

[▲ Home](#)[◀ Contents](#)

Creating the Conditions for Effective Communication and Learning in Organizations

by Monica Scott

Introduction

I believe effective communication is an essential factor in overcoming differences and creating an environment where people can come together to learn, work, or play. Communication on the surface seems a straightforward endeavour. In practice, it is fraught with a multitude of issues that are dependent on the parties involved, who convey and receive messages. Is it possible to convey a message and have it received as the speaker intended? What happens between the voicing of a message and the hearing of a message? Under what conditions does accurate communication occur? Do our own mental models affect interactions with others? What can leaders do to create the conditions for clear communication?

In this paper, I will explore communication and learning using the notion of mental models or mental representations as well as integrative thinking and generative listening. In my workplace, we collectively strive to create a positive learning and working environment so students feel welcome and accepted. Given this, I have also noticed how often miscommunication happens between staff members as well as between staff and the students we serve. Working directly with students, I find a major challenge is to communicate as clearly as possible to ensure students receive the information they need. To do this I have used traditional communication strategies such as paraphrasing to ensure I understand the student and asking them to articulate back to me their understanding of what I have said. I have observed that regardless of how skilled the speaker, there are still many interpretations by the receiver.

With this understanding of mental models, integrative thinking and generative listening, I will discuss what I think leaders in my department can do to create the environment for improved communication with students and staff. I work in a large university, rich with people representing different cultures, religions and nationalities. The communication challenges created by this diversity necessitate a deeper understanding of the communication processes. The students who use the services of my department can be from anywhere in the world and the staff I work with also represent diversity. Even with the predisposition to strive for equity and embrace the richness of the diversity of our population, miscommunication and misunderstanding sometimes happens. The question is why and how can we achieve better communication.

What is Communication?

Wikipedia defines communication as “the process of conveying information from a sender to a receiver with the use of a medium in

which the communicated information is understood by both sender and receiver. This process requires a vast repertoire of skills in intrapersonal and interpersonal processing, listening, observing, speaking, questioning, analyzing, and evaluating (Wikipedia, 2007)". I think that as we communicate we consider what we say, and what we hear and attribute meaning to both. How we process and attribute meaning comes from our stores of knowledge we have accumulated to date. These are what Roger Martin calls mental models and what Howard Gardner calls mental representations. These models or representations act as filters through which we convey and receive information. It is important then to understand what our own models are and to be open to understand the models of those with whom we wish to communicate.

What is a Mental Model or Mental Representation?

Mental models are constructions made by people to enable them to filter the barrage of information they are exposed to living in our complex, multifaceted world. Models or mental representations simplify incoming data and allow us to create "our customized understanding of reality (Martin, 2007, p. 50)". Our models influence our perceptions of how we see others, the world, and ourselves. I agree that it is important to make the distinction between our perceptions and reality. Howard Gardner suggests that although we begin to form mental representations early in life, they need not be permanent. Given the right incentive, individuals may be convinced to examine and reconstruct a mental representation.

The cognitive approach is based on emerging scientific understanding of how the mind works, courtesy of psychology, neuroscience, linguistics, and other neighbouring disciplines. It takes into account our inborn or early representations, and it acknowledges their debt to both cultural and biological factors. But most mental representations are neither given at birth nor frozen at the time of their adoption. In our terms, they are constructed over time within our minds/brains and they can be reformed, refashioned, reconstructed, transformed, combined, altered, and undermined. They are, in short, within our hands and within our minds. Mental representations are not immutable; analysts or reflective individuals are able to lay them out, and while altering representations may not be easy, changes can be effected. Moreover, because we have at our disposal so many mental representations that can be combined in so many ways, the possibilities are essentially limitless (Gardner, 2006, p. 46).

