ENHANCING DEEP LEARNING: LESSONS FROM THE INTRODUCTION OF LEARNING TEAMS IN A GRADUATE DEGREE PROGRAM

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Abstract

In this essay we describe our efforts to deepen graduate management student learning through the use of learning teams based on the concepts of dialogue, mentoring and experiential learning. Student learning teams led by faculty learning managers were introduced in the experiential, competency based curriculum of a European business school. Evaluations of the team learning program over a two year period based on learning manager interviews and student learning logs indicate some success in producing deeper learning by students and a number of implementation difficulties. These results are examined in light of previous research on dialogue, team learning, and curriculum innovation in management education,

Key words: deep learning, conversational learning, dialogue, mentoring, learning team, learning manager

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Many observers of higher education have decried the prevalence of superficial approaches to learning that are increasingly vocationally focused and grade oriented. This is particularly true for business education. The 1959 Carnegie Foundation report established the scientific basis for management education by grounding it in the three scientific disciplines of economics, mathematics, and behavioral science. Especially since then, management programs have relied heavily on the traditional information transfer model to deliver authoritative scientific knowledge through lecture based classes.

Efforts to improve higher education, including reports from the National Research

Council (Bransford, Brown & Cocking, 2000), the American Psychological Association
(1997), and a number of other scholars (Baxter Magolda, 1999; Boyatzis, Cowen & Kolb,
1995; Keeton, Sheckley & Griggs, 2002; Prince & Felder 2006; King, 2003; Light, 2001;

Mentkowski & Associates, 2000; Zull, 2002) have focused on improving the learning process
in education through the application of research from what has been called "the new science
of learning." One stream of this research is focused on the concept of experiential learning.

Experiential learning includes a variety of educational methods such as action learning
(Raelin & Raelin, 2006), internships and field placements in organizations, classroom
simulations and games (Osland, Kolb, Rubin & Turner, 2007), and team learning (Kayes,
Kayes & Kolb, 2005) that have in common a philosophy of education based on what Dewey
(1938) called a "theory of experience." Like the other new science learning theories,
experiential learning theory (Kolb 1984; Kolb & Kolb, 2007) holds the constructivist view of
learning and knowledge creation arguing that learners construct their knowledge based on

their previous experience and that learning is retained and applied when it is integrated within the learner's experiential context (Lave & Wenger, 1991).

In the 1990s, MBA programs received intense criticism for being too focused on abstract learning. MBA graduates were viewed as: "(1) too analytical, not practical and action oriented; (2) lacking interpersonal and, in particular, communication skills; (3) parochial, not global in their thinking and values; (4) having exceedingly high expectations about their first job after graduation; (5) not oriented toward information resources and systems; and (6) not working well in groups" (Boyatzis, Cowen, & Kolb, 1995: 4).

Inspired by Boyatzis, Cowan & Kolb's influential account of steps on a journey from teaching to learning (1995), EDHEC Business School in France initiated a revision of its Graduate degree curriculum based on leadership competency development (Boyatzis, 1982), and experiential learning (Kolb, 1984). Experiential learning was adopted as the school's philosophy of learning and, to deepen student learning, student learning teams facilitated by faculty "learning managers" were introduced into a competency based, experiential curriculum.

In this paper, we begin by explaining the deep learning, dialogue and mentoring theories on which our project was built, followed by a brief description of EDHEC Business School and the process of introducing the new Master in Management curriculum with team learning. Next, we describe the EDHEC learning teams and evaluate how they worked from the faculty and student perspectives. We conclude with lessons learned, considerations for further research and recommendations for the use of team dialogue to facilitate deep learning in management education and executive development.

DEEP LEARNING

A number of scholars have addressed the issue of deep learning. For example, in the tradition of research initiated by Marton and Saljo (1976) and further developed by Ramsden (1992), Biggs (1987, 1993), and Entwistle (1981), deep learning is contrasted with surface learning. In this framework, surface learning is focused on accumulation of information and memorization for extrinsic reasons such as getting a good grade. Deep learning is more intrinsically motivated, integrated, reflective, and complex. Border (2007) has argued that the terms "surface" and "deep" have often been used superficially in education and that use of experiential learning theory (ELT) (Kolb, 1984) provides a more substantive and usable definition of deep learning.

In experiential learning theory (ELT) (Kolb,1984), the concept of deep learning is introduced to describe learning that fully integrates the four modes of the experiential learning cycle - experiencing, reflecting, thinking and acting (Jensen & Kolb, 1994). Learning is defined as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb, 1984: 41). The learning model portrays two dialectically related modes of grasping experience - Concrete Experience (CE) and Abstract Conceptualization (AC) - and two dialectically related modes of transforming experience - Reflective Observation (RO) and Active Experimentation (AE). Individual learning styles are determined by a person's preferred way of resolving these two dialectics, favoring one mode over the other. The theory suggests that these learning styles represent specialized and limited ways of learning.

Following Jung's theory that adult development moves from a specialized way of adapting toward holistic integrated approaches, in deep learning the movement from specialization to integration involves a creative tension among the four learning modes. It is portrayed as an idealized learning cycle or spiral where the learner "touches all the bases" - experiencing,

reflecting, thinking, and acting - in recursive processes that are responsive to what is being learned and the context in which it is occurring.

Deep learning encompasses three recursive levels. At the first level, learning is registrative and performance-oriented, emphasizing the two learning modes of the specialized learning styles. The second level is interpretative, adaptive, and learning-oriented, involving three learning modes, and the third level is integrative and development-oriented, involving all four modes in a holistic process. The traditional lecture course, for example, emphasizes first level, registrative learning through the modes of reflection and abstraction, involving little action (e.g., multiple choice tests that assess memory of concepts) and little relation to personal experience. Adding more extensive learning assessments that involve practical application of concepts prompts the second level, as the action mode supplements reflection and abstraction to deepen conceptual understanding. Further addition of learning opportunities, for collective and individual reflection on personal experiences, such as internships or field projects, creates the potential for third level integrative learning (Kolb, 1984, Chapter 6). The collective reflection through team conversations about the internship experiences and/or student journals can stimulate deeper interpretative learning. Linking interpretive, adaptive consideration of concrete experiences to the conceptual material adds the fourth learning mode through completion of the learning spiral.

William Torbert (1972) described these levels of learning as a three-tiered system of feedback loops. This work has been extended by Chris Argyris, Donald Schön, Peter Senge and others. Single loop learning (Argyris & Schön, 1978), 'adaptive learning' (Senge, 1990), 'behavioral development' (Fiol & Lyles, 1985) or 'operational learning' (Kim, 1993) describes learning that does not modify functional frameworks for action or fundamental beliefs. If we are to aspire to substantially broaden understanding, then assumptions need to be called into question which is the basis of 'double loop learning' (Argyris & Schön, 1978),

'generative learning' (Senge, 1990), 'cognitive development' (Fiol & Lyles, 1985) or 'conceptual learning' (Kim, 1993).

