



Reflective Learning: Educating Managers for a Sustainable World

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Abstract

The importance of reflective classroom practices in addressing complex business problems has been noted by Mintzberg, Senge and others concerned with building a sustainable world beyond the assumptions of the Industrial Age. This paper presents an overview of alternatives and one set of practices in depth developed by the author.

Introduction

This paper focuses on the challenge of teaching students to become critical thinkers. For most students entering university, the greatest shock is discovering that learning is more than collecting information and reiterating it. These students know what they know on the basis of accepting authority. This article explores several theoretical frameworks and innovative classroom methods that prepare students for the complex business problems they will face after graduation. Students use reflective learning to see patterns that connect many different problems, identify and share their own perspectives, question the assumptions that allow the problems to persist, and develop the skills to collaborate effectively around options and solutions.

The practical methods suggested in the second half of this paper are based on preliminary classroom research that began in 2003 at Saint Mary's University and continues as part of an interdisciplinary doctoral thesis to be completed in 2012 at Dalhousie University. The two courses are at the undergraduate level and are popular electives for Business School students as well as majors in the social sciences and humanities: Spirituality and Work, and Buddhism.¹ Qualitative research methods are being used to develop measurable indicators of the underlying dispositions for critical thinking and quantitative methods will help determine the effectiveness of these classroom methods in teaching students to become critical thinkers.

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An Example of The Challenge

Markets tend toward efficiency. People respond in pretty straightforward ways to incentives. The invisible hand forms a spontaneous, dynamic order. Economic behavior can be accurately predicted through elegant models.

This view explains a lot, but not the current financial crisis — how so many people could be so stupid, incompetent and self-destructive all at once. The crisis has delivered a blow to classical economics and taken a body of psychological work that was at the edge of public policy thought and brought it front and center.

-- David Brooks, the New York Times Op-Ed page, January 16, 2009

What kind of educational preparation might have made things different for all those business school graduates in the financial sector? It is not that all business is bad, or that all business school teachers are at fault. This article highlights the efforts of some educators to include more reflective practices in preparing students for the complex challenges they will face.

The financial sector is not our only concern. Complex problems such as those that pit crucial environmental issues against voter sensitive economic concerns, or create unprecedented bioethical questions, or compromise individual rights in the name of public safety, require consideration and dialogue that allows examination of underlying values, purpose, and assumptions. Enabling current and future leaders to address these complex problems through reflection, creativity and collaboration should be our goal as university educators.

In a Harvard study of MBA students titled "*Can Ethics Be Taught?*" the authors concluded that "[students] are hindered by a lack of experience in making value-based decisions, a lack of comprehension regarding the consequences of their actions on society... and an inability to articulate their own values in a leadership role" (Piper, 1993, pg. 72). As managers, investors, and business owners, will many of our graduates remain so focused on short-term profitability that they will ignore long-term sustainability? What can we do to enable the next generation of decision makers to see the trends and patterns underlying events, find their own voices, and respect a diversity of views as they make decisions that affect society?

In her book, *Becoming a Manager*, Linda Hill (1992) concludes from her own research that "the education many business schools provide does little to prepare managers for their day to day realities" including values-oriented decision-making. Once we take analysis behind the numbers and graphs we are in a realm of "soft skills." We are talking about value laden choices, multiple perspectives, reflective thinking and the ability to communicate. Further, even when these "soft skills" are introduced they may get lost amid all the hard analysis and technique. Yet, asked to suggest one improvement to the MBA program, the graduates of Hill's courses called for more teaching of the soft skills.

According to a survey of MBA programs by Mintzberg (2004), the soft skills simply do not fit in. Some professors do not care about them or cannot teach them, while most of the younger students are not ready to learn most of them. This article delineates several approaches that show promise, including Mintzberg's emphasis on student engagement.

The burden does not just fall on business schools. Learning is regarded by almost half of university students as acquiring and being able to reiterate information presented by a teacher or a text (Baxter Magolda, 2004). Rote learning, memorizing new information without relating it to prior knowledge or exploring its meaning, still dominates much university thinking and writing, almost regardless of students

chosen fields of study (Novak, 1998). Many students do not recognize the degree to which information has been selectively chosen and interpreted, nor do they demonstrate much inclination toward reflection and independent critical thinking.

It is clear that students must have opportunities to develop greater sensitivity to the consequences of their decisions and actions; to develop skills needed to analyze complex situations which involve incomplete information, conflicting responsibilities, and multiple viewpoints; to examine their own assumptions and values in light of new situations; to “try on” different ethical decision-making rubrics; and to fully explore others’ values. There have been many approaches with mixed success, but the most successful have some characteristics in common. They all use reflective practices that engage participants in examining their own assumptions.

