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Systems Thinking and Theory U in Human Service Leadership

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SYSTEMS THINKING AND THEORY U IN HUMAN SERVICE LEADERSHIP

by

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Bachelor of the Arts – Bradley University, 1994

A Research Paper Submitted in Partial Fulfillment of the Requirements for the Master of Science

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RESEARCH PAPER APPROVAL

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Approved by:

Dr. Carl Flowers, Chair

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CHAPTER 1

INTRODUCTION

"When Simplicity is broken up, it is made into instruments. Evolved individuals who employ them, are made into leaders. In this way, the Great System is United."

- Lao Tzu The Tao Te Ching (Verse 28)

Need of the Study

Systems thinking is looking how each aspect or point affect the bigger "organism" (Leischow & Milstein, 2006). It is looking at how processes are connected and how decisions made in one area can have a ripple effect across multiple areas. Leaders unaware of the process can find them selves doing unintended damage based on the timing of there decisions. While those with skills to look across systems can place their agencies in a stronger position by being able to better forecast upcoming trends and problems (Meadows, 2008).

From systems thinking, a new theory of leadership has also emerged and that is Theory U. The concepts of Theory U were originally being set forth by C. O. Scharmer in 2004. This new way of thinking is looking at the internal focuses of a leader in preparing for and bringing about change in their organizations (Scharmer, 2009).

Statement of the Problem

Human service agencies are facing challenging times, both financially and philosophically. Current and emerging leaders in the field are in need of new ways to

examine problems, make informed decisions, and lead their teams and clients to successful treatment in the future. There is emerging information that the concepts of systems thinking and the new ideas of Theory U may be viable strategies for human service leaders.

Purpose of the Study

This paper will be examining the concept of Systems Thinking, Theory U and how they can be utilized within social service leadership. Human service organizations have historically been under-funded and forced to function on limited resources. However, they have also historically functioned separate from the business world. Persons rose to leadership positions based on their skills in the non-profit world and few had or have any formal business training. Many believed that as not-for-profits, normal business practices were not necessary or even appropriate. Over the years, this trend has begun changing (Karp & Helgo, 2008). As funding and resources have shifted from limited to anemic, not-for-profit agencies have found a need to employ more traditional business skills to survive. Those functioning with a traditional mindset of business rules do not apply here are quickly becoming failed agencies. As the economic climate continues to tighten, agencies that are proactive in predicting and leading through change can find themselves in a stronger position heading into the future. One of the styles that may help in this is looking at systems thinking and developing style of change leadership and decision making.

Plan of Operation

Information for this paper has been obtained through an analysis of existing literature and information. The paper will be broken down into the following: A clear

look into what Systems Thinking is and a look at how it impacts areas of human services.

We will then look at how Theory U has emerged to provide a framework for leaders in all fields, including human services, to look at future planning and change within the system.

Application ideas for this will be discussed as well.

CHAPTER 2

REVIEW OF THE LITERATURE

What is a system?

A small thing is a part of another; which is a small thing in a part of another; and so on and so on. Such is how it is with systems. We might introduce the idea of systems thinking to our children early on, and unknowingly. A child comes home from her first grade class, excited to share what she has learned in science. She lets us know that her teacher told her that the earth is always moving and the sun stays still. We might respond to her that she is half right. We then begin to talk about how the earth revolves around the sun; which in turn is taking its path through the galaxy at about a million miles a day. Earth, moon, planets, sun, stars, galaxy, universe...we talk about how all are pieces of the same big system and that all worked together to make the system work. According to Meadows (2008), looking at a system is not looking at a still picture, but rather looking at movement, interaction and change.

Just as children learn about the expansive system of the universe, so do we need to look at all areas of importance. It is that way with all things we study, learn, and work with. Many areas are, not just together, but are inter-connected and react with and impact each other (Rowitz, 2009). It is the interaction that is the key. It is the interaction that makes it a system, not simply being in proximity. For example, loose and empty plastic bottles are strewn about in a yard. They are in the same yard, but there is no interaction, no movement towards a goal, thus there is no system. However, in the morning, those same bottles are picked up by an environmentally conscience person and placed in a

recycling bin, with is picked up and taken to a recycling plant; those same bottles are now a part of a system.

