Eureka Moments:
Pivotal Learning Experiences in the Workplace

by

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Abstract

This study aims to illuminate the content and structure of workplace learning by novice managers. Combining cognitive and humanist learning theory concepts, it explores the relationship between learning content and learning structure.

Data was collected through semi-structured interviews with ten early-career managers, in a retrospective look at specific workplace experiences, which resulted in significant learning.

The learning deemed valuable comprised of formulating a subjective meaning of the management role, adapting to human and organizational dynamics, and forming their own identity as managers and individuals. These processes intersected and occurred simultaneously.

The structure most commonly found started with some 'hard learning', when the novices experienced failure or surprise. The learning was dramatic, rather than gradual, and emotions along with high stakes played a role in mobilizing the learning effort and willingness to adapt. Stakes were largely internal, defined in terms of self-esteem or self-perception. Reflection, following the experience, was very much in evidence and much of the learning occurred in the movement between adaptation or experimentation and reflection. Learning was strengthened through repeat experiences, sometimes from different perspectives, and confirmed through successes. New perspectives and insights emerged some time after the triggering incident, usually through reflection.

Experiences triggered an examination and transformation of assumptions and values. Dispositional learning therefore occurred through an experiential, discovery process. These transformations led to experimentation with different ways of acting (procedural learning) and often led the novices to seek guidance. Dispositional learning thus emerged as the leading variable.
Guidance played a role in prepositional and procedural learning, and expanded the learners' horizons. Guidance did not precede the engagement with a situation, but was valued and sought from by the participants from a variety of individuals in response to specific workplace problems. The learners saw themselves playing the leading role, and factors internal to the learner exceeded external factors in importance. Self-confidence, self-efficacy, and the ability to reflect were most evident, and allowed the respondents to face new challenges, having developed an ability to treat task failures objectively, without impacting their sense of identity.
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Chapter 1  The importance of workplace learning

It is the year 2006, and the first baby-boomers are turning 60. North America and Western Europe face an imminent capability shortage as this generation approaches retirement age. In British Columbia, more than a quarter of the workforce is expected to retire in the next ten years. This exodus will impact both the private and public sector, cutting across all job categories.

Retirement of older employees is a normal occurrence in the job market. This time, however, it combines with the effect of decades of low birth rates, to create an acute shortage of workers at all levels. Predictions indicate that, by 2010, more people will be leaving the workforce in British Columbia, than will be entering it. ¹

While people shortages are expected across all ranks, the senior ranks will be those hardest hit by this exodus. Many of the retiring employees had progressed through job levels over the course of their careers. The expertise and experience they accumulated over past decades will be leaving with them, opening up vacancies at senior and management levels. As a result, developing incoming managers to replace the retirees will be particularly crucial. This is the reason for choosing the management sector as the focus of this study.

Workers filling these vacancies will have to acquire the skills and abilities necessary to meet the demands of the vacated jobs. This applies equally to skills development and adaptation by workers entering the labour market, as well as those already there, who will be stepping up to more complex or more senior positions. Learning for work will become an economic and social necessity.

Learning for work occurs in a number of places. Formal education and skills training play an important role in developing the skills and capabilities required for entry into the workforce. Continued education through formal training can maintain and develop those skills. However, important learning also occurs in the course of job performance, as novices learn what to do, how to act, and as they formulate their values and beliefs. It is this informal, spontaneous learning in the workplace by novice managers that is the focus of this study.

This learning through work provides most of the knowledge required for job performance (Billett, 2002b). Billet gives four reasons why workplace learning is a highly important, sometimes the primary, site of learning for work. First, for many employees, the workplace is the only site where vocational knowledge can be developed. Second, workplace experiences are a pre-requisite for many positions. Third, only in the workplace can novices learn about the world of work, and place their learning in context. Finally, Billett stresses that ongoing development of skills and adaptation to continually evolving vocational practice occur through work participation, over the course of one’s career. In his discussion, Billett focuses mainly on skills-based, instrumental knowledge relevant to a vocational practice and preserving its traditions; a limiting perspective. Such a narrow view is also reflected extensively in training and development literature (Marsick, 1987). Marsick argues that a new, broader paradigm is required. Learning must also consider the social interaction, and the individual’s perception of self.

This distinction is rooted in Mezirow’s (1991) differentiation of learning into three categories: instrumental, dialogic, and self-reflective. He defines instrumental knowledge as “based upon empirical knowledge, and... governed by technical rules”². Mezirow draws on Habermas to point out that different domains imply different modes and dynamics of learning.

In this study, I adopt a multi-faceted definition of knowledge to better understand workplace learning by novice managers. The job of a manager is arguably more complex than a role,

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² Mezirow (1991), p. 73.
which consists simply of ‘doing’. Peter Drucker (1973) summarized three key tasks of management – defining the organizational purpose, making work and workers productive, and managing the social impacts and responsibilities of the enterprise\(^3\). Managers set objectives, organize resources, motivate employees, monitor progress, and develop people. These tasks clearly extend beyond the ability to ‘know’ or to ‘do’. They represent complex, context-sensitive decision-making and judgements, combined with shouldering responsibility for the results. In the management job, the three planes of learning continually intersect (Marsick, 1987). For these multi-layered challenges, formal training diminishes in importance as the vast majority of knowledge is acquired during the course of job performance. Marsick cites a Honeywell study, which found that 50% of managerial learning was acquired as a result of challenging experiences and 30% through work relationships\(^4\). How does this learning in the workplace occur? How is the ability to make decisions, to act accordingly, and to formulate the necessary judgements developed? This is one of the guiding questions of this study.

Once it is developed, the ability to formulate judgements is demonstrated in how a manager acts in novel situations. Billet (1999), building on Piaget’s work (as cited in Billett, 1999), terms this ‘accommodation’ and defines it as “the process of developing new knowledge when faced with a new situation”\(^5\). He further classifies learning into three dimensions - prepositional or factual knowledge, representing command of facts and tools; procedural knowledge, comprised of knowing what to do and how to act; and dispositional knowledge, which consists of values and beliefs.

Taken together, these dimensions represent the intersection of internal psychological processes of the learner with the social dialogue of the workplace. Novice decision makers will have acquired much of the prepositional knowledge through prior schooling. In the workplace, they learn to apply this within a specific context (procedural knowledge) and

\(^3\) Drucker (1973), p. 40.
draw on it in making decisions, using dispositional knowledge to guide their decisions. Procedural knowledge – ‘knowing how to act’ – and the formulation of judgement, which draws on dispositional knowledge, will be the primary focus of the study.

It was a wise individual, who said that good judgement comes from experience, and experience comes from bad judgement. Authentic experience can offer a rich learning environment and developmental opportunity, as novices extend earlier knowledge to new situations, or grapple with a decision without a ready reference point. Informal learning arising out of the experience can be invaluable. Yet we know relatively little about the nature or structure of the experiences, which produce effective learning, as most of the learning design and program planning literature focuses on formal settings and structured programs.

Curriculum and program planning studies offer comprehensive advice on the design of formal, planned, training courses and programs. These typically start with a needs assessment, which comprises both the needs of the organization and of the learner. The assessment is followed by a determination of objectives, curriculum development, selection of instructional strategies, and culminates in the actual delivery of the training. A feedback and evaluation process completes the cycle, or may start a further cycle to deliver on the learning objectives (Nadler and Nadler, 1994).

Similar principles have been suggested in the literature on workplace learning. They have depicted learning as an orderly, progressive sequence of events, often orchestrated by others for the learner, only when he or she is ready (Billett, 1999). This orderly view sharply contrasts with Mezirow’s ‘disorienting dilemma’, which lies at the centre of transformative learning (Mezirow, 1991). Indeed, many learning experiences in the workplace don’t fit this orderly structure. They are rarely neat, as trainees respond to real-life problems. These problems are generated in random order, or in a sequence determined by the priorities of the workplace, not by the learning needs and readiness of the new manager or trainee. According to Marsick (1987), these challenging problems are an important site of learning.
Further, the literature appears divided on whether workplace learning is more effective when guided, or when structured as pure discovery (Smith, Ford and Kozlowski, 1997). Again, this debate takes place in the context of planned learning and often references the instrumental, or prepositional learning. I pose this question in the context of informal learning, which takes place during the course of delivering on authentic job responsibilities, and to all the dimensions of learning, which comprise a new manager's job.

**Problem Statement**

The purpose of the research presented here is to gain a deeper understanding of the elements and structure of learning, occurring in the workplace, in the course of work. The study will use the current discourses in the literature on workplace learning as a point of departure to describe, and to analyze, pivotal learning incidents experienced by novice managers.

Individuals, who entered managerial positions in recent years, will be asked to describe up to three significant learning experiences or incidents, which occurred in their workplace. They will be asked to select those incidents, which they consider important in developing their ability to successfully meet the expectations of their managerial role. It is hoped that from the analysis, a deeper understanding of the content and structure of these experiences will emerge. How did these experiences occur? How did they contribute to the new managers' learning? What did they contribute? Why was the contribution deemed significant by the novice manager?

The incidents will be probed to determine the learning content or outcome, as well as its structure, from the viewpoint of the learner. The relation to other events deemed relevant by the interviewee will be examined, as will the related processes and context, both organizational and personal to the learner. The interviews will be structured as retrospectives, in order to benefit from subsequent reflection and, possibly, improved objectivity. Responses will be examined against the criteria outlined below.
1. What do the responses indicate regarding what was learned? How do they inform us about the learning content and outcomes deemed significant by the learners? Will the findings be supportive of the focus on instrumental learning reflected in much of the workplace learning and training literature or will a different emphasis emerge?

2. What will the responses indicate about the structure of learning and about how learning is linked to a context? Will a personal or an organizational context dominate the focal horizon? Within the organizational context, will the connection to the larger organizational environment, the ‘big picture’, emerge as significant? Or, will their responses indicate that pivotal learning occurred in building on the smaller tasks without necessarily a connection to the larger context? And, will we find a connection between them, where one illuminates the other – the bigger picture making smaller tasks more meaningful and clearer, or an understanding of the smaller tasks acting as a pre-requisite to an appreciation of the larger picture?

3. Is there evidence that a specific sequence and timing matter? The learning experiences, judged effective by the interviewees, will be analyzed to determine if they represent a smooth progression (e.g. Billett’s ‘graduated pathway’). Or do they represent a non-graduated, random order of events, perhaps at a level of complexity for which the novice manager feels unprepared? Did the insight occur simultaneously with the learning incident or was it triggered subsequently? And if so, what was the triggering factor – a repeat experience, additional reflection, dialogue or other?

4. What degree of guidance will be reported by the interviewees, relative to these pivotal learning incidents? Who will emerge as the key player? The participants’ descriptions of the incidents will be examined for the presence of guidance and also for the timing of guidance, to determine whether they are more appropriately classified as guided or discovery learning. For those that represent discovery learning, evidence of after-the-fact guidance will also be sought. Quinones (1997)
has presented evidence that learner-initiated learning produced higher achievement – will this be confirmed?

5. How will the responses inform us regarding the importance of enabling competencies and other internal factors, such as intrinsic motivation, learning skills, communicative competence or decision-making skills? There is general agreement that factors internal to the learner play a very significant role in learning (Quinones, 1997, Sims, 1990, Smith et al., 1997). Are they pre-requisites to effective adaptation? Quinones (1997) stresses the positive role of self-efficacy and learner motivation on learning outcomes. Will the interviews indicate that the same is true for experiential learning?

6. What processes helped the novices adapt skills and knowledge already possessed to solving new and unfamiliar problems in the workplace? What role did emotions play? We know that learning for a task can become interwoven with new self-awareness and personal insights, as well as context awareness, essential to adaptive expertise (Marton and Booth, 1997). Did practices, such as reflective dialogue, journaling or de-briefing with a mentor impact learning? Were they perhaps the after-the-fact catalyst, allowing a deeper level of understanding of a recently lived experience?

7. What role did context play in the learning, both within and outside the organization? Did other external factors play an important role? For example, did the level of risk or reward impact the learning and if so, how? If yes, was it a constructive or counterproductive role in the eye of the learner? Did transfer between environments figure prominently?

The questions posed above aim to explore the multi-faceted nature of workplace learning. Current literature explores elements of the learning process, but it rarely addresses the interrelationships between them. Power and politics receive much attention (Forrester, 2002, Cervero and Wilson, 1997) from a critical theory perspective, and this discussion
generally takes place in the context of policy rather than workplace application. Development of learner subjectivity is a frequent topic of research (Albertyn, 2001, Fenwick, 2002, Usher, 1999, etc.), and is discussed in terms of outcomes, separately from the structure of the learning experience or the nature of the learning process. The learning process receives less attention, as does the workplace curriculum (Billett, 2002b). The content discussion conceptualizes outcomes in terms of instrumental learning, a bounded practice, which can be acquired from others, whether it is vocational know-how or professional judgement. This presents a limiting view, which does not fully consider the mediating effect of learner agency, learner subjectivity and motivation, all factors at play in the learning process. It also does not address how learning occurs as a result of unplanned, spontaneous experiences served up by the workplace. These provide rich areas for study.

The questions posed above also explore workplace learning from the viewpoint of the learner. Much of the discussion in training literature in particular takes the viewpoint of everyone except the learner. Thus discourses adopt the perspectives of the planner, instructor / guide, or policy maker. They speak of interventions, and of ‘teaching’ rather than ‘learning’ moments. Program planning discussion and workplace participation theory contemplate structured, formal workplace programs of designed experiences. This approach tends to treat learning as objective and rational, yet we know that learning has intensely personal elements, and this also applies to learning for work and through unplanned work experiences (Mezirow, 1991, Marsick, 1987). Much of this unplanned learning is informal, structured only by the needs of the job or task, or by the social situations, which create it.

Many of the specific study questions posed above address the experiential curriculum of the workplace, and aim to integrate the areas of workplace learning content and outcomes with the attached learning structure, process and context. Workplace learning is conceptualized not as a series of independent steps, but rather as a multitude of interconnected actions and reactions, all impacting one another. For example, the needs of learners determine which element of content will be in focus. Learner biography determines which approach to learning will be most effective. It has been stated that "facilitating learning
experiences...requires knowledge of the goals and needs of the individuals involved."\(^6\) The best mentor or planner cannot fully factor in these internal and external factors. However, we can aim to equip the adult learner to take charge of the experience and make it an important and productive part of his or her learning.

An improved understanding of the forces and elements, which make these experiences meaningful and productive for the novice manager, can be helpful. It can assist new managers and their supervisors or mentors in selecting and structuring learning experiences in ways that may enhance their effectiveness.

Understanding the effects of sequence, repetition, and timing can provide guidance for assigning, or seeking, tasks. Insights into the role played by enabling competencies can guide how much emphasis should be placed on programs which develop them, and when these should take place. The relative importance of guidance has implications for resource use and specific novice-boss/mentor matches. Better understanding of the relative importance of linking smaller tasks to the broader context can enhance the efforts of both novice managers and their mentors/supervisors. Information gathered regarding the processes, which supported learning, can provide the motivation to implement such practices. Finally, understanding the role of context can assist both the trainee and the organization’s leaders in creating an environment conducive to effective learning – both inside and outside the workplace. Having a deeper understanding of the elements, which make learning through experience productive for the novice manager, can help support the development of new managers, and facilitate their adaptation to the workplace.

This chapter has outlined the problem context and has positioned the research problem within it. I have expanded on the research problem by raising more specific issues, focusing on those that represent actionable decisions, and have introduced a rationale for their choice.

Chapter 2 will provide an overview of the relevant literature on the topic of workplace learning, and experiential learning. It will first review the research on adult learning and provide definitions of common concepts and terminology. Theories with application to workplace learning will be summarized – particularly those concerned with experiential learning, discovery learning, transformational learning, and Billett’s theory of co-participation. Next, literature specific to workplace learning will be analyzed in relation to the study purpose and the more specific research questions outlined above. The chapter will conclude with a thematic summary, highlighting the areas of contention and the remaining gaps.

Chapter 3 will provide a rationale for, and description of, the research methodology. It will justify the use of semi-structured interviews and the retrospective viewpoint of respondents. Question choices will be related to the underlying theoretical framework and a rationale for the categorization will be provided. The interview protocol and sample selection logic will be described. Pilot interview results will be presented, and resulting modifications will be outlined. The chapter will conclude with a discussion of the limitations of the study.

Chapter 4 will present the interview results. Chapter 5 will provide an analysis and discussion of the findings, and will present conclusions. Chapter 6 will summarize conclusions and expand on the implications of this research for practice and for future study, highlighting where findings confirm or clash with earlier literature.
Chapter 2  Literature Review

The research presented in this study aims to explore significant learning incidents – the 'Eureka' moments – experienced by novice managers in the workplace, in order to illuminate their learning content and structure. Earlier, managing was defined as providing a purpose, making work and workers productive, and managing the social impacts. This chapter reviews the literature on adult learning, with particular focus on workplace learning, and learning by managers and other professionals.

First, major theoretical frameworks, which provide a foundation to this study, are reviewed. Cognitive, Humanist and Social Constructivist traditions are discussed, and the nascent integrated view of learning (Illeris, 2003 and Yielder, 2004) is introduced. Second, the content emphasized by the different theoretical frameworks is presented. This section also highlights the agency and intentionality of adult learners and discusses the participation metaphor. Third, discussion on the structure of learning is reviewed. This section discusses Marton and Booth’s (1997) anatomy of learning, Kolb’s (1984) experiential learning theory, Schon’s (1983) theory of reflective practice and Mezirow’s (1991) transformational learning theory. Next, the conflicting arguments in favour of guidance and discovery learning are summarized. Finally, research on the role of factors internal and external to the learner is presented, including a discussion on the role of context, and on traits attributed to the generation of learners, which the study participants represent.

The chapter concludes with a summary presenting the current conceptions of workplace learning, points of contention, and outstanding questions.

As stated in the purpose, our interest is with learning related to being a manager, and performing management decisions and actions. These include areas where choices may be governed by functional guidelines or professional standards, such as, for example, engineering or accounting decisions. However, they also include the management of people
and the surrounding context, which increase the complexity of decision making, as the novice manager is required both to ‘read’ and interpret the decision making context and the personal factors of those impacted.

The job of a manager involves both knowledge of what can be done, and decisions and choices, which determine what will be done. How do novice managers develop the ability to make these choices? Piaget (cited in Billett, 1999) classified learning into two processes – *assimilation*, which links existing knowledge and *accommodation*, which Billett summarizes as “the process of developing new knowledge when faced with a new situation” ⁷. Billett builds on this differentiation and proposes a classification of learning into three categories: (1) prepositional or “inert” knowledge, consisting of facts and absolutes; (2) procedural knowledge – knowing what to do and how to act; and (3) dispositional knowledge – which consists of an individuals’ values and beliefs. These terms will be used throughout this study. This research will specifically probe the intersection of procedural and dispositional knowledge. The choices managers make on how to act cannot be separated from dispositional knowledge – the formed values and beliefs, which provide the principles and criteria for their choices and thus guide their decisions.

**Theoretical Frameworks**

Theoretical frameworks referenced in this study include Cognitive and Humanistic theory, Social Constructivism, and the emerging more integrated theories, such as Illeris’ (2003) Comprehensive theory of learning and Yelder’s (2004) integrated view of workplace learning.

**Cognitive Framework**

Cognitive learning theory contributes to our understanding of how we learn. It focuses on the internal mental processes of the learner, through which new knowledge is acquired and organized. Piaget (cited in Kolb, 1984) conceptualized these as a movement which

⁷ Billett (1999), p. 153
originates with learning by sensing, and moves through the stages of observation, inductive reasoning to the development of reflective ability, and ability to synthesize these processes in acquiring new knowledge.

Cognitive learning theory distinguishes between different types of learning, as represented in Piaget’s distinction between assimilation and accommodation, referred to above. With age, these cognitive practices evolve as past experiences provide a frame of reference and cognitive structures to organize learning. The development of new knowledge is related to an external stimulus. Gagne (cited in Darkenwald and Merriam, 1982) separated the learning process into three elements – the stimulus or trigger, the learner who senses the triggering event, and the response.

