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In conversation

Leadership and integrative thinking

An interview with Roger Martin

This issue of *In Conversation* follows on the very successful Principal Congress hosted by the ministry last February and attended by over 240 school and system leaders, the majority of whom were practicing principals across the province.

Among many Congress highlights was the engaging keynote address delivered by Roger Martin, Dean of the Rotman School of Management at the University of Toronto. Roger spoke about his book *The Opposable Mind:*

DIGGING DEEPER

About the Principal Congress

The Principal Congress is a unique, tri-level forum for Ontario's education leaders. It serves as a "think tank" to generate and exchange innovative ideas designed to improve schools and enhance student learning. You can learn more on the ministry website. Look under "What's New" at www.ontario.ca/eduleadership

How Successful Leaders Win through Integrative Thinking and shared his insights about problem-solving, decision-making, and the thinking skills and attitudes shared by successful leaders.

Based on the enthusiastic response of Congress participants to Roger's presentation, we decided to devote this issue of *In Conversation* to his ideas, and speak with him further about how he arrived at this unique approach, and how it can be applied to the issues all of us face every day as leaders.

Any reader of Roger's book – which focuses on business leadership – will naturally wonder how transferrable these concepts are to leadership in the education setting. It is interesting to note that in the following interview, Roger cites the lessons learned in researching the decision-making process of a school leader as one of the key steps in his journey toward the ideas presented in the book. In fact, the premise of Roger's work is that successful leaders share a set of thinking skills that transcend context and are applicable in any setting.

As always, these ideas are presented as a springboard for professional dialogue. I encourage you to explore them with your colleagues and put them to the test in your own professional practice.

I also encourage you to send your thoughts on this issue to InConversation@Ontario.ca by June 19. We will review them and share excerpts with you on the *In Conversation* page of the ministry website.

The Principal Congress confirmed my belief that Ontario school leaders are skilled, dedicated and committed to supporting the success of their students. The small-group dialogue we shared during the day was proof of that commitment and an extremely valuable part of our time together.

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Ben Levin Deputy Minister of Education





Most people in a leadership position would intuitively ask 'What should I do?' to be an effective leader. You suggest 'What should I think' is the more powerful question. How did you arrive at that point of view?

A. There were a couple of paths that led me there.

First, in my years as a consultant, I had the opportunity to work with many different organizations and see an enormous array of situations. One of the realizations I came to during that time was that effective leadership is profoundly linked to context.

Effective leadership in one situation might require focusing on core activities. Another situation might call for expanding broadly.

"...context matters... what you do right in one context may be completely wrong in another." So context matters. What you do right in one context may be completely wrong in another. Viewed from that perspective, you can see that giving leaders a formula for 'what to do' is problematic.

The second path to that point of view came from my reading. I have always been interested in popular culture and, likewise, I will read all the best-selling business books to stay on top of the ideas and currents that are broadly appealing at any given time.

What you find is that these books, which tend to focus on what leaders should do, are highly contradictory. They also, in many cases, dispense advice that is not actionable – advice in the form of 'be creative' or 'don't be distracted by the unimportant things'. In essence, these books are saying 'why don't you just be smarter'? It's not useful to be told that doing smarter things is better. That's un-actionable advice.

So, in combination, I was seeing the wide variety of actions leaders were taking, depending on the context, and I was seeing books purporting to give advice that were all over the map. I came to the conclusion that if I wanted to give actionable advice to a senior executive, going down the path of telling him or her 'what to do' would be to miss the mark. And so I began to seek out knowledge that was not only actionable, but that could also be generalized.

That seems like an act of extreme optimism, given what you had observed.

A. Yes, and I certainly could have taken a nihilist point of view – which some people do – the one that says you can't teach management, that you can only learn it through practice. Operating from that point of view, we would shut down all the universities, shut down all the high schools, and just go out and apprentice.

But one of the things I had begun to notice was that when I spoke to successful people, there did appear to be something generalizable – there appeared to be a pattern in their thinking. And it crossed the lines of context.

"...there is, in fact, a 'pinch-point' between context and action. That pinch-point is thinking."