Reflection

Reflection begins with the conscious monitoring of one’s thoughts, often in a comparative and iterative process, that leads to some kind of evaluation or judgment (Beauchamp, 2006). With respect to investigating background logic and underlying assumptions, Stephen Brookfield (1995) holds that “the most distinctive feature of the reflective process is its focus on hunting assumptions.” Brookfield describes the deepest layer of assumptions as “paradigmatic” axioms we use to order the world into categories, yet we may not be aware of them unless we are encouraged to articulate them.

Peter Senge (2008) also focuses on reflection and assumptions, but at first from a different perspective than Brookfield.

"[In] a world of growing interdependence, it's more important than ever to learn how to expand boundaries of normal management attention and concern in order to see the larger systems in which businesses operate. Failing to do so leads to policies and strategies whose side effects eventually sabotage the intended effects... " (45)

Senge describes “the systems thinking iceberg.” What we usually see above the surface of our attention are events. The first layer of reflection addresses the question, “What just happened?” If we look below the surface we may see patterns and trends. This layer of reflection addresses the question, “What’s been happening? Have we been here or someplace similar before?” Looking further, we may distinguish systemic structures or forces, and address the question, “what are the forces at play contributing to these patterns?” Many analytic processes take us this far. But Senge goes further and matches Brookfield’s deeper concern by seeking to identify *the mental models* that address the question, “What about our thinking allows this situation to persist?” Here the attention turns inward to a more subtle kind of reflection, *a reflexive disposition*.

A reflexive disposition involves stepping back or ‘decentering’ from personal requirements, disciplinary or social norms, and personal and disciplinary assumptions (Endres, 1996; Habermas, 1990; Van Gyn & Ford, 2006; Van Gyn & Ford, 2006). A reflexive disposition enables the reflective thinker to see things as they are, beyond egocentric and ethnocentric thinking, and beyond mere habitual thinking (Paul, 1990). This does not imply that things are “one way;” a single objective truth. On the contrary, seeing things as they are may reveal interdependent layers to reality and changing conditions, more like a poem than a mechanical schematic.

The mental models that filter perceptions and guide decisions do not necessarily dissolve with development of a reflexive disposition, but they do become clear. We are able then to distinguish them as a choice we are making. Mental models can often be expressed simply; they do not necessarily express themselves as complex systems diagrams, as educator Jaime Cloud discovered (Senge, Smith,

Kruschwitz, Laur, & Schely, 2008, p. 176). She asked hundreds of students who played a game called Fish Banks about their thinking. Fish Banks is a computer-supported simulation game: a simplified world of commercial fishing where the players control the fishing companies. Invariably, students as well as experienced managers who play this game fall into the “tragedy of the commons;” they overfish and there is an eventual collapse of the industry, much to their dismay. This game is an excellent vehicle for students to uncover their mental models and underlying assumptions.

Peter Senge popularized the concept of the “tragedy of the commons” in *The Fifth Discipline* (1990), but it is a pattern that was noted by ecologists long before. No community shared resource – fish, land, water, oil – is immune to this tragedy. Historically, many natural resource-based businesses start out wisely and sustainably and then yield to competitive urges, as they assume they must increase their efforts to keep up with the other companies that are growing. The results are unsustainable businesses and depleted resources.

Here are some of the responses of students who played Fish Banks and were questioned about their initial assumptions after the game resulted in the fisheries collapsing: "our actions won't affect the future; there will always be fish." "You've got to win; it's that simple." "There isn't enough to go around so if we're going down, we might as well go first class." "Things are the way they are and there's nothing we can do about it." "If others do it, I'd be stupid not to do it also." "My responsibility is to myself and my family." "The market or technology or someone/something will take care of it." "I want a lot, and I don't care about the consequences." "It's just a game."

These are mental models, core beliefs that people, adult professionals, as well as students, may or may not be aware of or admit . With the development of a reflexive disposition, people do become aware of their mental models and allow them to be challenged in the interest of a sustainable future, a world where maximizing individual short-term gains is not the only priority. The collapse of the commons is not inevitable.

Senge (2008) also describes a Fish Banks workshop hosted by Harley-Davidson, the famous motorcycle company he describes as having a unique organizational culture. The Harley team refused to continue the game until every team agreed to share information on fish catches -- they wanted to make a point because they had seen the pattern of previous games. They knew this information was necessary so that everyone could monitor the overall supply and determine if the total fish catch was declining. They also set an example of announcing when they would expand their fishing fleet and eventually everyone followed it. The fishery never collapsed, the companies all remained profitable, and the players learned an important lesson about recognizing their mental models and allowing them to be challenged.