What we perceive and how we learn is related to how it is organized. Stable, clear, well-organized cognitive structures facilitate learning (Ausubel, cited in Darkenwald and Merriam, 1982). Learning can take the form of either reception learning – absorption of knowledge shared by others, or discovery learning. Although Ausubel acknowledged the value of discovery learning for delivering insights, he preferred and prized reception learning for its efficiency.

Some cultural/cognitive theorists emphasize the influence of external stimuli and social contact. Vygotsky (1987) emphasizes the role of external influences in helping learners develop their cognitive structures. Thus more advanced guides can provide a structure, or approach, which a less proficient learner can adopt to formulate and solve a problem. Thus “what the child can do today in co-operation and with guidance, tomorrow he will be able to do independently”.

The emphasis on the value of guidance among the cognitive theorists appears to rest on two assumptions. One, the learning described is generally described in terms of prepositional, factual knowledge. Second, the assumption is made that those guiding the learning

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understand the problems of the learner, and that their objectives are aligned, since “facilitating learning experiences ...requires knowledge of the goals and needs of the individuals involved”

*Humanistic Framework*

The problems of the learner are at the centre of the humanists’ view of learning. The goal of learning is a meaningful existence of the individual, on his or her terms. Emotions and feelings of the learner play an important role. The learner is perceived as self-directed, aimed at self-actualization, and striving toward a more ideal self. Learning is conceptualized as a product of experience and goals (Darkenwald and Merriam, 1982).

The humanistic framework provides a clearer connection to what is learned than Cognitive theory. The purpose of learning is determined by life’s problems of highest relevance to the individual, as the adult learner initiates and directs the learning (Knowles, 1980; Tough cited in Selman, Cooke, Selman and Dampier, 1998).

*Social Constructivism*

Social constructivism construes learning as being a product of interaction between the learner and his or her world and provides insights into the structure of the learning experience.

Marton and Booth (1997) present a non-dualistic stance to understanding learning, which views the learner and their world as interdependent, rather than as separate entities. What is ‘real’ is individual, but it is defined neither by the person, or the world, but rather by the relationship between them. The learner and his or her surroundings are engaged in a continuous process of interaction, during which the learner partly adapts the world to him or herself and partly adapts to the world. It is during this process that we both learn about the world, and change as we reflect on our findings. This interaction of inner thoughts and beliefs with the outside world leads us to ask new questions, search the world around us, and

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reflect on what this means to us as individuals. Marton and Booth advocate this social constructivist view in that they believe we learn most not by undergoing this process in isolation, but in concert with others. When we ask about or observe others’ interactions with their surroundings, we formulate our own views and in that process, we form ourselves.

Thus social constructivism focuses on the relationships and transactions among the players in learning process. The individual learner plays a role by determining when to engage, and what to focus on. The external world plays an equally important role. According to Illeris (2003), some interpretations of social constructivism emphasize the role of the social interaction with the world to the exclusion of the internal processes of the learner.

**Integrated Theories of Learning**

To overcome this imbalance, Illeris (2003) proposes a comprehensive, integrated view of learning, and defines it as “covering all processes which lead to relatively lasting changes of capacity.” 10 Learning includes emotional, motivational and attitudinal dimensions. It is conceptualized as an integration of an external interaction between the learner and his environment, and an internal psychological adaptation process. The internal process comprises both cognitive processing of learning content, and “the emotional or psychodynamic function, providing the necessary mental energy of the process.” 11

Illeris sees the cognitive dimension as supporting the acquisition of skills and knowledge required to deal with life’s problems. The emotional dimension’s function is “to secure the mental balance of the learner”12. It is however the interaction with the external environment which triggers engagement of the emotional and cognitive dimensions.

His theory reconciles the cognitive approach with the social constructivist view. Importantly, it also recognizes the emotional aspect of learning, which drives the feelings and motivations.

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10 Illeris (2003), p. 397
He views resistance, caused by the learning situation, as having a very strong learning potential, and Illeris argues that “the value and durability of the learning result is closely related to the emotional dimension of the learning process.”

He builds on Piaget’s (cited in Billett, 1999) work and distinguishes four levels of learning: mechanical learning which requires no context, assimilative learning which adds to what is already known, accommodative learning which requires breaking down existing schemes, and finally transformative learning which represents a profound shift in orientation. Illeris’ ordering of these suggests an implicit hierarchy, which appears to be ranked by the magnitude of adaptation required of the learner. He criticizes learning programs as being designed for assimilative, instrumental type of learning and not addressing defences to learning, or providing for unintended learning.

His framework provides the main foundation for this research study, since it addresses both the learning process (how) and the receptivity to learning, which may well determine what is learned. His comprehensive theory integrates the role played by the learner’s environment, and recognizes the importance of processes internal to the learner, including his or her motivation. Finally, he examines the learning process from the view of the learner, a perspective shared by this study.

Yielder (2004) proposes an integrated view of how professional or management expertise is developed, which shares many elements of Illeris’ theory. His model contains the elements of prepositional knowledge, an internal integrative process, cognitive processes, interpersonal relations and professional practice. He argues that professional expertise consists of a critically reflexive stage, which considers all elements in a specific context and adapts the response accordingly. The model articulates professional learning and expertise as a fully conscious process, but is limited in that it does not consider emotional factors in learning. It takes the learning content as determined by the professional practice, and does not aim to address the determinants of what will be learned, or incidental learning in the workplace.

\[13\] Ibid, p. 401.
Learning Content and its Determinants

Learner at the centre

The adult learner’s intentionality, individual agency and biography play a crucial role in determining which work problems, or phenomena, will become the focus of learning.

Adult learners generally learn on purpose, often in response to a specific problem or concern. Havighurst's framework (cited in Selman, Cooke, Selman and Dampier, 1998) lists life's major problems to be solved. It reflects life's important passages, such as getting a first job, progressing in a career, raising a child, or coping with illness ¹⁴. These very personal life challenges matter to us deeply, and learning provides an important coping mechanism. Research has shown "that 83% of all adults sought learning in response to such triggering events as job changes, marriage, arrival of children, and retirement." ¹⁵ The participants interviewed in this study were facing such a significant 'life problem' in learning to fulfill their new role as managers.

The individual biography determines which problems adults consider relevant and the degree to which they engage in learning to overcome them. Stroobants, Jans and Wildemeersch (2001) found that adult learning created connections between life and work, impacting both.

The biography and subjectivity of the learner not only play an important role in the learning process, but also are often transformed through it. The ‘reinvention’ of self by woman entrepreneurs, reported by Fenwick (2001), can be construed as a resistance response to the combined pressures of the workplace and family or norms inconsistent with individual values. The women in the study reconstituted their interpretation of business success and reformulated their identity. Such a transformative effect of learning through work is evident in other studies as well. For example, Billett and Somerville (2004) emphasize the

¹⁵ Aslanian and Brickell, cited in USDE, p. 26
connection between learning for working life and the development of an individual's sense of self and identity.

Learning opportunities, which present themselves in the workplace, range from transitions (changes requiring adaptation when old responses are ineffective) to task characteristics, including the level of responsibility, obstacles and support (McCauley, in Van Der Sluis and Poell, 2002).

Despite these numerous acknowledgements that workplace learning takes place on many levels and contributes to identity development, much of the literature conceptualizes its learning content as mainly instrumental. For example, Billett (2002b) refers to a learning process mediated by others "who have already appropriated that knowledge"\(^\text{16}\), which implies that the learning is objective, prepositional or procedural. He defines workplace learning as the development of capacities for practice and understanding of procedure; it is intended learning.

Earlier, Billett (1999) describes workplace learning in terms of purposeful, guided "construction of knowledge for workplace performance."\(^\text{17}\) He also refers to it in terms of adaptive transfer, which consists of the ability to perform non-routine tasks and solve unfamiliar problems. Billett (2002b) seems to acknowledge that this conceptualization dominates the literature, when he states that "there remain concerns about the worth of ...what is learned through work. This learning is sometimes assumed to be concrete and procedural, rather than conceptual. It is perhaps too easy to categorize and dismiss workplace learning as being technicist or reproductive."\(^\text{18}\). His comment that some trainees may view guidance as "an affront to their competence"\(^\text{19}\) indicates a view of learning as

\(^{16}\) Billett (2002b), p. 32.
\(^{18}\) Billett (2002b), p. 40
\(^{19}\) Billett (2002b), p. 38.
prepositional or procedural, since surely no one can be incompetent in terms of their values or beliefs.

Similarly, Goldstein and Ford (2002) refer to the ability to operationalize and apply ideas and concepts in the course of work performance. Schon (1983) defines professional practice, in which he includes management, as “an application of knowledge to instrumental decisions”\textsuperscript{20}, where knowing is inherent in action, and may be tacit.

Beckett and Hager (2000) propose a broader view of workplace learning as judgment formulation, where decisions combine the cognitive, affective and social dimensions. Practitioners learn to separate the stage of the need for judgment from the stage of the actualization – what should theoretically be done vs. how will it play out? They also consider social impacts – how will what I do impact how I am viewed? They learn to distinguish the emotive and ethical considerations. This perspective presents a more complete view of what is learned, and comprises prepositional, procedural and dispositional elements.

According to Smith, Ford and Kozlowski (1997), such judgment formulation relies on two precedents – skills or factual knowledge, and the ability to read the situation. The ability to accurately read the context is one outcome of successful socialization to the organization. Wanous (1980) defines socialization of newcomers in broad terms “as those changes caused by the organization that take place in newcomers”\textsuperscript{21}. To succeed, newcomers must not only have the skills and the abilities to do the job, they must also correctly interpret what is expected of them, and have the motivation to perform to the expected standard or beyond. People complexities often provide the greatest challenge. According to Wanous, the organization has a significant influence on how the newcomer interprets his or her role and the entity’s expectations. Thus the ability to read the organizational context, and to interpret

\textsuperscript{20} Schon (1983), p. 50.
their new role, represents important learning required of organizations' novices. Others (Goldstein and Ford, 2002) also share this view.

**Participation Metaphor**

With respect to workplace learning, the dominant view in current literature conceptualizes *learning as participation in a practice*, and often learning is portrayed as *learning in practice for practice or as learning in practice through practice*. This portrayal again emphasizes the performance aspect of work, or prepositional and procedural knowledge, but also includes elements of dispositional knowledge.

Lave and Wenger (1991) articulate this metaphor by proposing the concept of learning situated in communities of practice, where the learner moves from peripheral participation to the centre over time, assuming greater and greater responsibilities. Their view integrates the cognitive process of learning with the social nature of learning. Apprentices acquire 'the culture of practice', which comprises both the knowledge of procedures as well as a 'sense of identity as a master practitioner', and dispositional knowledge about the practice.

Wolek (1999) similarly emphasizes the integration of various elements of work performance into a 'productive practice of a skilful process'. Acquired skills are comprised of a physical proficiency to perform a task, as well as of internal knowledge, or 'feel'. He deconstructs feel into four elements: ideas, sensations, perceptions, and feelings. According to Wolek, these elements of knowledge apply equally to physical occupations, where performance is embodied, as they do to management occupations.

Thus the emphasis on the different type of learning varies in the literature, ranging from an emphasis on instrumental learning to a focus on the formation of identities and subjectivities. But, whatever the learning, what do we know about how it is acquired?
The Structure of Learning

This section examines in greater detail the literature on the structure of the learning experience.

The Anatomy of Learning

Marton and Booth (1997) define three separate aspects of learning: the agent, the act of learning, and the object. Focusing on the learner, they dissect the process, which builds our ‘anatomy of awareness’, into elements of structure (the how) and the object or end product (the what) of learning.

The structure of learning is, simply stated, how we look at a problem. Thus a learner can focus on the whole problem, one or more of its parts, the relationship between the parts, or on the relationship between the parts and the whole. To understand a problem, the learner needs to appreciate all of these – the whole, the parts, and the relationship among them. Marton and Booth view learning as always situated in a context, and a full understanding therefore requires the ability to judge a problem both in context, as well as separate from it.

The learning process has varying levels of depth. At a base level, the learner may simply commit facts to memory, acquiring superficial (most likely prepositional) knowledge. A higher level of learning seeks understanding, and the highest level consists of learning for meaning. Learning for meaning can be evidenced by the learners reflecting on their actions, seeing themselves and the world in a new light or from a different perspective. Adopting new perspectives parallels transformational learning. The emphasis is on connections between the learning and the learner, and an impact of the experience on the learner.

The learner determines the object of learning. The element, which is brought into focus, is a product of the learner’s biography and intentionality, and the problem conceptualization reflects his or her prior knowledge and experience. These prior conceptions may impose limits on the learner’s understanding of the problem. External agents can help widen the scope of the learner’s focus and bring different aspects into view. According to Marton and
Booth, the act of learning and the object of learning are therefore highly interdependent, individual to the learner, and a product of the learner’s prior experiences.

**Experiential Learning**

Kolb (1964) also formulates learning as a process, where “concepts are derived from, and continuously modified by, experience.” Experience becomes a valuable tool for learning and development, and is acknowledged as being subjective. Kolb emphasizes that the process of learning requires the resolution of conflicts, since “…learning is best facilitated in an environment where there is dialectic tension and conflict between immediate, concrete experience and analytic detachment.” If there is no conflict between these, there is no learning. Kolb argues that “the transactional relationship between the person and the environment is symbolized in the dual meanings of the term experience – one subjective and personal, referring to a person’s internal state...and the other objective and environmental...”

Kolb views the process as comprised of progressive levels of learning. The most basic level, *acquisition*, views the self as undifferentiated in the world. From adolescence onward, learning progresses to the *specialization* level, which sees the self as ‘content’, interacting with the world in a dualistic relationship – “I act on the world...and the world acts on me..., but neither is fundamentally changed by the other.” Kolb contends that the highest stage of learning is *integration*, where the self is viewed as a process, able to transform, and be transformed, by the world. Kolb states that individuals can progress to this state either gradually, or “dramatically as a result of a life crisis”, a view consistent with Mezirow’s (1991) ‘disorienting dilemma’. According to Kolb, this highest stage represents a more

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24 Ibid, p. 35.
26 Ibid, p. 145.
active mode, as the individual sees opportunities to influence the world. The entire learning process thus occurs as a result of reflection on concrete experiences and conflicting ideas.

The emphasis on learning through work experience is also evident in Usher (1999), who argues that work needs, which shape the curriculum, reflect a merging and integration of different disciplines; and such a broad scope is difficult to incorporate into structured, more formal training. Similarly, Wolek (1999) challenges the cognitive emphasis and also conceptualizes learning as occurring through practice, observation and repetition, followed by reflection on process feedback.

**Reflective practice**

Schon (1983) pioneered the concept of reflective practice, where professional knowledge is formulated through reflection-in-action, which is an extension of experiential learning. When surprises happen, or a unique situation presents itself, professionals ‘reflect-in-action’ to reframe the problem. This ‘reflection-in-practice’ is a type of experimentation process, which can be iterative, consisting of examining the problem, reflection, reframing, further reflection and so on.

Schon also argues that managers engage in a reflection-in-action process, in a way which is fundamentally identical to that of other professions. (Schon uses the term profession to describe a *functional* professional practice, such as medicine.) “It consists in on-the-spot surfacing, criticizing, restructuring, and testing of intuitive understanding of experienced phenomena; often it takes the form of a reflective conversation with the situation”\(^{27}\). He acknowledges the role of the corporate culture, which “may promote or inhibit reflection in action”\(^{28}\) and thus impact learning either positively or negatively.

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\(^{28}\) Ibid, p. 242.
Beckett and Hager (2000) further illuminate how this learning may occur. The formulation of judgments combines the cognitive, affective and social dimensions and occurs as an organic, holistic process, situated in practice and in context and containing elements of the contingent, the practical, the process, the particular and the affective. Practitioners learn to distinguish the emotive and ethical considerations in their reflection.

**Transformative Learning**

Critical reflection and communicative competence are important ingredients of transformative learning (Mezirow, 1991). Transformative learning occurs when “we reinterpret an old experience (or a new one) from a new set of expectations, thus giving a new meaning and perspective to the old experience.” 29 Through it, learners rearrange their meaning perspectives (the rule systems of habitual expectations) and meaning schemes (the specific habits of what is expected). The first stage of such a transformation in perspectives is a triggering event, which Mezirow terms a ‘disorienting dilemma’, an experience, which presents a contradiction with a current meaning system. This disorientation creates a state of readiness to learn, and to change, in order to reduce the discomfort. Through reflection, and being willing to let go of perspectives developed from prior experiences, people can develop new meaning schemes.

Mezirow sees this as a social process, since “others precipitate the disorienting dilemma, provide us with alternative perspectives, provide support for change...”30 Mezirow’s trigger point of a disorienting experience has also been confirmed by the research of others.

London (1989) also views learning as a change process, with the degrees of change being determined by the speed of change, the unfamiliarity of conditions and environment, the cost and the risk. Learning can range from an incremental change to frame-breaking change. Frame-breaking change bears a strong similarity to Mezirow’s disorienting dilemma, since it

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involves “significant differences from prior or current conditions and ... absorbs energy, emotion, and financial resources.”

London uses new jobs and new roles, such as those experienced by the novice managers in this study, as examples of frame-breaking changes. He further links the learning method to the degree of change, and discusses “make-it-or break-it”, shock learning, and the experience of failure as possible frame-breaking learning methods. He does not suggest other methods for frame-breaking learning, implying that some degree of discomfort and high stakes are necessary for significant, rapid learning to occur. He offers that co-workers and supervisors can cushion the learner from adverse effects. London does not advocate such high stakes learning, although he acknowledges that “frame-breaking change will require a greater disconfirmation and stronger disorientation.” Thus he confirms the power of disorientation as a catalyst to learning, but views it as having limited use in effecting a transition, since “there is little time to discuss and reflect on the change, explore its implications…” This interpretation assumes that the learning and adaptation should be simultaneous with the experience, although this has not been established. His discussion draws an important link between a strong, dramatic experience as the triggering point and subsequent reflection and dialogue, which he sees as necessary to meaningful learning.

Elkjaer (2003) argues that meaningful learning originates with an important problem, which provides the impetus for learning, and views ideas and concepts as the tools for learning. She proposes an inquiry metaphor, where the development of experience to solve real problems represents the main purpose at the centre of the learning process. The method is paraphrased as ‘inquire to acquire’. Elkjaer draws on Dewey’s (1938) conceptualization of learning as “the continual transaction between the individual and the environment” and

32 Ibid, p. 32.
33 Ibid, p. 32.
views learning as “a practical rather than a cognitive process” 35, and knowledge as embedded in a community of practice. Context plays a critical role, as it determines the content to be learned. She criticizes the participation metaphor as lacking definition in how content and method impact learning. Elkjaer thus merges the “what and how of learning” 36.

**Discovery or Guided Learning for the workplace?**

In the workplace, learning occurs through routine and non-routine problem solving (Billett, 1999). This section shows that it has been conceptualized both as an important, intentional, work activity directed toward job performance, and as a by-product of engagement in work activities. The literature on workplace learning is divided on whether it should be structured as pure discovery learning or as guided learning (Smith et al, 1997). The differences in conceptions contribute to the divergent views reflected in this debate.

Ball (2003) conceptualizes learning as flowing unintentionally from an intended engagement in an activity. Fuller and Unwin (2005) share this view in stating that “learning is not the primary goal of the workplace but a by-product of engagement in the activities and relationships…” 37. In examining the learning patterns of older employees, they found that these workers continue to learn by doing on the job, with the support of colleagues. In the authors’ view, there is no advantage to a structured program over this spontaneous learning on the job.

Many disagree, and those that view workplace learning as incidental are outnumbered by those who view it in terms of ‘managed’ training (Lave and Wenger, 1991; Smith et al., 1997; Billett, 1999, 2002a; Goldstein and Ford, 2002; Wolek, 1999). These voices tend to conceptualize the outcome of workplace learning in terms of performance, and tend to emphasize learning through guidance.

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37 Fuller and Unwin (2005), p. 24
Lave and Wenger (1991) refer both to guided learning and to learning through experiences. However, since the experiences are controlled by others, this represents a form of guided learning. Novices progress from peripheral participation to the centre in progressive steps. The closeness to the centre is defined by the importance of the tasks performed. The authors distinguish between a learning curriculum and a teaching curriculum. “A learning curriculum consists of situated opportunities...(and) is a field of learning resources in everyday practice viewed from the perspective of the learner”\(^{38}\). Experiences thus provide learning opportunities, but learning is guided through access to these opportunities, controlled by those at the centre, the master practitioners.