For example, I recall two consulting situations in which a respected leader was about to retire. One was in an elementary school setting, the other in a leading law firm. In both cases, the request was the same – we know what these leaders do, we like what they do, we like the decisions they make, but we have no idea how they make them. And so I was asked essentially to uncover how they do what they do.

What emerged was that, although these two individuals were leading in dramatically different contexts – a school and a law firm – there were some things that sounded remarkably similar; in particular, the thinking that lay behind what they did.

And so I began to wonder if all the 'doing' was obscuring the 'thinking'. I wondered if there might be commonalities in thinking that lead to completely diverse doing. That is, while you can't generalize from the doing, you might be able to

INSIGHT

Essential to integrative thinking is the need for optimism which **Daniel Goleman** defines as "having a strong expectation that things will turn out all right in life despite setbacks and frustrations". Read more about the importance of Ontario leaders choosing optimism in the Winter 2009 issue of *In Conversation:* Values-Driven Leadership

generalize from the thinking. And that's what set me off on my journey.

I interviewed as many people as I could. People who were highly successful, and who were considered exceptional in their respective fields. And that research ultimately led to my conviction that there is, in fact, a 'pinch-point' between context and action. That pinch-point is thinking.

Regardless of the context they're in, there is a thinking process that leads these highly successful leaders to effective actions. The actions have nothing in common. But the thinking process – which I have come to describe as integrative thinking – can be generalized. And I would suggest it will take you further as a leader.

One of the core concepts of integrative thinking revolves around the ability to consider apparently contradictory alternatives. Why is that so important?

A. It is important because it opens up the possibility of coming up with something that's better than either alternative. Economists are taught using a classical model that says you can have guns or butter. You can have either 100 percent guns, or 100 percent butter, or some other combination of the two. And the curve of all those combinations taken together is essentially the boundary of what is possible – it's the accepted frontier.

That's all well and good. But what if you can go somewhere else? What if you can have both guns and butter? In order to do that, you need a new approach of some kind that gets you to a different place. Essentially, the world moves forward when we can move these frontiers further out, rather than remain in the realm of trade-offs. New technologies are often a great force in accomplishing this, because they allow us to do things we couldn't do before.

"...I think of integrative thinking as a form of technology... that can help us expand the frontier of possibilities."

Similarly, I think of integrative thinking as a form of technology – a thinking technology – that can help us expand the frontier of possibility.

In a school, for example, you might find yourself considering the alternatives of more teacher training versus more learning resources. That's a trade-off. The question is, how could I have both? What if I could figure out some better way?

And so you're suggesting that integrative thinking is the technology we would use to generate the better way, to expand the boundaries of possibility?

A. Yes. You can't invent a new approach while staying at the same level of abstraction. At the level of 'more training' versus 'more resources' these truly are incommensurate alternatives.

When you're searching for an answer, you have to get beneath that. "You might find yourself considering... more teacher training versus more learning resources. That's a trade off.

The question is, how could I have both?"

You have to explore the underlying theories you have about training and resources.

What do you mean by underlying theories?

A. Well, this has to do with the way your mind works. You see things in the world – pure data – and you build meaning out of them. You build stacks and stacks of meaning until you come to a conclusion.

For example, someone might conclude that, because I'm wearing a grey pinstripe suit, I'm a conservative business person. That conclusion arises from the thinking 'I've seen a lot of people who dress like that, and that's the way they are. And so, therefore, Roger is like that'.

So you've gone from directly observable data – on which we would all agree – to a higher order inference. Another person looking at the same situation, on a grey day like today, might say 'He likes to wear grey on a grey day'. A completely different solution based on a stack of inferences.

How would that play into your 'training versus resources' example?

A. Well, there's a similar stack of inferences behind 'buy resources' – there's a theory, a set of assumptions, about why buying resources is a good option, about the benefits new resources would bring us, about how that option would move us toward our goals. And there's a similar theory behind why training might be a good option.

So you need to identify these underlying assumptions, and discover the logic. You have to ask 'What makes buying resources a great option? What do we like about it? What do we not like about it so much? What do we like about teacher training? What do we dislike?'

