

INTEGRATIVE THINKING: The Learning Challenge

Accurate perception of environmental conditions and the ability to think about them in integrative terms requires a level of mental flexibility that is rare in today's managers. Dr. Hilary Austen of the Rotman School's Dean's Advisory Board shows how adults can develop the learning skills they lack, turn themselves into superior learners, and make a significant step towards effective integrative thinking.

Speakers participating in the *Rotman Integrative Thinking Seminar Series* have helped make a compelling case for the business advantages that integrative thinking can bring. Their stories illustrate how integrative thinkers can excel in unconventional and dynamic ways in today's marketplace. At the same time, they reveal how taking an integrative approach undoubtedly makes day-to-day activities more demanding, due to the integrative thinker's inclination to think holistically, entertain multiple perspectives, make new connections, and embrace the uncertainties of both change and innovation. If integrative thinkers are to succeed in their approach, they will be adapting, expanding, and even transforming traditional ways of doing things. In short, they will find themselves learning at a furious pace.

Achieving an intense, accelerated learning pace is a difficult challenge. Learning can be one of the most anxiety-producing experiences people ever face, according to MIT professor **Ed Shein**, founder of the Organization Development field. Shein says that 'survival anxiety' is often the only emotional force strong enough to overcome the fear that blocks adult learning. If he is correct, this means that only a greater fear will move most people past their fear of

learning. Integrative thinking is not yet considered a survival skill, so unless we find ways to overcome the intense fear of learning, chances are that integrative thinkers will remain few and far between.

Research has generated many theories—biological, cognitive and behavioral—that shed light on the source of this paralyzing fear of learning. In short, adults avoid doing things they don't do well. Fewer still like doing something when they know they will fail, especially in risk-filled environments where the consequences of failure are typically negative—even terminal. Unfortunately, organizational research reveals that adults are surprisingly poor learners. And so, in anticipation of failure's terrible consequences, fear inhibits and even cripples many adult learners.

Given the negative personal and professional consequences that unskilled learners expect to experience—frustration, disappointment, and failure—it is easy to see why they treat learning as a risky activity to be avoided. It is obviously smarter, safer, and more satisfying to stick to what you can do well—a fundamental notion that drives organizations to conserve 'best practices.' This prudence might be fine were it not for the aspiration to become integrative thinkers—people who know success in

the past does not ensure success in the future, and for whom learning is a necessity, no matter how frightening.

My research suggests that adults can develop the learning skills they lack, turn themselves into superior learners, sidestep much of the fear and anxiety they once felt (even come to enjoy learning), and so make a significant step toward effective integrative thinking. By developing a *personal learning strategy*, students of integrative thinking can move in this self-empowering direction.

Developing a Personal Learning Strategy

While preoccupied with the quality of our children's education, by comparison we often ignore the learning that occurs after we leave school. Liberated from campuses, we expect that experience will naturally take over and teach us what we need to know. Unfortunately, the adoptive learning skills typical of successful students transfer poorly for those with integration as a goal. And experience — while compelling — can be just as limited: the randomness and narrow scope of personal experience can't provide all the learning power integrative thinkers need. With school habits and experience as imperfect sources of help,

the design of a personal learning strategy that takes the demands of integrative thinking into account is a critical step for each student of integrative thinking

Before recommending the design of a learning strategy, it is important to define the kind of competency this strategy will facilitate. While learning does have intrinsic value, for integrative thinkers the utility of learning is particular to their intentions. These intentions are described in Dean **Roger Martin**'s article on page 6. In short, whatever the organizational setting, learning should enhance the integrative thinker's ability to:

1. Distinguish what is important—**Salience**.
2. Use this sensitivity to identify critical relationships—**Causality**.
3. Use their understanding of causality to act effectively over time—**Sequencing**.
4. Work creatively with organizational tensions along the way—**Resolution**.
5. Accomplish each of the above iteratively (see

diagram, page 8.)

To achieve these integrative activities, the learning must also help integrative thinkers:

- see relevance and relationships that others typically miss.
- use this awareness to update what they believe and do.
- use their updated understanding to confirm or revise their strategies, goals and overall directions.
- achieve the above in the midst of their organizational constraints (no small feat!)

To someday enjoy these sophisticated capabilities, students of integrative thinking must take an atypical approach to learning. They must develop the basic learning skills that support integrative thinking, but that are not automatically developed in school or through day-to-day experience. These basic skills can be sorted into three main learning categories: *Experiential*, *Conceptual*, and *Directional*.

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Experiential Learning

Experiential learning is the avenue through which we develop sensitivity and mastery. There are several experiential learning skills that are particularly relevant to integrative thinkers. First, useful experiential learning requires *reflective practice*. Take for example, the problem of assessing the quality of a bottle of wine. We have the option of relying on the label comments, or of becoming sensitive to the qualities wine has to offer. To do the former circumvents experience. To accomplish the latter, the wine has to be tasted and savored, not thoughtlessly swallowed. Variations in flavors, textures, aromas, acids, fruits and tannins offer taste experiences for those who can achieve them—only from these experiences can wine can be assessed. Sensitivity in any profession offers the same challenge—if we can't experience something richly, we will not be able to recognize salient elements, or see relevant features and relationships.

