REPORT TO WORK AND LEARNING KNOWLEDGE CENTRE

WORK-RELATED INFORMAL LEARNING

RESEARCH AND PRACTICE IN THE CANADIAN CONTEXT

CENTRE FOR WORKPLACE SKILLS
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The Canadian Council on Learning’s Work and Learning Knowledge Centre (WLKC) issued a call for proposals to its members to conduct a synthesis research project on “Work-related Informal Learning” in order to develop an evidence base about work-related informal learning to help illuminate stakeholders’ approach and response to the challenges it raises. The purpose of the research was to inform and guide WLKC’s subsequent knowledge exchange initiatives designed to communicate with and engage a broad audience of key workplace and work-related learning stakeholders on the importance of informal learning and the practices that support it. Since the WLKC’s mandate is knowledge exchange, the focus on this project was to examine and collate existing research and expert opinion on the topic, rather than conducting original research. The findings of this research project will contribute to knowledge exchange in the area by identifying challenges or gaps in the research, interested audiences, and useful knowledge exchange activities.

The specified objectives of the research were to:

- Contribute to the development of a working definition of “informal learning”;
- Describe the incidence and characteristics of work-related informal learning in Canada;
- Discuss practices being used in Canada to support and/or assess work-related informal learning;
- Map the field of practice in terms of key actors involved in providing, recognizing or otherwise supporting work-related informal learning;
- Develop a Knowledge Exchange plan for WLKC with respect to work-related informal learning.

Under each of these topics, WLKC provided a detailed set of questions to be answered by the research. The study method included a focus on synthesis research that had already been published, a search of primarily Canadian literature on the topic of informal learning, and a consultation process with key stakeholders from academia, business, community groups, government, organized labour, and trainers. A Project Advisory Committee of Stakeholders was involved in development of the research approach. The research method is described in detail in Appendix A.

The Canadian Association for Prior Learning Assessment (CAPLA) was chosen to lead this project. CAPLA is Canada’s only membership-based association for prior learning assessment. It focuses on all types of learning (informal, non-formal and formal), and how they connect to one another for recognition of many forms. The project team consisted of Dr Christine Wihak of Thompson Rivers University as principal researcher; Dr John Bratton of Thompson Rivers University as an expert advisor; Gail Hall, Coordinator of CAPLA’s www.recognitionforlearning.ca community of practice; and Bonnie Kennedy, Executive Director of CAPLA.

The report that follows was prepared in response to the requirements of the RFP, with incorporation of suggestions from stakeholders who reviewed an interim draft at a Validation Meeting.
Why the Interest in Informal Learning?

Global Influences

Concern with lifelong learning in the workplace has grown worldwide in response to globalizing forces and rapid technological change (Bratton, Mills, Pyrch, & Sawchuk, 2004). In early conceptualizations of lifelong learning, learning was presented as something that people needed to be encouraged to do. Later it came to be viewed as natural, pervasive, and part of an on-going process. This shift in the understanding of the nature of lifelong learning has brought informal learning to the foreground of lifelong learning discussions (Rogers, 2008).

Specific interest in informal learning within the workplace is relatively new (Skule, 2004). White (2008) described workplace learning practitioners who were actively interested in the topic as being in “the bubble of early adopters.” Within the world of academic research, Sawchuk (2008) has noted that research focused explicitly on informal learning and work is just over 15 years old, “a birthday marked…by the accumulation of a critical mass of theoretically coherent, basic and applied research” (p. 4).

The increased interest in informal learning stems from multiple, interacting causes and sources. A major factor is the growing awareness of the frequency and importance of informal learning in the working lives of most adults. In the United States, research has suggested that informal learning represents 70% or more of work-related learning (Lowenstein & Spletzer, 1999). Similarly, in 1998 and 2004 Livingstone and his colleagues at OISE (Ontario Institute for Studies in Education) conducted national surveys focused on adults’ informal learning and work (Livingstone, 2008). These surveys indicated high rates of participation in work-related informal learning.