So a system is a group or set of things which are connected and work in forming a more complex whole (Simpson, 2005). When we begin to look at the human service field, many systems begin to emerge: the financial system, the program system, the evaluation system. When we begin to see it as such, we can begin to break it down and better understand and predict its behavior. Then we are really entering the area of systems thinking. Systems thinking is the study of that idea of interconnectedness and how we make it work for our own understanding in most any area of need (Meadows, 2008).

What is Systems Thinking?

Systems thinking is defined as a process of thinking and examining how individual parts and events influence the whole (Meadows, 2008). Proponents press it forward as an effective tool across disciplines; from physics, to nature, to societies and business. It is a holistic approach to learning and problem solving. It is a way to begin to predict and prepare for change and movement within a defined area.

Systems thinking in the social sciences can be traced back to the post World War II era. Beginning in 1946 and continuing through 1953, the Macy Conferences were held on the east Coast with the first nine in New York City and the final conference in New Jersey. At these conferences some of the 'top minds' of the times, from both social and physical sciences, were in attendance. It was here the G. Bateson, an anthropologist and social scientist, began to express and make a case for needing more sound theory in the social sciences if it was to advance. One of those in attendance was N. Wiener, who is

considered the founder of cybernetics, a discipline closely linked to systems thinking. These men and women began to seek commonalities in learning and discussions and ideas on circular causation began to emerge. (Montagnini, 2007). Through the years, many theories have blossomed from this foundation.

In the 1940's, General Systems Theory (although postulated earlier) was being advanced by L. von Bertalanffy. It is stressing the commonality in systems across disciplines and serves as the real foundation for systems thinking as we know it today (Pouvreau & Drack, 2007). With cybernetics, mentioned earlier, Wiener focused on the communication and control systems in both machines and living beings.

In the 1980's Chaos Theory began to have an impact on all disciplines as well. With Chaos Theory, scientists were looking to explain variance in results where predictability was expected. Similar or even seemingly identical systems were introduced to an identical outside influence. Scientists expected to see controlled, similar, and predictable results. What they found instead was unpredictability. The focus began to look a the subtle differences in initial conditions of the system (Bussolari & Goodell, 2009). Those subtle differences could, did, and do have dramatic impact on the end game results. This is a crucial thing to remember as we look to utilize systems thinking in human services as leaders today.

The Parts of a System

So all of these ideas and theories, having built on and influenced each other, bring us to system thinking as we utilize it today. Let us take an initial examination of what are the basic parts that we need to be aware of if we are to put this theory into practice.

There are four common pieces that we need to be aware of, no matter what type of system we are examining.

This first are the items or actual components themselves. Looking back at our original example, the planets and stars were items in the system. The possibilities for items are limitless (Meadows, 2008). In human services, some examples are clients, staff, licensing bodies, transportation, schools, and on and on. When defining the items of our system of interest, we can be as general or as specific as the need and time allow. If we are too general, the chance of any real insight is diminished greatly. If we call the financial system, for example, the interaction between only the agency and the state that is paying it, we are not going to glean any new and important information. So we must begin add other key parts, and begin to reduce the pieces of each part, gaining detail with each step. One of the dangers of this process is that any item we define can, if we choose, be broken down into its own parts. These can then be broken down as well in a seemingly endless loop. In R. Pirsig's novel Zen and the Art of Motorcycle Maintenance, the protagonist, Phaedrus, at one point became obsessed with this process (Pirsig, 1974). While the breakdown he eventually suffered may not be our fate as leaders, we can certainly hit a point where advancement of an idea or function stops due to the constant reduction of a piece into its parts. As a leader, we must be responsible for finding the balance in this process. We must determine at what point is the time and cost of reducing each item to smaller subsets outweighing the added benefit of that action. Once that is determined, we have our items.