The third level of learning referred to as either 'triple loop learning' (Bateson, 1972; Isaacs, 1993; Romme & van Witteloostruijn, 1999) or 'transcendent learning' (Pauchant, 1995) occurs through a process of intentionality and immersion in the process. It involves inquiry into, rather than captive allegiance to, traditional mind sets, values, or paradigms to identify and transcend arbitrary and outmoded limitations. We usually consider intelligence as a measure of how fast or how easily we assimilate theories, information or concepts. In this domain, however, intelligence is understood as a source of ideas or creativity, which is accessible through a process of making space to suspend habitual 'knowing' (Borredon & Ingham 2005). Bateson (1972) and Pauchant (1995) claim that accessing new levels of intelligence and creativity depends on freeing up energies normally restrained by rigid thought patterns. Learning at this level requires a profound re-definition of self-identity (Bateson, 1972) and traditional management education.

Differing dynamics prompt and constrain the movement from one level to another. We come to the limits of effective single loop learning when the hypotheses that underpin our approach to a given situation cease to be valid or efficient. The transition from single loop to double loop learning can provoke anxiety and fear that threaten stability. Learners may impulsively use defense mechanisms or seek refuge in deeply-rooted routines and procedures that play a stabilizing role by moderating behaviors (Argyris, 1993). In these situations, learning becomes, more often than not, a response to pressure and not the result of vision or inquiry. Double loop learning, on the other hand, requires challenging accepted assumptions, attitudes and thought patterns to adopt others that are better adapted to the existent reality and ultimate goals for maximizing performance and competitiveness (Cayer, 1996).

The obstacles that inhibit accessing triple loop learning are of a different order. The search for meaning and deep learning subjects people to paradoxical pressures, such as, tensions generated by awareness of limitations and inhibitions, and the sacrifice entailed in letting go of attitudes that blind awareness and limit behavior (Schein, 1993). Learners are confronted by the paradox of learning - i.e., doubt and anxiety generates reticence and often justification for refusing to learn while doubt and anxiety are also driving forces of learning. Accessing level three learning thus implies transcending binary thinking. It involves recognizing behavior and cognition as manifestations of the same iterative, developmental process that leads individuals to discover and rediscover the meanings of what they do, think and feel. It is not a matter of removing doubt and anxiety but rather engaging in them to learn at a deeper level – a process enabled by a supportive learning team.

TEAM LEARNING

Recent research suggests that properly organized and facilitated student learning teams can generate deep learning. Michaelson, Knight and Fink (2004) have developed an approach called team-based learning which they argue will promote "the deep learning all teachers strive for." Kayes, Kayes, Kolb and Kolb (2004), have developed an experiential approach to team learning to develop deep learning and "executive consciousness" through recursive cycling through the learning cycle by the team members (Kayes, Kayes & Kolb, 2005). The approach to team learning adopted at EDHEC was based on three theoretical foundations - dialogue, mentoring and experiential learning. We now consider how dialogue, mentoring, and experiential learning foster deep learning.

Dialogue

The word dialogue comes from two Greek roots: *dia* and *logos*, suggesting 'meaning flowing through'. This contrasts 'debate' which is 'to beat down' with 'consensus', meaning 'to create a measure of agreement'. Dialogue is often associated with Socrates and the search for human wisdom through a process of questions and answers. As developed by de Maré (1991), this question and answer principle has evolved with our understanding of dialectic and the works of Kant, Fichte and Engels In dialogue, we progressively learn together to suspend defensive exchange and to understand why this type of exchange exists. Dialogue consists of suspending judgments, engaging differences, and calling assumptions into question (Baker, Jensen, & Kolb, 2002; Isaacs, 1993, 1999; Schein, 1993). For dialogue to have substance and uncover deeper levels of meaning, we need to openly explore divergent values and priorities and at least implicitly call them into question (Blake, 1996). In dialogue we learn to preserve and honor diversity and differences.

For Isaacs (1999 ibid), dialogue requires intentional engagement in a process that has the potential of unveiling new possibilities and insights. In Figure I below, he illustrates alternative directions that conversations can take distinguishing between what he refers to as discussion and dialogue. While the decision-making and closure of discussion are essential group competences, dialogue is the distinguishing competency here. The learning teams we introduced aimed at engaging in dialogue to encourage suspending judgment and resolution, reconsider assumptions, explore alternatives, and evoke insight as, "a way of reordering our knowledge" (Isaacs, 1999: 45).

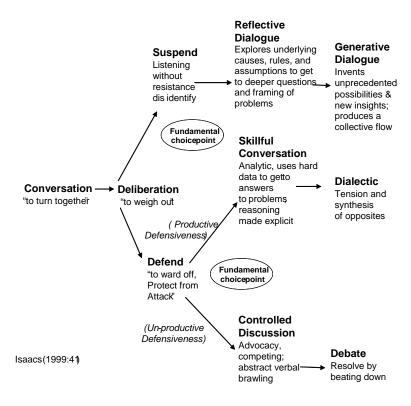


FIGURE 1: Positioning Dialogue (Isaacs, 1999: 41)

An aspect of dialogue especially relevant for learning teams that was stressed by Paulo Freire (1992) is for team members to name their own experiences in reflective dialogue with others as a path to deep learning. Freire and other critical theorists give primary emphasis to praxis, the transformative dialectic between reflection and action - i.e., reflection informed by action and action informed by reflection. He writes powerfully that within the essence of this dialective in dialogue,

... we find two dimensions, reflection and action, in such radical interaction that if one is sacrificed - even in part - the other immediately suffers. ... When a word is deprived of its dimension of action, reflection automatically suffers as well; and the word is changed into idle chatter, into verbalism, into an alienated and alienating "blah." ...

On the other hand, if action is emphasized exclusively, to the detriment of reflection, the word is converted into activism. The latter - action for action's sake - negates the true praxis and makes dialogue impossible. (1992: 75-76)

Incorporating the transformative tension of reflection and action allows students to expand their access to holistic, integrative learning.

Another aspect of dialogue that is one of the contributions of this paper is to draw attention to the importance of the dialogic context to deepen learning. The context or situation in which a dialogue occurs has a profound effect on whether people can talk constructively about difficult issues, disagree respectfully and responsibly, and learn. The context largely determines whether substantive inquiry into differences occurs, whether differences get integrated for deeper understanding or are avoided, or whether a *winner takes all* tactic prevails.