The development of lifelong learning policies is another reason for the increased interest in lifelong learning research and practice. For example, in the European Union (EU), lifelong learning policies were developed to maintain competitiveness and labour mobility. These policies led to the need to identify work-related informal learning in certifiable forms recognized by the National Vocational Frameworks, which specify required competencies for a wide range of occupations (Colley, Hodkinson, & Malcolm, 2002).

Growing dissatisfaction with the effectiveness of the formal education system and off-the-job training has also been a factor in making on-the-job informal learning emerge as a field of interest (Beckett & Hager, 2002; Cross, 2007; Rothwell, 2002). Rapid change in the workplace is another reason that on-going informal learning is critical. As Cross (2006) has pointed out, “It’s impractical to try to learn in advance when what you need to know won’t stand still.”

Finally, the Web has transformed informal learning, offering over a billion people ready access to information and ideas on a vast array of topics. According to Cross (2006), “Google is the world’s largest learning provider, answering thousands of inquiries every second.” The rapid growth of Web 2.0 has made it possible for individuals and organizations to have readily accessible and highly interactive internal information networks. Furthermore, informal learning is highly visible in the form of recorded interchanges taking place in wikis, blogs, and other interactive websites (N. White, 2008). Such visible tracks may make informal learning more amenable to being studied and measured than it has been in the past.
Stakeholder Responses

In our consultation with workplace stakeholders, interest in informal learning varied. Although we received no responses that indicated that stakeholders had only some or no interest in this topic, we did not see uniform agreement that it was very important either. Not surprisingly researchers and facilitators indicated the highest level of interest. The issue was also of great interest to Occupational Groups. Respondents in the business category attached less importance to the issue of informal learning than the other categories of stakeholders, as did labour respondents.

Working Definition of “Informal Learning”

Definitional Issues

The term informal learning is often used to refer to learning that is neither formal learning (occurring in the context of the formal education system) nor non-formal learning (occurring through planned, structured training or education outside of the formal education system). That is, the type of learning has been defined historically by the context in which it occurs (Billett, 2002). In this perspective, informal learning occurs somewhere other than a classroom or training venue. The Centre for Education and Work (2004) used the following definition in research on informal learning:

“Learning resulting from daily life activities related to work, family, or leisure. It is not structured in terms of learning objectives, learning time or learning support and typically does not lead to certification. Informal learning may be intentional but in most cases it is non-intentional, incidental or random.” (p. 3)

While a consensus exists that informal learning is important in the workplace (Solomon, Boud, & Rooney, 2006), research on the topic has been complicated by the competing definitions of what comprises “informal” learning in the workplace context. Several synthesis papers have discussed the different theoretical definitions of the concept (Billett, 2002; Cole, 2005; Colley, Hodkinson & Malcolm, 2002, 2003a; Livingstone, 2001, 2005; Marsick & Watkins, 2001; Sawchuk, 2008). No clear consensus has yet emerged from these efforts. The synthesis approach taken by Colley and her colleagues at the University of Leeds (Colley, Hodkinson, & Malcolm, 2002, 2003a, b) has, however, received notable approval from other scholars in this area (Butterwick, Jubas, & Liptrot, 2008; Cole, 2005; Gairey, Ng, Martin, & Jackson, 2006; Sawchuk, 2008; Straka, 2004.)

The Colley research team (Colley et al., 2002, 2003a, b) was commissioned by the Learning and Skills Development Agency in the UK to conduct a comprehensive literature review, original research, extensive consultation with researchers and other stakeholders, and analysis on the topic of non-formality and informality in learning. They were to use their findings to clarify the meaning of these terms. The authors’ final report compared and contrasted ten major theoretical pieces in the field of informal learning, looking at how different authors defined informal learning so as to make it distinct from formal learning and/or non-formal learning1.

What the researchers (Colley et al., 2003a; 2003a, b) found was a dismaying lack of consensus on the definitions of informal and non-formal learning. Although Colley et al. (2002, 2003a, b) tried to create ideal definitions from the ten competing conceptualizations, they were dissatisfied with the results. “[T]hese models use so many criteria in so many different ways, and with such utter lack of agreement, that there could be no way of imposing a once-and-for-all definition that would have any credibility across all sectors” (Colley et al., 2003b, p. 8).