In his response to a conference organizer’s question, "Is the modern corporation fit for the 21st century?" Henry Mintzberg answered an unequivocal "yes." "The only problem," he added, "is that the 21st century is not fit for life on Earth." Mintzberg added that the US corporate model, with its emphasis on "virtually unbridled" shareholder rights epitomizes the imbalance between the business sector and the social sector; it leads to an unsustainable future (Senge et al., 2008). Mintzberg proposes and carries out an educational design that centers on reflective practices to clarify and enable students to address this imbalance.

Mintzberg distinguishes five mindsets than encourage a reflexive disposition: 1) the reflective mindset -- about self; 2) worldly mindset – about the environment and social context²; 3) the analytical mindset -- about the organization; 4) a collaborative mindset -- about relationships; and 5) the action mindset --

² With respect to the worldly mindset, Mintzberg relies on the Oxford dictionary, which defines worldly as "experienced in life, sophisticated, practical."

about change. Discovering these mindsets leads to a deeper appreciation of reality in its many forms (Mintzberg, 2004).

Mintzberg puts considerable weight on engaging students through *experienced reflection*. He overcomes the limitation of students' seemingly limited experience through interactive exercises in the classroom that create experiences relevant and analogous to "worldly experience." Experienced reflection in the classroom confronts established beliefs with new ideas, individually, in small groups, and across the whole class as he takes students through exercises that demonstrate the five mindsets. Because this is a pedagogical method of sharing and adapting, he leaves the learners to be significantly self-organizing and free to follow the natural patterns of discovery. At the same time, experienced reflection makes beneficial use of concepts conveyed through traditional lecturing, the experiences of others through case studies, and new experiences obtained through students' field studies and projects. These traditional pedagogical methods are sources of inputs for experienced reflection. The real power lies in blending these more traditional ways of teaching with the personally engaging experiences of interactive classroom exercises.

At the MIT Sloan School of Business Management Peter Senge has been enabling students to develop "learning organizations" with reflective practices for 25 years. This means above all learning to see the deeper patterns that connect many different problems in an organization, questioning the assumptions that allow problems to persist, and collaborating with all stakeholders to make necessary changes. Students are taught not just to track events and "react" with problem-solving solutions, but to reflect more deeply and ask questions that inevitably trace back to the assumptions they make about what they perceive as reality.

To begin with what students were learning was aimed at making companies more innovative and profitable. But something shifted as Senge saw the results coming out of the MIT Sloan School of Management. For the past decade, the focus has shifted to learning that aims at a sustainable, flourishing world for life beyond the Industrial Age, not just short-term profits and problem solving that merely shifts the burden elsewhere. Senge saw that people get so drawn into fragmented views of all the "problems" we face that they often resort to superficial quick fixes. According to Senge (2008, p. 12), "this represents perhaps the greatest learning challenge humans have ever faced, and it will require extraordinary leadership from institutions of all sorts." In *The Necessary Revolution* he documents the ways that some organizations and individuals are already working together to enact new ways of managing and leading. They engage in many reflective practices to make creative collaboration and effective action possible.

Hedberg (2009) sees the classroom as a place not only where analyses occur and actions get taken, but where managers can gain the perspective needed to see general patterns, ponder alternative actions, be aware of consequences, learn how others might perceive the situation differently, and challenge their own assumptions about what needs to be done. She builds on the work of Schon (1987) and Seibert and Daudelin (1999) and distinguishes three different types or levels of reflection that enable students to judge the relevancy, appropriateness, and the consequences of their decisions and actions: 1) *Subject reflective learning* focuses on the subject matter or concept itself. It addresses the question, "what am I learning about the subjects studied?" 2) *Personal reflective learning* focuses on the learners perspective or personal insights gained. This type of self-reflective or reflexive learning leads to insights about habits of the mind and helps students see how their habits influence actions. It addresses the question, "what am I learning about myself?" Reflexive inquiry produces a deeper level of engagement because it involves the students' own experience. It is less abstract than subject reflective learning because it can uncover a person's mental models. 3) *Critical reflective learning* challenges the student to question assumptions, beliefs, and commonly accepted wisdom. It focuses on the broader implications of learning and addresses questions such as, "what societal meaning does my learning have? What would be the impacts of decisions in the immediate and long-term future for everyone affected?" Hedberg's work is further supported by Brookfield (1995) who described critical reflection broadly as thinking that develops a

greater social awareness, encourages students to see the social and political forces that shape behavior, and recognizes the systemic structures and the larger context within which they operate.

These three types of reflective learning are not hierarchically arranged. Nor are they independent of each other. But taken together, they allow students to see things differently than they would if they were merely reiterating the words of the text while passively accepting the authority of their teachers.