And then you need to ask 'Is there another option we hadn't seen before – one that gives us everything we like about teacher training and new resources, and eliminates those things we don't like about both?'

DIGGING DEEPER

If integrative thinking is such a good thing, why don't people use their opposable minds all the time? The answer to this question lies in part in what Peter Senge terms "mental models". Read more about mental models through **Peter Senge** and the learning organization.

I wonder if you might be able to illustrate that with an example from your own experience.

A. Yes. I'll give you a personal example. When I came to the Rotman School, I was essentially told that you either have to be a teaching-oriented dean or a research-oriented dean. Those are the choices, full-stop.

If you're a research-oriented dean, you'll favour research over teaching, you'll attract researching professors, you'll give them time off teaching to do their research, and you'll funnel more money toward research. And that's what you will build your brand around. The students may not be as happy – which is an example of something you may dislike about that choice – but that's what you get.

Or, you can be a teaching-oriented dean. You can place the focus on teaching, and put teaching ahead of research. You probably won't get as good a research faculty – a dislike – but you'll have happy students.

I could have chosen one or the other. But it was not a choice I wanted to make. It seemed to me there had to be a better way. And so I had to think about the logic of the

"You need to identify... underlying assumptions... and discover the logic."

research-oriented dean and the teachingoriented dean. For example, within the logic of the research-oriented dean, what do we think about students? Within that logic, what do we think about professors? What do we like about this? What do we not like about it? Similarly, I had to think about the logic of the teachingoriented dean.

As a result of that thinking, and instead of choosing, I said 'here's the answer – we'll get our professors to teach their research passion. I will reward people most highly who can do both teaching and research. I'll eliminate courses that aren't somebody's research passion. I'll let new courses be created that are someone's research passion. And students will be happy and well-served, not only because they will learn from enthusiastic professors, but also because they will learn to be scientists in life themselves'.

Ten years later, there's no trade-off between teaching and research. The best researchers are the best teachers. And the worst researchers are the worst teachers. That's exactly the opposite of the norm. And that situation exists because we've created a new system that says there's a way around the trade-off.

In your book, you uncover four steps in the process of thinking and deciding. The first, which you call 'salience' revolves around the question 'what are the things that matter' in any given situation. How would an integrative thinker approach this step?



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A. Here, the integrative thinker is willing to absorb more complexity, and to consider a greater number of factors to be salient. You will never hear an integrative thinker say 'keep it simple'. He or she will take into account things that others won't.

In a school setting, that would mean a principal who is willing to consider, for example, that many diverse factors may be influencing student achievement. That principal might brainstorm the situation to get to a more complex view – one that brings in a greater number of salient factors. These might be factors outside the school walls such as family environment, for instance, or other factors that may not typically be considered.

"...You will never hear an integrative thinker say 'keep it simple'. "

By doing that, you open yourself up to more possibilities. Because the fewer things you consider are of consequence in any given situation, the less raw material you have to work with.

So your advice here is to avoid the assumption 'everybody knows what the key factors are'.

A. Yes, but only when there is a problem. If things are going well, and there's no trade-off to be made, then it's fine to default to the factors everybody already knows about. Because those are our models for life. Those are what help us get through. If we took the time to apply integrative thinking to every situation we encountered, we'd be too slow.

But what integrative thinkers have in their heads is a red flag that says 'I have to make a choice I don't want to make'.

And so at that point, they would step back and ask 'What is it about the way I'm thinking about this that makes it an undesirable choice? What do I dislike about it?' This in turn leads to important questions such as 'Am I narrowing this down too much? Is there something I should be taking into consideration that I'm not thinking about now?' and so on.

So it's that red flag that tells them when it's time to bring out these thinking tools?

A. That's right. And this is something people get confused about. They wonder, 'Do I have to do this all the time?' I say, yes and no. It should be an always-on capability. But you don't need integrative thinking when somebody asks you whether you want coffee or tea. You need it when you are being forced to make a choice, and don't like it. That's when you need to think about whether or not there's a way to do it better.