Billett (2002a) argues that workplace learning is not an informal process or a by-product, but rather a highly structured series of progressive, guided experiences aimed at sustaining a vocational practice and strongly advocates guided learning (Billett 1999, 2002a, 2002b, 2004).

Billett (1999) dissects the process of learning and examines factors which help and hinder the process. He builds on Piaget’s distinction between assimilation and accommodation and echoes the theme of Vygotsky’s (1987) zone of proximal development, which allows learners to expand their abilities under the guidance of those with greater knowledge. He does not distinguish the learning process for various types of knowledge (prepositional, procedural or dispositional), although Vygotsky’s (1987) examples refer primarily to prepositional and procedural knowledge, such as the solving of puzzles. Billett aims the guidance not only at mastering workplace procedures but also at the development of dispositional values or attitudes. He states that “although both procedural and conceptual kinds of learning can be achieved through workplace experiences, the development of some kinds of conceptual and symbolic knowledge are only likely to be learned through interventions to this end”\(^{39}\).


\(^{39}\) Billett (2002), p. 35
Billett likens workplace learning to an 'immersion', and proposes that knowledge is "most likely acquired through a combination of engagement on work tasks of increasing accountability, the close guidance of other workers and experts and the more indirect ongoing guidance provided by the setting." 40. It is this combination, which provides the grounds to develop transferable knowledge, applicable to new unstructured situations. The access to the experiences is best guided and staged and Billett (1999) proposes a four-point framework for the design of guided workplace learning.

The first element in guided workplace learning is a graduated pathway, where tasks gradually increase in complexity and impact, and where the successful completion of a simpler task signals readiness to progress to more challenging tasks. Yet training occurs among many other influences and learning opportunities (Goldstein and Ford, 2002). Billett does not offer suggestions on how the graduated pathway should respond to these external random influences.

The second element is access to the product of learning, or ‘goal end’ result. Billett’s basic premise is that as trainees experience the consequences of their performance, their learning gains greater meaning. This parallels Marton and Booth’s (1997) conclusions that those who learned with a focus on meaning attained a higher, deeper level of learning. Billett does not address how learning for meaning is related to motivation, although he refers to ‘the indirect guidance provided by context’.

Direct guidance by experts comprises the third element of Billett’s framework. Experts, acknowledged by the trainees to be credible, can guide by modeling actions, demonstrating behaviours, and transferring their procedural knowledge. Beyond credibility with the learner, he is silent on what characteristics, such as competencies or personality traits, the guiding experts must possess in order for guided learning to be effective.

\[40\] Ibid, p. 155.
The fourth and final element of Billett’s framework is the indirect guidance provided by others and the environment. It is always present as trainees observe ‘what is going on’, what others do, and how and why they do it. This conception parallels closely the social guidance identified by others (Wanous, 1980) and implies a reflective process on the part of the learner.

In a subsequent piece, Billett positions workplace learning as a product of participation in a social practice, with new knowledge arising out of an inter-psychological process between the learner and the source, relying primarily on a cognitive framework (Billett, 2002a). Workplace experiences provide learning opportunities and their authentic, goal-oriented nature provides the motivation. These experiences are structured by the norms and business practices of the workplace, and directed at sustaining existing practices. Billett employs examples of precisely structured, progressive steps used to train apprentice hairdressers, or fishermen, to argue that learning at work is not informal, since a clear ‘curriculum’ of existing practices exists. In this work, Billett recognizes that the learner impacts learning by how he or she engages with the experience.

Later, Billett (2002b) puts more emphasis on the part of the trainee, acknowledging that individual agency acts as the mediating factor by determining the amount of effort, ascribing motives and judging the credibility of those providing guidance. He recognizes the important role that learner biography plays in this process and emphasizes the interdependence between cognitive and social experiences. He reiterates three key contributors to learning practice through work: (1) engagement in the task, (2) direct guidance of co-workers; and (3) indirect guidance of the workplace. Social partners can assist in knowledge transfer, by managing the pace and sequencing of activities, and by providing the ‘guided pathway’. This pathway is premised on tasks of increasing criticality and accountability, which hold increasing risk associated with mistakes or non-performance, in a process guided by those who are more knowledgeable and at the same time sensitive to the learner’s readiness to progress. Learning results continue to be defined in terms of prepositional and procedural knowledge, and the influence of the workplace overshadows the impact of the learner.
The guidance theme is developed into a proposed framework of three planes of guided engagement. The first plane consists of everyday participation at work, in tasks of increasing responsibility and complexity. The second plane consists of guided learning for work. This comprises intentional strategies such as modeling, coaching, questioning, and providing analogies. These efforts are aimed at "developing the values, procedures and understandings that would not be learned through experience or discovery alone."\(^{41}\) The third plane is represented as guided learning for transfer, aiming to facilitate extension of knowledge to other, unfamiliar situations. Billett underlines that "learners can be guided to see both variance and invariance across workplaces."\(^{42}\)

In a more recent publication (Billett, 2004), the learner takes on a larger role, as a co-participant in learning. Co-participation is a reciprocal process, where the workplace offers learning experiences, and the learners determine their own degree of engagement. Thus individual agency determines the degree of engagement and, consequently, learning. Employees can block and disengage, if goals are not aligned with their own. Billett again mentions progressive sequencing of experiences, echoing the theme of a graduated pathway.

In essence, Billett's model is based on active management of workplace learning by others, who are presumably wiser and more knowledgeable. He concludes that "although both procedural and conceptual kinds of learning can be achieved through workplace experiences, the development of some kinds of conceptual and symbolic knowledge are only likely to be learned through interventions directed to this end."\(^{43}\)

The workplace context also provides guidance, by linking learning experiences to the broader goals of the organization (Billett, 1999.) By having access to the goal end result, trainees experience or appreciate the consequences of their performance, and this lends a meaning to

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\(^{41}\) Billett (2002b), p. 33.

\(^{42}\) Ibid, p. 35.

\(^{43}\) Ibid, p. 35.
their learning and performance. This viewpoint requires that the goals have personal significance to the learner, a qualification Billett does not make explicitly, although he does consider the mediating factor of the learner’s agency.

Billett’s workplace pedagogy builds on the cognitive and social constructivist traditions, and his frameworks tend to be deductive, rather than inductive. The empirical evidence presented to support the ‘guided pathway’ pedagogy relates to vocational training. The approach is in sharp contrast to the significant learning that can result from experiences for which we are unprepared, which present disorienting dilemmas and force us to question our assumptions and fundamental beliefs (Mezirow, 1991), and which result in more complex learning. Billett does not consider such unintended learning, or explore discovery learning in the workplace.

In contrast, a number of authors stress the importance of learning through experience. Margolis and Bell (cited in Sims, 1990) state that experience is the richest resource for adult learning and underlie the importance of active participation. Others have suggested that the workplace curriculum should employ a variety of examples, or stimulus variability, to facilitate transfer and inductive learning (Gick and Holyoak, cited in Smith et al., 1997) and that the variability should be progressive (Smith et al., 1997). These viewpoints acknowledge the value of both guided and discovery learning.

The workplace, rich in experiences, can provide many opportunities for inductive learning through discovery and experimentation.

Kolb’s (1984) theory of experiential learning construes learning as induced from experience, through a process of experimentation, observation, and reflection. It views ideas as “not fixed and immutable elements of thought but . . . formed and reformed through experience.” 44 This process is continuous, recurs with each experience, and encompasses all types of learning including adaptive learning as well as attitude changes. Kolb does not emphasize

the acquisition of simpler, prepositional knowledge, but explicitly mentions procedural and dispositional learning, which is more complex.

There is considerable evidence that discovery learning is more effective in the acquisition of more complex skills and adaptation to novel situations (Smith, et al., 1997; Sims, 1990.) An empirical study (Swaak and de Jong, 2001) explored the quality of discovery learning. The authors built on earlier research, which found that simulations provide opportunities to gain intuitive knowledge. They attribute some of the effectiveness of discovery learning to its richness – the ability to absorb more information useful to the learner simultaneously. Swaak and de Jong carried out experiments within the domain of physics, engaging students from various domains in experiential learning. The study involved subsequent tests of acquired knowledge, measuring both the accuracy and quickness of responses. The authors found conclusively that discovery experiences were highly effective in the acquisition of intuitive knowledge, which allowed participants to anticipate answers to 'what if' questions correctly and quickly. Those, whose scores improved the most following the discovery learning phase, were physics students with some theoretical background relevant to the problems. This finding relates to our purpose, as novice managers also aim to build on theoretical foundations acquired through formal training.

Discovery learning, by definition, entails a high degree of learner control. A high degree of learner control builds meta-cognitive skills, which favourably impact learning effectiveness (Smith et al., 1997). Discovery learning can also occur through trial and error simulations (Swaak and De Jong, 2001) directed at a specific problem. When the problem is significant to the learner, and initiated by him or her, the learning will not be threatened by the defenses of the learner (Illeris, 2003). This view is supported by Quinones (1997), who cites research showing that motivational factors significantly impact on learning performance, and that learners who are not motivated may fail to benefit from training, or guided learning.
Factors impacting transfer

Motivation is one of several factors known to impact training. This section discusses the impact on workplace learning of factors external and internal to the learner.

External factors


Organizational support provides both the resources to support training and the incentives for trainees (Goldstein and Ford, 2002). Quinones (1997) argues that organizational framing for training plays an important role, since organizations can position training as punishment, reward or condition of continued employment. He further proposes that the organizational context affects trainees as they form expectations and these in turn impact training outcomes. He posits that the organizational context acts through the trainee by impacting motivation, and self-efficacy. However, he does not present empirical evidence to support this conclusion.

An empirical study conducted by Lim and Johnson (2002) does provide evidence to support this viewpoint. The authors studied factors influencing learning transfer, by examining the adoption in practice of concepts learned during a three-week course on human resource development, offered to human resource practitioners, within a large international organization. The study tested the degree of learning through tests and the degree of transfer through self-assessment questionnaires, completed by the participants. The transfer environment could be considered positive, as the organization put on the course with the objective of implementing the tools in practice through the HR professionals.

Lim and Johnson’s findings underline the importance of relevance of learning to worklife problems. The major reason found for high rates of transfer was the opportunity to use the
lessons learned in practice, while lack of opportunity was associated with low transfer. Attending ‘with a mission’ appeared to have a positive effect and allowed participants to extract elements relevant to their needs, confirming the impact of learner intentionality. The match between departmental goals and the learning goals was also found to be significant. The three most important factors within the job environment related to the trainee’s immediate supervisors. Lim and Johnson conclude that “without a strong match between training content and the trainees’ work roles, it is unlikely that transfer will occur.”

The major contribution of the Lim and Johnson study lies in the ranking of factors felt to positively (as well as negatively) impact learning, and the empirical support for this ranking. The crucial role played by supervisor support is underlined, as is the need to have an opportunity to apply the learning within a reasonably short time frame.

Lim and Johnson’s research informs this study by identifying factors contributing to learning transfer. The group has similarities to my target group, as the participants were college-educated managers. However, its relevance is somewhat limited, since the managers attending were not novices, may have some unique characteristics common to Human Resource professionals, the transfer studied was from an academic setting, and the study took place within a Korean conglomerate, where cultural (both ethnic and corporate) values may differ.

Others echo Lim and Johnson’s conclusions on the crucial role played by the supervisor. The importance of an external agent to guide workplace learning is strongly argued by Billett (2002b). He draws on work by Vygotsky, when he states that “knowledge required for vocational practice does not emanate from within the individual. Instead, it is socially constituted and refined over time.” He further argues that social partners, such as workplace supervisors or mentors, can support transfer by being sensitive to the trainee’s readiness to progress and by managing the pace and sequencing of learning experiences.

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45 Lim and Johnson (2002), p. 46.
46 Billett (2002b), p. 32
The importance of a supportive supervisor or mentor support to learning is well documented. In Darwin’s (1998) qualitative study on characteristics ascribed to mentors, protégés reported that mentors provided them with opportunities and visibility. Subsequently, she successfully argues that mentors also help their trainees function within the organization and successfully negotiate their way through the political and social context and cites research, which showed that having a mentor leads to career success (Darwin, 2000).

**Internal factors**

There is an increasing body of evidence, which views factors internal to the learner as the most significant. These include individual biography (Billett and Somerville, 2004; Hodkinson, Hodkinson, Evans, Kersh, Fuller, Unwin, and Senker, 2004), motivation and goals (Quinones, 1997, Sims, 1990, Lim and Johnson, 2002), meta-skills and self-awareness (Smith et al., 1997, Lim and Johnson, 2002, Hodkinson et al., 2004) and learning styles (Van der Sluis and Poell, 2002).

Hodkinson et al. (2004) attempt to integrate the impact of an individual’s personal history, or biography, with existing learning theory. In a small ethnographic case study, it was shown that, in the same workplace, two individuals had very opposite reactions to the same initiative. The difference in reactions stemmed from their prior experiences, which formed very different frames of reference.

The individual biography determines which problems adults consider relevant and the degree of engagement in learning to overcome them. Stroobants et al. (2001) found that adult learning created connections between life and work, impacting both. Individual ontogenies also determine how meaning is construed from experiences.

Individual biography will impact how adults learn. Individuals can exert influence on their environment through their learning behaviour (Van der Sluis and Poell, 2002.) Their study of early career MBA’s showed that the trainees engaged in planned learning, setting specific
goals, and driving their own learning experience. Such planned learning in turn created further learning opportunities, as learning goals were communicated to supervisors and others, similar to the effects found by others, cited above (Lim and Johnson, 2002). The key theme in these studies is the positive effect of pro-active management of the learning by the learner.

Positive experiences build a sense of self-efficacy, as Ball (2003) has shown in a study of trade union education, where trainees’ attitudes to learning changed following a positive experience with applied training. Self-efficacy has been proposed as the leading variable in workplace learning (Gist, 1997).

The theme of learner agency and learner control has been an important element of adult education since Knowles introduced the concept of andragogy (e.g. Knowles, 1980) and integrates closely with learner motivation and content relevance. One of Knowles’ main points was that adults want to learn what they feel they need to know and what is relevant to their existence, echoing Havighurst’s (as cited in Selman, Cooke, Selman and Dampier, 1998) ‘lifeworld’ theme. Quinones (1997) has shown that trainee motivation and perception of self-efficacy positively impact transfer outcome. Further, a positive workplace environment acts through the trainee in raising levels of self-efficacy, encouraging effort and motivation, and positively impacts on learning outcomes.

A number of important enabling competencies are among the internal factors which support learning. Those who are aware of their own cognitive processes and can monitor and evaluate their own learning strategies – in other words those who posses both self-awareness and certain meta skills – are able to more effectively apply certain skills, such as judgment (Smith et al., 1997). The authors successfully argue that the development of adaptive expertise requires such ‘knowledge structures’ and meta-cognitive skills. Further, adults transfer such process and meta-cognitive skills between roles and settings and this facilitates new learning (Hodkinson et al., 2004).
One meta-cognitive skill acknowledged for its importance to learning is reflective thinking (e.g. Schon, 1983; Wolek, 1999; Mott, 1996; Moore, 2003; Merriam, 2004). Mott (1996) emphasizes the importance of reflective thinking and the movement between uncertainty and exploration. She concludes that practitioners develop deep knowledge of theory through reflection on their own actions in practice. A more recent article similarly defines practice-based learning as reflection on, and appraisal of, one’s own performance (Moore, 2003).

The ability to think critically, to reflect and examine one’s assumptions, is critical to significant learning, since reflection is a crucial element of transformative learning, along with the ability to engage in rational discourse (Merriam, 2004).

Thus the emphasis emerging in literature is on a link between the workplace environment, an external factor, and self-efficacy and the motivation to learn, which are internal factors. Overall, internal factors weigh more heavily in their importance to the learning process, and ability to reflect is highlighted as critical. These internal factors also include emotions.

Role of emotions

As Illeris (2003) points out, the cognitively oriented literature on learning has not adequately considered the role of emotions in the learning process. Research on workplace learning rarely mentions emotions. Yet emotion can both motivate learning and form a major barrier, as shown in a study of self-directed learning by women with breast cancer (Rager, 2003). Rager found that many used learning as an important coping mechanism in overcoming fear, and also reported that "emotions interfered with their ability to begin learning"47. The ‘reinvention’ reported by Fenwick (2001) also corroborates this theme.

Emotional factors and reactions are commanding increasing attention (e.g. London, 1989; Illeris, 2003; Fuller and Unwin, 2005), as the importance of feelings to motivation is

increasingly becoming evident in research findings. The emotional reaction to workplace stress was a factor evident in Fuller and Unwin's (2005) study. Beckett and Hager (2000) acknowledge the importance of the affective factors in learning, as does Wolek (1999). A learner's motivation is impacted by factors, which may vary among generations.

**Generation X characteristics**

The study participants, currently close to age 30, are members of "Generation X". This generation is defined as individuals born between the years 1963 and 1977, whose characteristics differ considerably from the Baby-boomers they will be replacing in the workplace (Caudron, 1997; Cordeniz, 2002). As children of working, often single parents, this generation learned self-reliance early in life and became more peer- than parent- or authority- oriented. Growing up in a recession, they expect less of a career and tend to view work as means to an end, not as an end in itself (Cordeniz, 2002). She highlights their traits of independence, peer orientation, technology reliance, and desire that work should align with their personal values, as being relevant to workplace learning. Caudron (1997) echoes these themes, and further stresses that a paternalistic approach to training is not appropriate for this generation and recommends in its place experiential training, using simulations. She also notes that this generation likes to be in control of their development, and is more likely, and more comfortable, to choose technology as a medium to acquire knowledge.

**Summary and Implications**

The review of literature above shows that the social constructivist view dominates the literature on workplace learning. Learning is conceptualized as a process, where both external factors and internal factors play an important role, and learner agency and biography represent important driving forces. A more integrated view now appears to merge the external (behaviourist) and internal (cognitive) factors into a dialogical process, often triggered by a need to solve specific real-life problems.

This more integrated view of learning (Illeris, 2003; Yielder, 2004) combines the internal and the external, the reasoned and the emotional. This view of learning holds much promise in
bridging the various theories presented to date. It allows for consideration of the widest number of factors, which influence learning. The role of learner emotions is explicitly acknowledged, opening up an important area for further study. Illeris' view, in particular, considers both what is learned and how it is learned.

The main points of contention, and most gaps, centre on the workplace learning curriculum and its structure. Here two groups of voices with divergent emphasis are evident. One group views workplace learning as mainly instrumental in nature, oriented toward workplace vocational performance. Others emphasize the development of the learner’s identity and subjectivity. Are these two processes indeed as separate as the literature portrays them?

Authors emphasizing vocational performance tend to emphasize guided learning as a methodology, while those focused on the development of learner identity cite discovery learning.

An unresolved debate on guided vs. discovery learning continues. While both sides of the debate provide compelling arguments, little exploration has been done on the method of learning relative to the type of learning, which would offer conclusions on the relative efficacy of different approaches for different learning outcomes.

Further, the advocates of guided learning have not addressed if or how learning occurs when novice workers (including managers) encounter unexpected, or difficult situations, for which they are unprepared. This is an important issue, since the problems presented by the workplace context are not necessarily neatly ordered in progressive levels of difficulty or complexity.

The learning context extends beyond the workplace, and is not familiar or known to those superiors or mentors, who would guide workplace learning. Unplanned events occur within this broader environment and can impact learning. Also transfer of learning occurs between different workplace environments and between work and non-work contexts. The advocates
of guided learning have not proposed how these external and ‘random’ events, both in and outside of the workplace, should be incorporated into the ‘graduated pathway’.

The learning in practice reflected in the literature shows that real world, authentic problems are the richest site for learning in the workplace. This presents an interesting question *whether preferred sequencing exists*. Does a gradual progression of opportunities, such as advocated by Billett (1999), result in richer or faster learning than ‘random’ events served up by the workplace? Do such randomly sequenced experiences of greater difficulty trigger a ‘resistance’ response, as conceptualized by Illeris (2003), to master the situation?