Once the items or elements in the system are defined, we begin looking at the next point in the process, the interconnectedness (Trochim et al., 2006). This is a much more

challenging step in system thinking because this is not always easily observable or agreed upon. What forces, seen and unseen are at work that bring the items together toward the system's purpose? We know that the sun is providing us with heat and light. Those are straight forward. We can observe and experience those with our senses. But what about the mass of the sun, the planets spin and orbit? The unseen and often un-agreed upon forces take much more time and study to understand. We will see that it is the same with human services and the systems we need to influence and predict. On interconnection, often theory emerges rather then fact. Different theories begin competing for attention and resources and support. When we later examine the financial realities of the field in Illinois, we can see this competition for support and its impact on us through taxing, spending, funding and the release of funds. But for this part, we simply must define the connection itself.

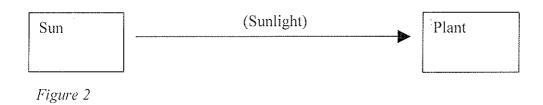
Now that a connection has been established, we have to point the arrow. What direction is the causality flowing? Below are two initial pieces in a simple system (figure 1).

Sun (Sunlight) Plant

Figure 1

The sunlight and the plant are defined items in our system. The line connecting them is representative of the interconnectedness of the two items. Our first two steps are

determined. But it is an incomplete system. Our next step in completion is giving a direction to the causation. Is one object affecting the other, or is it symbiotic in that each is giving and taking from each other to complete their function? In this simple system, we know that it is the sunlight that is providing and the plant that is taking, so our direction arrows can represent that as seen in figure 2.



The more complex the system we look at, the more complex the causation diagrams would become. Many items, each connected in some way, can have multiple directions of causation moving through the system. We know that with the above simple example, sunlight is not the only influencer on a plant. We also know that the plan will have causation arrows moving out from it as well directing toward the items that it influences. By breaking down systems into causation diagrams, leaders and teams can visualize and build common ideas and theories together to help explain outcomes and hopefully better predict future behavior (Trochim et al., 2006).

The final portion of the process is output itself. What is the effect for the system? With our examples in diagrams 1 & 2, the sunlight hits the plant, the wonder of photosynthesis triggers, and the plant produces food and energy. This is a reinforcing system (Meadows, 2008). The reinforcement does not stop there either. It begins to

cycle and accelerate. As a result of photosynthesis, the plant grows, producing larger leaves. Those leaves are now free to catch more sunlight, producing more energy, allowing more growth. This is a positive cycle, having a beneficial effect on the system.

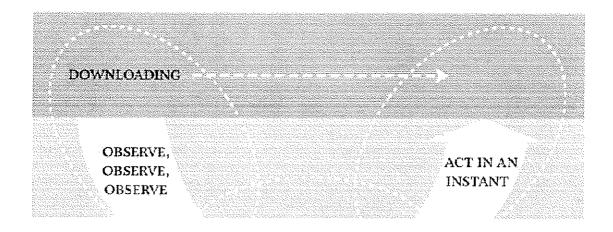
A final system point to be aware of is that of chaotic system behavior. Behavior within a system that appears unpredictable may point to instability within the system itself. It is a system in crisis if you will. Systems in crisis may make the parts of that system extremely susceptible to even the slightest outside influence. Because of this susceptibility and the difficulty in knowing all possible influencers, the systems behavior during this time becomes either much more difficult to predict or effectively unpredictable. An example of this may be made from trying to track and predict the movement of a single piece of debris during a tornado. The environmental conditions have become chaotic. Competing winds, rain, stationary objects, and other debris are all influencing and making an impact on the path and eventual completion of the single pieces movement. While there may be a pattern within the chaos, it is unlikely that we will be accurate in our prediction. In mathematics, these chaotic systems can bring about wonder and a new field of study. In the human service systems that we will be discussing shortly, they bring mainly fear.

Change Leadership and Theory U

Change leadership build off of a foundation of knowledge of system thinking. Proactive change and preparedness only come through observation and understanding of the system connections and loops. It is in this way that the two are tightly connected themselves. In the article *Form Change Management to Change Leadership*, authors Karp and Helgo (2008), rightly state that the value of a social service agency is measured,

not by its profit line, but rather by its success is positively impacting it targeted client base and its community as a whole. The ambiguity of this measurement poses a huge challenge to leaders within the field. Because of the diversity of the stocks, structures and influences in the social fields, it is impossible for any one leader to understand and predict all of the reinforcement loops that are discussed earlier in this paper. However, that diversity and interconnectedness is shaping and impacting the field. It is a time of chaotic change within the human service system. In our current climate we are forced to move from a singular thinking of what is right, to what is possible. So how do we, as leaders, prepare for and bring about change on an organizational and individual level?

