Learning Organizations
Part 3: Mental Models
and Developing Critical Thinkers
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“We believe that there is always one answer to a problem, regardless of its complexity. Despite our repeated experiences in life, we persist in looking for one answer, the quick fix, or the ultimate solution that will solve all our problems. ... [Managers and supervisors] should encourage their [people] to ask impertinent questions regarding quick fixes, a questioning typical of critical thinkers.”
— Stephen Brookfield, Developing Critical Thinkers (1987)

Peter Senge’s second discipline, practiced by learning organizations, is called Mental Models. This discipline asks individuals and teams to question their ingrained assumptions that lead to their actions. One of the ways to do this is to practice critical thinking. Critical thinking is a high-level skill that is practiced by people at every level in learning organizations. According to Stephen Brookfield, author of Developing Critical Thinkers, critical thinking requires the organization and its people to:

- Use reflection to gather adequate information

- Use critical questioning techniques that are non-judgemental to determine what assumptions are being used to make decisions, and whether or not the assumptions are accurate and valid

- Use envisioning techniques to determine alternative perspectives

Why is critical thinking important?
Many of our decisions are based on assumptions that are neither accurate nor valid. For example, let’s say that you come into the office to find your usually warm boss barely answering your questions, and walking away whenever you approach. If you are like most people, you assume that it must be something you did that is causing your boss’s apparent distress. In reality, your boss’s behaviour could be caused by a number of things, such as a personal problem at home, a bout with the flu, an unpleasant phone call, or a lack of sleep. As well, if you are like most people, you won’t even ask your boss what might be causing him or her to act in such a manner. Instead, you operate from your initial assumption, which may not be accurate or valid.

This seems like a simple example. However, it illustrates how easily we
get caught up in our assumptions. The human brain is programmed to make assumptions based on very little information. That’s conditioned thinking. This is where most people stop the thinking process. First, we need to reflect on what assumptions we are making, and whether these assumptions are accurate and valid. Then we need to think about alternative perspectives to our situation, so that we can make the best decision. That’s critical thinking.

Brookfield suggests that people and organizations use the Critical Thinking Model to determine the assumptions from which they operate. This model is based on his research (1987) in the area of critical thinking. The model has four steps:

1. Identify assumptions.
2. Check the accuracy and validity of assumptions.
3. Look for alternative perspectives.
4. Make an informed decision.

To use the model effectively, you need to select a small group of people whom you trust. Take at least two hours for the exercise. Once you finish telling the group about your situation, ask them to use non-judgemental critical questioning to determine the assumptions underlying your thoughts and actions. Then ask your group to give you alternative perspectives to your situation. One of the ways to do this is to envision what the situation would be like if the problem were being effectively addressed. Brookfield calls this developing preferred scenarios. Write down all of the ideas, even if you don’t agree with them. This is an exercise that requires you to be open to what your group has to say. Don’t get defensive. Remember that your group is trying to help you to reflect on your situation, and to analyze it for more accurate and valid information. Once you have reflected on your situation, you can make an informed decision.

This does not seem very difficult to do, but it is. As a culture, we tend to operate from an action perspective most of the time. We make decisions based on the information we have at hand, and the assumptions we have about the situation. This usually results in frenzied activities that drive us to action without reflection. We call this crisis management. For example, during my courses on critical thinking, many people say that they have no time to reflect on their decisions. They are right; if they continue to operate from an action perspective, they continue to have no time to reflect. In this case, they need to change their assumption from one of action to one of reflection that leads to action. Even one minute of critical thinking can yield a more informed decision. To make better decisions, you must build in time to reflect critically. In the long term, you have more time because your decision has not caused another crisis.

To deal effectively with the turbulent environment, you need to make informed decisions. To make informed decisions, you need to use critical thinking to see the long-term impact of your decisions. As a result, you make your decisions by knowing the assumptions under which you operate, how accurate and valid these assumptions are, and what other perspectives are possible. Critical thinking is the reflective tool that helps you to make informed decisions.

“There comes a time when the mind takes a higher plane of knowledge but can never prove how it got there. All great discoveries have involved such a leap. The important thing is not to stop questioning.” — Albert Einstein

Further Reading:
- Stephen Brookfield’s book, Developing Critical Thinkers, Chapters 1-8. He writes very well, and gives excellent examples. Brookfield also has an excellent audiotape, Becoming Critical Thinkers.
- Peter Senge’s The Fifth Discipline Fieldbook, pages 18-36 and 59-64.