Further, there is no clear agreement on whether progressive steps or frame-breaking experiences are more effective in creating strong learning outcomes. The discussion on reflective thinking as a catalyst to learning opens the possibilities for combining guidance and reflective practices to realize the learning benefits of more dramatic, frame-breaking experiences, perhaps over time. Yet I found no discussion or studies on the effects of after-the-fact guidance, as a catalyst to ‘frame rebuilding’.

This study attempts to add to knowledge in these areas. Experiences, which novice managers consider significant to their learning, are analyzed for the type of learning they represent and the structure, through which they occurred. Do they correspond to a smooth progression of smaller steps, or did they present challenges, for which the learner felt unprepared? The experiences are probed to determine the presence of both discovery and guided learning, whether these processes differ for different types of learning, and whether they occurred alone or jointly. The roles played by the learner, others guiding learning, and the context are examined for relative importance in the context of novice manager development. Finally, the importance of internal factors and meta-skills is examined, relative to external factors.
Chapter 3 Methodology

This chapter describes the methodology for the empirical research conducted as part of this thesis. First, the rationale for a qualitative approach is provided. Second, selection of participants is explained. Third, the interview approach and decisions such as the type of interview, the duration, locations, and recording methods are discussed. Fourth, the analytical framework, which guided question formulation, is outlined, and the interview questions are justified. Next, limitations of the study are identified. The chapter concludes with a discussion of results from pilot interviews and resultant modifications.

A Qualitative Study

As my research purpose is to develop an understanding of the elements, qualities and structure of learning experiences, where the context and individual may impact responses, I chose a qualitative research approach. This approach allows unanticipated themes to emerge and provides for a deeper understanding of the processes, which took place during the learning and of how participants made sense of the experience (Schram, 2003). Or, as Rubin and Rubin argue:

"Qualitative analysis ...is to discover variation, portray shades of meaning, and examine complexity. The goals of the analysis are to reflect the complexity of human interaction, by portraying it in the words of the interviewees and through actual events and to make that complexity understandable to others." 48

Selection of Participants

The research purpose and the socio-economic context guided the selection of participants. The aim is to inform the development of future managers in their early career stages, therefore the study sought respondents in the 25 – 35 age category.

Although people can enter management ranks later in life, the age range was restricted to limit the effect of varying life experience. We know that this is a rich resource to learning, and also that adaptive style varies with age (Darkenwald and Merriam, 1982). Thus all respondents would have common generational characteristics, which have been deemed unique for this group (Cordeniz, 2002).

Although the talent shortages are expected to occur across all levels of occupations, I chose to locate my study among managers. This is a field where I have extensive experience. Ability to understand the interviewees’ context is important in choice of topics and audiences. (Slim, 1994).

As a qualitative study, this research does not aim to derive statistically significant findings, and consequently minimum sample size or random selection requirements do not apply. Instead, determining the number of interviewees was guided by qualitative objectives – a desire to hear a variety of perspectives, to obtain representation of both genders, and to reflect different organizational environments. Although a larger sample would provide richer data, practical considerations (time, ability to recruit respondents, budget) limited the number which could be interviewed within the scope of a Master’s thesis. The target number of interviewees was therefore set at ten to twelve individuals. Respondents were sought only in the Lower Mainland of British Columbia, again for logistical reasons.

The study uses a retrospective approach. This is designed to better enable respondents to judge what was significant learning. It is also anticipated that with the passing of time, any emotional or political reactions (e.g. getting the promotion or getting fired, being valued or excluded from groups, etc.) to earlier failures or successes will be less likely to distort responses.

Respondents were recruited through referral from personal contacts of the researcher. As a small token of appreciation for participating in the study, a donation of $25 was made to a
registered charity of the interviewee’s choice. The researcher offered to share study results, in a summary form, with those participating or referring candidates.

**Interview Approach**

This research represents a topical study, since it aims to understand learning incidents - how they occurred, their effect on the individual and the learning outcomes. This has important implications for question formulation, since the focus is on explaining events, understanding the context and order, and requires the use of some specific questions (Rubin and Rubin, 2005). This often requires depth and one-on-one probing.

To achieve depth, individual interviews were selected as the means of data collection. This allowed maximum flexibility in scheduling, and lessened demands on respondents’ time. Given that interviewees were managers, I did not anticipate that expressing their ideas would present any significant difficulties, and therefore there was no advantage in using group interviews. Group interviews are more appropriate for reserved individuals, who are more comfortable in a familiar group (Slim, and Thomson, 2005).

A semi-structured interview approach was used, to allow for exploration of themes not anticipated, and at the same time to capture information pertinent to the research questions. Several authors advocate the use of semi-structured interviews, as being effective for qualitative research (Slim and Thomson, 1994; Griffie, 2005).

Griffie (2005), lists the decisions required to complete semi-structured interviews as: who to interview, how long to interview and when to stop, where to interview, choice of the data collection method, and choice of questions to ask. The rationale for choice of respondents has already been outlined above. The other elements are discussed below.

The length of the interview was set at a maximum of 1 – 1 1/2 hours. This was designed to provide sufficient time to allow for exploration of important themes and stories, balanced
with limiting the demands on the respondent’s time. If all questions were answered early, the interviewer could terminate the interview before the maximum allotted time.

Interview locations and times were at the discretion of the interviewee, in order to minimize the inconvenience of participation. Most chose to be interviewed at their place of work, and had access to a private office or a suitable meeting room. Interviews were booked at least one week in advance, and respondents were provided with simple instructions and list of questions in advance (Appendix I). This was designed to allow them to select the historical work setting, which would form the context for the interview, to orientate themselves in it, and to reflect on and select significant, pivotal, learning experiences.

Interviews took place in Greater Vancouver in February and March, 2006. They were tape recorded and later transcribed verbatim. The interviewer also took ‘scratchnotes’, including her own observations as margin notes, and transcribed these following the interview. This allowed for simultaneous analysis and recording of visual, non-verbal cues such as body language, and facial expressions, and further facilitated recall of the interviews. For example, the margin notes included such items as “eyes misty” and “eyes shone”. Such analysis can provide important insights and the researcher “may discover themes by looking at the tension between what people say and the emotion they express.”

**Question Formulation Principles**

In this section, I review both the guiding principles behind question formulation and the rationale for specific questions. This rationale will link the research questions back to the theoretical foundations of this study.

In balancing breadth against depth of the interviews, depth was chosen for its richness. Focusing the research on a limited number of specific learning ‘episodes’, which the trainees felt had the strongest learning impact on their functioning as managers, would allow them to

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apply their own criteria of significance. Allowing them to tell a few stories in some detail would better illuminate these experiences (Rubin and Rubin, 2005).

Accepted principles of good interviewing were used in formulating the questions, structuring them to be simple and short, open and non-directive (Slim and Thomson, 1994). Wording was vetted and revised to ensure it was free of embedded assumptions (Schram, 2003). Above all, the interview time would belong to the interviewee: "a good interviewer's aim is to say as little as possible and to listen and learn."\(^{50}\)

Since my research purpose is to gain an understanding of experiential learning in the workplace, the introductory question asks the respondents to describe one or more (but not more than three) significant, pivotal, learning experiences or incidents. The only guidance provided is that these experiences had to contribute significantly to their learning to fulfill their role as a manager. Schram recommends opening interviews with descriptive, open-ended questions, starting in how or what (Schram, 2003). The opening invitation to describe a significant learning event represents an unstructured 'what' question.

This open approach also allows for adaptation and exploration of themes, which were not anticipated (Rubin and Rubin, 2005). The authors emphasize that the researcher must recognize concepts, which emerge, and modify questions accordingly.

My research is positioned to gain an understanding of experiential learning in the workplace and also to test the points of contention in the literature. This indicates further questions to probe specific themes. The questions would have to anticipate analysis and would use inductive logic to draw, or confirm theories from the responses, as suggested by Rubin and Rubin (2005). It was therefore necessary to anticipate the analysis and categorizations in question design: "Only by anticipating what you plan to do with the data early on can you ensure that you obtain the needed information."\(^{51}\)

\(^{50}\) Slim and Thomson (1994), p. 76.

\(^{51}\) Rubin and Rubin (2005), p. 52.
Rubin and Rubin also recommend that interviewees be allowed an opportunity to explain why things occurred, since this allows the researcher to progress more quickly toward inductive theory. Heeding this advice, a number of why questions were inserted to probe interviewees’ responses.

The relationship between theory, anticipated analysis and interview questions is bidirectional, as depicted in Figure 3.1 below. Thus theory suggests analysis, and analysis points to questions. Responses to questions may indicate further analysis.

**Figure 3.1: Rationale for Study Questions**

![Diagram showing the relationship between theory, literature on workplace, analysis, and interview questions]

The rationale for the questions is outlined in Appendix II, which maps the literature on workplace learning against specific questions, along with analysis planned. A brief discussion of this rationale follows.

*Interview Questions*

As the topic and instructions were sent to the interviewees in advance, the interviews opened with an invitation to tell the stories of the learning experiences, in a free form, undirected
narrative. Such a narrative would allow themes important to the learner, but not anticipated by the researcher, to surface. The questions, which were expected to elicit answers capable of illuminating the research questions, probed the personal significance of the learning, the factors that triggered the learning, and the identity and role of the various players who contributed to the learning.

Question 1 – *Why was this significant and important to you?* - probes the significance of the experience to the learner, in an attempt to understand what the learner values, and to clarify the type of learning which resulted from the experience. The narrative of the experience was expected to provide an indication of whether the learning occurred through discovery, or as a result of guidance, or a combination of the two.

Question 2 – *What or who initiated this event or the learning?* - is designed to clarify this understanding as well as to probe the role of learner agency. This theme is further probed by the next question.

Question 3 – *Who played a role in the learning? What role did they play? What was their impact?* - This aims to determine which players the learner sees as being crucial to the learning, and to probe the social processes involved. The question is also deliberately open to invite a discussion of processes internal to the learner.

**Study Limitations**

It is important to recognize a number of limitations, inherent in this study. They stem from a number of factors, the main ones being the selection of respondents, and interview methodology.

First, the study is situated among managers, most of them University educated. Given their positions, they have already achieved a degree of business success and are considered successful by others in conventionally defined terms. This group can be expected to have above average levels of self-confidence, self-efficacy, and willingness to accept
responsibility and risks. The conclusions of the study may not be applicable to individuals with a different psychological make-up, or those on the margins of society.

Secondly, the selection of participants from current management ranks, combined with the study design as a retrospective, by definition creates a bias in the respondents. It eliminates from the sample those, whose learning experiences in the workplace were not successful, and who may have failed and fled. I will, therefore, have to temper my conclusions regarding ineffective experiences or processes. However, since my focus aims at identifying effective experiences, this limitation does not present a major concern.

Third, the respondents represent a narrow range of ages, and share certain generational characteristics. As a result, the findings may not apply equally to members of other age groups.

Fourth, the responses represent only one view of learning – from the perspective of the learner. It is possible that interviewees may ‘screen’ experiences and limit them to those, of which they have a positive recollection. They may also not accurately acknowledge the role of others, and may tend to emphasize their own role in the learning. This will be tested, by asking for elaboration through specific examples, and by probing the role of others in several questions. Some respondents may not have an accurate or objective view of their learning, or their recall may be distorted. Still, we can learn from their perspectives of what they consider pivotal, and from their reasons for the choices.

Finally, because the research question asks participants to share their pivotal learning experiences, the responses are unlikely to provide information about the many smaller, simpler, task-oriented or procedural learning events.

Pilot Interviews

The first refinement of the interview questions occurred during a course on Qualitative interviewing. That course included a peer consultation, which provided both the opportunity
to conduct an interview and to obtain feedback on the proposed interview questions and methodology. This process clarified the focus on depth, as opposed to breadth. It resulted in a focus on specific learning experiences or incidents, which could be probed. Secondly, it resulted in refinement of the questions and wording revisions to remove assumptions. Questions were stated as simply as possible, using the key words of *WHAT, WHY, WHO, and HOW*.

Two further interviews were then conducted as pilots, using the questions outlined in Appendix I. During these interviews, I found that the respondents narrated their experiences, answering many of the questions in the process. The interviewees had printed the questions sent earlier, and referred to them in a self-monitoring process, resulting in most questions being addressed in the narrative. Consequently, the interviewer chose to play a very minor role, interjecting questions only when a gap remained or a potentially important theme surfaced and then was dropped. For example, the flow of the spontaneous narrative provided important study information, revealing emotional engagement.

The interviewer also felt that the 'richness' of information grew through the interview as the respondents reflected on their experiences. For example, narratives would start with an objective description of the experience, and would gradually build to more personal revelations of its significance and personal impact. Questioning interrupted this process. This reinforced the value of free form narrative to start the interview, and minimizing the number of interjected questions.

The interviews provided a great deal of information for analysis. Consequently, a decision was made to restrict the number of interviews to ten.

In the pilot interviews, the significance of learning to the interviewees stemmed from a changing view of themselves and their role, rather than mastering the tasks of management. This indicated a need to probe these themes in future interviews and to include them in the analytical structure.
In one of the pilot interviews, the respondent tended to focus on interpreting what happened. While this provided an important indicator of what she found meaningful, it alerted me to periodically redirect the conversation to obtain more specific descriptions of the steps and the players in learning, to obtain the information necessary for the analysis.

The pilot interviews also highlighted the fact that learning did not occur at the same time as the triggering event, but rather over time, following the event. This underlined the need to distinguish the triggering event or experience from the actual learning and to probe the process through which the actual learning occurred. One of the initial respondents also stressed how, for her, learning and insight occurred only after experiencing a similar phenomenon repeatedly and from different perspectives. This alerted me to watch for similar patterns in other interviews.

**Analysis of Themes**

The analysis was structured around a number of themes, arising from the literature, research questions, and the data.

The themes suggested by the literature included: identity and subjectivity, power and politics, type of learning described (prepositional, procedural, dispositional), presence of guidance, learner agency, and the role of reflection.

Further themes were included in the research questions. These included the time span of learning, nature of the triggering experience, the risk or stakes, role of emotions, and transfer themes.

During the interviews, several other, more specific, themes and sub-themes emerged. One major theme was the interpretation of the meaning of a management role. Within this theme, a number of sub-themes surfaced, including the feeling of responsibility felt by novice managers and their views on sources of ‘power’. Also, a structural pattern emerged, related
to repeating an experience, sometimes from a different perspective. This alerted me to seek evidence of this pattern in other interviews.

Finally, the analysis structure was reviewed against the research questions, to ensure that it would provide the necessary data for the study.
Chapter 4  Study Findings

This chapter presents the results of empirical research conducted as part of this study. The fieldwork consisted of interviewing ten managers about their learning as novices. During in-depth, semi-structured interviews, the respondents shared experiences, which they viewed as pivotal to their learning and effectiveness in a management role. Given the retrospective time frame, most would have been around age 30 at the time that the learning occurred. The findings are presented thematically, supported by direct quotes of the participants. Fictional names, which accurately reflect each participant’s gender, but not necessarily ethnic background, are used.

As a group, the respondents were confident, educated, articulate individuals. With a number of achievements already behind them, they possessed a level of self-confidence. At a relatively young age, they had been recognized for their potential, and had assumed management positions. In some cases, they were unusually young for the job. Of the respondents, seven were women and three were men. Seven were Caucasian and three came from Asian ethnic background. All were raised and educated in North America.

This chapter will first present the findings on learning, which occurred as a result of these experiences and will examine its significance to the new managers. The learning content extends considerably beyond the acquisition of instrumental or prepositional knowledge required for task performance. The learning will be discussed under the main themes, which emerged - the meaning of the management role, the personal adaptations to fulfill that role, and the development of the new manager’s own identity.

Second, I will describe the structure and sequence of the learning experience, and its elements. This will include a description and assessment of the incidents, described by the participants as triggering the learning. An analysis of the steps and forces in the learning
process will follow, and will present participants’ comments on the stakes involved, the role of emotions, the importance of reflection, their adaptation process, and the impact of success.

Third, I will examine the process of learning by contrasting the presence of guided and discovery learning, and the relative importance of factors internal and external to the learner. The chapter will conclude with participants’ comments relevant to transfer of learning, both prior and following the learning, which occurred through the experiences described.

**Significant Learning**

Study participants had been asked to describe learning experiences, which significantly contributed to their learning to be managers. As no further definition was provided, their answers also provide insight into what they perceived as important to the role of a manager, and how they define effectiveness.

The respondents described learning, which was mainly dispositional and centered around values, beliefs and assumptions. As a result of their experiences, they defined their conception of a management role. Second, they acquired perspectives, which enabled them to function better in the role. Third, they began to develop their own identity as managers and leaders, illustrating through their stories transformational learning. Perspectives were shifted, and assumptions reformulated, in a major focal shift from self to others.

*The meaning of being a manager*

Through the stories told, study participants described learning what it means to be a manager. Two significant themes dominated. As novices, they learned to appreciate both the importance and the complexities of human dynamics in the workplace. This resulted in new perspectives on the sources of power, as the new managers shifted from relying on positional authority to an emphasis on strong relationships and shared goals as a more robust basis of influence. They also internalized a sense of personal responsibility and ability to influence outcomes, formulating these into a personal definition of their new role.
Human dynamics and interdependence

Responses showed a focal shift, or extension, from self to others. Through experiences, which were often difficult, the new managers realized their dependence on others, the value that others could contribute, and human limitations in themselves and their staff. They also became acutely aware of the complexities of managing interpersonal relationships and accepted that different individuals may hold differing values and approach situations in their own way.

For the respondents, the realization of their dependence on staff came through an appreciation that the scope of work for which they were responsible extended beyond their own capacity, and exceeded their knowledge and experience:

“You’re only as good as the people around you... and if they’re not supporting you and working with you then you’re not going to be effective in whatever you do...” (Dale).

Michael’s words echo this acknowledgement of personal limitation:

“I go to them – I’m not going to know everything...You can’t do everything. If you want to run a successful business, you need good people behind you. Then you’ve also got to trust them that they do the job and that is very difficult sometimes.”

The acceptance of having to rely on others did not come easily. Sometimes, it was the result of a jarring experience. When a subordinate walked out on her, Joyce was faced with suddenly having to rework an entire marketing campaign. Paula tells how she worked late at night if her staff did not complete assignments. The new managers also realized how staff members impacted on others:

“One person not doing their job affects other employees, they are not happy” (Gina)
Others within the organization could also impact how the new managers were perceived. The most dramatic realizations resulted from derogatory comments, or public challenges. Ross described feeling frustrated and angry when his decisions and motives were publicly questioned. Joyce was initially hurt by a derogatory email, widely circulated within the office:

"This was the first time that somebody actually came out and said, and told everybody, that I wasn't good at what I was doing, that I needed to improve."

Whether negative or positive, the majority of the novices spoke about being surprised by others' reactions. These surprises represented important learning by raising awareness of differences in individual perspectives and goals:

"With staff...not knowing how they're going to take something. You get hit with feedback that you weren't even anticipating." (Cara), or

"I was surprised that the reaction was either different than what I anticipated, more extreme, or even something that I wouldn't have considered" (Ross)

The potential of others also sometimes came as a surprise. After losing a key staff member, whose departure compromised marketing plans, Joyce recalls how she had to work with everyone in the office to come up with a new concept. She was amazed at how people, from whom she didn't expect much, could contribute useful, new and original ideas.

With the recognition of the potential of others and mutual interdependence came an acknowledgement and acceptance of human imperfections in both themselves and fellow employees. Kate reflects on how her own failures led to a recognition of her limitations and opened the way to accepting the imperfections of others:

"Failing and learning from it - there is huge value in not being successful. I don't think that I would be as effective today if I didn't know that was possible, I don't think I would be as
understanding of my colleagues... I just look at things differently, much more reasonably. People are human - recognizing how to bring the best out of people and how to let people make mistakes but then learn from that (is important).”