Inhospitable environments tend to breed avoidance, defensiveness, and suppression. On the other hand, receptive spaces invite inquiry, reconsideration, and deeper learning. When team norms develop unconsciously, embedded within the norms are the unexamined assumptions of single loop learning. For example, learning will be limited to the first level if the norm is for participants to defer to one or a few people in positions of authority.

Nonaka (1994) and many others in organizational learning (Brown & Duguid, 2000; Wenger, 1998) recognize the interdependencies of individual and collective learning. For Nonaka (1994), while "ideas are formed in the minds of individuals, interaction between individuals typically plays a critical role in developing these ideas ... 'communities of interaction' contribute to the amplification and development of new knowledge" (p. 15). Communities of practice (Wenger, 1998) more spontaneously surface when the structure and tenor of the dialogic context do not impede them. The less we are aware of the norms we

encourage or discourage, the more the team's norms erratically shape behavior. Thus, we must intentionally encourage teams to develop norms that support inquiry, temporary suspension of judgment, reflection, and deep learning.

One approach is to recognize how the *quality* of the dialogic context can provide leverage to help students access deeper learning. *Leverage* and *quality* are mirror images. Because the dialogic context impedes or facilitates increased understanding, the potential leverage of intentionally striving to create supportive environments for dialogue can hardly be overestimated.

Various references to dialogic contexts show up in the literature - e.g., a 'knowledge space' (von Krogh et al., 2000), 'container' (Isaacs, 1993), 'receptive space' (Baker, 2002, 2004, 2005), 'holding environment' (Winnicott, 1990, 1992), and the social embodiment of experiential learning (Baker, Jensen, & Kolb, 2002). The common thread though is the significance of the context and the influence that the space has on the potential for substantive, deeper learning.

Even though dialogue is an invaluable means for accessing deeper levels of learning, most people recognize it is not easily accomplished and is certainly a challenge to initiate (Raelin, 2005). In each case there is an instigator, a facilitator or, as Schweitzer (Adair, 1983)) suggests, 'a spark from outside'. The mentoring literature provides a perspective from which to examine this role within the ambition for deepening learning whether in one-to-one situations or within groups.

Mentoring and Levels of Learning

Mentoring is a developmental process, on a one-to-one basis, in which more skilled or experienced people use their gifts, experience, knowledge and competencies to promote and facilitate the professional or personal growth of a less skilled or experienced person. The

mentor adopts functions depending on the context and needs of the learner, including role modeling, sponsoring, teaching, guiding, counseling, coaching, and inspiring the learner to become who they are and undertake the challenges to which they aspire. The process anticipates the mentor's dedication to self-learning and personal experience with the process (Megginson, Clutterbuck, Garvey, Stokes, & Garret-Harris, 2006).

Parsloe (1993) explains how a teacher-centered mentoring provides input where student-centered mentoring fosters self-discovery and what needs to be done. Thus, teacher-centered interpersonal and technical training fosters level-one, or single loop, learning associated with career functions and academic study where behavioral change is the focus.

The primary challenge for mentoring at this level is to shift the learners from passive non-involvement or subject-oriented memorization to an involved or behavioral level, similar to single loop learning. The transition from a non-involved, zero position means that much of the mentor's work is to support behavior change.

If behavior change is the sole goal, the risk is that it becomes 'habitual', and equally part of a repertoire of re-actions. Focusing on behavior change can promote adjusting to 'the social order,' through superficial honesty that keeps basic assumptions intact, as opposed to transcending those barriers that prevent a deeper level of learning. (Borredon & Roux Dufort, 1988).

Interactions at level-two learning permit the learner to step back, work through blocks, allow the self to emerge, and dare to listen to that self. They also lead the learner to develop the courage to question attitudes and deal with defensive reasoning that prevents testing premises and conclusions in a truly independent manner (Argyris, 1993). Inevitably, as deeper levels of learning are sought, groups enter spirals of behavior patterns that can manifest extreme negativity or an open attack directed at the 'mentor' (Kilberg, 1999).

Learning, involving examining basic assumptions is very difficult to accomplish alone, though the process of challenging, questioning, and inquiring, prepares the learner for greater receptiveness, teamwork and leadership. There is a major difference between helping learners change behavior and developing conditions for learners to reflect on their work and behavior, and, as Argyris (1993) says "surface the potentially threatening or embarrassing information that can motivate learning and promote real change." Inevitably, deeper learning is grounded in this approach.

Thus, the role of dialogue, associated with level-three learning and a means for transforming understanding, resurfaces (Isaacs, 1999). To facilitate learning within the context of the business school, supportive learning teams provide an environment to promote third level learning. It can only happen if the learning team context is favorable, if the degree of trust is established and if the general culture permits this degree of inquiry with the inevitable personal risk this entails (Raelin, 2006). Returning to Isaacs's model, we see the fundamental choices needed to leave behind unproductive self-defense to access deeper learning.

Experiential Learning

Experiential learning is a way to manage the process of team learning. A study of teams engaged in research and development activities at a major US consumer products company indicated that the learning cycle provided an accurate and useful description of the team learning process (Carlsson, Keane, & Martin, 1976). Three important findings emerged. First, the most effective teams, as measured by supervisors and anonymous observers of the teams, progressed through each of the four stages of the learning cycle a number of times during the project life-cycle. It is important to know that more effective teams do not cycle through the learning process once but complete the loop of learning many times.

Second, the less-effective teams became stifled in their development in several ways. They often failed to cycle through all four stages of learning, and the strengths and weaknesses of each team related directly to the stage it ignored. For example, some teams spent too much time creating new ideas but failed to explore properly the practical aspects of their ideas. Other teams lacked creative ideas but developed great implementation strategies. Finally, teams assisted by a trained facilitator or a team member, who could facilitate their work, improved their learning process by moving through each stage of the cycle. While the cycle of learning may seem like a natural progression for teams, teams may not go through the four-stage process without some form of intervention or knowledge about the process.

When teams successfully navigate the learning process, they are likely to avoid some of the dysfunctional aspects of group life such as social loafing (Latané, Williams & Harkins, 1979) and group think (Janis, 1972). One such dysfunctional process is the Abilene paradox (Harvey, 2001). This paradox occurs when individuals do not express inner needs and feelings and then act in ways that are counter to the stated purpose of the team. Overcoming this tendency to simply agree and go along can increase the team's access to multiple viewpoints and ideas that can deepen learning. As groups engage in the multiple phases of learning, they become more likely to express multiple viewpoints, explore problems from multiple angles, and engage the diverse experiences of the team members, a process that stimulates critical thinking and deep learning (Kayes, 2001). To the extent that the team is composed of students with different learning styles, who actively participate, the dialogue will include analysis based on all four learning modes.

In the above section we have positioned the founding principles on which the EDHEC learning teams were conceived. Because pedagogy cannot be understood out of context, we explore the Business School, curricula decisions, the constitution of learning teams and selection of 'learning managers'.