INSIGHT

Integrative thinkers embrace "messiness" and complexity. They recognize the need to differentiate between technical problems and adaptive challenges and, what Heifetz and Linsky call, "adaptive leadership". See a video of **Ron Heifetz** at the *Multiple Perspectives and Collaboration in Strategic Leadership Conference.*

Traditional leaders say 'the buck stops here – I make all the tough choices'. Integrative thinkers say 'I don't want to make the tough choices – I refuse'.

The second step in the process, which you call 'causality' has to do with identifying the relationships between salient factors.

A. Yes, it's essentially about creating a model in your head of how the system works.

For example, you might have a conventional thinker who says 'more money means better results, less money means worse results' in a straight-line relationship.

An integrative thinker might study the situation more deeply and conclude that up to a point money is important. Without a certain amount of money, you can't produce anything. But the relationship may not be a straight line. There may be a point of diminishing returns. Or there may be other factors at play that have not been considered. Or you may believe X causes Y when, in fact, Y causes X.

I should point out that the model you create will always be an approximation. You're going to have to make estimates. Some things you will know. Others you may need to speculate about.

But what matters here is considering the situation in a more sophisticated way – looking beyond what's obvious. And the way to look for that is to ask yourself, 'Have I created a simplistic model, or have I created a complex and vibrant model that takes all of the important relationships into account?' In the third step, called 'architecture', you talk about how to approach working through the problem, and deciding what tasks to undertake in what order.

A. Yes. And the key here lies in keeping the whole in mind while working on the individual parts.

"...the key... lies in keeping the whole in mind while working on the individual parts."

This is particularly important in complex situations. If you want to get to the highest place in eastern Africa, there's a simple algorithm: just walk uphill. Eventually, you'll get to the top of Kilimanjaro. Because it's the one peak that rises out of a huge plain.

If I gave you the same instruction in the Himalayas, the odds of you getting to the top of Everest are minuscule. Because there are many peaks of varying heights and all of them look gigantic. You'll spend months climbing to the top of K2, only to discover there's a higher peak still.

So in that sense, the integrative thinker is searching for Everest most of the time. It's very rarely as simple as Kilimanjaro.

In our example, if you send a group off to think about teacher training, and send another off to think about resources, when you come back together you won't find the optimum solution. Because each of the groups will have optimized their solutions for one particular function.

If you consider the components separately and then slam them together, you are likely to end up with a sub-optimal answer. If you consider them all together – here's a range of ways to

INSIGHT

Michael Fullan compares the concept of "integrative thinking" to the way in which leaders put his "six secrets of change" into practice. To find out more read The Six Secrets of Change: What the Best Leaders do to Help their Organizations Survive and Thrive (San Francisco: Jossey Bass – 2008). Michael Fullan is also featured in the Fall 2008 issue of In Conversation: Leading Change. think about training, here's a range of ways to think about resources, and so on – if you have them all floating together, you're more likely to arrive at an optimal answer.

And that's what integrative thinkers do. You don't build the factory first, then determine a price for the product, then develop the marketing. Because the decisions in each of these areas influence decisions – and available options – in the others. There might be a better way, but by approaching the process sequentially, you are cutting off those better options.

In your final step, 'resolution', you talk about knowing when the optimal solution has been reached. How do we arrive at that conclusion?

A. I think that is completely an issue of experience. And it's why I will often say I can't make anyone an integrative thinker tomorrow. It takes time. You have to be thinking this way, and slowly but surely building your experiences to know what your stopping rule should be.

I can say, however, that your stopping rule in general terms should be that your answer is sufficiently elegant that you don't feel despondent about it, and you are no longer in a position in which you have to choose.

And so this ties back to the beginning of our conversation, and the 'red flag' that tells us we're facing a choice we don't want to be forced to make.

A. Yes. However, it's also important to point out that, while integrative thinkers have a relatively high bar, they understand that the bar can be set only so high. If you set the bar too high, you're going to be spinning your wheels, thinking and thinking, and you're not going to get anywhere.

"...when the solution arrives, you feel it... it just goes 'click'." And so recognizing the resolution of the process has to do with being able to weigh the cost of a choice if it isn't elegant enough.