Dealing with the human dynamics thus represented one of the most challenging elements of their new role, which had not been fully anticipated:

“It was significant to know that when you are managing people, managing a department, it’s not just about the work...managing people is probably the toughest job you’ll ever have” (Gina); and

“It comes down to communication and relationship building and it’s not just about giving them a project and working with them to reach the goal - it’s finding out about who they are, how they work, and who they are as a person and that’s what I never realized about management” (Joyce)

By shifting their focus, the novices learned to accept the interdependence with others, and to appreciate the value that others can contribute. They came to understand that approaches, underlying values and motives will vary and to accept the human limitations in themselves and others. They also made an important connection between the strength of personal relationships and the ability to influence others in order to get things done.

Relationships and shared goals provide influence
In getting things done, their experiences broke existing assumptions about the source of authority. Most of the participants told stories which illustrated significant shifts from reliance on positional power to the power of influence based on relationship strength, leadership by example, and shared goals.

Paula, after being promoted to manager, felt responsible for departmental results and dependent on her staff to deliver them, while struggling to establish her authority. Initially, she responded by changing her style to “slightly less joking, being a bit more formal”. Over
time, she realized that genuine respect of her accomplishments and advocacy of employees' interests provided a more effective basis:

"I mean you can't make people do things – they have to want to do them... it doesn't work to say you must .... How you get people to do work for you is you get them so they want to do it for you ... that's an important way of managing people..."

Kate articulates well the dominant theme in the interviews – that strong personal relationships and shared goals provide a more effective influence base than the authority of a position:

"...nobody was going to do anything if you didn't have a personal relationship with them... they had to have a chance to ask you some questions... you had to demonstrate your respect for them... they knew that I was doing stuff that was of value to them and the organization...."

Her comments also reflect a sense of responsibility, shared among the respondents, for results and the success of their work relationships.

**A sense of responsibility and control**

Acceptance and internalization of responsibility for overall results, for the performance of their staff and the human relations were dominant themes when the participants described their learning. Gina, facing an unfamiliar, challenging situation with an under-performing employee, had to decide on how to act:

"Here was an employee that was a challenge and what was I going to do? Was I going to let her continue? It was affecting morale..."

Her comments illustrate her feeling of responsibility, reflected also in Joyce's remarks:
"It's not about my supervisor working it out for me. How now do I manage this relationship that obviously is not working well...I can’t avoid it.... How can we move on from that... I guess we won’t be best friends...but how can we work with each other...."

Through their experiences, the novice managers reformulated the perception of their role from a doer to an initiator, one that actively influences and reformulates outcomes. Jin, after a challenging, but successful experience, now sees herself differently:

"I’ve become more of an initiator now than I was before ... so again it’s having the confidence and the fear subsiding... you know make that phone call, set up that meeting, get what you want, get the information you need to do your job better. And before I think I would maybe sit back or hesitate a little bit.”

Sometimes, a commitment to finding better approaches came as a result of working through an event, which they did not wish to repeat. Gina, reflecting on the unpleasant dismissal task behind her, formulates her own, preventive approach to such a situation:

"It’s not always going to be like that...it’s so much hire the right people... keep a stronger touch with your employees’ performance...This person never got any feedback that she was doing a poor job... it was too late...she had a certain habit...it became very difficult...it doesn’t have to be that way...It’s up to me to make sure that I’m managing the people and the workplace...It should never be a surprise...."

Most of the interviews echo the theme of being responsible and proactive. Dale extends the application of responsibility to managing his own career success. Cara, with the support of her senior management, reformulated a more proactive approach to handling labour issues, avoiding grievances by maintaining more open communications. In the process, she also learned about the ambiguity often inherent in a manager’s role:

"There are never any wrong or right answers... you may never get the right or wrong answers...."
Performing a Role

Accepting such ambiguity, adapting their approach to different individuals and contexts, and taking a longer term view were important adaptations to their new role as managers.

Handling uncertainty and ambiguity

Learning that people will surprise you with unanticipated contributions or reactions, and dealing with such ambiguity, echoed through several interviews.

Asked why he had selected three incidents as pivotal to his learning, Ross explained:

"In all three cases the most significant thing was the reaction to the decision... was not what I anticipated ...I was surprised that the reaction was either different than what I anticipated, more extreme...or even something that I wouldn’t have considered...”

Similarly, Paula now accepts such uncertainty and tries to anticipate it by thinking ahead through several different scenarios, expecting that people may respond differently than she expected them to. Gina summarized the ambiguity surrounding a dismissal process this way:

“Nobody was able to tell me...how’s this going to end and nobody knew. That was frustrating...That was learning for me that nobody has the answers.... You can’t predict what’s going to happen...I like to know,... to control the situation...you can’t do that...and being OK with that...”

Giving themselves permission not to have all the answers, even accepting the fact that there may not be one right answer, figured quite prominently in the stories told by the new managers. Initially, it came as a bit of a surprise to Jin, that there would be issues for which she did not have the solutions, or for which she couldn’t provide the decision. Michael
describes a similar realization, and this also further built his appreciation of what others can contribute:

“when I first became a manager, in my eyes ... I was the one that they were supposed to come to for help .... And I realized throughout this past year, through these little trial and error processes that not only do they come to me ...but I go to them – I'm not going to know everything... there’s going to be suggestions to me... different ways of looking at something ... which I didn’t see, which are good.”

Kate, when asked about her big ‘take-aways’, repeats the theme of multiple possibilities. She allows herself not to have the right answer, accepts there may not be one, and stresses the importance of the situational context:

“There isn’t a right or wrong when it comes to.. values and culture...in the workplace ...so I don’t walk away with this thinking ...I was searching for a right answer I thought there was a right and a wrong thing for me to do, there isn’t...so that’s a huge learning.”

Adapting to a context

Like Kate, several interviewees mentioned how they learned to read differences in workplace context and culture. After becoming aware of the differences, they realized the need to adapt their actions and approaches in order to get things done, or to be accepted. This realization came through personal experience, often through failure, and subsequent trial and error.

Dee and Kate both tell stories of becoming aware of a different cultural environment, when working outside of Canada. Dee first became aware of cultural differences, observing what happened when a new manager was transferred in from abroad. His way of dealing with staff did not fit with the North American style, and the staff thought that he was ‘hovering’, not trusting them. However, her insight was only triggered when she went through a similar experience herself, where she ‘didn’t fit’ into a job abroad, and she draws parallels:
"and when I was faced with that same situation I thought - you know what - I'm in a different place ... and I even know the language and yet I don't fit here- they don't want (me).... I just sort of had that aha moment where I thought the same thing happened to him - well why didn't I fit... I just didn't have the same ... background or knowledge that they would have expected from growing up there – I just ... didn't fit”

Kate found it easier to recognize differences in the social culture of a smaller company, having earlier worked abroad. With the sharper perception, she more quickly realized the need to adapt:

"The... learning... was around...how do you get things done...going into something new I definitely took the approach of doing a lot of listening and observing..and taking the time to understand how the organization works, who are the key influencers, who is really running the show...and the various different shows within the organization, what's important... culturally and socially...”

Having gained an understanding of the culture, she adapted accordingly and eventually became effective. Similarly, Ross recognized the different power dynamics after transferring to a new environment, where processes were far more structured. Asked how he identified the difference, he also explains his experimentation and adaption:

“Through trial and error...my old (workplace) had been an incredibly close-knit community...there was this inherent wealth of trust.... If someone wanted to do something we'd just say go for it.... Here, you've got to take it to a staff committee. Being aware of what those procedures and processes are has certainly been a learning experience...”

Dale, having worked in large, very supportive organizations, explains his decision to let some people go in terms of having fewer options in a smaller workplace. His comments further demonstrate the feeling the responsibility for results and toward other staff:
"...(I) had to let a number of people go...which was a lot different for me because I would have in the past tried to bring them along, but I had more time on my side...in a smaller environment there’s not enough people to bring them along...you have to make that decision - are they going to make it or you’re better jumping off...”

**Adapting for individuals**

Experience taught the new managers to read the workplace context, to recognize differences in individuals, and adapt their approach accordingly, as Gina’s comments illustrate:

“That worked for that person...it may not work for that person....It’s for me to figure out. Sometimes I get the wrong answer...maybe I guessed the wrong thing...it’s kind of trial and error...”

Dale feels fortunate at having had guidance on individualizing his management approach from a very supportive boss. When he started as a supervisor, his manager sat down with him and gave him a kind of biography on the people he would be managing, making him aware of the differences among them, and of the need to manage them differently.

Similarly, Michael learned through trial and error that understanding the different individual needs and goals of each employee and client was an important part of his role:

“it’s the subtleties of working with all types of people..it really was the active listening ... and making the connection ... with each and every client ... recognizing that every client is different ... which really helped out...”

**Longer-term focus**

Better understanding of the client needs also led to a longer-term focus. Asked about what were the big ‘aha’s’, Michael replies:
"Part of building a relationship with a client is not only looking after their immediate need but looking at what they might need in the future - to try and help them now ... I guess it’s forward thinking... At a young level, or an immature level, I was just looking at the now – what’s happening now?"

This focal shift to the longer term, in defining the future role and structure of her department, was also evident in Cara’s remarks. Although she finds it challenging, she is accepting the responsibility for shaping her department for the long-term. Similarly, Joyce speaks of her responsibility for long term sustainability in work relationships:

"...if I were to be a good manager, I had to learn...figuring out how best to approach the person to complete a project, not just a task...while sustaining and building on the relationship that was there before...it’s about trust and... being able to work with each other for the long term, not just for that one hour."

Personal Transformations

Through their experiences, and interactions with others, the new managers reformulated their own self-concept in relation to their management role.

Own capability and equality

Emerging identities were more capable, and viewed as more equal to other, established managers. This was particularly evident for those who had previously been ‘stretched’, as successful navigation through challenging experiences strengthened their perception of self-efficacy. Cara summarizes the lessons learned from the challenging experiences this way:

"Knowing my abilities now...that’s going to help me in anything I do...knowing I can do it...That’s huge...knowing if I can get through this...I can get through other things..."
Increased perception of self-efficacy, and confidence in going into unknown situations, is also evident in Jin's response, along with a new view of herself as equal with more senior managers:

"and that has now... given me... the confidence and you know... I'm as good as ... that other person - they may have more expertise and knowledge in certain areas that I don't have but that doesn't mean that, you know, we can't work together or I shouldn't go and ... approach them about something."

For Michael, the idea of being equal to those in senior roles was nurtured by a former boss, who shared his experiences with him, and also sought Michael’s input. For Dale, the perception of equality was similarly developed by a Vice-President, who drew parallels between their careers, setting up an expectation and goal of success. Gina’s comments repeat the themes of self-efficacy, and equality:

"All these situations gave me a lot more confidence ... in being able to resolve issues.... At the end of the day, everybody’s just a human being and doing the best that they can...
I’m more comfortable in my own skin,...much more able to speak effectively with senior managers...much more confident and at ease managing staff... I don’t doubt in my mind...I’m satisfied in my role as a manager.... I’m not worried, what if I get another difficult employee, cause you know what I can deal with it. There will be support, there will be different channels, different ways of managing it. I can deal with it."

Personal values and choosing priorities

Along with self-confidence, the incidents the participants shared in the interviews resulted in much greater self-awareness. For some, a greater clarity of personal values and priorities emerged, often out of difficult experiences.
When Gina made the difficult decision to dismiss an underperforming employee, who was affecting the morale of others, she revised her assumptions about what it means to be a manager. She also questioned the role:

"It's up to you as a manager to control that situation...you are also taking the role of leader, mentor, sister, mother...At the end of the day you're still letting somebody go...and then asking yourself...do I want to do this? Is this the kind of role I want to be in?...I went through a period of that...I had to decide..."

The incident helped her clarify her responsibility as manager, and formulate her own leadership style, which would emphasize preventing such situations.

Kate, when confronted with conflicting workplace culture and values, gradually crystallized her own values. Looking back on her experience in Asia, where she was working virtually around the clock, feeling pressured in work and relationships, she affirms her own boundaries:

"...I thought a lot of it was cultural and ...it wasn't cultural...I guess that's the big learning...it's making the distinction, what's cultural and what's OK and what's not and how do you kind of work that line and it's a very grey line and it will always be a very grey line....what are your personal values and what are their values and how do you make that work."

In retrospect, she describes the lessons learned:

"My personal limits...and how those get managed... from a living life perspective...'cause life is short...I guess essentially the prioritization, identifying what is important is key, because I can't do everything..."
Others repeat the theme of determining their own priorities, taking control, not allowing the meaningless things to dominate their time and mind. Paula states this in terms of not allowing ‘meaningless things to bubble up’ and take over her entire day. The novice managers recognize the importance of setting their own agenda, and devoting time and effort to important things. One of the things they consider important, worthy of effort, is becoming the kind of leader they want to be.

Interpreting the role: What kind of leader am I going to be?

A clearer sense of values, combined with experience, helped the new managers formulate their own personal interpretation of the kind of manager and leader they wanted to be. Gina’s comments affirm her view that leadership requires effort, and defines her ideal mainly in terms of interpersonal relationships:

“You have to decide what kind of leader you want to be...you have to decide whether you’re going to spend some time and become a good manager.... A good job is for me...having a good relationship with the employees, they are working and committed... they are respecting your decisions, and able to challenge your decisions and leave the meeting joking, laughing...they are able to come to you for personal issues and ...trust you... they don’t hide things from you...”

Others share a similar interpretation. The main adjectives, used to describe the management qualities they value, include openness, trust, empowering their employees, trusting them with responsibility, and providing them with opportunities, and allowing them to make mistakes. They stress the need to create an environment where staff can grow:

“...letting people try and creating an environment where it’s okay to fail ... If they’re not even trying ... they’re never really going to learn .... And they’re never really... going to stretch themselves and actually take on ... more responsibility” (Paula)

Recognizing that mistakes will occur, the new managers learned to separate failure from the individuals, whether for themselves or others. Thus their sense of self-worth and identity is
not tied to every result, allowing them to manage their own emotions and take new risks. Paula puts it this way:

"You win some, you lose some, right? ... You have to... be able to take chances .... When you have an attitude like that... the worst thing that happened was I didn’t do well at that, or that didn’t work out. But it’s not like you... failed as a person or ... I can’t be a manager or can’t do this ... it’s that one particular task ... I tried to do didn’t work out."

Gina extends the message that not all efforts will be successful to an obligation to manage her emotions in dealing with others in the office, particularly her staff:

"... if you have a bad day.. you have to control it... I’m very frustrated about this situation... not about a person... the situation and that’s OK... this is a situation that you’re managing at work... to take it personally was not the right thing... If I let that... then I’m not an effective leader..."

Out of successes on the job also came an understanding of what they enjoy and value in a management role. Cara transferred into an operational management role from a technical staff position. Having accepted the position mainly due to its location, she wasn’t initially sure of her abilities or interest:

"I wasn’t sure... if I was able to fulfill this role... I really enjoy this work – it gave me some more confidence in my capabilities... I do enjoy the management of the staff vs. a role where I am by myself... I learned that I can manage staff..."

Their expanded self-awareness also provided newer insights into how they learn, and how that learning is structured.

Learning Structure
This section will examine the structure of the learning experiences, described in the interviews.

Leaping, or falling, starts the learning

An overwhelming majority (nine out of ten) reported that pivotal learning was triggered by very challenging, sometimes disturbing, experiences. Highly challenging tasks, for which the novices felt wholly unprepared, and situations where established assumptions no longer held, were the most common theme.

Jin, a professional then in her late 20's, moved from a technical staff role into being responsible for a transition team, charged with coordinating the shut down of the company's entire office. Faced with leading a group of managers, considerably older and more experienced than herself, she describes the challenges:

"It kind of tested my boundaries...and I kind of went out of my comfort zone because ...it's something ...I did not have experience doing...you had to lead a group of people in quite an unstable emotional environment...being a leader of a group where everyone in the group has more expertise than you."

The experience would prove to be transformative for her, giving her a sense of identity as a manager, and of her own capacity to handle issues and problems. It also provided a starting point for defining her concept of a management role, and building the confidence to take on unknown situations.

Ross, an administrator in public service, tells of how handling a novel situation, for which no process had been established, elicited unexpected reactions. These caused him to question his assumptions, and expectations. He also felt unprepared when others viewed things differently or did not share his disposition:
"On a personal level I have a whole lot of trust...I take for granted that everyone else has that...I was surprised being challenged on your morals or on your intentions....I went into it probably naively thinking what an exciting opportunity for all of us and this reminded me that it's not necessarily viewed that way for everybody"

Dee recalls with emotion the moment when she probed reasons for an out-of-town assignment, which she perceived as punishment. In response, a senior manager told her how others perceived her:

"
'you know ...you're a good person... but you've got this lousy management style, you can't delegate .... He said you're just lousy. I was crushed."
"
After initially feeling devastated, feeling like she had failed, she took on the assignment, which would eventually transform her view of herself and her role as manager. Joyce's learning also started with a perceived failure in an assignment:

"Because this was probably the first time I was told that I wasn't effective in what I was doing... thought I was doing very well....this was the first time that somebody came back with a comment that said that I was less than satisfactory...and that mattered to me! ...Because the only time I ever got an unsatisfactory mark was in Grade 1 when I got a C+ in Art.... And I took art classes after that...and improved!"

Thus it was often a failure, or a very challenging situation, that stimulated the new managers to question their assumptions and alter their approaches, and caused significant transformative learning. Strong emotions were engaged in this process. Kate's comments provide a good summary of this theme:

"Failing and learning from it...It's really interesting... before that I don't think I ever failed anything...I didn't necessarily excel at everything but I did pretty well. And so there is huge
value in not being successful, it’s just a weird...it’s different once it actually happens and you realize it’s OK, and you just pick up and you keep on going...a lot of value...”

Level of preparedness

Whether it was a first failure, or surprise at unexpected, undesirable outcomes, the majority (eight out of ten) felt unprepared for the experience, which started their learning:

“Before that happened, I thought I was prepared...I’ve done my degree, I’ve got my courses... I’ve got it down... but when I was in it, ... no, I wasn’t prepared, nothing prepared me for it...and it’s one of the first lessons that I really learned in management...yeah” (Joyce)

Kate echoes the theme, when she describes difficulties of working in a different culture:

“Not well prepared at all...it was the first time I couldn’t rationalize my way through something...there is limits around logic...and also knowing the system...first time I couldn’t crack the code...”

Michael also felt stretched. After two promotions in four months, he described the challenge as a sink or swim opportunity and the learning curve as ‘going from steep to vertical’. This involved very significant, and very personal stakes.

Stakes

Most respondents described stakes involved in the experience as personal pride, self-esteem, their own satisfaction and acceptance of their authority. The stakes cited were primarily those internal to the respondents, and involved their validation in a management role. Although the validation was external, it was its importance to the novice managers that made it personal.
When Paula was promoted to be the ‘boss’ of a group of former professional peers, she felt challenged in the role, and felt that her authority was at stake:

“We either... take charge right away and you set the tone or you just never ever take charge...”

Joyce put it this way:

“Stakes were high...I could very easily have given up at that point...it wasn’t about the organization...it was about whether I would continue on in my role....”

Cara repeats the theme of internal stakes, in describing her experience implementing a new productivity tool. She felt she had to make sure the project would become a success, or her integrity and reputation would be compromised. Gina similarly describes the risks in terms of being accepted as a supervisor, while recognizing the stakes for the organization if the dismissal process backfired. Other responses echo this theme. When asked what was at stake in the incident he described, Ross related them to concepts of personal integrity, and to being recognized as a valid leader:

“the view of me as a leader and manager (here)...being far younger that was inevitable... it’s easy to be the popular guy... It was a real test - do I really believe what I am saying, which includes taking the disagreements and the difficult...(and) on a bigger level ... the relationship between staff and administration...that improving relationship was at stake”.

These high personal stakes engaged a range of strong emotions, which played an important part in the learning.

*Role of emotions*

Emotions and feelings described by the respondents ranged from fear, feeling of panic, shock, being overwhelmed, disappointed, sad, angry, resentful or frustrated, to pride, empathy and a sense of accomplishment and validation.
Most (nine of ten) respondents felt strong negative emotions at the start of the learning experience, and the internal discomfort generated by these feelings spurred them into action, and forced them to look at problems and themselves from different perspectives.