In his book, <u>Theory U: Leading from the Future as It Emerges</u>, C. O. Scharmer puts forth Theory U as a model a change leadership. The name comes from the "U" shape that his visual model takes on and it bases its initial foundation in systems awareness. The beginning of the idea came to Scharmer as a three part system model: observe, reflect, act. Figure 3 shows his visualization of this model.



RETREAT AND REFLECT allow the inner knowing to emerge

Figure 3 – Three Movements of the U (Scharmer, 2009)

The initial stock is to observe. The leader gathers as much pertinent information through awareness and exposure to the system. The goal is to accumulate data. The U then progresses into retreat and reflect. The point of this step is to work to fill in the gaps of knowledge. It is to look at not just what is there, but to find the deeper knowledge of what will be there. As the deeper knowledge is formed, the leader then acts, putting the knowledge to the test. A new "U" is now begun. Observation of the action and its effects starts the system cycle over again. The leader observes the change and looks to determine whether it was as predicted and then what further reflection and action is warranted. The shape and the shading of the diagram are to illustrate the act of moving to a deeper level of understanding. The top level (downloading) is a judgment on where many people are managing change rather then leading through it. Managing being

simply to observe and act within the current framework of policy, procedure or accepted practice. This is not an easy shift, from managing to leading change.

CHAPTER 3

RESULTS AND APPLICATION

The financial system in human services is the most talked about and key system impacting us today. During a personal interview with J. Durdel, (personal communication, September 22, 2010) interim CEO of Tazewell County Resource Center, he was asked to name the five most critical areas for a human service executive to be aware of today. His response was "budget, budget, budget, budget, and budget". Illinois is currently facing a \$13 billion budget shortfall. The system is in a negative reinforcing cycle. Cuts to the system have left agencies and individuals without services and resources. Agencies that were unprepared for this crisis began closing their doors. Even those who were managed well and prepared for the turn leaned programs and cutting services. Through July of 2009, Progress Illinois (2009) listed two areas of reported impact by the current financial situation. Reposted statistics included nearly 2000 employees laid off of work with elimination or reduction of services to 14,000 individuals and these estimates are noted as very conservative.

Over the past three years, the Department of Human Services Division of Developmental Disabilities has realized dramatic cuts to is programs. The percentage of the cuts varies from 2 percent to the total elimination of program funding. The cuts themselves came in various ways. Some were across the board of a budget line, others were through the slashing or elimination of a grant. Programs such as Extended Employment Services have been affected dramatically. The program exists to allow individuals with developmental disabilities to maintain a job coach in the community to ensure stable work placement. Without these services, many individuals will have no

employment options at all. The full cuts in the past fiscal year were at fifty percent.

Home based support service grants also received cuts of up to one hundred percent of funding (Progress Illinois, 2009). And those are predictable and defined budget cuts.

When announced, leaders can make long term plans based off of the projected budget.

Cuts are painful and to the detriment of clients, but the leader can be proactive in protecting the long term stability of an agency. The cuts, however, when combined with other stocks, can create a more immediate and unpredictable problem; that of cash-flow. Leaders need to be able to visualize a complete picture of this system. So what are the individual stocks? How might a diagram of the system look? Let's examine figure 4 now.

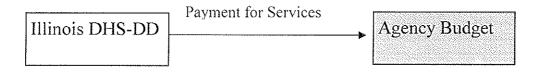
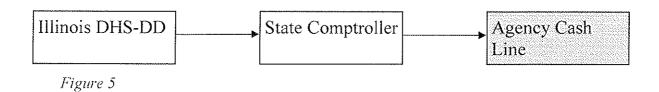


Figure 4

This diagram shows the most simplistic view of the budget in human services.