THE EDHEC BUSINESS SCHOOL

The *Grande Ecole* System is grounded in the French tradition of extensive and highly selective education for high-level management positions. The 'generalist' syllabus covers all founding management disciplines. This educational model is built on Fayol's organization principles and classical twentieth century theories of organization that considered the corporation as rational and, as such, gave birth to the development of hypo-deductive teaching, grounded in the fragmented components of management. Two characteristics of this model are selectivity and elitism. To merit an entry "ticket", applicants undergo two years of preparation for a competitive entrance examination where individualism and inter-personal competition are prevalent. As a result, those who succeed and access the *Grande Ecole* are the "good students", able intellectually but with little personal vision other than to acquire their degree, which, in turn, will permit them to step into the job market in a position of power on the merits of their academic journey.

Ranked in France's top five *Grandes Ecoles*, the School offers a master's degree to students selected for their academic brilliance and their potential to hold management positions within leading global corporations.

In November 2002, the school's board of directors suggested instigating a renewed focus on teaching leadership. The nominated faculty team chose to address leadership through a focus on student learning and managerial competencies with emphasis on :

- Ethical and cultural awareness
- Initiative and entrepreneurship
- Collaborative thinking and team spirit
- Self-mastery and interpersonal skill
- Leadership and team facilitation

- Managerial communication
- Creativity in decision making and problem solving

Focusing on these managerial competencies, the ambition was to move away from the notion of *teaching how to lead through theory* to one of *learning about leadership through experience and reflection*.

The deputy dean extended the original four member team to nine faculty members with differing and even opposing styles of communication and interaction, and different academic disciplines to launch what was, at that time, an embryonic leadership project. The new program was to begin at the start of the following academic year. Defining this program was an arduous process. The original team had an idea of where it was going; integrating newcomers and their ideas, values and diversity was a challenge.

As detailed below, the major purpose of the learning teams was to help students integrate the various components of the curriculum, to deepen their progression through the learning cycle and to access the deeper levels of learning described above. The components of the curriculum organized by learning mode are in Figure 2 below.

FOUR LEARNING PLATFORMS

Some aspects of the identified competencies already existed in the school program but they lacked a common thread.

Learning Platform 1: Knowledge Input within the Common Core Program:

By 'input' we mean a lecture, case study or course support material which deals directly with a given competence. For example, cultural awareness is some part of 19 different courses, ranging from law studies and languages to culture and society issues, and interpersonal skills

are developed in all disciplines when students work on case studies or on work placements. However, there was no context for reflection or creating useable or transferable knowledge.

Learning Platform 2: Observation

Students were encouraged to be observant and to learn from visits to a large number of volunteer companies. Teams of six students visited a company and focused on the economic environment, the specificities of the market sector, the corporate structure and the trades or professions within the corporation. Once again, however rich the observational experience, there was no specific time or place to create links between the observations and the knowledge inputs from their classes.

Learning Platform 3: Simulation in Intentionally Created Situations

Above, we referred to input and learning through case studies, lectures and reading. Within the common core program there are a number of workshops aspiring to 'bring the board into the classroom'. Platform three differs from platform four in that the situations are simulations and learning is stimulated by CCTV (Closed Circuit Television)] and peer feedback, by the much appreciated seminars dedicated to team effectiveness, or the development of self-knowledge through the MBTI. The limitation was that the impact diminished without sustained reflection transformed into actionable learning. No context existed for these processes.

Learning Platform 4: Management Experience

In this platform, learning takes place through students adopting a management role within an Entrepreneur Project, requiring leadership and collaborative enterprise. While these projects were evaluated, learning from them was not integrated into how students were prepared for

business assignments or debriefed in terms of trans-disciplinary or personal learning that would align learners to their upcoming twelve to eighteen-month compulsory internships.

CREATING A FIFTH LEARNING PLATFORM: THE LEARNING TEAM

From our study of the nature of learning within the existing platforms, we realized that there was no context for collaborative sense-making, dialogue, or reflection on experience, and thus no context to achieve the deeper learning we sought. We concluded that students could not develop the previously identified competencies at the intended level. These considerations led to the creation of a fifth platform and the notion of a **learning team**, facilitated by a member of faculty, called a **learning manager**.

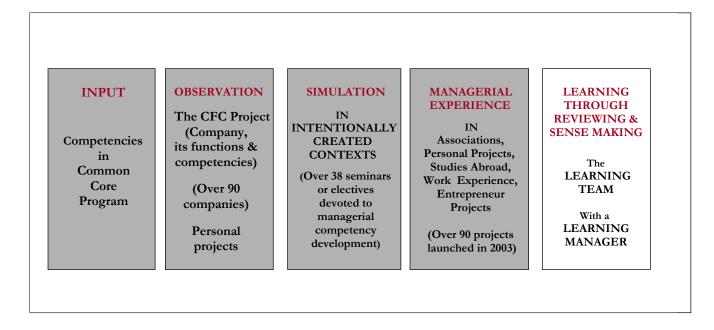


FIGURE 2: Five learning platforms

The primary purpose of the learning team is to help students deepen and integrate their learning from the various components of the curriculum as well as from life in general.

The learning team consists of twelve students. Within this team, and under the guidance of a learning manager, students concentrate on questioning their entrenched beliefs and honing their managerial skills. They also focus on systemic thinking about what underpins

actions, whether at school or at work, in France or abroad. Students become a member of a team upon entry and remain in the same team until graduation.

Learning team meetings are not evaluated but attendance is obligatory. In evaluated "learning summaries", students explain awareness of what leadership entails and their observation or experience of a given competence with a focus on 'critical incidents' experience. Reading and noting relevant insight from study of a competence are encouraged. Thus, the purpose of the summaries is to transit the learning cycle and deepen learning through personal reflection. Criteria for evaluation of students are genuineness in entering the learning process and their effort to manage the various aspects of the cycle. While the summaries are confidential, learning managers debrief these during the learning team meeting, and members refer to their writing as they choose.



FIGURE 3 The Learning Team

The Learning Manager Role

So who is the learning manager? How is the role assigned? What preparation does this require? At the launch of the new curriculum with its fifth platform and extended offer of experiential learning seminars devoted to managerial competencies, fifty learning teams were

envisaged. This required a core assembly of twenty-five learning managers (preferably permanent faculty) prepared to take on the role, learn to do so, and agree to review regularly.

An outside trainer prepared the future learning managers for their role. Training involved examining mentoring principles (Megginson & al 1988; Realin 2006 ibid) and a learner-focused approach to development. It also allowed participants to experience being 'mentored' and assuming the role of 'mentor' themselves. Dialogic exchange, examining assumptions and reviewing experience were included in the design (Isaacs 1993, 1999; Bohm 1990 ibid). Finally, the most difficult attitude change was shifting the focus from the expert or deductive approach to student-centered inductive pedagogy.