I think as we become more aware of our unconscious use of mental models, we can also become more sensitive to the impact our biases have to clear communication. Our mental models act as shortcuts or filters that enable us to sort, categorize, and draw conclusions about situations and other people that we encounter. The shortcut saves mental energy, however, it causes us to make assumptions, stereotypes or cast people and situations into familiar roles that we have experienced before. Craig Wynett, Head of Corporate New Ventures at Procter & Gamble refers to this as the "factory setting" in Roger Martin's book *The Opposable Mind* (cited in Martin, 2007, p. 49). He likens it to the default setting of various products in factories, which are usually never reset. We as individuals travel between experiences, relying on our default settings that we construct over the course of our lives. We rarely question whether

they are valid or close approximations to truth until confronted with an opposing view. Martin refers to this opposing view as the clash of models at which time both parties engage in advocating for the validity of their "correct model" to prevail (Martin, 2007, p. 158). It is the clash where Martin sees the potential to use the tension between models to seek an integrative solution other than choosing one model over another. Rather, he sees an opportunity to creatively reflect upon the possibilities presented by the clash to move forward with a new model that combine the best of both. To do this, requires one to acknowledge one's own mental model and that of the other with whom we have clashed. By actively engaging in the complexity of working through both models, we move to a deeper understanding of both and an appreciation of the others. Martin challenges us to utilize what he terms integrative thinking to reach resolutions to complex and seemingly unsolvable issues (Martin, 2007).

I recently witnessed an interaction between two colleagues, a team leader, and a clinic coordinator, that illustrates how our models unconsciously filter what we hear. With the departure of a staff member, the team leader wanted to discuss the reallocation of her team's time commitments to the clinic. The team was temporarily short-staffed and it was not possible to absorb the vacated work hours internally. A conversation transpired between them, with each person defending their own viewpoint. The team leader's viewpoint was the hours conflicted with the remaining team member's schedules and could not be covered by her team. The clinic coordinator's viewpoint was equally firm - the service should proceed as normal and the other team was responsible to cover the hours. The conversation ended with both parties somewhat frustrated and no clear resolution found. However, if they had acknowledged their mental models, and used a more empathic communication style, the outcome may have been more productive.

What is integrative thinking?

According to Roger Martin, integrative thinking is "The ability to face constructively the tension of opposing ideas and, instead of choosing one at the expense of the other, generate a creative resolution of the tension in the form of a new idea that contains elements of the opposing ideas but is superior to each (Martin, 2007, p. 15)". Integrative thinkers, in Martins view, are able to recognize that the models they have formed to understand a complex world are really their perception of reality, and there are equally valid models constructed by others to explain their view of the world. Using a series of reflective tools, an individual can seek to resolve the tensions between mental models to envision a resolution that captures the best of both and eliminates less favourable tradeoffs. If doing this in concert with another person, the reflection allows each person to contribute toward a new understanding of the issue. Both parties will learn from becoming aware of their own mental models and gain an appreciation of the other parties' mental model (Martin, 2007, pp. 6-9). In *The Opposable Mind*, Martin draws upon numerous conversations with leaders to illustrate the process of integrative thinking they used to create successful outcomes. He believes that although integrative thinking has not been taught, these people through reflection and experience have developed this ability. He further points out that he believes it can be taught to others and the process he has observed in leaders has been incorporated into curriculum at the Rotman School

of Business at the University of Toronto.

My own classroom experience suggests – but does not prove – that people can be taught to use their opposable minds, and they grow more confident with practice. But it is already clear that integrative thinking is untaught. The world has not organized itself to produce integrative thinkers as it does brain surgeons or computer engineers. Integrative thinking is largely a tacit skill in the heads of people who have cultivated, knowingly or otherwise, their opposable mind. Many of those people don't appear to know how they are thinking or that it is different from the common run of thought. They just do it. But an outsider can observe, describe, and analyze their thinking process. And from this conscious, systematic study, a method of teaching that process is starting to emerge (Martin, 2007, p. 23).

I believe, to a great extent, the ability to step back and view our models or interpretations of reality requires objectivity and a willingness to let go of beliefs that in many cases are firmly entrenched. Martin includes several examples of individuals who have achieved this. I wonder how strongly they held their models or how emotionally invested they were. If faced with another situation, perhaps a more personal situation, would they have the same objectivity with their integrative thinking?