There are many models of reflective learning and business school educators are encouraged to experiment to see what works best for them. Driscoll, Sable, and van Esch (2005) and Sable (2007) documented a particular set of reflective practices in university undergraduate courses over four years, explained in detail below. Preliminary research indicated that students showed modest gains in their ability and motivation to explore content-related questions beyond reiterating information presented in lecture notes. There was increasing incidence over a twelve week period of students articulating their own beliefs, values, and theories, acknowledging others' beliefs, values and theories, recognizing their mental models and the constructed nature of meaning (implicitly and sometimes explicitly), and consequently enriching their original understanding.

Reflective Interaction

In this section the set of reflective practices described have been implemented with 35-40 students per course once a week in a 45-50 minute sequence in the context of a 2 ½ hour class that runs for 12 weeks. They can be considered most effective as a whole set, but shorter exercises based on any element or combination of elements may also produce the benefits of a reflexive disposition.

Mindfulness Meditation

The faculty of voluntarily bringing back a wandering attention, over and over again, is the very root of judgment, character, and will. An education which should improve this faculty would be the education par excellence. But it is easier to define this ideal than to give practical directions for bringing it about. (James, 2007)

Fortunately, practical directions for bringing back “wandering attention” are now available. Over the past several decades, a growing body of research examined the impact of mindfulness meditation and other contemplative practices on a variety of human faculties related to attitudes and decision-making. The work began in the fields of health and stress management (Beddoe & Murphy, 2004; Davidson & Kabat-Zinn, 2003; Kabat-Zinn, 2005; Santorelli, 1999), expanded to psychology and psychotherapy (Germer, Siegel, & Fulton, 2005; Goleman, 2003; Langer, 1989; Langer, 2000) and also focused on education (Buchmann, 1988; Butler, Symons, Marshall, Kaufman, & Spiegel, 2008; Zajonc, 2003; Zajonc, 2008). Networks of educators and researchers now exist for promoting and researching the impact of mindfulness meditation and related practices in higher education e.g., 1) The Association for Contemplative Mind in Higher Education and 2) the Mindfulness in Education Network).

Mindfulness meditation in this context is training one's attention to be focused on the present yet open (Kabat-Zinn, 2005; Langer, 2000). In general, the benefits of mindfulness meditation are becoming well known: stress reduction, calmness, broadened perspective, and insight. An increasingly common approach to reflective practice in higher education begins with some form of mindfulness meditation in class (Zajonc, 2003).

Mindfulness meditation in this context is a complement to analytic thinking. It is an unbiased investigation of present experience – qualities, images, feelings, thoughts – without rejecting, fixating on

or creating a storyline. The five senses are not shut out; sense experiences are also regarded in the same way, with suspended judgment. The intention is be curious but with suspended judgment, key ingredients of a reflexive disposition.

Yet, in basic mindfulness meditation there is no specific situation to focus on, only the natural breathing, the sense of body, and whatever arises in the mind without provocation. The effect of the practice is to enable the practitioner to gradually recognize the field from which experience arises, the clear inner space of experience: the mind. Equally important, the practitioner recognizes and becomes familiar with how one's mind functions: with projections, filters, and habitual patterns mediating between direct experience and judgment (Kabat-Zinn, 2005; Mipham, 2003; Wallace, 2007).

In practicing meditation, students inevitably experience thoughts, feelings, and sensory perceptions that form the filter of ordinary consciousness. They notice the memories, habitual patterns, assumptions, hopes and fears that color present experience. They may recognize the premature cognitive commitments of "mindless" thinking, when we attach particular meaning to some data purely out of habit, without thinking critically (Haidt, 2006; Langer, 1989; Langer, 2000).

They may notice how meaning attributed to other people's behavior may be their own projection. If one rests the mind openly in the present moment one can also suspend judgment. One can then examine freshly the evidence for making judgments. However, during mindfulness meditation all this is unprovoked – there is no intended form or object other than natural breathing to focus on.

The practice is merely to notice whatever arises in consciousness and return attention to the breath, without judgment. Nonetheless, mindfulness meditation typically leads to new insights about how the mind works. Langer (1989) further describes the results of this practice as: "(1) creation of new categories; (2) openness to new information; and (3) awareness of more than one perspective" (p. 62). These results correspond directly to the characteristics of a reflexive disposition, especially to the ability to "take a fresh look," and open the door to new insight (Shapiro, Brown, & Astin, 2008). Mindfulness meditation is the foundation for the contemplative practices that follow. Each of the succeeding practices is an extension or an elaboration of this basic practice.

At the same time, as Nosich points out, for some students (and professionals) "suspending judgment... is an awkward, uncomfortable, almost unnatural response. It is far more immediately satisfying to plump down for some answer, however unexamined; it is more gratifying to be unreasonable" (in Paul, 1990, iii). Indeed, not all students benefit from mindfulness practice because they cannot manage the discipline of regular practice. Classroom meditation sessions are limited by necessity to short periods. However, for many students more structured contemplation exercises with specific content to focus attention may be more engaging and may yield similar insights (Crooks, 2008; Jeong, 2003). Contemplation practices are a bridge between outer-oriented reflective thinking and the more inner oriented reflexive thinking that uncovers assumptions and mental models.