As we prepared for our role, there were requests for a program, for a 'tool kit', for ready-made explanations that would prevent the learning manager being put on the spot or being unable to answer questions about leadership. Reluctant to provide such guidance, those responsible for the program declined such assistance, believing that learning needed to be grounded in the team's questions, experience and interests. There were consequences to this decision that had not been envisaged.

At the launch in September 2003, the above principles were in place; most learning managers had participated in the preparatory program. However, there was a small group of 'invited' faculty who joined at the last moment. This had consequences that we explain in the next section, when we examine the first year of learning teams and how the process evolved.

Learning Manager Review Meetings

Originally, learning managers met with their teams for six months before an intermediary review, followed by a major review at the end of the academic year. While the first review had a euphoric character to it, with learning managers expressing surprised satisfaction, the end-of-year assembly was more agitated. Several procedural patterns were noted:

- Some learning teams met for two hours, others for fifteen minutes.
- There was no control and no ongoing follow-through
- Twenty-five learning managers on the two campuses were autonomous
- There was little guidance
- Learning managers designed their meetings in response to the group, their own vision and the reception given to them on meeting their team.

We came up against the first managerial obstacle; we had no credibility for assuming a managerial function with our peer 'learning managers'. The project was launched on the assumption that each learning manager would fully engage, and that managing learning team meetings was outside the jurisdiction of the pilot group or its leader. Thus the only place for developing the project and the learning manager role was the review meeting. Here the team of learning managers had to learn to talk to one another and build the same climate of trust previously described (Baker, Jensen, Kolb 2002 ibid). The team of learning managers had to engage in deeper learning. In our case, building this trust and mutual learning was slow, but we found that challenging assumptions became possible after the second year.

Relationships between learning team (LT) members and their learning manager (LM), underpinned by Kolb's learning cycle, varied; there was no guarantee that, even if a given LT meeting was rich in reflection, the following would also be. There was no guarantee that students would engage in authentic exchanges, would self-disclose, would listen to one another and that they would find their meetings in any way a "learning experience".

We noted how entrenched defensive routines could be and the difficulty students and learning managers had entering "Skillful Conversation" (Figure 1). Yet, there were moments when judgment and self-defense were suspended; there were even moments with "reflective dialogue" (Figure 1).

One learning manager reported:

When I started the meeting there was silence. Students sat round the table with their arms crossed, there was a heavy atmosphere and it seemed to me that no one wanted to be there. For myself, I did not want to 'rescue'; I felt myself reacting to their apparent passivity. So I asked them what they wanted to talk about: silence. Eventually I said that we could sit in silence but this seemed a waste of time. Better leave. Why torture ourselves... if we have nothing to say, we will call the meeting to a close and get on with our day. Several disagreed, saying they had come and wanted to stay but that talking was difficult without a theme or purpose. They were not used to this.

Unexpectedly, someone asked if we could talk about what ethics meant to them. The resulting exchange was one of the most memorable learning team meetings we had that year. Students did not agree with one another; some were dismayed at the values held by fellow team members. The impression differences made was considerable and picked up again during the learning summaries over the following two years.

We see here the shift from non-engagement to engagement because the students were initiators and then participants by choice. They became engaged because of authentic self-disclosure about personal values and assumptions; while suspending judgment, they gained insight into others' values and also their own, previously tacit and improved their understanding of the role ethics play in their managerial and business intentions. During that LT meeting, members transited observation of others, expressing concepts, examining their own and others' ethical actions and considering possible applications of an emerging understanding of ethics.

Most notable in this incident is that the deeper learning has had an undeniable impact on all members of the group. The remarks of the LM were essential in triggering the process of deepening the team's learning, suggesting that this type of learning is inclusive, even if members will retain different aspects of the learning moment. Where before we talked of engagement as an individual act, Astin (1984) talks of involvement and we saw that, with students as with learning managers, ... "learning and personal development...(was) directly proportional to the amount of ...involvement in that program" (Astin 1984:134). Thus, when faculty was co-opted and took on the role to 'please the dean' we saw little engagement and, in turn reduced involvement in integrating this type of learning within the curriculum.

Another learning manager reported:

One day while I was doing my shopping in a city store, I heard a voice behind me cry 'my learning manager'! It was the first time that I was recognized other than as a professor. Here I was identified as a "learning manager" in a positive way.

The understanding illustrated in the above was prompted by experience and reflection that shifted thinking; as Argyris explains:

Effective double loop learning is not simply a function of how people feel. It is a reflection of how they think – that is, the cognitive rules or reasoning they use to design and implement their actions. (Argyris 1991:100)

We also see the importance LMs give to recognize their dual role. We had not envisaged the degree of challenge in managing vulnerabilities, certainties, assumptions, and reluctance of highly skilled professors in having students reflect, listen, question and engage in their own and peer development. Among the first learning managers, some had a genuine interest and experience in facilitating learning, some had interest and no experience, while others were skeptical, reluctant or negative but wanted to please.

The most personally challenging aspect was calling oneself into question as a professor of a specific discipline: that is, questioning one's own identity as a pedagogue and assuming a role which some could not identify with. Not rare was it to hear "when I am in 'class' I must have answers to everything; without having all the answers I am not credible."

When learning managers reviewed the year together, there was an exchange of anecdotes and frustration of not having been able to put their "mentoring" into practice or not having been able to take their learners into a reflective space, of disbelief that the learning summaries, described earlier, served a purpose and of requests for more guidance or support material. There were those who wanted a skills focus. Some wanted to be armed with articles, books or research papers, while others preferred to focus on what emerged during the meeting.

Some learning managers considered that we should start learning teams in year two because year one students were too immature. They felt that there were too many difficulties because members of the learning teams did not know what leadership and managerial competencies meant. Other faculty insisted that it was precisely because of this difficulty that the second year teams would create actionable knowledge through their conversations.

Almost unanimously, the learning managers needed structure and wanted to be told what to do. This intensive type of existential questioning challenged the launching team's assumptions about the degree of guidance that was actually needed. Questioning the premise on which we had insisted led to re-designing the learning team support material. Abandoning this mind-set was not easy as Argyris (1993 ibid) and others cited in the above paragraphs have shown.

Student Reviews

As explained previously, learning team members were encouraged to keep a record of their learning. In their learning log, they kept a record of what they observed, experienced or questioned. They wrote about what surprised them or critical moments that momentarily destabilized them or led them to being able to see themselves or others in a different light. Capturing these moments gave material for personal and group reflection and served as a basis for their learning summaries. One student wrote: "At heart, I do not feel a leader; at least, I don't feel I aspire to being such. Is this a problem? Should I necessarily acquire this competence?"