Jin describes how initial feelings of fear and panic, when she did not even know how to get started in an overwhelming assignment, triggered a coping mechanism and gave her the drive to push ahead. When asked what role the emotions played, she elaborates:

"I think they played a positive role and I think it's because ... being overwhelmed at going into the unknown kind of triggers a coping mechanism ... in you, where you have to sit back and approach the situation and learn how ... you can ... kind of jump into it and how you ... will get started ... how are you going to organize your thoughts, what tools are you going to use ... to ... get this thing going... so it kind of gives you that little extra drive (laughing)"

For others as well, the fear of failure mobilized the learning and provided a sense of urgency to close the gaps, to do what it takes to succeed. Other negative emotions were also evident. Ross felt frustrated and angry at having his motives for a decision questioned. He reacted emotionally to being challenged and was not happy with himself. He values the role played by emotions in triggering reflection on his own behaviour and stimulating a change in behaviour:

"Emotions, on two levels, were huge. One - they were what made me act or react or behave the way I behaved and it goes without saying that the situations that were the most emotional were the ones I learned from by far..."

Joyce describes an evolution of feelings when a trusted subordinate unexpectedly and suddenly quit, and she learned through the rumour mill that the reason was her management style:
"Anger, resentment... it was quite difficult to swallow when I heard ... at first I thought that it was him... a relationship is a two-way street and obviously something wasn’t working that well... then sadness that it had to come to this... and finally ... I can’t say that I actually accepted it quite yet... but... a reflection that I have to assess myself...”

While negative emotions such as fear, anger and frustration provided an important impetus to learning for most, in a few instances very strong negative emotions temporarily paralyzed the novices. Joyce was initially too upset to consider the possibilities. Kate felt pushed to the limit and isolated in a job overseas, thinking she had failed, and the emotions were a hindrance:

“As far as before and after... They were really debilitating in terms of how I was working through that... they weren’t helpful... after the fact... I recognize those things much sooner and I don’t let them take over... that would be the difference, being strong enough and confident enough.”

The respondents gained an increased awareness to their emotions, and learned to use them as important signals:

“Frustration and anger... those emotions are very powerful... If you channel it in a positive way... you can use it to solve problems... When I feel anger or frustration... for me that’s a signal that something is wrong... then I have to decide... what is actually creating it... what is it- oh that’s what the problem is. I take myself back... instead of blowing up over little things.”

The respondents became more aware of their emotions, and described how these feelings gradually changed as the learning experience evolved. For example:

“I guess the fear subsided and your confidence level went up ... you know you kind of had a system in place ... you know what to expect ... and how to handle it – and even if you didn’t
Paula described an experience negotiating salary scales for her staff, a challenging experience for which she felt unprepared, yet succeeded. At the beginning of the process, she felt frustrated, and at the end of a successful negotiation, she felt satisfaction. Ross describes a similar evolution, a sense of accomplishment and validation that resulted from opening up to an individual who had earlier confronted him, and having a frank and open conversation about the motives. He feels that being aware of his own emotions was crucial to his learning:

"It was my dealing with my emotions and my responses to it that became a learning situation"

Thus the emotions played an important role in engaging the novices, and provided an important impetus to reflecting on their experiences.

Reflection triggers adaptation

Self-reflection played an important role in the process of learning, by helping the new managers formulate new responses and motivating adaptation. It was also crucial in formulating their values and identity. Kate described how writing about her difficult experiences in Asia helped her understand her own values better. Ross keeps a formal reflection journal, but tells how the ‘flashes of insight’ occur while pondering things at the end of the day.

Self-reflection was evident in most of the interviews. Paula describes it as a process of “me talking to myself in my head”. Michael describes his process as ongoing:
"I look back – I'm constantly looking back at situations and say okay what did I do well ... what didn't I do well ... Could I have done this a different way? Could I have talked to this client a different way? I guess a – I guess a recap – a constant recap ...");

For others, the more jarring, or surprising experiences triggered reflection:

“When comments I got from the outside were very uncomplimentary...that's when I thought oh, if people are saying that...maybe there is some truth to it...(laughter) that's when I started to think about that.....It was later on when I had a chance to really think about it that I realized that it was me and I had to learn to communicate better in order to...make that relationship work.”

Dee recalls her disappointing experience, not fitting in culturally, which took her back to an earlier incident. Through reflection, she resolved to be different herself in the future:

"like I said I was crushed and I ... it caused me to sort of self-reflect and ... I thought we weren't very helpful at all in sort of getting ... the tasks of the department done ... you know when I sat back and thought about that ... it sort of made me reflect on that saying you've got to try to be different going forward in terms of, you know, people who work for me ... people I work with ... people I work for..."

Thus self-reflection provided an important learning tool in interpreting experiences, analyzing feelings, and in generating resolve and approaches for moving forward. It was often the reflection, occurring quite some time after the original incident, which generated the learning.

Learning Process

One of the research questions in this study revolves around the relative efficacy of guided and discovery learning. This is a point on which the debate continues in learning literature. In the learning described through the interviews, a movement and fluidity occurred between
discovery and guided learning. The guidance was less structured, and less intentional, than is generally conceptualized in literature. It was shared among the workplace context, superiors or workplace mentors, as well as a range of co-workers and others outside of the workplace. It occurred both in and out of the workplace, most often initiated by the novice manager.

To distinguish between intentional guidance in the workplace, and guidance sought by the learner in the wider context, I will discuss these separately.

Of the ten respondents, six reported elements of both discovery and intentionally guided learning. Three reported receiving no intentional guidance in the workplace, and one described learning that appeared highly guided. Importantly, a relationship emerged between the form of learning (guided or discovery) and the content of learning.

*Intentional Workplace Guidance*

Guided learning played a role in four major ways. First, it offered new managers access to experiences, which would in turn provide the learning. Second, guidance provided support and recognition, which in turn strengthened the learner’s perception of self-efficacy and motivation. Third, intentional guidance was instrumental in helping new managers shift perspective or expand their focus to new areas, or learn new tools. Last, working with senior managers and observing them provided an opportunity to emulate approaches and behaviour.

Supportive bosses were instrumental in providing access to experiences offering significant growth to the new manager. When asked who or what initiated the learning, Jin responds:

"my manager ... and she kind of initiated the whole process by saying you know I think this would be really good for you ... to take on because it's something you haven't done before ... so ... she was kind of a driving force ... but past that it was pretty much me ..."

Similarly, Michael credits one manager, who believed in him, and moved him into challenging, larger roles, for the important role this played in his development. Cara also
appreciates the confidence shown in her, through the experiences she has been offered and stresses the importance of a supportive environment, a theme repeated by several others:

"Having that supportive environment and having that confidence of my managers to put me in charge of a project... that's huge...they feel I can do it then I can definitely have that confidence in myself...I've had a few successes...when I know something succeeds or I get good feedback, it just makes me want to do more..."

A supportive environment, and tolerance for making mistakes, were frequently mentioned as facilitating the learning process. Support mostly took the form of 'just being there' or positive reinforcement and consultation, when sought.

Guided learning also played a role in expanding the new managers' awareness of issues, as well as command of tools and approaches. This guidance supported prepositional learning, and occurred through instruction by others, more expert in the areas.

Jin mentioned becoming aware of the breadth of issues to consider from other members of the team. She also learned to use a new tool, an 'event chart', from other members of the shut-down team to track activities and progress. Michael described being taught how to use a template tool in financing decisions. In both cases, the tools were peripheral to the significant learning that occurred during the experience.

Cara and Gina found a gap in their knowledge of labour management protocols after moving into positions managing staff. They acquired the necessary knowledge in practice, by doing, with the support and guidance of functional specialists and more experienced managers. Cara describes it this way:

"It's more – what we are actually able to say in those meetings... what is the purpose of that meeting, what is my role, knowing what I can say, and working with HR ...what we can ask
them...what kind of questions that you can answer and...how to answer them...because it can lead to escalation...”

Yet her full understanding required active participation and she felt she only really understood the process after experiencing it directly. Working with other, more senior managers through difficult tasks offered both support and more tactical guidance. Gina describes the involvement of one senior manager through the dismissal process:

“I was able to work with one senior manager...she just sort of like pulled me aside – giving me a pep talk...how she reacted to me – how she responded to me and gave me kind of coaching and everything – I learned a lot that...but not giving me the full answers...sort of like maybe look at this you know...keep doing what you’re doing and everything – that helps for a leader to come in and give you some sort of nudge....And - and give you some tips along the way....That really um makes a difference ...”

Thus the guidance provided by supportive bosses or colleagues raised additional questions, highlighted new issues or possibilities, and demonstrated confidence, but left the new manager to navigate through the decisions. Since the guidance did not dictate what to do, the new managers retained a strong sense of ownership, as in Jin’s case:

“with my boss it was more you know...these are some of the suggestions...so I never felt like I was alone...she would provide suggestions...then she would leave it up to me”

Sometimes, the guidance was instrumental in getting the new managers focused on broader goals, even back on track. Joyce describes the guiding role of her supervisor:

“In realizing what I had to do, not as much...in helping me realize that I had to move on from the anger and resentment, yes...my supervisor...I learned from her that I had to put aside...no matter how angry and resentful I was, I still had to complete all the projects, I still
In Michael’s case, active coaching expanded his focus to long term needs of his clients. Similarly, Dale revised his assumptions about what is important in a job, after discussions with a senior manager who took interest in him, and helped him develop greater awareness of what he found satisfying and valuable in a job. For Dale, Gina and others, having access to seniors whom they respected helped them formulate their own management style. Observing how admired managers in their organizations conducted themselves provided a rich source of learning behaviours, emulated by the new managers:

"On the way that they conduct themselves... He is very productive... in meetings he has an agenda, certain things he wants to accomplish... that’s a lot of stuff I have learnt from him... how he conducts himself..." (Cara)

"The trust that those people will rise to the occasion... He was really good at that, and I watched him... a lot... so when you’re lucky enough to work with someone like that it really does have an impact on how you manage people there and in the future" (Dale)

Several of the interviewees drew a distinction between emulating an entire style and adopting certain approaches or behaviours. Although Ross considers his style very different from his boss, he continues to learn from him. He cites an example of where his superior ended a deadlocked meeting as effective behaviour, and a valuable skill. He follows up by acknowledging that this was something he would not consider doing himself earlier, citing his natural inclination to persist.

Others also describe the skills and traits of people around them, which they have observed and tried to adopt. In emulating behaviour, the roles of the ‘learner’ and ‘teacher’ were more balanced in importance, as the new managers watched with interest, and adopted what they liked.
In summary, guidance played an important role, in improving task-effectiveness and in expanding horizons. The interviewees described it as valuable when describing task-oriented learning or in learning how to behave and approach problems. Guidance and support also provided important motivation and enhanced perceptions of self-efficacy. At the highest level, guidance provided access to significant experiences and opportunities.

However, without directly living the more challenging experiences, with the learner at the centre, the learning was limited. Michael found too much direct guidance hindered his learning:

"What hindered me was I was ...the non-recognition that that wasn’t helping ... to do it for me with me in the office...and say okay ... there you go – it’s done – this is how you do it ... And ... and I wasn’t learning that way."

For Dale as well, seeing things done did not translate into being able to do it. Having worked in two very supportive environments, with bosses he highly respected for their ability to manage and motivate staff, he is not sure of his own skills in that area:

"I’ve been fortunate, having jobs...we were able to build such good team that that aspect of the job (managing people) wasn’t that difficult...I don’t know if I got a freebie but I made it a long way in my career without having that as a challenge...in other ways it was a gap in terms of my learning...I always...said one of my skills, one of my good skills, is being able to manage people and build a good team... now I’m not so sure anymore... I have some more learning to do...."

When the novices became aware of gaps in their knowledge or abilities, they often sought out others.
Guidance Sought from Others

In ‘figuring things out’, the interviewees drew on a wide array of individuals, both in and outside of work. Role of others ranged from providing emotional support and encouragement, helping the young managers see new perspectives, being available for consultation, and providing affirmation for the learner, to participating in reflective debriefing.

Participants frequently referred to friends and family who provided support and encouragement outside of work, when the novices shared some of their doubts:

“you know I had good support at home ...if I come home and say ... I don't know if I'm going to be able to make this work ... I get a lot of good feedback and a kind of just (laughing) ... telling me that ... you know, yes you can.” (Jin)

Trusted friends and family, outside of the workplace, also helped the new managers see a situation from a different perspective. For example, Dee’s husband-to-be could see the opportunity in her out of town assignment, which she saw as exile:

“... I couldn’t really think straight and I was crushed and he said ... you’ve got to ... look at the experience that you’re going to get – I didn’t see that as being anything good ... he’d list the stuff ... and just wonderful ... he could see it for what it was ... it was a wonderful experience for you to have an opportunity to go out on your own and - and see if you can make a go of it ...”

Gina’s boyfriend helped her understand the need to separate work-related frustrations from her personal life, and also provided an important outlet. Similarly, most respondents talked about how debriefing with friends and family helped provide an important level of support and encouragement at difficult times. That conversation process also clarified for them the main issues:
"...on a personal level be able to talk about it ... it really helps because – it's an outlet for my releasing my emotions ... being able to talk about it ... and being able to listen to it but also talk... I find that if you don't talk about it ... then you're just going to bottle it up and you're not actually solving anything" (Gina)

Peers, friends, subordinates and others also provided important affirmation. The managers felt pride at the respect they have earned from their staff. Gina felt that her approaches and management style was validated when employees turned to her for advice:

"I guess I never thought that I would feel such a reward from these two incidents ... where the employees are coming to me and sharing their concerns and frustration – it - it just... it was important to me that ...I had grown from where I was"

To grow, the managers frequently found out trusted advisors to consult, or share ideas with. This process was no doubt facilitated by an earlier realization that not having all the answers is acceptable and does not diminish their ability. A certain level of self-confidence was thus a pre-requisite to them initiating such a process, without worry that it may reflect negatively on them. With greater confidence, Joyce is now more open about her learning and has shifted her approach from a tendency of 'relying on self-help books' to consulting others:

"After whatever situation, after I've calmed down and looked past the initial emotion...that's when I would start consulting the people that I trust...and start getting views on what I can do next...now I may completely disagree with them...but I feel much better if I've talked to them...I know that someone else has heard what I've had to say and played devil's advocate...It definitely happens nowadays....Coming after those two incidents, yeah...”.

At work, or off, the novices valued the ability to discuss possible approaches in advance and to ‘debrief’ situations and attributed much learning to this process. Michael describes experimenting with financing decision and then reviewing his decisions with his boss. Paula draws on her ex-manager, and seeks him out to get his reactions to her proposed approaches.
She describes it as ‘a kind of peer checking thing’. Ross explains that such conversations helped him make sense of more complex situations, after the fact:

"...yeah I think um ... certainly after the fact .... Especially again when it’s an emotional decision .... I find it – reflection is vital simply because it’s still sitting there ... in the pit of your stomach ... But generally through conversation – we ... do a very good job the three of us here ... debriefing a situation ... and bouncing the ideas off each other ... so that opportunity to do that ... so we’re initiating the learning but ... what we learn ...is a result of those conversations ...."

Importantly, the value perceived in these debriefings or consultation is greatest following the experience. Kate also found significant value in this and emphasizes the value of being on safe ground:

"The whole idea of experiencing something and debriefing it – huge...

While consultations were important, the majority of participants indicated that the most meaningful, significant learning occurred as a result of direct experience. In a number of cases, the experiences weren’t pleasant, and some would rather not have to repeat them. Still, they look back on this discovery learning with appreciation of its value.

*Role of Discovery*

Most of the learning the respondents view as significant initiated with a direct experience, and was built through trial and error experimentation. When they describe learning to navigate the complexities of human dynamics, or to recognize changing context and to adapt their approach to a specific situation or individual, it is most often through discovery. Through these experiences, they re-arranged their view of a manager’s role, and evolved their own management identity, and values.
A very high level of engagement, emotional involvement, and high personal stakes in the outcome characterized the discovery learning described. A number of processes appeared to be occurring simultaneously. As Kate described it:

"all the different dimensions and layers of everything kind of going on at any one time and having an awareness of that..."

When Ross describes events following the removal of a volunteer on the basis of philosophical differences, learning was occurring on a number of fronts simultaneously:

Values  "we all felt we had done the right thing"

Processes  "I'm not sure if we could have communicated more clearly"

Responsibility  "I make sure that I am open and that every process is as clear as possible"

Weak spot  "to anticipate other people's reactions"

Personal stake  "feeling like your values are being challenged"
                "the view of me as a leader and manager"
                "my reputation and relationships"

Self awareness  "I made a snide comment, I was not happy with myself"
                "I am incredibly proud...for me to apologize was almost unheard of...a big first step"

Leadership role  "I called the guy to apologize" (for acting unprofessionally)

Identity  "I make sure that I am open..."
“It wouldn’t have felt right (not to call)...it would have bothered me”

The tension arising from feeling challenged on values, the high personal stakes, and sense of responsibility for longer-term outcomes motivated him to do something that did not come naturally and facing the disagreement and the difficult conversations, and

“what made it so powerful as a learning experience was the impact it had...”

The experience revised his attitudes toward those difficult conversations, and helped to crystallize his view of the leadership role.

Gina’s experience dealing with an underperforming employee as a new supervisor also had multiple, concurrent dimensions:

Values

“I’m always learning from my employees” – respect
“Letting somebody go...it’s not a good situation”

Processes

“you have to go through those steps to make sure the employer has done what they can”

Responsibility

“Was I going to let her continue to affect our department the way she was ... because it was bringing down the morale”

“it doesn’t have to be like this....”

Personal stake

“Whether I could cut it as a manager”

Adapting

“some people are going to want structure ... Somebody else is going to ... need a different type of leadership”
Leadership role  

“*It’s up to you as a manager to control that situation*” (proactive)

“When I was supervisor – you’re also taking the role of being leader, mentor, sister, mother ... everything ...”

Identity as manager  

“you can come in anytime ... chat with me about stuff – know that I’m going to share my honest opinion with them ... and we can build from there ...”

In practice, the new managers discovered effective approaches through trial and error:

“the big take away was that ... you know you do have to change your style ... and you do have to change how you relate to people ...(Paula).

Asked how she came to that conclusion, she replies

“just from trying something and then seeing how it works ... try something – say you try something else ... to see how it works ....”

Gina also describes active experimentation in getting to know her staff and formulating an individualized management approach:

“Sometimes I’ll ask them here’s a project, I want you to organize it ... to see how they react – all these types of things I give them to do ... is a test of how they are going to manage themselves and what – how much leadership and mentoring they need from me ... sometimes I get the wrong answer – maybe you know I guessed the wrong thing – sometimes I’m right ... it’s always kind of trial and error”

Michael and Cara also describe how they learn best by doing, experimenting, and ‘working through things’ themselves. Most of the respondents described such experimentation, and also told how they change their approach in response to a situation, when the results were not as desired. The example of Ross venturing into a difficult conversation is one such example,
spurred by dissatisfaction with his own actions. Here, and in other cases, significant discovery learning followed an initial disappointment or failure, shocking the learner and breaking old assumptions, resulting in a readiness to reformulate approaches and need to resolve the tension.

Joyce's shock at being told she was ineffective was instrumental in getting her attention, resulting in a revision of attitude toward self-promotion and in opening her up to the need for a change in her own actions:

"Growing up, I guess, I was discouraged from self-promotion...sounded to me very egocentric, and not something that nice people do... but in fact that's what you need to do to have people realize what you can bring to the table ...it's now in my weekly to-do list...to let others know what's going on..."

She, along with others, recognizes the value of some 'hard learning' through direct experience, a theme echoed by the majority of the interviewees. The experiences were often harsh, and emotionally demanding. However, the new managers see their value, although they don't necessarily want to repeat them:

"All three (pivotal learning experiences) were things ...not things I chose to have happen...They were opportunities or events where I was forced outside my comfort zone where I was confronted by an unexpected or different reaction or response than I would have (expected)...I 'd like to think that I am learning because I am choosing to learn and I am learning because I am guiding but really so it's interesting that I (that wasn't the case)...The most impactful learning I was shocked out of that" (Ross)

"... But these experiences were very much like - threw you into the wilds, and figure it out and good luck... the learnings are more powerful...and they are harder things to learn...they definitely made a big impact on me..." (Kate)
Similarly Dee’s initial interpretation of a manager’s role as a doer and checker, and her unwillingness to delegate, were only transformed after she received the crushing news that she had a “lousy management style”. It was only through training staff at a location where her role was temporary, and experiencing the effectiveness of giving her staff more responsibility, that she internalized the value of delegating and empowering staff. Such success, following an intense experience and change was a common theme in the stories told, and no doubt contributed to its significance for the participants. In this learning process, the rookie managers saw their own role as paramount.