The state agency, in this case the Illinois Department of Human Services Division of Developmental Disabilities (DHS-DD), approves the budget and the individual agency allots that amount of money to fund its programs. This is how many entry level and first time mangers in an agency picture the budget. They see the approval of money at the state level to be the single point that determines an agency budget. Knowledge of this relationship can form the basic outline of an agency budget. This is, however, neither

complete nor useful in itself for a leader that is responsible for the economic health of an agency. Figure 5 makes the first crucial addition to the system, the stock of the state comptroller.



It is the comptroller that releases the money and pays the bills owed to the individual agencies. It is this step that has caused the beginnings of a cash-flow crisis in Illinois social service agencies (Rushford, 1993). With the afore mentioned budget shortfall at the state level, the comptroller is not able to release funds owed to agencies in a timely fashion. Delays of payment are currently running between three and nine months. The result is millions of dollars owed. Building a more complete picture in figure 6, we see the needed additions of donors and local funding as well as planned and unplanned expenses.

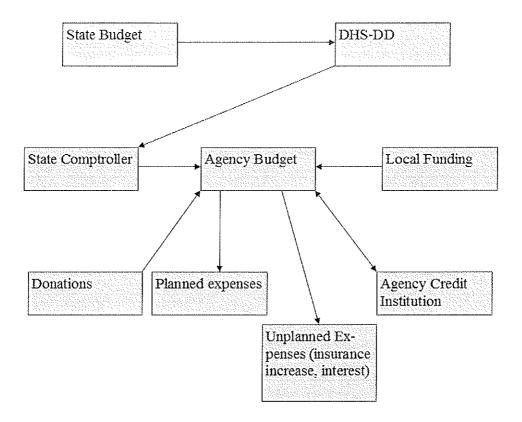


Figure 6

An executive needs to be able to look at where money is coming from and will be going to. They also need to see how various stocks combine to reinforce each other.

Examples for in-flowing stocks working jointly is easily seen when local sources, such as city and county funds, as well as donors are struggling with the same issues as the state, funding delays and cuts replicate and begin to have multiple levels of impact.

In depth diagrams and systems thinking can also reveal connections that many might miss. One of the largest concerns in human service budgets is the increasing costs of employer sponsored health care insurance coverage (Sood, Ghosh & Escarce, 2009). With annual increases of twenty to forty percent, the impact on annual budgets can be in the thousands, or even millions depending on the size of the agency. However,

struggling economies can have unbudgeted impacts as well. Job loss and unemployment of employee's family members will also impact an agency. Those events can trigger a change in enrollment, having an agency pick up multiple new persons to cover and dramatically increasing monthly expenses.

Within leadership, we might look at a simple reinforcing cycle to be with supervision between a manager and an employee. The elements or "stocks" within a very simple system might be each supervisor and employee and client. The interconnectedness in this situation are the feedback from supervisors and the performance of the employee and resulting improvement in the client outcomes. A supervisor observes a positive behavior of a staff interaction with a client. Directional causation flows from the supervisor to the staff in the form of praise to the staff. Internalized praise increases the positive behavior toward the client. Improved services from the staff to the client improves the client skills and outcomes which is noticed by the supervisor, thus increasing praise to the staff. A positive reinforcing system has been created.

Not all created cycles are virtuous, however. Some can be detrimental or even terminal for a system. Negative loops can be thought of in terms of quicksand. If a person falls in quicksand the initial response is often one of panic. Your body begins to flail and struggle against the quicksand, trying to escape. Unfortunately, that selfsame struggle causes the person to become more mired in the sand, causing more panic, causing more struggle. Negative loops can occur in business when we panic or fail to change behavior that is having a negative impact on the system. So the feedback loop can create simple reinforcing systems, both positive and negative in nature. For this in

human services, we can discuss one of the biggest concerns in the field currently, and that is cash flow (Why Watching Cash-Flow, 2004). Cash on hand is one stock in the financial system of an agency. As shown, this is a very complex and crucial system for an executive to be in control of for the agency. If we simplify the number of stocks we can look at a negative loop here. We remember that the state comptroller releases monies owed to organizations after services have been rendered. Delays in that release force agencies to utilize reserve to met monthly expenses, decreasing cash on hand. Once reserves are expended, agencies must begin to utilize credit lines to meet those same expenses. The credit lines actually increase the drain on cash flow over the long term by adding a new monthly expense of the principle along with an unbudgeted expense of the interest during the return of the loan. Added expenses continue the negative reinforcement loop by further draining cash flow for the agency. Without the relief of more timely payment, the cycle will continue to progress.