Another said, "On arrival, I thought that leadership and charisma were totally interdependent so I told myself "this is not for me..."

At the end of the first academic year, students found the LT difficult: No link was made between their work within their student-run voluntary associations and the development or even observation of managerial competencies. They did not understand the purpose of the learning team; learning summaries were a burden. Managerial competencies, leadership and critical incidents were almost derisive terms. Students had not associated the managerial competencies' workshops with their personal or team learning. We remained in a single-loop learning process.

And yet, the questions they had were thought provoking and, for many learning managers, learning summaries were not just based on superficial opinions; there was some search for meaning, even if observations and questions were voiced with discomfort and uncertainty as to the "why" of the exercise.

PROGRAM REVISION BASED ON REVIEWS

The degree of difficulty expressed by learning managers at the end of the first academic year with learning teams led to a complete rewrite of all the supporting material. A LT support kit

was designed explaining the purpose for each LT meeting together with dates, reading material, desired outcome and review sessions for learning managers. Although the exercise was a challenge, it formalized the process and later served as a basis for parallel learning team projects at the executive level in two corporations, which we describe later.

We started the following academic year with over one hundred learning teams and fifty four learning managers.

Between the first and second years, our LT students complete a two-month internship. Many go into chain stores, banks or luxury goods; others go into niche markets outside Europe. On return to EDHEC for their second year, attitudes have shifted and team members enter a different level of learning. With a degree of hesitation, themes such as initiative, responsibility, self-mastery and managerial communication emerge and gradually students make connections with observations from the previous year as recorded in their first learning summaries. We noted that 'critical incidents' have become a familiar term, depicting moments of transition from "automatic" to "awareness" mode. One student said,

I learned a lot from my placement supervisor (...) One day I was alone in the store; there were very few sales due to a severe heat-wave when he 'phoned me: 'Do you know the reason for my call?' he said. I feared the worst. 'The sales figures in your store are catastrophic while those in the rue Royale are excellent'. I did not know how to reply. He then said 'But it is partly thanks to you that the director of rue Royale called me to say that he had served a client sent to his boutique by you; the client spent 5000 euros. Congratulations; I appreciate your dedication to our enterprise.

Nevertheless, don't forget the X corner; I am certain you will do better in the coming days. If sales do not increase, I'll come to see you and we can talk things through'. I had discovered a real leader! With few words he was able to alert me to poor sales figures

while at the same time appreciating my effort, motivating me for the coming challenges and remaining attentive to improving my performance.

This extract alerted the LM to her own 'blind spot'. She said she had not realized the degree of vulnerability amongst her team members who, on the surface, appear arrogant, self-assured and clear about what they want, do not want, can do and aspire to do. Here, she recalled seeing the need for encouragement and recognition because of authentic achievement. But achievement related to the entire cyclic learning process requires a context in which to discuss the learning. She acknowledged that traditional curricula do not provide this space.

During the second year, exchanges between LT members became more personal; there was more self-disclosure, and perhaps more strikingly, members manifested interest in appreciating differences between themselves. MBTI profiles served as points of departure as individuals took on responsibility for their projects. One student commented: "During the MBTI seminar, I became aware of how different we were in terms of how we learn and how we work. I knew these differences existed, but I had underestimated their significance and importance."

Several members of a learning team decided to focus specifically on their "less comfortable" MBTI preference. For example, a member explained that her preference for introversion ('I') usually resulted in not taking initiative within a group, or not adopting a leadership role, favoring a more reserved observer position. She had thus set a goal for herself. This meant taking more manifest initiative, voicing her own vision and giving energy to others rather than focusing on herself.

In reviewing the learning teams at the end of the second year, we could see the degree to which each member had evolved. Even more striking were comments such as "I now see what

all this has been about" or "rereading my earlier learning summaries gave me all the material I needed for talking about my own progress" or again "I could not have spoken as I did during an interview had we not had the exchanges in the LT," confirming that learning at deeper levels results in lucidity.

We had at this stage learned that the deeper learning we targeted aligned to literature on the subject. We had also found that this type of learning was individual but most often also depended on others. We had not estimated how true this was for students as well as the pilot group till we drew conclusions from the learning teams launched at executive level.

INTRODUCING LEARNING TEAMS IN EXECUTIVE EDUCATION

Encouraged by the results described above, we launched our search for corporations who would not only sponsor our development but participate as active learning partners.

Specifically enthused by the "learning team", two corporations - Redcats (world's No.3 Home Shopping Group), and Auchan Hypermarkets - took up sponsorship and we launched a learning team at each of them. For Redcats, the learning team consisted of senior managers with diverse responsibilities within the Family and Children's Wear Subsidiary. At Auchan, the learning team was based at one of the stores and members drawn from more junior management positions. At Redcats, the HR Director was interested in creating a "managerial community" and hoped that the learning team pedagogy would provide a new approach to learning, improving the management practice of the learning team members. Auchan HR policy is to develop participative management. As the Auchan learning team participants shared the same managerial function, it initially appeared that there was a readily identified common theme in helping managers to manage their own review teams (similar to quality circles) better.

In both corporations however, the real developmental issues, whether personal or collective, emerged as part of the learning process within each of the learning teams. We often heard: "In our companies we find it difficult to talk about crisis or failure or to build on this. We do not usually take the time to analyze. We are really swallowed up by operational aspects." Learning to talk together about critical issues takes time and we saw that, similar to our EDHEC students, executives did not immediately see the purpose of reflection or how to proceed. Identifying "critical incidents" within their day was often pivotal to learning: "I experienced the value of working with 'critical incidents'; also keeping a written record of experience radically diffuses tension. For me this does not come naturally and I have made great progress!" We discovered here an aspect of what Kolb & Kolb explain as 'owning and valuing one's own experience':

To learn experientially learners must first of all own and value their experience. Students will often say, "But I don't have any experience," meaning that they don't believe that their experience is of any value to the teacher or for learning the subject matter in hand (Kolb & Kolb 2005:207)

We have noticed that learners, whether in schools or corporations, search for past acquisition of information or teaching from which to 'produce the goods'; they have difficulty in understanding the value of their unique experience. And yet, as Kolb and Kolb suggest, it is "concrete experiences that allow the learner to re-examine and modify their previous sensemaking in light of the new ideas" (Kolb & Kolb ibid).

In both companies, in spite of the diversity in the nature of management responsibility and sector, learning to talk personally, without inhibition, and listening to others without judgment and without knowing what will emerge, were major hurdles. At the end of a

meeting, one person said, "I discovered the importance of sharing experience; of having the courage to say what had occurred and have others bounce off their reactions. I would like to apply this process with my colleagues and in my work teams." Thus, striving to transfer learning to the corporate work-place from the privileged confines of the learning team is similar to the EDHEC students' search for making actionable sense of lectures on management theory.