*Learner Agency*

One of the questions posed to the interviewees probes who played the major role in the learning. While credit is given to others, the dominant theme is “Me!”

Accurately or not, the new managers saw themselves as playing the lead in their own learning. When asked, more than half of the responses were along the lines of:

“It was pretty much me” (Jin)

An important factor that emerges is the learner’s subjectivity, and connection of learning to underlying values:

“Me. ...I guess again, recognizing when things aren’t right... you’re the only one who knows yourself and you’re the only one who could kind of know what’s right or wrong for you...I would choose what to focus on in terms of what aspects of it was I going to try to understand now...and what aspects I could leave for later...” “I don’t know how it couldn’t have been myself” (Kate)

Their comments a high degree of intentionality and autonomy. They also underline the connection between experience, motivation, and adaptation:
"I like being more autonomous ... just ... um sort of figuring it out for myself as opposed to somebody ... showing me ... that's boring ... because I ... I just need to ... develop my own theories and figure it out so it ... it just works better that way so..." (Paula)

"It still came down to me being the main person, to have to go through all of that... to come to a realization that I had to reassess the way that I worked with people... (Joyce)

The perception of the learner playing a key role linked closely to the feeling of responsibility the new managers internalized. They observed behaviour of others, and made their own decisions about how to act, or whom to emulate. Gina describes observing the behaviour of various managers, learning through others’ mistakes, and deciding which behaviours to adopt or avoid.

Individual agency and reflection was also crucial in insights gained from similar experiences being repeated, transparent only to the learner. Exposure to multiple situations over time, combined with reflection, culminated in greater understanding of cultural differences and need to adapt:

"...huge difference in terms of how you get something done...this clash of cultures.... I wouldn’t have known that myself if I hadn’t had the previous experience...Because of my experience... I recognized it sooner..." (Kate).

Experiencing an event from two different perspectives also advanced Dee’s learning. In her case, she first observed cultural differences observing how an outsider ‘didn’t fit’. Later, she experienced them first hand, being the ill-fitting outsider.

Such ‘dual perspective’ learning was cited by at least half of the respondents. Ross, Gina, and Michael all refer to experiencing an event or phenomenon from two different perspectives in their stories of important learning. Both Michael and Dale, as managers, attempt to emulate how they were managed by seniors they admired in behaviour toward
their staff. Similarly, Gina saw more clearly a situation encountered by one of her employees, having been in that same situation years ago. This enabled her to give good advice when approached.

These stories again underline the value of the novices’ ability to reflect on experiences, one important internal factor which supported their learning.

**Enabling Factors**

Both external and internal factors impacted on the novices’ learning experiences. However, factors internal to the learner played a more important, and highly significant, role.

External factors in evidence included a supportive environment, both in the workplace and outside of it. This was often mentioned as supporting the learning process, by supporting the individual. External rewards or incentives did not appear to play a significant role, and were rarely mentioned by the interviewees. As already discussed above, acceptance in the workplace and acceptance as managers was an important motivating factor, yet its power lay in how the new managers viewed themselves.

Internal factors played a significant role. Those in evidence included the ability to think reflectively, motivation, self-awareness, and a sense of self-efficacy. Internal motivation and self-efficacy provided a state of mental readiness to learn.

When asked which factors, internal or external, played a greater role, Jin responded this way:

"I would say internal and only because ... if .... If you're willing to accomplish something you then use that I guess that energy and emotion to get the external...

so for me it would be internal because if I'm not motivated to learn it I mean what's the point to having the support?"

Perception of self-efficacy, confidence in their own ability to ultimately succeed, was mentioned often, including its 'spillover' effect:
"you have a bunch of successes and it just builds up confidence – even if you’re doing something that’s new …you still have … confidence from other things that you’ve done that have gotten recognition for … or self-satisfaction for …it adds to you being able to - to take on something completely new and to say – hm – I can do it” (Paula)

Similarly, Joyce describe self-confidence as a pre-requisite to being open to learning:

“I needed to have more confidence about my capabilities…so that when the criticism comes I’d be able to look at it objectively…and …see if it’s true…and if it is true, how can I improve myself?”

Other meta-skills, such as self-awareness, self-monitoring and self-discipline, organizational skills, research skills, and analytical ability also played a role. Jin – asked how learning linked to prior knowledge comments on the usefulness of organizational skills, planning ability, and self-discipline. These previously mastered process skills, along with communication skills and ability to reflect, played a crucial part in the learning. Still, perhaps none was more important than the self-confidence required to open up to the possibilities of change:

“I think you have to be at a certain place…level of confidence and comfort…you have to be able to listen to other people…you have to be willing to reflect on what you are doing...” (Ross)

Ross’s comments provide a good summary of how these internal factors, or meta skills, played the more important part in learning, which the novices could then extend to other situations.
Transfer to/from other situations

While the new managers found their technical skills and meta-skills useful, they did not feel that their prior life experience equipped them for the complexities of a management role. They felt quite unprepared. Joyce’s comment is a typical response:

“I think not as much because everything else before that had been either through school or formal courses... so it never really spoke too much about...relationship building and it never spoke too much about how you go about...managing people...because managing people is probably the hardest thing”

The few prior experiences, which were cited as being helpful, centered on the complexities of human dynamics. In Dee’s case, her prior experience with an employee who did not fit culturally made her more aware of the impact of such differences when she experienced them first hand. Paula’s volunteer experience made her appreciate the importance of clarity around goals, expectations and responsibilities. She also makes the connection with her role as a mother:

“I think I’m probably more empathetic ... but part of that is just probably being a mother ... it just changes your perspective on things ... And probably .... You know like ... if my staff were having a problem like ... I’m totally out there”

Gina relayed how working in teams in an educational setting helped her in appreciating the diversity of personalities and individual goals, useful to her being a manager:

“We wrote a project on a team ... that in itself was the biggest learning curve I ever had with working for four different teams because everybody’s different personality ... and nobody’s a manager per se –I was constantly managing people and I didn’t expect that ... because I figure oh team project - everybody’s probably going to do their part – not true at all ... everybody also has different goals ...”
After stepping into their first management role, the new managers felt ill equipped as they experienced their initial challenges. However, they told numerous stories of applying the lessons learned in subsequent situations, both at work and outside of work. Several of them shared examples of how they are applying the lessons learned to their other major new role, that of parents. Their parenting role underlined the importance of allowing each individual to find their own way, and tolerate human imperfections. They spoke of allowing their children to make their own mistakes, just as they did, and as their employees have to, if they are to learn:

“And you can learn – and you know I have to ... think about that when I think about my kids because I don’t want to coddle them and do everything for them ... they’ve gotta learn and experience it and that’s the opportunity that I had” (Dee)

**Summing up**

This chapter presented the findings, often in the words of the study participants. Kate’s closing remarks provide a good summary of the important learnings and themes, echoed by others. They underline the importance of human dynamics, the interdependence between a manager and others within the organization, and an appreciation of a need to adapt responses to a specific situation and context. They further reflect an acceptance of responsibility, a presumption of ability to influence outcomes, and a stronger belief in their own ability as managers and individuals. They also illustrate the shift to influencing people on the basis of a strong personal relationship, rather than relying on positional power:

“Recognizing how complex these work environments are...all the different dimensions and layers of everything kind of going on at any one time and having an awareness of that...recognizing what’s important to people, and ...how do you draw the best out of people...Identifying what’s important and being able to walk away from the other...that’s key.... Finding ways to sort of negotiate in the workplace...that’s a big one... everyday negotiating something with somebody...and how do you do that....”
The main themes, which emerged from the interviews, will be synthesized in the following chapter. There, I present an analysis of the findings in relation to the research questions, and propose conclusions in terms of emerging patterns, and in relation to the literature presented earlier.
Chapter 5  Analysis of Findings

This study attempts to illuminate the content and structure of pivotal learning experiences in the workplace, from the perspective of novice managers as learners. This chapter will analyze the findings, present conclusions on a number of contested fronts, and propose interesting possibilities in areas where the literature has been sparse, if not silent.

First, implications for the common conception of workplace learning as largely instrumental, often framed within a cognitivist framework, will be discussed. Second, the learning structure will be analyzed, and the roles of guided learning and discovery learning will be contrasted. Third, the learning processes will be analyzed, including a deeper examination of the players who impacted the learning, and their roles.

A Significant Site for Significant Learning

"Finding one's identity is almost synonymous with finding one's career."

(Maslow)\textsuperscript{52}

The participants' responses provide clear evidence that the workplace is a site of significant learning. The learning extends far beyond technicist, instrumental acquisition of knowledge intended for performance. While the managers provided a few examples of learning 'how to do some things', such knowledge was not referenced in their view of what made the experiences personally significant.

The interviewees viewed as significant those experiences, which triggered an examination of previously held assumptions and views, and which resulted in a material revision of their own self-concept. Perspectives both shifted and expanded, assumptions were shattered, and new perspectives emerged. These were transformative learning events, out of which a new sense of identity emerged. These identities reflected a greater sense of self-confidence and

\textsuperscript{52} Mazlow, as cited in Darkenwald and Merriam (1982), p. 80.
ability to face new challenges, while at the same time accepting one’s own flaws and human limitations.

The most dramatic learning described was dispositional. Values and assumptions shifted and others emerged more clearly through directly felt experiences. The main area where perspectives were transformed was in how others were viewed, and this in turn stimulated new perceptions of self.

**Focus shifts to others and assumptions shift**

In the participants’ view, the most significant learning related to understanding the human dynamics in the workplace and making judgements on how to act and adapt to a variety of situations and individuals. Here, the main ‘topic’ they cited consists of the complexities and multiple layers of interpersonal relations, occurring naturally within organizations. They recognized their dependence on others, including subordinates and peers - sometimes this came as an unwelcome surprise. They found out that others could impact on how they were perceived, and how they perceived themselves – sometimes this came as a rude shock. They learned that other individuals could approach a problem in ways they themselves had not conceived, and achieve results. They learned that people, from whom they expected little, could contribute a great deal.

Working with others also brought into focus the human imperfections of others, and of themselves. Many described themselves as ‘former perfectionists’, who had never failed at anything. Experiencing first hand the challenges, and sometimes failures, in managing staff and other work relationships, these expectations of perfection were shattered. This opened up important new possibilities.

Many of the triggering events were surprises or ‘disorienting dilemma’s’, consistent with Mezirow’s (1991) theory of transformative learning, and consistent with Darkenwald and Merriam’s (1982) conclusion that “the events or tasks which stimulate change offer the greatest potential for continued adult growth.” These events created a level of discomfort
within the learner, a conflict and tension, which had to be resolved. This engaged emotions, and created a force for change, thus initiating an important learning process. The results are consistent with Rager’s (2003) findings, that coping with fear provided a motive to learn. Thus negative emotions can trigger a coping mechanism, which can initiate learning.

Assumptions and beliefs about the sources of power or influence were also transformed, and the new managers found their place within the power structure. Initially, a number had assumed that authority would come automatically with their new management position. It was only through first-hand experience that they found this is not so. Many were challenged. As “Gina” stated, it’s “a false message ... that you’re automatically a leader – because you’re not ... you have to develop your leadership.” They learned the influence of informal networks and other power groups within the workplace. They found that their own ability to influence and motivate staff, or simply get things done within the organization, grew with their increasing sensitivities to human dynamics, individual needs and adapting their approach. Thus interpersonal competence emerged as a more robust and permanent source of influence.

As direct contact transformed perceptions of power relations ‘downstream’, it also contributed to transforming perceptions of power relations ‘upstream’. This reduced the awe toward more senior managers, and helped the novices to see themselves as equal, if not in position, then in potential, since ‘everybody is just people’. It is likely that experiencing first hand the human imperfections of themselves and those around them facilitated this perspective.

**Co-constructing the meaning of a management role**

Out of the participants’ experiences emerged a deeper understanding and appreciation of the management role and its complexities, co-constructed through individual subjectivities and social discourses in and out of the workplace. The interpretation reflected the individuality of the participants. Most internalized the meaning of responsibility for results, although the definitions varied in emphasis on different elements of results. These included performance
toward business goals, perceived effectiveness of human relations, as well as personal satisfaction and career success of the participants. Those were daunting tasks.

The complexity of the challenges, and experience of failures, also transformed the perspective that there was a right answer to every problem, and they were expected to have it. Thus the new managers learned to accept ambiguity and uncertainty as inherent elements of their more complex job, and to separate their identity from the occasional failure. Many mentioned the importance of creating an environment where “it’s OK to make mistakes”.

When the goals were challenging, or when results disappointed, the novice managers became strongly engaged to resolve their own discomfort. They told how through reflection, experimentation, and effort, they eventually succeeded.

Some of these successes were the result of adapting their approach to a different situational or cultural context, and individualizing their approach with different co-workers. This underlined the importance of being aware of differences in context, and adapting accordingly, as crucial elements of the role. Out of these successes also formed a view of the management role as an initiator, setting the agenda, and capable of making a difference. Out of this a more capable, more influential, identity emerged.

**Personal Transformations**

The identity transformations provided the most meaningful learning to the novice managers. They developed a new sense of their own capacity to handle challenges and face the unknown, and to make a difference. This appeared to emerge as a result of two very different forces. One, having been successfully tested by challenging assignments or difficult situations further strengthened their sense of self-efficacy. At the same time, experiencing failure or disorientation and accepting that results will not always be as expected increased their tolerance for their own mistakes and in that process expanded their capacity to take risks.
The identity development emerged through interpreting the management role on their own terms, and through actual performance of the role. This relationship is depicted in Figure 5.1. below by the triangle, whose bases are 'Role Understanding' and 'Role Performance', which in turn enable 'Identity Development'.

**Figure 5.1: Learning at the merge**

The workplace learning extended far beyond vocational or instrumental. Through work experiences, they learned about who they are, and re-formulated that image closer to their idea of who they want to be. This can, and did, occur in the workplace, in the course of work. The learning, which took place, is more accurately described by Mazlow's humanistic
statement that the goals of learning should be the “discovery of identity” and “the discovery of vocation”.

Learning Structure

“When one does not accept something, the possibility of learning something significantly new emerges” (Illeris)

The structure of many of the learning incidents starts with a dramatic opening event, fully consistent with Mezirow’s disorienting dilemma, where the rookie managers were shocked by others’ responses, or perceived themselves as failing. This unleashed strong, sometimes negative, emotions such as anger, fear, and sadness. It also triggered considerable reflection on the situation, resulting in adaptation and experimentation, more reflection, and ultimately bringing success (at least in the stories told!). The process is depicted in Figure 5.2 below:

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This group reported learning a great deal through the most difficult experiences, for which they felt unprepared, and found that 'there is a place for some hard learning'. This challenges the graduated approach, often advocated in training and development literature, including Billett’s (1999) graduated pathway where learners progress only when ready.

The findings thus fully support Kolb’s (1984) experiential learning theory, that “Learning is the process whereby knowledge is created through the transformation of experience”\textsuperscript{55}. The experience played out at two levels, the objective event that occurred, and at the personal level, through the individual’s subjective interpretation. My diagram has a number of elements in common with Kolb’s (1984) experiential learning circle.

\textsuperscript{55} Kolb (1984), p. 38.
The process described by the novices represents movement *originating* with a concrete experience, followed by movement between experimentation and reflection. While the experience acted as a catalyst, most of the learning the participants described occurred in the movement between reflection and experimentation. Using Kolb’s terms, this is transformation via extension - the movement from reflection to active experimentation or trial and error, and transformation via intention – the movement from experimentation back to reflection. Abstract conceptualization was less evident. The interviewees’ sense of their own capacity grew most significantly as a result of overcoming significant challenges, experiencing both the difficulty, its impact and the ultimate success. The success ‘cemented’ the transformation. In the words of one participant:

“Knowing my abilities now...that’s going to help me in anything I do...knowing I can do it...That’s huge...Knowing if I can get through this...I can get through other things.”

This new view of herself grew out of having lived the experience.

**Dispositional knowledge started with experience**

The changes in attitudes and beliefs, including new views of themselves, form dispositional knowledge comprised of values and beliefs. When transformations in these perspectives were described, it was as a result of direct, often difficult, experiences. This included the new view of interdependence with others, acceptance of their differences, and appreciation of their ability to contribute. It also included the acceptance that there is not one right answer, and that one is a flawed human being.

This leads me to conclude that, at least for this group, dispositional knowledge and transformations occurred through the direct experience, or discovery, rather than as a result of guided learning. It was not staged for these new managers by their superiors, but rather served up by the workplace through random, unplanned experiences. For a number of participants, experiencing a similar situation from two different perspectives triggered the insights and learning, or strengthened it.
**Good things take time**

For this group, new insights and learning did not happen simultaneously with a new experience. The Eureka event was not the Eureka moment. It took an iterative process of reflection and adaptation, followed by a success, as depicted above. Most respondents described learning as occurring gradually over several months. In this process, dispositional learning emerged as a leading force, and reflection played an important role in giving meaning to the experience.

Sometimes, the meaning and the personal, subjective implications of the experience emerged only after a repeat experience of a similar, subsequent event.

Reflection played an important role, triggered by surprises which required reframing, confirming the model proposed by Schon (1983). However, Schon portrays it as a process occurring simultaneously with the problem (on-the-spot surfacing), whereas the respondents in this study told of how reflection and insights occurred gradually over time, following the experience. This could be the result of their novice status, in contrast to the more established professionals to which Schon refers. Also, Schon focuses on the application of knowledge to instrumental practice. In contrast, the delays relate to the transformations in attitudes and beliefs, which comprise dispositional learning. Further, the findings here may illustrate the early stages of a reflective practice, where the new managers first utilize reflection to orient themselves to the goals and meaning of their role.

**Dispositional changes precede procedural learning**

The attitudinal changes resulting from newly acquired dispositional knowledge acted as impetus to other learning. The realization that they depend on others, as well as greater clarity of values around the importance of human relationships and/or work purpose, provided motivation for action and change. Because other people mattered, what they said or thought generated strong, sometimes emotional responses, triggering a high level of engagement. Having accepted that, despite being in management, they don’t have to have all the answers, the novice managers were also more comfortable in seeking guidance on how to
Having accepted the need to adapt, they were ready to listen to advice and experiment with different approaches through trial and error. Thus dispositional learning appeared to precede sophisticated procedural learning, as new views of the world and themselves provided the impetus for adapting how they act, resulting in new procedural learning.

**Learning Process**

*Different object, different process*

For new procedural learning, and for most prepositional (how to do things) learning, the participants drew on others in the workplace and accepted their guidance. While they sometimes formulated approaches to procedural learning (how to proceed) through trial and error, guided learning was the only process referenced for prepositional learning.

This indicates that different learning methods vary in their usefulness for different types of learning, a conclusion I advocate here, and presented in Figure 5.3 below. The Figure depicts dispositional learning as leading to procedural learning. It proposes that dispositional learning in adults can only be acquired through discovery, procedural learning can be acquired through both discovery and guided learning, and that prepositional learning is largely acquired through guidance. This was the case with this group of participants. Since prepositional learning did not emerge as a significant element in this study, I do not propose that it can only be acquired through guidance. By definition, all prepositional knowledge was discovered at some point. However, for those among us who are not Einsteins, it was more easily acquired through guidance.

My conclusions are consistent with those drawn by Hermann (as cited in Smith et al., 1997), who argued that discovery learning leads to greater adaptation for more complex and novel skills. Dispositional learning may not represent novel skills, but it is an intricate web of assumptions and values, and thus can be categorized as complex.
This learning corresponds to the highest level, described by Kolb (1984), where the learner sees him/herself as a process. The participants report both their own internal changes, resulting from their experience, and at the same time they have become aware of their ability to impact outcomes and 'the world', in a multi-layered learning process.