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1 Theoretical positions considered included those of Beckett and Hager (2002); Billett (2002); European Commission’s Communication on Lifelong Learning (2001); Eraut (2000); Hodkinson and Hodkinson (2001); Hunt (1986); La Valle and Blake’s (2001) report on U.K. National Adult Learning Survey; Livingstone (2001); Simkins (1977); Stern and Sommerlad (1999). The interested reader is referred to Colley et al. (2002) for descriptions of each of these theoretical approaches, which are too complex to summarize here.
The Continuum Approach: Balancing Informality and Formality in Learning

Instead of trying to create a synthesized definition of informal learning, Colley et al. (2002, 2003a, b) decided to take a completely different approach. They took the position that informality and formality can be considered attributes of learning that are found in varying degrees in every learning situation. “The challenge is not to combine formal and informal learning, but to recognize that they are always combined, and to then understand the implications of their particular balance in any learning situation.” (Colley et al., 2003b, p. 8). As an analytic method to investigate learning in any context, they proposed four aspects of learning, each of which can range along a continuum from formal to informal in any particular situation:

**PROCESS:** This aspect is concerned with control of the learning process, the provision of pedagogic support, and assessment. In more formal learning, an instructor or trainer controls the learning, provides pedagogic support and conducts summative assessments of learning. In more informal learning, the worker controls the learning, receives pedagogic support from a colleague or friend, and engages in self-assessment based on the satisfaction derived from his/her own learning.

**LOCATION AND SETTING:** This aspect addresses the physical location of the learning, with a college classroom being more formal and an office coffee room being less formal. To illustrate the flexibility of the approach, however, a workplace training room would be considered more formal than the hallway of a university.

**PURPOSE:** This aspect relates to whether learning is the primary focus of the activity (more formal) or whether it is a sideline (more informal). It also introduces the impact of power relations on the learning process, whereby the learning purpose could be set by an external authority such as an employer (more formal) or by the learner (more informal).

**CONTENT:** This aspect focuses on what is being learned and the expected results of learning. Acquisition of an existing body of theoretical knowledge or a high level of technical skill would be considered more formal. Acquisition of everyday practices would be considered more informal. If the learning outcomes are highly specified as in a professional licensing exam, the situation would be considered more formal, while if the learning outcomes are left unstated, as in much web browsing, the situation would be more informal.

Colley et al (2003b) have described their framework as a “practical tool” to use in analyzing the complexities of any given learning and for investigating what happens to learning when it is made more or less formal by varying one of the four attributes. For example, when an organization introduces a planned mentoring scheme, both the process and purpose aspect of the learning has become more formal than in a spontaneous or voluntary mentoring situation. The introduction of such formality may or may not improve the quality or quantity of learning.

In another example, the Canadian system of training apprentices is a combination of formal and informal
learning. The in-class technical training through endorsed training institutions is at the formal end of the continuum with regard to all aspects of learning. The on-the-job training is more informal with regard to location and setting and to purpose, in that it takes place at a job site where the primary focus is productive activity. The content aspect, on the other hand, lies between formal and informal, in that an external authority (i.e. the qualified tradesperson who is supervising the apprentice) controls the learning, but the sequencing of on-the-job lessons is less structured than in a classroom. The fact that the supervising tradesperson, however, has authority to assess the apprentice makes the on-the-job portion of apprenticeship system more formal with regard to the process aspect than in a DIY (do-it-yourself) situation where the person self-assesses how well a job was done. The process aspect is often also more informal than in a classroom setting, in that the use of log books and systematic assessment of the apprentice’s work varies greatly in many trades and jurisdictions during the on-the-job portion of their training.