Both corporate learning teams focused on developing each manager as well as the development and cohesion of the team members. At Redcats, difficulties appeared at the start when members struggled to identify their 'raison d'être'. At Auchan, progress was inconsistent, frustration easily replacing euphoric insight, and crisis became a key feature within the nine-month period of the learning team experience.

Initially, we noted the nine-member learning team meetings were calm and orderly. Members gradually disclosed their management practice and even volunteered suggestions for improvement in their mission with their collaborators who were in contact with customers on a regular daily basis. As previously explained, the Auchan learning team was launched at one particular Hypermarket, with the agreement of the store director and his HR manager. We were insistent the learning team should be allowed to live its learning team 'life' without intrusion into what was discussed. However, messages of discontent gradually filtered from the HR manager through to headquarters. One of the coordinating team members recalled:

I was traveling with two directors from Auchan corporate HQ to the hypermarket for a mid-cycle review. On the way, news was gently broken that the store director was thinking about canceling further learning team meetings because they seemed to be 'leading nowhere'. I realized from the conversation that the HR manager was not respecting our agreement but regularly intervening between meetings with her store

managers. Yet, to me, everything seemed 'right on schedule.' 'Great' I exclaimed, much to the surprise to my traveling companions. 'The learning team is changing its focus.

As it turned out, this was indeed a critical moment in the life of the learning team. They were shifting into defining their own learning objectives and learning to spread their wings. At the end of the nine months when we met to close, all members referred to this critical time. Those from HQ still talk about it, recalling how often training missions are abandoned because of instability, negativity and doubt at a given moment. The advantage of such critical situations is that they provide precisely the type of shared experience which enables what Raelin (1997) calls 'premise reflection' as opposed to process reflection, distinguishing the two as follows: ...

Process reflection is an examination of how we go about problem solving with a view toward the procedures and assumptions in use. Process reflection also takes into account how we think about a given situation.

Premise reflection goes into a final step of questioning the very presuppositions attending to the problem to begin with. In premise reflection, we question the very questions we have been asking in order to challenge our fundamental beliefs" (Raelin 1997: 567 citing Mezirow 1991).

Premise reflection is a form of double loop learning as the underlying assumptions are brought to the surface.

Both corporations required us to review the learning team process; each member was interviewed, and a plenary review meeting held with participants and corporate sponsor

representatives. In both sectors, it was remarkable to note how each member had learned differently. Some had developed confidence, others had understood about collaboration, others talked about 'seeing' peers in a different light. Others still referred to a brief MBTI session done with the team and how that had helped in broadening understanding and thinking exclaiming: "At last, we have experienced management training delivered in an innovative way."

When comparing our experience in the corporate and academic settings, perhaps the greatest contrast is the corporate teams' access to concrete everyday managerial experience. These experiences made it easier for them to transit all aspects of the learning cycle, deepening learning through dialogic exchange and through the role adopted by the learning manager. "Sharing experience raises awareness and this is vital as the moment you integrate a board of directors, you are isolated. The opportunity to step back and position things in relation to yourself and your values is fundamentally important."

The experience at executive level throws light on fostering deeper learning contexts within graduate programs, such the EDHEC *Grande Ecole* program. Before presenting these recommendations, together with those directly linked to the graduate program, we outline specific and other lessons we have learned over the past three years.

LESSONS LEARNED

Five years ago, EDHEC faculty was asked to reconsider its approach to teaching leadership.

The "learning team", promoting active leadership learning by targeting deeper learning through experience and reflection, was a practical response to this request. Today, we consider this a success, even if student maturity and organizational difficulties could call this assertion into question.

Within programs at Master-level, approximately half of the first year learning teams and 70% of the second year teams successfully established a hospitable conversational space and mentoring relationship, enabling students to deepen their understanding of managerial competencies associated with leadership and strengthen their ability to apply what they had learned. These percentages are explained by the following:

- The time required to establish this type of learning environment
- The differing patterns of individual maturity and authentic collective learning that do not occur simultaneously or in parallel
- The capacity of the faculty to fully enter the learning manager role and to accept the natural resistance at the launch of the learning team.

We noted that most teams were characterized by resistance on the part of students and/or learning managers. "The greatest readiness to change occurs with moderate dissatisfaction... deriving from learning theory which says that readiness to learn is greatest when there is moderate anxiety. Readiness to learn and readiness to change are two faces of the same phenomenon" (Cohen 2003:157)

We also noted however that when a member proved resistant, this did not necessarily obstruct team development. Without threatening effectiveness, the learning team offers a degree of liberty regarding individual inclusion and involvement. We learned that while defensive routines (Argyris 1993; Realin 2006) are difficult to bear, it is often through them that deeper learning was accessed.

The number of students and faculty involved in the project also renders it ambitious; in this respect to date, institutional resistance still exists. The cost of facilitating so many learning teams is high, thus consideration is being given to the learning team process becoming optional.

At MBA and executive level, results are more spectacular; corporate evaluation suggests a high level of satisfaction amongst learning team members. Both partner corporations, where pilot teams were launched, have requested new and more widely spread learning teams, with members from the original teams being prepared for the role of learning manager. The manifest ambition within the corporate sector is to adopt the learning team as a way of deepening learning and consolidating learning cultures within their sectors.

We could say that pedagogy at EDHEC will never again be considered as it was before the learning teams were instigated. Reflection and the creation of learning teams genuinely intrigued all faculty members, provoking a more global and certainly more transversal learning perspective, with students more confident in their capacity to learn from and through others. So, is there potential for taking this type of learning forward?

Our concluding comments, drawn from the contexts in which we worked, are considered from two major standpoints: institutional factors to be taken into consideration when launching learning teams; and the position adopted by the learning manager, as well as the manner in which the learning team is managed.

Institutional Factors

Firstly, as doubt and anxiety are consistent characteristics displayed by learning team members, it is vital to establish a climate permitting each member to experience confidence in other members as well as in the learning manager. This confidence cannot be established without an explicit message from the top of the institution, whether this be an academic institution or a corporation, to all stakeholders of the learning team.