The loop may also help create a balanced system. By that we mean that the goal or purpose of the system is not to allow the output to become too high or too low. Its goal is not a simple accelerating reinforcement loop. The system works to stabilize the output. We can think of an example of that government finances. The Chairman of the Federal Reserve is charged with working to maintain a stable system. We all want economic growth, but if the economy grows too quickly, there are concerns; inflation, spending, increased use of limited resources. So the Fed takes steps to balance the system, perhaps by introducing a higher interest rate. The rate decreases the number of new loans, and slows growth. But if it slows too much, concerns of recession and

stagnation begin to creep in. The system is in a constant state of flux, items interacting and working to find balance.

As simple reinforcing and balancing systems are at work, they may begin to interact and interconnect with each other. These compound systems become increasingly complex. With so many factors at play, it becomes difficult to see the causation of one to another and even more difficult to predict the output and result of the interaction. What function does the system that I have influence in have on the larger compound system that it is a part of? This functionalist question is one that we as leaders may ask our managers. How does your program work impact the department? How does it impact the agency? The functionalist approach in systems thinking created opportunities for the "Big Picture" examination of human services.

Utilizing Theory U

As discussed, Theory U can be used as a new method to examine issues and direction both systematically and creatively to bring about effective change and deal with chaotic change in the human service field. To utilize this method, we can further break down the "U" system. We now begin to examine and apply the five primary points within the of seeing, sensing, presencing, crystallizing, and prototyping.

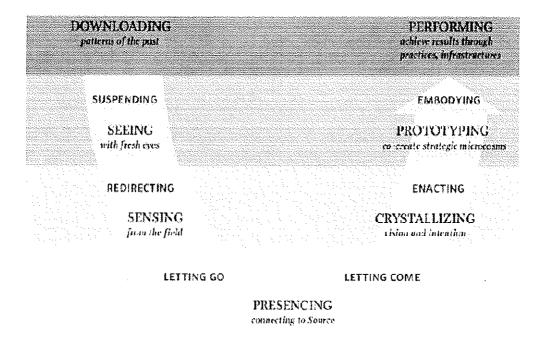


Figure 7 – The Complete U: Six Inflection Points (Scharmer, 2009)

Movement down the left of the U is taken in three stages: seeing, sensing, and presencing. In seeing, a leader stops simply reacting to old habits and thoughts. The leaders stop seeing what is expected and instead separates off and looks to see without bias. This suspension of belief is critical in building a clearer perspective of observation. Here the leader must examine and clarify the question or problem being addressed. Are we asking the right question? A key here is to not come to any judgment or conclusion this point. Observe and gain contextual information only.

Next in sensing, the leader begins to take the new observations and connect them on a system level. A leader must also begin examining his/her part and place in the system. While we are observing to learn we must remember that in action, we are not independent of the system. The system thinking idea of interconnectedness must be present to remind us that the cause and effect loops are inclusive of each agency. We are

a collection of decisions throughout the industry. We are not simply affected by connected system stocks, our response and behavior effect other system stocks around us.

The bottom curve of the "U" is presencing. This is meant to be a combination of the words presence and sensing. This is where we, as leaders, work to form our answer of the perfect future possibility. Having collected the information and begun to understand the system and our place in it, we look for the "highest future possibility and bring it into the now" (Scharmer, 2007). This is a creative leadership leap. We step our of what has failed us and try to build a new picture of where we will, as an agency and as a discipline, be in the future. This picture can and should be the basis for the strategic map of where the agency is going and the steps it will be taking to get there. Those steps, are the right side path, back up the "U".