How do people change mental models or representations?

In *Changing Minds*, Howard Gardner points out that a person's ability or willingness to abandon a mental representation is dependent on when and how the theory was established, regarding the issue under consideration. This determines how firmly the belief (or model of the world) is held. In fact, he suggests that childhood theories are very difficult to change.

It helps to think of our early childhood theories as slight dips in the initially smooth terrain of the mind/brain. The more the theory seems to be born out, the deeper the dips become until a significant valley has been formed. Barring mental bulldozing, these valleys are likely to endure. Another suggestive metaphor construes the early theories as engravings in the mind/brain. These engravings are enduring. However, in school, one learns many facets and when properly prompted, can repeat this sound bit. From a distance, it looks like facts are piling up high and one has learned a great deal. However, all too often, the fundamental engraving has remained unchanged. And so, when one is posed a question for which one has not been properly prepared, not only is one stymied but, more often than not, the respondent reverts to the earlier engraving, or, to shift metaphors, slides back into the valley of ignorance (Gardner, 2006, pp. 56,57).

Gardner also suggests that the more emotion attached to an issue the less likely the person will be willing or able to change (Gardner, 2006, p. 57). Gardner defines changing minds as "the situation where individuals or groups abandon the way in which they have customarily thought about an issue of importance and henceforth conceive of it in a new way (Gardner, 2006, p. 2). He further elaborates by saying "a key to changing a mind is to produce a shift in the individual's 'mental representations' - the particular way in

which a person perceives, codes, retains, and accesses information (Gardner, 2006, p. 5)". These shifts are most likely to occur when at least six of the following factors are met, and resistances are low: reason, research, resonance, representational redescriptions, resources and rewards, real world events, resistances (Gardner, 2006, pp. 17,18).

Although both Gardner and Martin are in agreement that people have established strong models, beliefs and mental representations, Gardner establishes a strong argument that suggests that the ability and willingness for an individual to acknowledge, question and abandon mental representations is very complex. It is entrenched by views held through emotion and often established from childhood. These beliefs or mental representations may be unknown to the individual. Ironically, much of Martin's discussion centres on how people oversimplify issues and miss key data when developing salience and points out that the true situation is always far more complex and messy (Martin, 2007, p. 41). I believe that Martin has oversimplified the strength with which people hold on to their mental models and underestimates the emotion that so firmly entrenches mental models. Although Martin acknowledges the complexity, he does not adequately attribute the powerful pull of emotion that entrenches mental models as does Gardner. The examples Martin uses are of highly motivated individuals who overcome their preset mental models. Because their choices are business decisions, and not personal decisions, their released models may not be those that have been entrenched since childhood. I believe this is the weakness in Martin's theory. Is it possible to move integrative thinking outside of the business realm and into mainstream life? If the process of integrative thinking is a learnable skill as Martin proposes, are there limitations regarding where it can be utilized?

I have observed many students struggle with these firmly entrenched models. Family values of a university education resulting in a professional designation such as a doctor or lawyer put pressure on students to comply even when they are unsure if this is the right choice for them. Their mental models have been held since childhood, and also carry the honour and financial weight of their family. These students are often conflicted because although they feel they must comply, their experience at university has provided them with new mental models that suggest alternatives – academic or otherwise – that may be a better fit for them. They experience a very personal clash of opposing models, and are fearful of letting their family know of their change in perspective. Their firmest mental model, that of family honour, hinders their transition to other alternatives. For these students, the objectivity to view and understand their mental models may exist, but the emotional pull is too strong to abandon their entrenched model.

Is the process that Martin sets out to utilize integrative learning actionable?

"For advice to be helpful" Argyris writes, "it must specify the intended outcomes or objectives to be produced, the sequence of actions required to produce them, the actions required to monitor and test for any errors or mismatches, and the actions required to correct such errors and mismatches." Most professional advice simply fails to meet these standards, he says (Stamps, Jan 2000).

