breakthrough thinking. In mixed groups they brainstormed "wild ideas" that represented not just improvements to the current system, but ideas that would propel them far beyond their competition. This turned out to be not only productive but energizing and fun. After reporting out, the subgroups reconfigured into functional groups to create the ideal technical design for their plant. The redesign was a synthesis of:

1. "Wild ideas" applicable to their area;
2. Opportunities for improvement recorded during the current state analysis;
3. Observations based on a review of the plant layout and material flow;
4. Ideas about how to eliminate key variances or at least control them as close to the source as possible;
5. Customer requirements;
6. Design criteria gleaned from the plants vision; and finally
7. We introduced ideal state designs from one of the initial design team efforts. (We waited until now so their creativity would not be stifled.)

As subgroups began their work, it became obvious that as functional areas they could not redesign in a vacuum. Not only did new thinking about how work was conducted break down functional walls, but a decision one group makes often has severe downstream consequences. We encouraged them to coordinate their efforts and interact with each other to ensure alignment of recommendations. To the casual observer this probably looked like chaos, but it was beautiful to watch in action.

By the next day the groups presented an ideal state process map, reconfigured plant layouts and material flows, and a list of technical improvements and the benefits of each. The most touching experience I had was with a yarn department subgroup who asked for my advice. They looked concerned and appeared to be struggling with a tough issue. An hourly spokesperson for the group looked up at me and stated that after much analysis, they had discovered a way to modify the production process in a way that would eliminate a part of their function as well as their current jobs. It seemed the sensible thing to them, but they weren't sure they could make that

type of recommendation. Such courage, commitment, and trust does not just happen. I attribute much of it to the cohesive team spirit created during the conference process.

The Social Conference

The social system of an organization has the greatest impact on human creativity, teamwork, and motivation, and yet many reengineering efforts fail to address this important dimension. Unique to our approach is a separate conference developed to specifically address social system design. Our model is based on the five S's: structure, skills, style, symbols and human systems. Each element is impacted by changes in the environment and must be aligned with the vision, values, and technical system.

The third and final conference designs the ideal social system. This conference is tough because the issues hit close to home, such as "Will I have a job?" "What is my new role?" "Will I lose the management perks I worked so hard to earn?" At this point in traditional redesign, design teams feel a tremendous pressure not to "sell their buddies down the river." They will agonize for days as to whether they are making the correct recommendations and will often rebel against the facilitator when pressed for a decision.

In a conference setting, the design team is under no such pressure. What emerges is a practical consensus based on sharing across all levels in the organization. Whether the ideas are the plant manager's or an hourly employee's, they must be supported logically and be consistent with the plant vision. This open forum builds understanding and agreements. We used an opening exercise where participants shared characteristics of their "best" job. This demonstrated that regardless of level, employees are motivated and obtain job satisfaction in the same way. Through this exercise they identified additional criteria by which to evaluate their redesign.

As with the Technical Conference, there was an attempt to cause people to think differently about the possible choices in organizing around their work. Through the use of video and case study examples the participants were presented with alternatives to their current social system. This was the most lecture-intensive day of any of the conferences (about two and a half hours). The first task was for mixed subgroups to design an ideal team structure. Care was taken to set up this task through discussions about how to draw team boundaries from the bottom-up. Subgroups designed the team structure and determined each team's responsibilities and decision making authority. The six groups shared their ideas and similarities were noted. It was understood that the design team would reconcile the differences.

Day two began with the same subgroups brainstorming "symbols." Symbols exist in every culture as a means of communicating values. It is the message rather than the symbol that is meaningful. For example, neckties themselves have little meaning. We all might wear them from time to time (to weddings, church, dinner, etc.). However, when worn in the workplace by senior management they may be a symbol that communicates the wearers are different (somehow better) than others, distinguish decision-makers from doers, people in charge from those not in charge, and serve to divide people rather than bring them together. The subgroups examined symbols in their plant and determined the intent of the symbol; the common perception of its meaning; and whether it was divisive or in support of their key concepts/values. They then recommended to either keep it, eliminate it, or change it and suggested any new symbols they felt were necessary.

As the final activity, we distributed a different redesign task to each of the six subgroups. For example, one group redesigned the hiring, orientation, and transfer process. Another group worked on recognition and safety. The goal was to align human support systems with the plant's key concepts or values through identifying minimum critical specifications for each. Again, the use of examples from other designs expedited this task by providing a point of departure from which the groups freely moved.

Conference evaluations during both pilots were unanimously positive. The only criticism was that the whole organization of three hundred employees could not attend each conference. Both plant

managers were highly satisfied with the results and shared the same sense of camaraderie and commitment as the other participants.

Lessons Learned

The entire effort was completed for both plants in two and a half months. After this rather hectic period, we evaluated our efforts and some key learnings were noted:

1. The design process (or more specifically, the Miller Consulting Group design process) lends itself to the conference methodology. Given clear instructions, carefully structured tasks, examples, and support materials even a relatively unsophisticated audience can quickly learn and practically apply analytical design tools such as relationship mapping and structural design.
2. Our fear that we would sacrifice quality for speed was never realized. In fact, the opposite occurred. Given the number of participants providing input and the synergy created, the quality was actually better.
3. There continues to be a need for a design team. Although their role is much different than described earlier, consensus is difficult if not impossible to achieve with a group of sixty to eighty participants. By focusing on similarities, a consensus emerges naturally during each conference. And where it doesn't, participants who have had the opportunity to voice their opinion feel free to defer to a cross-functional design team.
4. Creating a forum for personal sharing leads to a recognition of a common fate and similar aspirations and values. This brings people together in extremely powerful ways. (I had not anticipated just how much.)
5. It is impossible to facilitate a design process for sixty plus people. Don't try. Participants are capable of self-management when given clear, concise guidance. Detailed planning is the key to success.
6. Each of the three conferences are uniquely different in how people are engaged. During the Vision Conference, people are dealing from the heart. Discussions are lofty and future-focused, and consensus is easy. The Technical Conference requires a lot of mental work. Participants spend most of their time in objective analysis or creative brainstorming. And the Social Conference hits people in the gut because it is no longer something way off in the future or to be objectively examined, it now impacts them personally. In each successive conference the issues draw closer. The same feelings and emotion experienced by a design team working six or nine months is compressed into three conferences.

The Conference Method of Redesign offers many advantages over traditional methods. But is it always the answer? Probably not. When a complex, non-linear work process is the subject of redesign, a Technical Conference may not be sufficient. In this case, a design team might conduct a current state technical analysis and then convene a conference to create the ideal state. As with any design effort, one size rarely fits all.

Does this method represent input to a design team or a way to do design itself? I see it as both: a process of "co-design" between the team and each conference. The participants ask little from the design team, but need them to act as the "honest broker" for change where consensus fails to emerge. Generally, consensus does emerge and agreements are reached in a way that creates a critical mass for change. As the pace of change increases and resources shrink, organizations can ill afford to spend six to twelve months on a design process that merely sits on a

shelf for lack of buy-in and commitment. I believe the Conference Method of Redesign will become the standard for redesign in the future.