Structured Contemplation

While the foundation practice for a reflexive disposition is mindfulness meditation, structured contemplation exercises also train the attention. While mindfulness meditation has no intended object of thought other than the experience of breathing, structured contemplation is distinctly focused on a particular question, statement or image. As described by Buchmann (1988), Chickering, Dalton and Stamm (2006), Seamon and Zajonc (1998) and Zajonc (2008), the objective of structured contemplation is to take the student's awareness past data noticed only from habitual patterns to fresh, direct experience.

There are two phases to structured contemplation practice. First, one trains the attention on the object *without analyzing or manipulating it in any way*, following the practice described by Seamon and Zajonc (1998) and Zajonc (2008). For example, the professor could describe the Fish Banks game and the typical tragedy of the commons result.

The instruction is:

Hold the contemplation. Listen to the story, but don't try to analyze it yet. Stay mindful but remain open. Notice any initial thoughts that may arise in connection with the story and its outcome, but don't fixate on them. This part of the process trains your ability to remain focused on the present situation without attachment to habitual thinking patterns.

The first phase is valuable in that gradually, over repeated practice with different contemplations, the student develops a sense of discipline free from distraction and is no longer limited only to habitual patterns of conceptualization. As habitual intellectual deliberations are noticed, students are instructed not to be committed too quickly, but to remain open and come back to the present situation, in this case to the story of the Fish Banks game.

Following Seamon and Zajonc (1998) and Gendlin (1978), in the second phase one then begins to open the attention and allow new dimensions to emerge. The instruction is:

Next, open your awareness and pay attention to what is happening in your whole body, not just your mental space. Notice especially any *felt sense* rather than a storyline with words. In this step, stay with that felt sense just as you would otherwise stay with the breath in meditation. Look directly at this felt sense without judgment. Let your attention be open.

Within oneself one may notice an internal *felt sense* or perceive something unnoticed or unformed at first (Gendlin, 1978; Jaison, 2007). This introspective side of contemplation has also been termed *focusing*. "Focusing is spending time sensing something as yet undefined that comes 'in one's body' in connection with some specific problem" (Gendlin 2000, 11).

On a gross level, most people can recognize tightness in the chest or butterflies in the stomach if they occur when thinking about a provocative issue -- although they would rather not focus their attention on it. This second stage of contemplation is more subtle and more deliberate. This redirecting of attention from the stream of thoughts to the body is a kind of gentle curiosity about what one is experiencing underneath the words running in the mind. What may arise from the focusing aspect of contemplation might be, for example, recognition of a slight feeling of irritation, a slight aggressiveness, which, if conceptualized might lead to the thought, "I know better than these other players." The student may then become mindful of what is happening and question such a thought, in effect suspending it for the moment.

Whatever conceptual meaning is derived in the next stage of contemplative practice would take this felt sense into account. For example, the student may write in response to this contemplation that she noticed her own mental models guiding her response to the story and a deeper felt sense that those ideas may not be true.

By slowing down the thinking process, the student discovers space for fresh perspective to emerge. New dimensions of meaning can appear to come from either side: something new about the object of contemplation (the story in this case) may emerge or something new inside oneself in response to the object of contemplation may emerge (Gendlin, 2000). In other words, something new may appear to emerge from the *perceived* or something new may be noticed in the *perceiver*, or both.

The importance of considering and integrating as many factors as possible about challenging complex problems (such as the tragedy of the commons in the Fish Banks game) is emphasized by diverse researchers and scholars of critical thinking (Baxter Magolda, 2004; Brookfield, 1995; Kurfiss, 1988; Paul, 1995).

From structured contemplation exercises students find their own voice (Belenky, 1986). They develop fresh language to describe what they experience. Rather than simply re-iterate lecture material, they integrate it with their own experience and assimilate the meaning of the contemplation in the context of the course material. In our example, students explore their response to the Fish Banks game, whether they would have responded differently than most players, how and why.

What students may gain from structured contemplation is encouragement and familiarity with being open-minded, flexibility in considering alternatives and opinions, honesty in facing one's own biases, prejudices, stereotypes, egocentric or sociocentric tendencies, and prudence in suspending, making or altering judgments -- characteristics of a reflexive disposition (Facione, 1990). In turn, these dispositions support the self-regulatory judgments in interpretation and inference, also core components of a reflexive disposition and independent critical thinking (Endres, 1997). They are vital in linking introspective insights with interactive learning in the following activities.