The first move back up the "U" is crystallizing. Based on the picture of our future goal, a new form of thinking begins to emerge. Here we create a specific explanation of what needs to be created or accomplished. In social services this is a crucial step. Given the chaotic climate of change, leaders in the field must be able to take vision and combine it with what is possible in light of all circumstances (Karp & Helgo, 2008). It may be that in going through the left side of the "U", we examined the financial state of our agency and its cash-flow. A lot of focus of the field in this area has been to press primary funding sources to maintain and expedite payments to service agencies. This can make sense as agencies in Illinois serving adults with disabilities can depend on DHS-DD for often as much as ninety percent of annual funding. However, when envisioning the highest future possibility, an agency less dependent on a single source of revenue may have been pictured. During the crystallizing stage, a leader may begin to set forth goals

of limiting dependence to no more then seventy percent of funding from any one source. In crystallizing, the goal is to begin changing the language and thinking of the individual or organization.

Once the ideas have been clarified, the next stage is that of prototyping. New behaviors and practices are laid out here. What actions and instruments will be used to accomplish the focused future goal? Who will be responsible? What are the expected results of each action in the process? Are the results in line with the future goal? The leader here needs to set actions that take three points into account and connects them. The three points are the current situation, the observed information, and the envisioned future. If any of these points are ignored the change program will likely join the over 90% of other change systems that have failed in the private sector (Karp & Helgo, 2008).

But put together correctly, these ideas drive the leader toward the final emergence from the "U", performing. That is putting the new plan into action. From there we move back into our original "U" points - observe, reflect, and act. As the system is not stagnant, our leadership cannot afford to be either.

Moving forward as leaders, we must be aware that our own willingness and recognition of the need for change is not enough. We must move our organization forward with this openness as well. This can pose a significant challenge, but to Scharmer, the model only takes on enough changes to add a collective level of thinking.

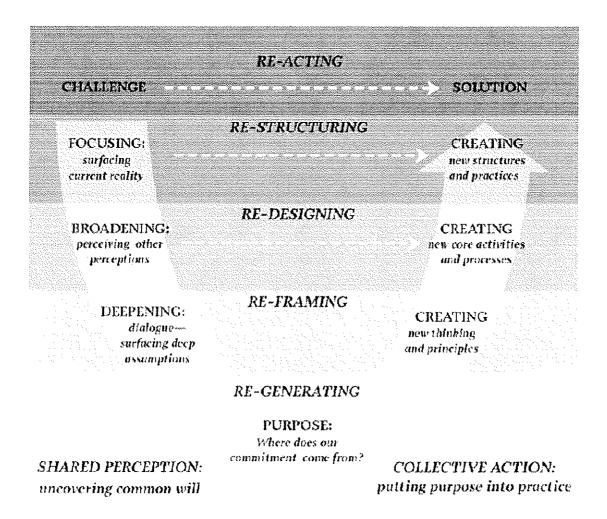


Figure 8 - Five Levels of Change (Scharmer, 2009)

The left side of the "U" above focuses on building a shared perception as a group.

The leadership team must build this picture together through shared and understood langue and ideas. Common perception and purpose then lead the team to common action.

This allows us as leaders and teams to effectively navigate the changes ahead.

CHAPTER 4

DISCUSSION AND CONCLUSION

As leaders and practitioners of systems thinking and change leadership, we must be aware of a singularly important point, we cannot control the system. We need to know that there is no perfect predictor. Utilizing systems thinking is not about controlling the system, but rather understanding and being able to move with and intervene in its flow. To do this, we must recognize and take advantage of leverage points within the systems that or vulnerable to our influence and actions. What those are will depend on our position, size, location, and other aspects of our organization. The size of the individual stock in comparison to the affecting stocks and flows is important. Going back to the earlier cash-flow discussion. We cannot directly control the outflow of cash from the comptroller. A long term leverage point may be through voting blocks that may have a positive impact down the road, but it does not address the short term problem. However, leverage points that we can effect may include timing of capital purchases, or using equity credit rather, then a straight back credit line (Steps for Improving, 1998). Another point is to take advantage of feedback in the system. If we react to a positive or negative loop too quickly, it can be to our detriment. Leaders need to make sure their response is timely and be aware of short versus long term leverage (Meadows, 2008).