Through the discovery experiences, learning occurred on a number of fronts simultaneously. This is consistent with past findings on the richness of experiential learning (Swaak and De Jong, 2001), and with Beckett and Hager's (2000) conceptualization of learning as
combining cognitive, affective, and social dimensions simultaneously. Certainly, our participants’ view of themselves enters into their decision on how to act, with personal values and assumptions guiding them. Social impacts on how they were perceived, and how they perceived themselves, provided significant motivation.

One can compare this to Marton and Booth’s (1997) view of learning where a full understanding is reached only after being able to discern the different parts of the entire picture, the relationship among the parts, and of the parts to the whole. We can link Kolb’s view with Marton and Booth's, if we conceptualize the learner as being one of the elements, or parts, of the whole. The authors state that discernment is a product of the learner’s biography and intentionality. The stories told by the new managers indicated that the experiences impacted the learning structure in two ways. First, they directed their intentionality and brought certain elements into focus. Secondly, the newest chapters of their biography, the at times shattering experiences, expanded their ability to discern new parts of the larger context. This was aided by others, who helped to expand the new managers’ horizons, and to bring new parts into view.

*Take me where I want to go - A place for guidance*

While the dispositional learning was achieved through experience, understanding on how to proceed was achieved in part through guided learning. Here, the process described in the interviews most closely followed Elkjaer’s (2003) inquiry metaphor. Learning was driven by the practical need to act in response to authentic problems, determined by the workplace context. The inquiry belonged to the learners, who saw themselves as having the major role in the process. An important problem, often with personal impact, created a need for change and the need for change created the need for learning. When they needed advice, the novice managers sought guidance.

As depicted in Figure 5.3, guidance played an important role in prepositional and procedural learning of the new managers. Through guidance, the participants became aware of new issues, possibilities, or approaches.
This guidance was provided by a number of different individuals, in and outside of work, and generally in response to inquiry or consultation initiated by the learner. When they consulted others, the managers were highly receptive to hearing advice on dealing with real-world, personally significant, problems. The learning process could be considered learner-directed. The new managers themselves made decisions on who to consult, what type of behaviour to emulate, and which practices to try.

The stories told do not reflect the conceptualization of workplace learning in the novice stage as occurring through well-structured, progressive steps. Much learning occurred as a result of unplanned experiences, rather than ones staged by a guiding agent. The learning 'pull' of experience appeared to be a stronger force than the 'push' of guidance. Guidance played a strong role following the concrete experience and reflection; it did not lead.

The learning described by these managers does not correspond to Billett's (1999) guided pathway model, based on active management of learning by others, presumably wiser and more knowledgeable. The guidance provided by the context, or current practices, was present, but sometimes questioned ("It doesn't have to be this way"). While their superiors offered access to the experience of management, many of the experiences offering significant learning occurred unplanned. The goals were important, yet deeply personal and subjective ("What kind of a leader do I want to be?"). The learners felt unprepared, challenged, even overwhelmed, at the start of the learning situation, rather than ready and eager to progress to the next step.

Billett conceptualizes trainees progressing through tasks of increasing criticality. The criticality appears to be defined in terms of external consequences of failure. In contrast, the novices saw their challenging experiences as highly critical, in terms of intensely personal stakes rather than in terms of the external consequences which gave rise to them. Billett also conceptualizes as knowledge something that can be 'appropriated'. This implies he is referencing factual, prepositional knowledge with a high degree of objectivity, rather than the
subjectivity involved in the development of values and beliefs. He construes learning as a
cognitive and social process, rather than as an internal-psychological and affective process.

Where Billett (2002b) proposes a second plane of guidance, aimed at developing values and
understandings, such learning for these managers occurred through direct experience. Billett
acknowledges the important mediating role played by individual agency. For the managers
in this study, individual agency, and intentionality represented leading forces in the learning,
particularly to dispositional learning. Thus Billett’s guided pathway appears more fitting for
prepositional or instrumental knowledge, rather than for dispositional learning. Alternately,
it may be less applicable as learners grow in maturity, confidence, and strengthen their sense
of identity.

There is also a possibility that the lesser significance of guided learning results from
generational differences. These interviewees, as Generation X’ers, were the first generation
to be more peer- than parent- oriented in growing up, the first to grow up in the information
age, and in a world of work where lifetime employment was no longer the norm. They are
more accustomed to finding their own answers and perhaps less ready to rely on, or trust,
answers provided by others. This generation, believed to be meaning-driven and internally
motivated, may be wanting to find its own answers, through experience.

As they became managers, this group’s first significant learning occurred as they established
for themselves the meaning of their new role. While functioning within it, they adapted, re-
defined the role on their own terms, and in the process re-formulated their own identity:

“"The big areas...I'm more comfortable in my own skin,...much more able to speak effectively
with senior managers...much more confident and at ease managing staff... and able to
manage people without being drawn into their emotions...I don't doubt in my mind...I'm
satisfied in my role as a manager.... I'm not worried, what if I get another difficult
employee, cause you know what - I can deal with it. There will be support, there will be
different channels, different ways of managing it...I can deal with it."
Chapter 6  Conclusions and Implications

The research presented in this study aims to illuminate the content and structure of workplace learning by novice managers, and to examine the elements, which play a role in the learning process.

Study Purpose

First, the study probed the learning content, in order to determine which elements novice managers consider significant. The content was then categorized, so that the learning process could be examined and differentiated for different types of learning. Second, the study examined the structure of learning and its linkage to both personal and workplace contexts to determine which, if any, dominated the focus of the learner. Third, it also probed the sequence, and time span, of steps involved in the learning experience, and examined the triggers, which initiated the learning and the processes, which supported it. Fourth, the study examined the learning experience for the presence of both guided and discovery learning, evaluated their relationship to different types of learning, their location in the learning process, and their relative importance. Finally, the role of factors internal and external to the learner was evaluated.

The study probed workplace learning by examining specific incidents and experiences, which managers felt were significant to their development as novices. Ten early-career managers, both male and female, from a variety of functional backgrounds and industry sectors, participated. Data was collected through individual, semi-structured, qualitative interviews lasting approximately one hour, and the respondents were provided with the questions in advance to allow time for reflection. The participants were chosen, and instructions formulated, to provide a retrospective view of the learning experiences of novice managers. The data was then analysed against themes suggested by literature and the research questions, as well as new themes, which surfaced during the interviews.
At this point, it is also appropriate to reflect on the research process and experience, so that it may serve to inform others.

**Reflections on research process**

In retrospect there are a number of areas where potential for refinement exists. First, the scope of the research questions was quite ambitious, increasing the complexities of data analysis, and the risk of discarding of potentially rich data. A narrower, deeper focus, perhaps only on the learning structure and content may have been more effective. Second, although the scheduling aimed to space the interviews and limit the number per day, accommodating the participants' schedules and requests for changes resulted in three interviews occurring on the same day. As a result, the interviewer's degree of alertness and ability to probe nuances diminished. In future studies, it would be advisable to adhere more strictly to a limited number of the interviews and spacing them to allow rest and reflection time. Finally, reviewing the transcripts revealed a few instances where the interviewer's comments may have interrupted the flow of the respondent's narrative. Such interruptions should be avoided. Despite these minor flaws, the overall research process worked quite well, and it is worth highlighting some of the inherent processes and procedures.

Using the retrospective approach provided a distance between the learning experience and the participants. Given the intense personal nature of some of the experiences, I believe that the participants would not have shared them as openly, if at all, if a more current perspective had been used. Further, providing the interview instructions and questions to respondents in advance allowed them time to reflect on past learning and distill what they felt was most important. Their remembrance also confirms the personal significance of the experiences. This process made it possible for the interviews to consist largely of a free-flowing narrative, with the respondents monitoring themselves to answer most of the questions. This allowed unanticipated themes to surface. I suspect that it also made the interviews productive, and the respondents were never at a loss, but able to provide answers rich in data. It may also have assisted in recruiting them.
The process of analysis for the data collected worked very well. Initially, the researcher/interviewer listened to the recording, transcribing passages, which appeared to directly relate to research questions and/or present important new themes. Following coding, data was then placed into an organizer under headings corresponding to the key themes. This allowed themes occurring frequently to surface and allowed a comparison of results across participants. Referencing particularly relevant quotes in this organizer saved significant time in writing the findings. Later, the full transcripts were analyzed again.

Using an iterative process, moving back and forth between analysis, study purpose, and literature review, proved to be highly productive. In this process, different concepts surfaced, as the research data clarified literature, and literature clarified data. This process was also supported by discussion of the preliminary observations and findings with a circle of colleagues, who raised questions and introduced new perspectives. Through this process, both internal and social, the findings emerged.

Findings

The findings point in a number of interesting directions. With respect to the content of learning, the findings indicate that learning extends far beyond instrumental, or technicist components. The most significant learning to new managers comprised of formulating their own meaning of the management role, adapting to the human and organizational dynamics, and forming their own identity as managers and individuals.

The structure most commonly found started with some ‘hard learning’, as when the novices experienced failure or surprise. The learning was dramatic, rather than gradual, in scope and significance and emotions along with high stakes played an important role in mobilizing the learning effort and willingness to adapt. Stakes were largely internal, defined in terms of self-esteem or self-perception, and internal context dominated. Reflection played an important role, and occurred following the experience. Much of the learning occurred in the movement between adaptation or experimentation and reflection.
strengthened through repeat experiences, and confirmed through successes. The insight and learning was gained gradually, rather than concurrently with the triggering incident.

Experiences triggered an examination of assumptions and values, and often resulted in their transformation. Dispositional learning occurred in this way. These transformations in turn led to experimentation with different ways of acting and proceeding (procedural learning) or led the novices to seek guidance.

Guidance played a role in prepositional and procedural learning, and in expanding the learners' horizons. Guidance was valued by the learners, and was sought by them in response to dealing with specific problems; it did not precede the engagement with a situation. The learners saw themselves playing an important, often leading, role in their own development.

Factors internal to the learner exceeded external factors in importance, at least in the learner's view. External factors were in evidence, and appeared to impact through their effect on the novice managers, confirming Quinones (1997) finding that the context acts through the trainee. Among the internal factors, self-confidence, self-efficacy, and the ability to reflect figured most prominently. The confidence to take on new and unknown challenges, and risk failure, was mentioned most frequently, and the respondents both cited and demonstrated an ability to treat task failures objectively, without impacting their sense of identity.

What do these conclusions imply for practice, and for future research?

Implications for Practice

First, let's be humble. Although the research is informative in its revelation of the viewpoint of the learning manager, the indications presented above are based on a small group (n=10). The participants were motivated, educated individuals with a good level of self-efficacy and self-confidence as they started their management career. All participants belonged to a
similar age group, and therefore generational characteristics may be reflected in the results. Also, as all were educated in North America, and shared mainstream values, the findings may not be applicable for different cultural groups. I will therefore confine the implications for practice to this limited group. Since learner agency emerged as an important factor, I will address implications both from the viewpoint of the learner, as well as of the employers.

*Who gets to decide?*

First of all, it is important to recognize that this group saw themselves as the main player in the learning. Whether reality or perception, this created a high level of engagement, receptivity, and motivation to learn. It suggests that learning is more productive when learners can direct their own development experiences and training. If they choose what type of learning to engage in, and when, the experience may prove more productive. Literature already suggests that learning for a purpose was more effective (Lim and Johnson, 2002). In order for the purpose to be authentic, it should be selected by the learner.

*Prepare for the unexpected*

Much learning described in this study occurred as a result of unexpected experiences. These experiences were not necessarily transparent to anyone but the novice manager. The learning followed the experience, and occurred over some time, through reflection, experimentation and adjustment. This reverse sequence suggests an important gap exists in traditional management training, which is geared to prepare the incumbents to cope with situations they have not yet experienced.

The learning process was supported by the learner’s ability to reflect, to take initiative, and ultimate expectations of ability to succeed, predicated on self-efficacy. Self-efficacy has been identified as a leading variable in learning (Gist, 1997), and the importance of meta-skills to learning, including the ability to reflect is generally acknowledged (Smith et al., 1997, Lim and Johnson, 2002, Hodkinson et al., 2004).
The only intervention feasible, if a problem is not transparent, is to prepare the learner to work through the steps successfully him/herself. This points to developing reflective skills, and other meta-skills, and developing individual self-efficacy through the experience of success. Such self-efficacy is strongest, when the success follows a difficult, not an easy task.

*To the moon not because it's easy, but because it's hard*

John. F. Kennedy used such a phrase in announcing the moon mission. It was the magnitude of the challenge which gave the mission much of its meaning. Similarly, the novice managers found that it was challenging tasks through which they learned the most, as they progressed from feeling overwhelmed to accomplishing results and feeling achievement. Yet much traditional training follows small incremental steps. The study participants’ stories told us that, for this group, a development path, which consists less of 'coddling', and more of dealing with significant, difficult tasks, results in significant learning. This suggests that novices should have an opportunity to take on challenging assignments, which will 'stretch' them. The participants’ self-efficacy also grew most through the accomplishment of tasks or projects they considered difficult.

*Being there*

The participants found guidance, when they were ready. They sought and found it from different individuals in the workplace, in other circles, and at home. For the learner, this suggests that establishing a social network in the workplace and outside is an important resource to learning. Such a network can provide advice on how to proceed, as well as the support needed when the problems of the workplace appear overwhelming.

For the employer desiring to develop employees, encouraging such contact networks within the workplace through involvement in various work teams should provide good dividends in employee development. It allows employees to access, and to learn from, a wider circle of colleagues. Employers can also encourage involvement outside of work with contacts, who
can act as additional resources for the learner, by supporting outside education and activities such as volunteerism. Having mentors or coaches accessible to the learner is another way that companies can support the learning process.

Play it again

The participants’ examples show that learning sometimes occurred after experiencing an event a second or third time, or from a different perspective. This is no surprise, since spaced learning is known to be highly effective (Dempster, 1988). This suggests that learners should aim to experience situations from different perspectives, and seek opportunities to repeat important experiences. Such repeat events provide opportunity to adjust approaches and adapt.

Similarly, organizations need to allow ‘time to get it right’. If novice managers don’t succeed at first try on a task, moving them into a position where such a task is not part of the job will certainly not result in mastery.

Implications for Research

As stated above, this study was based on a small, homogeneous sample. Clearly, to be able to generalize any of the conclusions would require extending the research to a larger sample. The study examined workplace learning from the viewpoint of the learner, using a longer time frame, which often stretched across employers. This revealed interesting new insights on the effects of various influences from outside the workplace on workplace learning. This longer-term perspective of the learner appears to offer rich potential for further study.

The most interesting conclusions are indicated in differentiating between the learning processes for different purposes (prepositional, procedural, dispositional). This is an area, which may offer important possibilities.
Also, the concept of dispositional learning as leading the learning process needs to be further examined and tested. Does it apply universally, or only for certain types of learners, at a certain point in time?

The learners in our study were novice to their management roles. In this situation, the meaning of the role, and certain key elements such as human dynamics, took centre stage. This was viewed as the most significant learning. Does this change as individuals progress from novices to seasoned incumbents? And if so, how?

The participants in this study had a strong sense of self, and were able to use difficult experiences as a catalyst to learning. This may not be applicable to all groups. It would be important to understand how difficult experiences translate into learning for individuals with lower levels of self-esteem and self-efficacy, or if they translate into learning at all, and if so how?

The difficult experiences generated a wave of emotions, which played an important role, according to the interviewees. The role of emotions in learning remains an area where little study has been done, leaving potential for much new learning.

And last, what role do generational differences play in learning? And since the generational differences are conceptualized along psycho-social lines, what implications does this have for groups with different dynamics? Do high achievers learn differently from happy-go-lucky types? Do innovators differ from resistors to change? And, what are the differences in learning between genders?

Workplace learning is an important area, which impacts on an individual’s sense of well-being by providing a sense of accomplishment and identity through work. It also meets important social goals of productivity and economic well-being. This study has attempted to illuminate the area further, in the hope that small steps can lead to giant leaps.
Bibliography


Appendix I  Interview Instructions and Questions

Please orientate yourself to your first management job. The questions you will be asked will relate to workplace learning in that environment. In this environment (this should be 1 – 5 years ago), think about a few (not more than three) significant/ pivotal learning experiences or incidents, which significantly contributed to your learning to effectively fulfill your role. (Please do not include learning which occurred during the course of training courses taken.)

You will be asked to describe these learning events, and will be asked the following questions (as well as other follow up questions which will depend on your responses):

1. Why was this significant and important learning to you? How would you summarize what you gained from it?

2. What/who initiated this event or the learning?

3. Who played a role in the learning? What role did they play?

4. Over what period did the learning occur?

5. What was at stake (if applicable)?

6. What emotions did you feel? What role did emotions play in the learning?

7. How (if at all) did this link to things you had done or known before (at work or outside of work)?

8. How did the learning impact on you and your actions?

9. Which factors or processes supported the learning? Which hindered the learning?
## Appendix II  Rationale for Interview Questions

<table>
<thead>
<tr>
<th>Question:</th>
<th>Theory/Literature:</th>
<th>Analysis planned:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory narrative, free-form, undirected</td>
<td>None assumed. Mezirow’s transformational learning or Billett’s progressive pathway and guided learning? Which type of knowledge – prepositional, procedural, dispositional?</td>
<td>Why was the experience significant for the learner? Does it represent incremental/progressive or transformational learning? What type of knowledge was acquired?</td>
</tr>
<tr>
<td>Q1. Why was this significant and important to you? How would you summarize what you gained from it?</td>
<td></td>
<td>Insight into what the learner values. Clarification of type of learning and its impact. Validation of answers to open introductory question.</td>
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<tr>
<td>Q2. What/who initiated this event or the learning?</td>
<td>Learner agency Guided learning Presence of a triggering event</td>
<td>Classify who initiated learning. What was the role of learner? Role of opportunity. Test for presence of a triggering event – was it a dilemma, frame-breaking event or incremental?</td>
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<tr>
<td>Q3. Who played a role in the learning? What role did they play? What was their impact?</td>
<td>Learner agency OR Guided learning Self-reflection Social dialogue</td>
<td>Who does the learner see as crucial? Why? What is the learner’s self-perception? Was reflection used? Evidence of transfer between environments?</td>
</tr>
<tr>
<td>Question:</td>
<td>Theory/Literature:</td>
<td>Analysis planned:</td>
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<td>Q 4. Over what period did the learning occur?</td>
<td>Spaced learning</td>
<td>Did learning require a certain duration or repeat experiences?</td>
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<td></td>
<td>Transfer between environments</td>
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<td>Q 5. What was at stake?</td>
<td>Role of risk and rewards</td>
<td>Which factors (risk or rewards) made the experience significant to learner, how?</td>
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<td></td>
<td>Organizational context (acts through learner)</td>
<td></td>
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<td>Q 6. What role did emotions play?</td>
<td>Little theory. Some findings that emotions can both help and hinder.</td>
<td>Identify presence.</td>
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<td></td>
<td></td>
<td>Classify as positive or negative.</td>
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<td></td>
<td></td>
<td>Identify impact of emotions.</td>
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<td></td>
<td></td>
<td>Was impact positive or negative?</td>
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<td>Q 7. How did this link to things you had done or known before?</td>
<td>Learning transfer theory.</td>
<td>Probe for progressive pathway.</td>
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<td></td>
<td>Importance of self-efficacy.</td>
<td>Probe relevance of prior training and perception of self-efficacy.</td>
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<td>Probe for transfer between environments.</td>
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<td></td>
<td></td>
<td>Probe for</td>
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<tr>
<td>Q 8. How did the learning impact on you and your actions?</td>
<td>None</td>
<td>Validate answers to above questions.</td>
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<td></td>
<td></td>
<td>Assess self-reflection by learner.</td>
</tr>
<tr>
<td>Q 9. Which factors or processes supported the learning?</td>
<td>Role of internal and external factors.</td>
<td>Assess presence and importance of meta-skills – self-regulation, motivation, reflection, etc.</td>
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<td></td>
<td>Current emphasis on internal factors.</td>
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<tr>
<td>Summing up: What made this experience a pivotal learning event for you?</td>
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<td>Test for themes missed.</td>
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<td>Confirm understanding.</td>
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<td></td>
<td>Obtain the learner’s words to describe the learning.</td>
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