Journals³

After structured contemplation, students are instructed to articulate their understanding in writing. Journal writing helps to build confidence in one's own ability to reason (Lee, 2004). Narrative journals have become a common pedagogical tool in university (Baxter Magolda, 2004; Elbow, 1986; Goldberg, 1986; Mezirow, 1991). In this context students are asked to write about their response to the contemplation process. Evidential, conceptual, methodological, criteriological, and contextual considerations may come into play (Driscoll, Sable & van Esch, 2005; Sable, 2007). The instruction is:

Write down what comes to you from your contemplative experience without a lot of editing on the first pass. Once you start writing, let it be "first thought, best thought." There will be time to edit it later if you wish. Let your response come in fresh words that reflect your full, present experience of the contemplation. Don't rush to write, be patient and wait for words that fit best. See if there is some new meaning there, beyond your initial response when you first heard the story.

Then ask yourself, "Is that all?" Explore the edges of what you are aware of in response to the contemplation. Write no more than a page, less is better.

While the instruction above is very open-ended, more analytic or evaluative questions could be asked as well. Here students are encouraged to explore their own questions, paradoxes, or images – whatever comes from their own experience in relation to the content of the contemplation. The point here is to train the mind further to clarify observations in the present moment, encourage internal inquiry, and allow genuine insights, including new questions and dilemmas, to be articulated in writing.

Interaction: Journal Reading in Pairs

³ Journals are not graded. Grading would reinforce student concerns with getting the "right" answer, when the exercise is really more concerned with articulating authenticity, inquiry, and insight. Samples of journals are often included, without identifying who wrote them, in the lecture notes of the next class to illustrate the richness of different points of view and to review the course content.

The next stages of the process are interactive and take the students out of a purely introspective realm. From this point forward knowledge is reviewed and constructed as a collaborative process, first between the students in pairs and then with the whole class led by the instructor. The following practices are significantly influenced by the research on the social construction of meaning (Bruffee, 1999; Gergen, 2001, 1999; Haidt, 2006; Kolb, 1984; McNamee, 2006).

Students may notice that meaning derived from shared experience in the present is more than abstract. Such meaning is personally relevant and of value in that it establishes peer relationships of mutual recognition, respect and trust. Shared meaning gives life to the course content. It may give the students a sense of connection to each other and even shift some of their underlying assumptions and paradigms for what higher education is about. There are several intentions to reflection interaction: to establish respect and understanding amongst the students for each other's point of view; to increase the levels of engagement, openness and authenticity of responses; and ultimately to engage them in collaborative thinking about complex issues in an atmosphere of respect and dialogue.

It is important to note that mindfulness is not forgotten in interaction. In fact, the challenge of being mindful begins with listening.

Reading, Listening and Reflecting Back (Paraphrasing)

Moving to interactive contemplation, students read their journals to each other in pairs (or a triad if there is an odd number in the class). The instruction is:

Reading and Listening

Break into pairs. One person volunteers to read out loud his or her response to the contemplation. The other person listens. Listen with self-awareness. This awareness has two aspects: 1) notice the tendency to make judgments, to agree or disagree. The point is not to reject your own judgments, but to recognize the habit and the tendency to commit to them prematurely; 2) listen openly, beyond your judgments and assumptions. (Do not take notes while the first person is reading – let your attention be directly on the reader.) In the next step you will paraphrase what you have just heard. But first, it is instructive to notice how much was retained and how much was imagined.

First, the listener is instructed to listen and absorb what is said, and to notice the tendency to compare what is said by the reader with his or her own journal. Both readers and the listeners often report that it is instructive to discover how much was retained and understood, and how much projection and “filling in” can go on (Gendlin, 1978; Jaison, 2007; Sable, 2007). Over time listeners can train themselves to become more aware of their assumptions and projections as they listen (A. L. Brown & Palincsar, 1985; A. Brown, 1987) .

Listening in pairs allows students who are reading to each other to feel less rushed and pressured than speaking to the instructor in a classroom discussion. There is more time. The concept of "wait-time" as an instructional variable was investigated by Rowe (1987). The "wait-time" periods Rowe found -- periods of silence that followed teacher questions and students' completed responses -- rarely lasted more than 1.5 seconds in typical classrooms. She discovered, however, that when these periods of silence lasted at least three seconds, positive things happened to students' and teachers' behaviors and attitudes. Students who previously had not participated did so. Equally important, teachers' opinions about who was likely to be following class discussions and engaging in autonomous reasoning shifted.

Within the reading and listening stage students trade roles so that each has the experience of reading, listening, and then reflecting back, paraphrasing, what they heard. The instruction is:

Reflecting (paraphrasing)

The listener then paraphrases or reflects back what has been said, trying to communicate just what the first person said *without adding to or interpreting their meaning*. The first person confirms, corrects, or fills in if something important to them is missing.