And so we now have the basis for system thinking. It is the items, there connectedness, and the flows of inputs and outputs all having influence over the overall function of the system. The key moving forward is finding the practical uses. For that we need to know that the power of systems thinking is not in the individual data bytes of

information that we collect about the system. The value is not in the snapshots. The value is in the movie. We need to take all of those bytes out of a stagnant state and inject the movement over time. All the snapshots studied in sequence shows the flowing picture of the system. Over time, we can use this to work to predict outcomes and influence trends within our own human service system. A lack of awareness of and utilization of this systems thinking style has been a detriment to human service organizations in the past. Our leaders must be aware of more then diagnosis if we are to survive and thrive in the current climate facing human services in the United States and Illinois in particular. We must be able to better predict and manage change within the field. This is where the concept of change leadership comes into play.

In conclusion, we know, as professionals in the human service field, that the challenges facing agencies are extremely daunting. Executives need every resource and advantage at their disposal to navigate the times ahead and successfully bring their programs through to the future. Systems Thinking and Theory U are options and styles that are being utilized to address the needs or executives, their programs, and the people they are serving.

REFERENCES

- Bussolari, C., & Goodell, J. (2009). Chaos theory as a model for life transitions counseling: Nonlinear dynamics and life's changes. *Journal of Counseling & Development*, 87(1), 98-107. Retrieved from Academic Search Premier database.
- Karp, T., & Helgo, T. (2008). From change management to change leadership:Embracing chaotic change in public service organizations. *Journal of Change Management*, 8(1), 85-96.
- Leischow, S., & Milstein, B. (2006). Systems thinking and modeling for public health practice. *American Journal of Public Health*, *96*(3), 403-405. doi:10.2105/AJPH.2005.082842.
- Meadows, D. H. (2008). *Thinking in systems: A primer*. White River Junction, VT: Chelsea Green.
- Montagnini, L. (2007) Looking for "scientific" social science: The Macy

 Conferences on cybernetics in Bateson's itinerary. *Kybernetes*, 36(7), 1012 –

 1021.
- Pirsig, R. M. (1974) Zen and the art of motorcycle maintenance: An inquiry into values.

 New York: William Morrow & Co.
- Pouvreau, D., & Drack, M. (2007). On the history of Ludwig von Bertalanffy's "General Systemology", and on its relationship to cybernetics. *International Journal of General Systems*, 36(3), 281-337. doi:10.1080/03081070601127961.
- Progress Illinois. (2009, July 5). Tracking the state budget fallout. Retrieved October 1,

- 2010, from http://www.progressillinois.com/2009/7/5/features/tracking-state-budget-fallout
- Rowitz, L. (2009). *Public health leadership: Putting principles into practice.* Sudbury, MA: Jones and Bartlett.
- Rushford, L. (1993). The name of the game is cash flow. *Outlook*, *61*(2), 26.

 Retrieved from Academic Search Premier database.
- Scharmer, C. O. (2009). *Theory U: Leading from the future as it emerges*. San Francisco: Berrett-Koehler,
- Simpson, J. et al.(Ed). (2005). *New Oxford American Dictionary* (2nd ed.). London: Oxford University Press.
- Sood, N., Ghosh, A., & Escarce, J. (2009). Employer-sponsored insurance, health care cost growth, and the economic performance of U.S. industries. *Health Services Research*, 44(5), 1449-1464. doi:10.1111/j.1475-6773.2009.00985.x.
- Steps for improving your firm's cash flow, (1998). *Nation's Business*, 86(11), 12.

 Retrieved from Academic Search Premier database.
- Trochim, W., Cabrera, D., Milstein, B., Gallagher, R., & Leischow, S. (2006).

 Practical challenges of systems thinking and modeling in public health. *American Journal of Public Health*, *96*(3), 538-546. doi:10.2105/AJPH.2005.066001.
- Why watching cash-flow is so important now, (2004). *Pulse*, *64*(32), 28-29. Retrieved from Academic Search Premier database.

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