In the case of an academic entity such as the one we have discussed, this consists of:

Positive discourse that acknowledges the mentor (or coaching) role adopted by a
 professor as an integral part of his or her professional contribution to the institution

 Adjusting pedagogical challenges within the curriculum for the role of learning manager to exist alongside, and at the same level as, recognition of more traditional professorial roles (See Cohen 2003)

In the case of a corporate entity, it is essential that conditions which permit the launch of a learning team are well defined by the person (internal or external to the corporation) who is responsible for facilitation (the learning manager role) and ensures the following:

- Assure a guarantee of confidentiality: the corporation undertakes not to demand or require content reviews of learning team meetings
- Avoid any demand or requirement to 'produce' tangible, evaluated results
- Avoid exaggerated pressure on learning team members that might inhibit authentic
 contribution, to allow a member to exit the learning team after the first two
 sessions, should participation appear too taxing personally (with obvious
 protection against loss of privilege or promotion). Such a safeguard is ensured by
 the following three-stage procedure prior to constituting the learning team:
 - 1. Presentation of what a learning team is about or discussion between potential learning team members and their line manager
 - 2. Meeting with the HR director who confirms corporate engagement
 - 3. Prospective Learning Team members attend two meetings prior to either engaging in active team membership for the remaining period, or exiting.

Without the necessary recognition and corporate congruence between espoused mission, values and practices, including the practice of the learning team process, this type of learning risks failure; recognition, support and transparency are keys to the launching of such projects.

We should add to the above the cultural dimension within which the learning team is launched. In a business school founded on deductive, Cartesian teaching practices, learning teams are a considerable cultural shock with their inductive and collaborative aspirations.

For the corporations we have studied, one functions on a well established affective mode and the other, according to a culture of control. Such cultural dimensions become an integral part of the learning process and constitute a challenge which can either be positive or detrimental to the existence of a learning team. All these aspects are critical and need to be taken into account, especially during the launch and at the first learning team meeting.

Role of Learning Manager

Our second point concerns managing the Learning Team. We remind readers that the learning manager role is different from traditional teaching with the 'expert' and 'receiver' dimensions this latter entails. Demands for being 'told' what 'should' be happening cannot be bypassed; learners, it would seem, expect to be informed in order to comply and then to experience. Yet, paradoxically in learning teams, members identify success as a radical shift in attitude about their own acts of management, largely as a result of having experienced what a collaborative approach to sense-making entails since, in the dialogic process, knowledge emerges together with appropriation of this knowledge.

As managers of learning teams, faculty will need to redefine how they position themselves with respect to the following three areas: engagement or consent; negotiation of time and space; and management of periods of doubt/rejection.

The specific question of "engagement" or consent

The learning manager contract does not include delivery of any specific knowledge; the objective is to create conditions in which members of the learning team produce knowledge or

transform experience into actionable knowledge. As a consequence, the learning manager is not responsible for the team's output or productivity. In legal terms, we could say there is a procedural obligation but without the obligation to produce results. The LM needs to be free to fully assume the facilitator role meaning that each team member is jointly responsible for the outcome of LT meetings, while the LM transfers energy, ensures ground rules are respected, listens, and questions as appropriate.

Learning Managers need to be debriefed, or receive what can be termed 'supervision', a term also used in psychotherapy with which it should not be confused, as the LT does not investigate emotional difficulties but focuses on conditions that favor learning, integrating aspects of managerial practice. LM debriefing can take a number of forms: with several other learning managers, with another LM in one-to-one sessions, or with their own external supervisor. Whatever form it takes, debriefing ensures rigor, lucidity and the detachment required to facilitate learning.

Negotiating time and space

Gradually, team members learn to acknowledge the importance of time and space provided by the learning team. Because of corporate constraints and short deadlines, LT members initially have difficulty in accepting the importance of taking time to reflect. Thus, members may want justification for time invested. Moving from active to reflective mode involves letting go of habits and often entails a period of turbulence within the team.

Managing periods of doubt or rejection

Learning teams experience discomfort in transitions. When team members become aware that team effectiveness involves investing personally during meetings as well as outside meetings, they experience a degree of unease. They may become resistant, defensive, critical of the

process in general or towards the learning manager. Learning managers need to prepare themselves for this phase. In order to ensure they do not add voice to doubt or criticism, champions or providers within organizations also need to be aware that the group may transit a period of rejection. This phase is difficult for all stakeholders and yet it plays a vital role. Through this doubt and difficulty, the group creates a completely new type of communication and dialogic exchange. Then, and sometimes for the first time, we can say that we have reached a collaborative and reflective dimension in deeper learning, as is recorded by a member: "Logging critical incidents somehow gives us the 'permission' to doubt; in fact I think one of the keys to management today is the 'permission' as well as the 'capacity' to doubt and to call oneself into question."

At the beginning of this paper we defined deep learning as learning that fully integrates the four modes of the experiential learning cycle - experiencing, reflecting, thinking and acting (Jensen & Kolb, 1994). We have also referred to double loop learning (Argyris 1993), premise reflection (Raelin, 1997), dialogue (Bohm, 1990; Isaacs, 1999) and mentoring (Megginson & al 2006; Kram 1988); Darwin (2000) asks that mentoring research be reexamined and aligned to today's corporate context.

We found the above theories to be interrelated. While Raelin and others touch upon "interrelatedness", we do not find enough data on how theories of learning are 'operationalized'. We are not referring to 'operationalization' as defined by Easterby Smith et al (1993) but research that would carry the same 'validity and currency' as traditional research (Cohen 2003), impact pedagogical transformation in business schools as well as encourage and guide practitioners into transformational change. Because, as Cohen reminds us, "....faculty members are idealists who want to believe in education, and if given the chance to create extraordinary education, many will join" (Cohen 2003:166)

From our observation, student logs and interviews, faculty meetings, corporate reviews, and business school experience, we suggest that deep learning does integrate the four modes of the Experiential Learning cycle. However, it is the double loop process of Kolb's 'conceptualization mode' that enables the learner to re-examine previous sensemaking and make a profound shift in learning that goes beyond the "light of new ideas". Unlike Babson's or Wetherhead's major transformations, where scale and investment far exceeds what we undertook at EDHEC, we suggest that transformation is not always a matter of scale. On the contrary, the changes we experienced are relatively small yet their impact on development is considerable.

CONCLUSION

There is a small interval of time in which we can create a unique space. With all the difficulties, challenges, resistance and diversity, this space enables some people to learn something infinitely more precious than acquiring skill, knowledge, or achieving ambition. These people have grown inwardly and become closer to who they truly are. From this, whether at EDHEC or within our partner companies, we have seen very different leadership strengths emerge.

In the above sections, we have shown that this approach to learning can be implemented and that deeper learning can be achieved in spite of the many obstacles encountered. In fact, we found resistance to be an important vector of progress, not only for the piloting group in setting up the project, but also for the members of the learning teams once in place.

The challenge of confronting resistance and building solutions is a way of deepening learning and contributes to bringing about change. Perhaps one of the longer lasting effects of the learning team process has been the creation of new mindsets for all those involved.

In a world where change is constant, the future difficult to predict and organizations complex and unstable, managers and future managers will need to develop their own responses to their specific questions and problems. We maintain that the learning team is a tool particularly well-adapted for today's management; it is also a lever for developing yet undiscovered potential for managing present-day organizations.

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