Chris Argyris suggests that although there is much advice written by well-meaning business experts not only is much of it not actionable but in many cases following such advice may also cause many unintended negative outcomes due to mismatches between intentions and what actually happens if the advice is followed (Argyris, 2000, pp. 29-32).

Both Gardner and Martin agree that model shift or mental representation shift can take place but what is the incentive for a person to do so? Martin refers to motivated learners. In his example of Red Hat founder Bob Young, he shows that "motivation is a vital force in Young's world (Martin, 2007, p. 95). From Young's point of view, "You can overcome dumbness through motivation (Bob Young as cited in Martin, 2007, p. 95)". Martin characterizes Young's engagement as a "motivated and patient learner (Martin, 2007, p. 95)". In fact, all of the people in Martin's examples are self-motivated leaders who for a variety of reasons chose to make a major shift. How would this same logic apply to a model clash in an everyday situation with equal parties where one or neither are motivated to understand their own or the other's model? Could this be used as a communication tool to enhance the ability of people to see beyond their own mental model and develop an appreciation of other equally valid models? What, if anything, could be used as a lever to affect the sequence of events after the clash of models to empower the parties to participate to work toward resolution? "A creative resolution requires one or the other party in the dialogue to recognize additional salient data and perceive more or different causal relationships. Repeated and intensified advocacy does not broaden salience, make causality more sophisticated, or facilitate holistic architecture. It crowds out the conditions necessary for creative resolution (Martin, 2007, p. 166)". Martin is saying that in a typical model clash, people resort to trying to convince the other of the correctness of their own model, which then requires the other party to accept the wrongness of their model. Each party works toward convincing the other that their model is the correct representation of reality, and should be accepted. The parties are not listening or understanding the other, and there is no effective communication occurring. Miscommunication happens as emotions flare and both parties walk away frustrated without having gained perspective other than their own. This was the case as illustrated in my earlier example of the team leader and the clinic coordinator. Indeed, there was no resolution; during the following week, this failure caused confusion in the clinic, directly affecting the students.

What is the motivation for either party to change their defensive stance and engage in a dialogue to gain understanding? I believe this is where the leadership within an organization is the key to creating the conditions and environment for the members to seek the understanding of their own and other's mental models. All too often, however, the intention of the leader is not well communicated to the organization due to his or her own mental representation. Chris Argyris calls these miscommunications inevitable, as many the leaders fall into the Model I mode of operations. According to Argyris,

Model I theory-in-use is composed of four governing variables: (a) be in unilateral control; (b) strive to win and not lose; (c) suppress negative feelings; and (d) act rationally. These actions must be performed in such a way that satisfy the actors' governing values—

that is, they achieve at least the minimum required level of the governing values such as being in control and winning. Model I tells individuals to craft their positions, evaluations, and attributions in ways that inhibit inquiries into and tests of them with the use of independent logic. The consequences of these Model I strategies are likely to be defensiveness, misunderstanding, and self-fulfilling and self-sealing processes. (Argyris, 1982; Argyris & Schön, 1996 as cited in Argyris, 2002, p. 212)

Argyris contends that most people operate using Model I to a greater or lesser extent and have honed this ability from an early stage in life so that its implementation is automatic. This is analogous to Craig Wynett's factory preset mental model (Martin, 2007, p.49). To protect themselves from facing embarrassment or other stressful situations, Argyris suggests that people rely on defensiveness. If you were to ask a person how they would act in a given situation, they would respond with a description of their actions. However, faced with the same situation in practice, they are influenced by their mental models and their actions are rarely congruent with their original description (Argyris, May-June 1991). A colleague recently related this example to me, staff in his team had been asked to participate in a brainstorming session. The team leader asked everyone to openly participate and offer creative ideas. He assured the team members that he valued all ideas and would consider all contributions in the overall plan. The expectation the team understood was that if their ideas were not included in the final plan, the reasons why would be communicated. The team leader then took all the suggestions away to formulate the plan. When the final plan was released, very little of the team's input was included and no explanation was given. Although the team leader had articulated his commitment to inclusiveness and collaboration with the team, in actual fact none had materialized. This example illustrates the incongruence between the team leader's espoused theory of action and his actual theory in use. Chris Argyris summarizes the notion as follows:

"Therefore, everyone develops a theory of action-a set of rules that individuals use to design and implement their own behaviour as well as to understand the behaviour of others. Usually, these theories of actions become so taken for granted that people don't even realize they are using them. One of the paradoxes of human behaviour, however, is that the master program people actually use is rarely the one they think they use. Ask people in an interview or questionnaire to articulate the rules they use to govern their actions, and they will give you what I call their "espoused" theory of action. But observe these same people's behaviour, and you will quickly see that this espoused theory has very little to do with how they actually behave. (Argyris, May-June 1991, p. 103)

Argyris says that "most theories-in-use" rest on the above mentioned set of governing variables.

These phenomena prevent people from learning to participate in what Argyris terms double loop learning. He says that this type of learning calls upon people to really think about their behaviour and their actions.

Effective double-loop learning is not simply a function of how

people feel. It is a reflection of how they think - that is, the cognitive rules or reasoning they use to design and implement their actions. Think of these rules as a kind of "master program" stored in the brain, governing all behaviour. Defensive reasoning can block learning even when the individual commitment to it is high, just as a computer program with hidden bugs can produce results exactly the opposite of what its designers had planned. What it takes is to make the ways managers and employees reason about their behaviour a focus of organizational learning and continuous improvement programs. Teaching people how to reason about their behaviour in new and more effective ways breaks down the defences that block learning. (Argyris, May-June 1991, p. 100)

From what Argyris says, traditional leaders are often bogged down with mental models that prevent them from demonstrating the behaviours that create the environment where people are motivated to work through model clashes. Argyris suggests that the leaders themselves perpetuate the status quo by exhibiting differences between their espoused theories of action and their theories-in-use. Is there another option that addresses the disconnect Argyris identifies and would also deal with some of the weaknesses discussed in Martins theory? I believe Otto Scharmer's "Theory U" addresses some of these weaknesses.

What is Theory U?

Scharmer believes that if people can achieve "a heightened state of attention that allows individuals and groups to shift the inner place from which they function", then they can collectively work toward a level of listening and communication that allows people to think at a deeper level (Scharmer, 2007, p. 1). He calls this principle Theory U, which includes four fields of listening: downloading, factual, empathic and generative (Scharmer, 2007, p. 2). Fields one and two, downloading and factual keep the incoming information at a superficial level; the listener is validating what they already know or are collecting the facts. Fields three and four, bring the listener to a deeper understanding and connection with the speaker. Generative listening "requires us to access not only our open heart, but also our open will – our capacity to connect to the highest future possibility that can emerge. We no longer look for something outside. We no longer empathize with someone in front of us. We are in an altered state. "Communion" or "grace" is maybe the word that comes closest to the texture of this experience (Scharmer, 2007, p. 3)".

Scharmer calls for "a new consciousness and a new collective leadership capacity to meet challenges in a more conscious, intentional, and strategic way (Scharmer, 2007, p. 1). He believes that the inner place or inner source from where leaders operate creates outcomes. I agree and have observed that the outcome of an initiative or function is determined and can be predicted by the intention of person who originated it. The Theory U process can be broken down into five movements, each occupying an evolutionary location on the U:

1. Co-initiating - Build Common Intent: stop and listen to others and to what life calls you to do.
2. Co-sensing - Observe, Observe, Observe: go to the places of

- most potential and listen with your mind and heart wide open.
3. Presencing - Connect to the Source of Inspiration and Will: go to the place of silence and allow the inner knowing to emerge.
 4. Co-creating - Prototype the New: living examples to explore the future by doing.
 5. Co-evolving - Embody the New Ecosystems that facilitate seeing and acting from the whole. (Scharmer, 2007, p. 6)

In order to move through the U process, groups or individuals must be able to operate in fields three and four, empathic and generative listening. This creates an “intimate connection with the world and to a place of inner knowing that emerges from within, followed by bringing forth the new, which entails discovering the future by doing. (Scharmer, 2007, p. 6)”.