One important attribute of learning that is not addressed in the Colley et al. (2003a) framework is that of consciousness. Neuroscience research is demonstrating that the vast majority of human brain activity is unconscious. These unconscious processes have significant influences on what appears to be conscious behaviour, such as learning (Davou, 2002; Goleman, 2008). Eraut (2004) has used the term implicit learning to describe learning that was acquired unconsciously, without explicit awareness of what was learned, while Polanyi (1966) coined the phrase “tacit knowledge” to describe a similar phenomenon. Implicit learning is considered essential to development of intuitive expertise, and indeed, the greater a person’s level of expertise, the more difficult it can be to share it with novices (Kercel, Reber, & Manges, 2005). While some unconscious learning can be made conscious through reflection, much expert knowledge cannot be articulated. “We can know more than we can tell” (Polanyi 1983, p.4). Recent research in cognitive science lends support to Polanyi’s insight (Fauconnier & Turner, 2002). Highly reflective practitioners engaged in work-related learning have reported awareness that unconscious learning has occurred, even if they cannot specify exactly what they learned (Wihak, 2006). Jarvis (2004), Illeris (2004), and Schugurensky (2006) have also recognized the importance of unconscious learning in their theoretical discussions of informal learning.

Focussing on the consciousness aspect of learning might be an important addition to the Colley et al (2003a, b) framework. Consciousness has important implications for the assessment of learning and the design of interventions meant to increase learning. With regard to the assessment of learning, unconscious learning is often unarticulated and may in fact be impossible for the learner to articulate since it is hidden from the learner’s conscious awareness (Goleman, 2008). This hidden aspect of unconscious learning can be just as true for experts in a field as it is for novices (Kercel, Reber & Manges, 2005). To assess this unconscious learning, methods other than surveys, interviews and questionnaires would need to be employed (Livingstone, 2005). With regard to interventions to enhance work-related learning, a focus on unconscious learning would lead to changes directed at the learning environment rather than the individual learner. For example, changing the art displayed in an office environment could convey important motivational messages to employees without their conscious awareness of this as “learning” (Bratton & Garrett-Petts, 2008).

Although the Colley et al. (2002, 2003a, b) approach was validated through extensive consultation in the U.K. and has received favourable comments from a number of researchers (Butterwick, Jubas, & Liptrot, 2008; Cole, 2005; Gairey, Ng, Martin, & Jackson, 2006; Sawchuk, 2008; Straka, 2004), it would be naïve to expect uniform consensus in a field as highly contested as workplace learning (Fenwick, 2006). For example, Sawchuck (2008) confirmed the continuum approach of Colley et al. (2003a) but nevertheless recommended that different theoretical conceptualizations could be used to investigate distinctive features of work-related informal learning. For example, Livingstone’s (2001) model highlighted issues of power and control of the learning process, while Eraut’s (2004) conceptualization focussed on unconscious/conscious information processing involved in problem-solving and Illeris (2004) offered a model that recognized the complex factors that mediate work-related learning. Therefore, while the recommendations of Colley et al. (2002, 2003a, b) deserve serious consideration, it is premature and presumptive to expect complete and widespread acceptance of their work.
Stakeholder Response to Continuum Approach

Many practitioners and researchers in the field have not fully articulated their understandings of key basic terms like "work" and "learning" (Fenwick, 2006), making it difficult to clearly define a term like "informal learning." In this respect, just as consensus on the meaning of the term "informal learning" may be an unrealistic and ill-advised goal, reaching an articulated and committed stance with regard to informal learning is something that relatively few people can be expected to achieve.

Our stakeholder consultations revealed that even the term informal learning is not used consistently. Because academics and practitioners in the area of work-related learning tend to use different vocabularies, we asked stakeholders, "What other terms do you use or do you see used to describe work-related informal learning?" We got a host of responses:

- Action learning
- Experiential learning
- Hands-on learning
- Incidental learning
- Independent study
- Industry training
- Job shadowing
- Lifelong learning
- Mentoring
- Non-formal learning
- Observation
- On-the-job training (OJT)
- Partnering
- Peer learning
- Professional development
- Project learning
- Reflection
- Researching
- Self-directed learning
- Service learning

One respondent preferred not to name informal learning, pointing out that workers helping each other learn the job was just “the way we do things around here.”

The lack of consensus on what to call informal learning points to the difficulty in trying to reach agreement on how to conceptualize the term as well as the challenge of arriving at a working definition. When we proposed the continuum model of formality/informality in learning in the stakeholder survey, the majority of responses indicated it would be “somewhat useful” or “very useful.” Additional comments ranged from highly enthusiastic to very dubious about the value of the approach. One leading academic researcher in this field described the continuum approach as a “paradigm shift” that would be challenging to convey.
How do People Learn?