Integrative thinkers are not unlike artists, in that there is no clearly defined guideline that

DIGGING DEEPER

Roger Martin believes that integrative thinking is a "habit of thought" that all of us can consciously develop to arrive at solutions that would not otherwise be evident. **Daniel Pink**, author of *A Whole New Mind* (New York: The Penguin Group – 2005) agrees. He argues that the future belongs to a different kind of person with a very different kind of mind – creators and empathizers, pattern recognizers and meaning makers – things typically associated with the right side of the brain. In his book, he provides a rich collection of tools, exercises and further reading to help develop the capabilities associated with original thought and creativity.

tells you when a piece is finished. So artists must develop a good enough / not good enough line for themselves. They must be able to identify whether a piece of work represents what they were trying to accomplish, or not.

One thing I can tell you is that, when the solution arrives, you feel it. You feel that 'yes, this is a good decision'. It just goes 'click'.

We have only scratched the surface of your ideas on leadership and decision-making. But to conclude, what advice would you give readers about how to begin developing these skills – how to incorporate them into their professional lives?

A. If I were forced to choose only one thing readers took away from my work, it would be this: your own worldview – or 'stance' as I describe it in the book – is the linchpin of absolutely everything.

More specifically, I would convince people to adopt a worldview that says 'existing models are not reality'.

By models do you mean assumptions about the world and how it works?

A. Yes. You could say, 'the reality is that X is like this'. Or, you could say, 'based on my experience, my best ability to model this situation is X, but that may be absolutely wrong, and somebody else may have a better model than I do'.

After all, Einstein came along and said 'This rather intelligent fellow called Sir Isaac Newton was mainly right, but there was a little problem his theory couldn't account for. Here's another way of looking at it that would help us to explain that'.

For over 200 years we believed Sir Isaac Newton was absolutely, positively, totally correct. And anybody who thought otherwise was wrong. We have traditionally encouraged people to think models are reality. And that has been a huge disservice. Because the key stance we should inculcate in people – and certainly in our students – is that we're teaching you the best thing we've been able to come up with to date.

Everything we are teaching is an imperfect abstraction of the world. We need these abstractions in order to operate in the world. We need generalizations, simplifications, and schematizations. They give us the power to think more quickly. But in some fundamental way, they are wrong. We just don't know in which way yet.

Everything else falls from this stance. If you make the mistake of thinking that existing models are reality, whether implicitly or explicitly, you will never be an integrative thinker.

DIGGING DEEPER

Martin believes all leaders can build their capacity to engage in integrative thinking. In fact, he would argue that leadership can – and often must – be learned by those who hope to practice it. See these related resources:

- Watch Gary Bloom speaking to this point while introducing the Ontario Leadership Framework in his webcast Blended Coaching for School and System Leaders.
- Read The Harvard Experiment: Recognizing and Conquering Adaptive Challenges, an article written by members of the Institute of Education Leadership Steering Committee.

How can we successfully adopt this worldview in our day-to-day professional lives? Although we may understand it intellectually, it is a challenging concept.

A. Yes, that's true, and that's partially because it's how we've all been trained. We've been trained to think that all the models we've been taught are correct. And so, implicitly, we get a good feeling from knowing we have good models. We've been socialized to think that way.

For most of us, that's far more comfortable than being pessimistic about all of our current models – embracing the idea that all of our models may be wrong, and that somebody may come along and replace all of our ideas with better ones.

But the fact is that, if you have absolute optimism about the veracity of everything you know, you also have a deep pessimism about the future. Nothing is ever going to get better. Because you know the answer already.

Yet, we all react positively when new discoveries are made. If we read that a life-threatening disease can finally be cured, we feel good about that. So it does not make sense to feel bad that one of your beliefs is found to be wanting, and that somebody has come up with a better idea.

If we are pessimistic about our models today, we will always move forward, as a people, by standing on the shoulders of giants. And what's so bad about that?

INSIGHT

More on Roger Martin

 A profile of Roger Martin, Dean of Rotman School of Management, is featured along with additional books, papers and articles.

What are your thoughts on the ideas presented in this issue of *In Conversation*? Email your comments and insights to InConversation@ontario.ca by June 19. We will review them and share them with the community on the In Conversation page of the ministry website.