Field four, generative listening, represents the level of operation that leaders must attain to create the conditions for effective communication within organizations. In addition, the type of leader required to move people through the U process is an individual who has traveled the inner personal journey to achieve the ability of generative listening. These leaders, because of their own commitment would not be blind to the disconnect between their espoused theories of action and their theories in use as Argyris sets out. In fact, by definition these leaders would have to have espoused theories congruent with their theories of action for the U process to unfold, as it should. These leaders must “create or hold a space that invites others in” in an authentic way. (Scharmer, 2007, p. 9). Scharmer points out that the key to holding space is through generative listening to yourself (to what life calls you to do), to the others and to that which emerges from the collective that you convene (Scharmer, 2007, p. 9).

Leaders must also leave room for the contribution of others. This offers a contrast to the examples that Martin uses in *The Opposable Mind*. Martin’s example of leaders, although supported by others, generated their alternative models largely on their own. They were also the primary force behind the success of the implementation. Scharmer disagrees with this mode of leadership, as his Theory U requires a group of committed individuals to share purpose and intentions and collaboratively work toward resolution. The conditions that must be in place for leaders to foster effective communication and collaboration success according Scharmer are;

1. Holding space: listen to what life calls you to do;
2. Observe: attend with your mind wide open;
3. Sensing: connect with your heart;
4. Presencing: connect to the deepest source of yourself and will;
5. Crystallizing: access the power of intention;
6. Prototyping: integrating head, heart and hand;
7. Performing: move your listening and performing from within to beyond yourself.

(Scharmer, 2007, pp. 9-12)

These conditions have successfully allowed groups of people to achieve great collaborative success. Examples Scharmer uses point to large companies, NGO’s, and governments that have created the conditions within to bring a collaborative group together with common

intention to make improvements for the greater good. It is exciting to see that this is possible. I have looked within my organization and identified a leader I am fortunate to know who has exemplified some of these qualities and has created conditions for positive growth and collaborative success.

A model of Scharmers' Theory U leadership

I have been privileged to know a woman for many years who has exemplified Martin's examples of integrative thinking and possesses many of the qualities Scharmer deems essential to motivate and facilitate groups through the U process. Scharmer illustrates these qualities using an analogy borrowed from L.A. Agenda's Anthony Thigpen; "The key principle of all community organizing is this, you never hand over the completed cake. Instead, you invite people into your kitchen to collectively bake the cake (Scharmer, 2007, p. 9)". This analogy describes how this person has managed her department. She is aware of the talents of her staff and values and integrates their input. She has successfully created space that invites and values the participation of her team and together they have co-created programs and services that keep pace with the diverse and changing needs of the population they serve. Observing her interaction with others, listening to her speak and witnessing the outcomes of her team, there is a true sense that she has committed to facilitating open process listening with "the open mind, the open heart and the open will (Scharmer, 2007, p. 9)". In the cake her team bakes, one can see the input of all, from student volunteers to senior staff. The success of her teams' programming is evidence of her generative listening.

Conclusion

I believe both Argyris and Scharmer are saying, it is the leadership that makes the crucial difference. Although staff make strong contributions to the success of an organization, it is the leadership with its inherent influence that creates the conditions for effective communication and learning. An organization needs leaders aware of their mental models, and to be on guard for the disconnect between espoused theories and theories in use. They should be capable of generative listening and integrative thinking in order to create strong communication and learning through their team. In Argyris's words;

What it takes is to make the ways managers and employees reason about their behaviour a focus of organizational learning and continuous improvement programs. Teaching people how to reason about their behaviour in new and more effective ways breaks down the defences that block learning. (Argyris, May-June 1991, p. 100)

I think this holds true not just for the most senior echelons but must also be reflected in leadership at each level of the organization. I believe that some leaders are born but many are cultivated through their own learning and mentorship. To this end, recognizing that an organization is only as good as its people, there must be an initiative that assists leaders to understand and develop the competencies set out by both Argyris and Scharmer.

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◀ Contents

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