Reflecting back (paraphrasing) what is heard without interpretation is sometimes called active listening, mirroring, or deep listening (Isaacs, 1999). This process originated with psychologist Carl Rogers (1969) and was elaborated by Eugene Gendlin (1978) in his focusing process. In the context of mindfulness and reflective interaction, listening is a continuation of mindfulness, suspending judgment, cultivating openness and training one's attention during interaction. Here students may become aware for the first time how challenging it is to listen without making judgments or thinking ahead about what one should say in response. After presenting many workshops on focusing, Gendlin reported giving participants permission to clarify what was said several times, ensuring them it was "normal" to need clarification, and creating some humor and humility by offering examples of his own lapses and mistakes (Gendlin, 1978). More recently, Fassaert, van Dulmen, Schellevis, and Bensing (2007) developed an Active Listening Observation Scale (ALOS-global) to quantify this kind of mindfulness.

While there is a natural tendency for students to return to a more typical unstructured conversation, the respect and trust created in the paired interaction generally slows down the premature tendency toward fixed opinions and views (Sable, 2007). The process leaves more space for each person to reconsider for themselves what they have written for their weekly journal.

Inquiry

Having read, listened and reflected back what was said, the next interactive stage is inquiry. Inquiry is open-minded curiosity by the listener, including suspension of initial assumptions about what the reader meant. Critical thinking scholars agree this recognition and suspension is a key element to effective communication (Facione & Facione, 2007; Lee, 2004; Paul, 1995). The objective of reflective inquiry is to help the reader explore what they wrote and to discover what meaning was actually communicated, as opposed to what the reader may have intended. At the same time, the listener explores his or her understanding of the reader's work through genuine inquiry: questions about the reader's journal entry and its meaning. Genuine inquiry is distinguished from asking leading questions based on the listener's first impressions, "putting words in someone's mouth" (Isaacs, 1999). For example, inappropriate leading questions are of the form "Did you mean to say . . .," "Would ___ be a better word?" Genuine inquiry tends to ensure depth of understanding; however to do it without projecting one's assumptions and preferences is generally challenging for students, especially in the early weeks of practice (Sable, 2004).

The instruction to the listener is:

Inquiry

Ask questions to clarify what the first person meant. The purpose here is not to persuade the person to a different point of view, get agreement or determine disagreement. The purpose is to help yourself and the reader understand in more depth what he or she meant. For example, you could start with the words that the reader spoke "What did you mean by _____?" "Can you say more about _____?" Avoid leading questions such as "When you said 'x' did you mean 'y?'" or "I thought your journal entry meant _____, didn't it?"

From inquiry, students begin to generate new meaning derived from interaction. For the listener, inquiry is intended to reveal further what assumptions were made and how well the listener understood what was

read. For the reader, inquiry reveals what was actually communicated, whether the written contemplation was clear or ambiguous. Inquiry at this more intimate level creates an eagerness for new information and perspectives (Brookfield, 1995; Driscoll, Sable, & van Esch, 2005).

Inquiry is an expression of two other aspects of critical thinking: concern to be generally well-informed, and general inquisitiveness (Facione, 1990; Paul, 1990). Often these aspects are clouded by habitual thinking, and proposed research on reflective interaction hypothesizes that through practice, inquiry can heighten honesty in facing one's own biases, prejudices, stereotypes, and egocentric or sociocentric tendencies. As business author Martin Rutte puts it, "Open-minded inquiry deepens one's understanding and ability to articulate the next deeper level of personal truth."⁴

At this point in the reflective interaction process the instructor signals the pairs to switch roles, so that the first reader become the listener and the process is repeated with equal time for the new reader.

Dialogue

Dialogue is a flow or "stream of meaning between" participants (Bohm, 1996) as opposed to the typical argumentative debate or discussion where views are dissected and individuals begin by advocating for their position. Dialogue strengthens the possibility that the students will engage each other's points of view rather than merely defend against the other's point of view. Of course, one student may simply agree with or take on the other's point of view. But, if the interaction moves to dialogue, they can not only choose from the existing alternatives, they can generate a third point of view, a synthesis or transcending alternative. "The most important parts of any conversation are those that neither party could have imagined before starting" (Isaacs, 1999).

The instruction is:

Explore the contemplation not solely from personal points of view, but by creating a new meaning based on shared experience. Share previous knowledge and use interpretation, analysis, evaluation, and inference in light of your shared experience.

"In order for socially determined difference to be authentically recognized, while still providing the possibility of agreement, participants in dialogue must move beyond their own perspective" (Endres, 1996, p. 7) (Endres, 1997). However, dialogue is not necessarily about agreement *per se*. It is about creating a space where people with differences can find an idea for action they can all agree on. The benefits may appear to be different for each person.