Second, our potential for experience is gravely limited by time, and the experiences we do have affect us greatly. This means that we are overly influenced by a small amount of experience—in the complex, changing, and innovative world in which integrative thinkers work, this small-sample bias can be a fatal trap. Here, the learning skill is the ability to continuously deepen and broaden personal experience beyond its current limits. This can be done in two ways. Learners can take a scientific approach by designing systematic practice. In addition, they can take a social approach to supplementing personal experience by inquiring into the experience of others.

In sum, the learning skills of experiential learning are:

- developing sensitivity and skill through reflective practice;
- systematically designing practice to broaden and deepen experience;
- accessing what others experience to supplement personal experience.

As experience stacks up, it must be organized and stored effectively. Without some kind of framework, experience can either be quickly lost or turned into a misinforming and flawed reference. In the example of learning about wine, it is easy to imagine how too much wine, thoughtlessly consumed, could lead to confusion! On

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the other hand, reflectively tasted, one type of wine can be enjoyed for its own qualities; two can be compared by identifying similarities and differences; tasting three wines, categories of style might be detected that can be used to assess the fourth wine tasted, and so on. Connoisseurs have created many ways of tracking their developing experience of wine, including frameworks that emphasize wine's qualities, its 'terroir', the technical methods by which it is produced, and its compatibility with food. This job of organizing and storing experience means a different kind of learning comes in to play—**conceptual learning**.

Conceptual Learning

Good conceptual learners have the ability to use and create conceptual tools—frameworks, maps, models, theories, recipes, rules-of-thumb, and schema—that organize and store what they learn through personal experience. These tools have great utility, giving us the means to better generalize what we know across different situations, anticipate events and predict outcomes, identify critical relationships, and plan ahead. Integrative thinkers adept in this arena will better apprehend and understand both causality and sequencing, and go on to turn that understanding into strategies, plans, and action.

All conceptual knowledge—a recipe, map, or causal theory—is simplified by design. It represents — rather than replicates — the experience that generated it. To use these tools intelligently, integrative thinkers must be skilled at translating conceptual tools into action. For example, consider the recipe instruction, "Braise the chicken until done." By using this short sentence, the recipe indicates a complete sequence of operations. A skillful translator understands this and, informed by past related experiences, knows what to do and how to recognize a cooked bird when he or she sees one. Without this connection between concepts and experience, concepts will remain obscure, abstract notions. Worse yet, misunderstood tools can easily be used ineffectively, even destructively, as a hammer can be used to pound a screw.

In addition, it is easier to adopt an existing conceptual tool than it is to create a new one. Creating these tools is an effort. Imagine, for example, the effort expended by early navigators traveling the rugged contours of unfamiliar

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continents to create the first nautical maps and charts. Integrative thinkers will face this same kind of challenge if they take the step of creating conceptual tools based on their own experience. However, the easier route of adopting pre-existing tools also has implications critical to integrative thinkers.

As simplified renditions, conceptual tools inevitably both reveal and overlook relevant features of the world. Adopting conceptual tools created by others means taking for granted what others see as relevant. These pre-existing ways of thinking often reflect the status quo of current thinking—and in this status quo, few integrative models exist. However taxing for integrative thinkers, formulating their own conceptual knowledge means they can synthesize and innovate based on their own experience as they learn.

In sum, the learning skills of conceptual learning are:

- Connecting conceptual tools to experience and then translating these into action;
- Critically using the conceptual tools created by others;
- Creating new conceptual tools from personal experience.

Directional Learning

It would be nice if things always went according to plan—if our conceptions of the world were stable, and if our preferences and expectations remained consistent. Of course, this is rarely the case—plans and goals are revised, our ways of seeing the world and ourselves are overthrown, and our preferences often change just as we reach our goals. Despite knowing that change is inevitable, many people still hope to live with steady predictability. They often exhib-

it this hope by doggedly pursuing outdated directions, simply because these directions are clear and their progress toward them is measurable. Alternatively, integrative thinkers are attracted to instability, change and innovation, so they must be skilled at making progress without the reassuring presence of fixed, clear goals.

Directional learning for integrative thinkers entails more than learning how to more skillfully reach established markers. When integrative thinkers move ahead, they often work in the dark, having let go of outdated objectives, without yet being able to establish new ones. In this transitional state, they may be rethinking the way their company does business; they may be reinventing their own job, or even their sense of identity, as the business environment shifts around them; or they may simply be redesigning a meeting in response to immediate, surprising events. Unchecked, this open-minded spontaneity can lead to organizational confusion and wheel spinning. Effectively executed, this spontaneity means integrative thinkers can move ahead opportunistically with both flexibility and focus.

For integrative thinkers, the predominant skill of directional learning is effectively resolving the inherent tension between the clarity and focus that guides effective action, and the openness and spontaneity that helps them respond opportunistically to both change and surprise. To accomplish this successfully, students of integrative thinking must develop the multi-tasking skills that allow opposing organizational forces—such as flexibility and focus—to cooperatively coexist.

The Learning Challenge

Developing the basic learning skills described here is a challenging goal for students of integrative thinking. Yet, without these skills, integrative thinking will remain an academic ideal. Unfortunately, most people will face this learning challenge alone. These learning skills are not competency targets found in many business or executive training curricula. It will be up to people with a commitment to integrative thinking to design a learning strategy that will help them use experience effectively, develop potent conceptual knowledge, and resolve directional tensions. Hopefully, the ideas presented here will prove helpful to those interested in moving toward this achievement. **RM**