The notion that new meaning is more likely to emerge from dialogic collaboration is supported by social constructivist research on meaning-making (Gergen, 1999). Once students have become familiar with the reflective interaction process up to this stage, they are more likely to engage and respond to each other with genuine and respectful communication (Sable, 2004, 2007). What they are learning is experienced as more than abstract; it has emerged from interaction and is grounded in experience (Kolb, 1984).

Paired interaction creates an additional dynamic to the classroom. Students are less caught in drawing out the instructor to provide the "right answer" when the format returns to the open classroom discussion model. They are more likely to be personally engaged and more disposed to apply all the core critical thinking skills to find new meaning. At this point, the reflexive disposition for self-discovery, seeing systems, relationships, and sustainable solutions to complex problems should be primed.

⁴ Personal communication with Martin Rutte, November 29, 2010.

Facilitated Class Discussions

When paired interactions are finished, the instructor reassembles the whole class. Even an unstructured, open discussion at this point may be qualitatively different than ordinary post-lecture discussion in that students are more prone to respond to each other rather than direct all their attention to the lecturer. Students begin to appreciate that they can learn from each other or help each other, as well as learn from the instructor.

The instructor may initiate the class discussion by asking for a volunteers to read their journal entries to the class or summarize their interactions. Or, the instructor can start with Hedburg's three questions: what did you learn about the subjects studied? what did you learn about yourself? what societal meaning does your learning have? It can be valuable to capture highlights on the whiteboard and provoke further inquiry using the words and insights of the students. The instruction is:

Where there is divergence, the point is not to arrive at agreement or consensus. The point is to encourage each other to hold what appear to be divergent views as if you could exchange places with each other. It is then possible that some new understanding may emerge, something generated from present experience through reflective interaction.

In the final stage, the instructor encourages the students to explore their own language further by paraphrasing, inquiry and dialogue. The purpose of facilitated class discussion is to engage the fresh language contributed by the students to explore the meaning and implications of the subject matter. Students own contributions are being acknowledged, shared, explored, and put in the context of the learning objectives.

Results of Reflective Interaction

A student who has been part of the reflective interaction process described above wrote at the end of the term:

I feel that I am becoming more aware of how I fool myself regularly. It is constant with brief flashes of awareness that I cling to. I must be so careful of my motivation, why I want that awareness...I want to be a part of society, a contributor, but on my own terms. It's hard to examine life, lifestyle, community...take what you want or accept and then discard the rest because the problem is, why do you want it?

Students who are asking such questions now and not rushing to safe or expedient conclusions will be more aware of their habits of mind and be open to reframing the way they see problems as they interact with their peers. As educators we need not ensure that students have definitive answers for all their questions, although they may find there are times that they do. Indeed, the greater achievement may be that we enable students to have confidence in continual learning as the complex world around them shifts.

Conclusion

Finally, as Taylor (2005, pg. 4) describes based on similar approaches,

“one's development as a critical reflective thinker is like a personal journey into unfamiliar or unknown areas. Both involve risk, open up questions, create more experiences than can be integrated at first sight, require support, yield personal change, and so on. This “journeying” metaphor differs markedly from the conventional

philosophical view of critical thinking as scrutinizing the reasoning, assumptions, and evidence behind claims. Instead of the usual connotations of 'critical' with judgments and finding fault according to some standards (Williams 1983, 84ff), "journeying" draws attention to the inter- and intra-personal dimensions of people developing their thinking."

Oxfam UK President Barbara Stocking, a co-founder of the Global Sustainable Food Laboratory (a cross-sector alliance of corporations and NGOs focused on food production) says, "We simply have to face the fact that these large systemic problems are going to continue to get worse if we don't start working together. This will not be easy. For example, many in the NGO world do not much like big business. But we must decide what is more important: our past politics or the future we hope to influence" (Senge, 2008, pg. 249). Reflective interaction, especially listening and inquiry, may be a far more effective strategy for collaboration than advocacy to expand the boundaries of people's thinking in such cases.

Collaboration depends on three capabilities: convening, listening, and nurturing shared commitment (Senge, 2008). Collaboration demands the best in people, particularly when it involves people from different stakeholder groups with different goals and little history of working together. Successful collaboration may likely depend on development of a reflexive disposition, an underlying attitude committed to multilogical investigation and suspending judgments long enough so that new perspectives and new meaning can come to light in the thinking process. It includes the humility to recognize that "you don't know," at least with certainty, and the confidence to admit it. It includes a kind of morality to feel there is something wrong in acting as if you know when you don't. The reflective practices in this paper are aimed at strengthening such underlying attitudes amongst all university students, not just business school students, and providing faculty with an array of pedagogical practices to make this possible.

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