Informal learning strategies

Early theorists in the field of work-related informal learning Marsick and Watkins (2001) have identified the following types of informal learning activities:

- Task accomplishment;
- Trial and error;
- Self-directed learning;
- Networking;
- Coaching;
- Mentoring;
- Performance planning.

The listing of informal learning activities in the 2003 Canadian Adult Education and Training Survey (Peters, 2004) offered respondents a choice of informal learning activities, including: seeking advice from someone knowledgeable, using the Internet or other software, observing someone performing a task, consulting books or manuals, or teaching themselves different ways of doing certain tasks. This list involves more detail concerning what Marsick and Watkins (2001) termed “self-directed learning.”

Two major US surveys concerned with adults’ participation in learning (Kim, Collins Hagedorn, Willaimson, & Chapman, 2004; Kleiner, Carver, Hagedorn, & Chapman, 2005) identified these work-related informal learning activities:

- Supervised training or mentoring;
- Self-paced study using books or video tapes;
- Self-paced study using computers;
- Attending “brown-bag” or informal presentations;
- Attending conferences or conventions;
- Reading professional journals or magazines.

Apart from the first item in the list, these activities are also elaborations on self-directed learning (Marsick and Watkins, 2001).

In Canada, the National Adult Literacy and Life Skills Survey (Rubenson, Desjardin, & Yoon, 2007) included a similar but more expansive list of informal learning activities:

- Visiting fairs, conferences or congresses;
- Reading manuals, reference or other materials;
- Learning through assignments in different parts of an organization;
- Attending lectures, seminars or special talks;
- Going on guided tours (museums, galleries, etc.);
- Using computers or the Internet to learn;
- Using video, television, tapes to learn;
- Learning by watching, getting help from others;
- Learning by yourself, trying different ways.

While the Canadian list is clearly very similar to that used in the US survey (Kim et al, 2004), the addition of observational learning activities, such as being sent around an organization or learning by watching; seeking help from others; and trial-and-error learning contributes other important components of work-related informal learning.
The lists of informal learning activities on the previous page are all focused on individual learning, rather than team or group learning. Billett (2002), Fenwick (2001), and Taylor, Evans and Mohamed (2008) have argued strongly that workplace learning is a social phenomenon rather than an individual one, stressing the social nature of informal learning (e.g. spontaneous conversational interchanges in the workplace.) Yet this type of informal learning activity is not addressed in detail in any of the existing major survey instruments.

In the workplace context, the individual focus of the survey research is problematic since teams and team learning are considered more fundamental than individual learning (Senge, 1990). Bratton et al. (2004), however, have described the research evidence with regard to team learning as “rudimentary” (p. 61), noting that most of the existing research on team learning has been carried out by consultants employed by management rather than by academics. Furthermore, the authors point out that from the labour perspective, an emphasis on team learning “shifts the focus away from the hierarchical nature of organizations, hierarchical control processes, inherent conflicts of interest between managers and workers, and dominant power relationships, and mechanisms of self control...” (p. 66).

Bratton et al. (2004) have also stressed the importance of “group learning” with regard to the labour movement. Groups of workers can learn through labour activities such as strikes and union campaigns on broader social issues (e.g. hospital closures). These experiences can provide lessons in areas such as the economic effects of globalization, as well as practical training on skills such as how to write letters to politicians or the press or manage a strike fund.

Jarvis’ model of adult learning: Putting the strategies together

A striking resemblance exists between the lists of individual informal learning activities used in survey research and the learning process described in Jarvis’ proposed model of adult learning (1992, 2004). Jarvis claims that learning can occur through multiple, interacting routes, which include both non-reflective and reflective learning, while acknowledging that non-learning can be the response to new situations or information.

Non-reflective learning results in non-innovative reproduction of knowledge. Jarvis (1992, 2004) considered non-reflective learning to be the primary way that people learn their place in a society or workplace. Such non-reflective learning, a task faced by anyone taking on unfamiliar tasks or working in an unfamiliar organizational context, has several different forms: preconscious learning, memorization, and non-reflective skills learning.

- **Preconscious learning** takes place on the periphery of consciousness, which in workplaces is often the way people learn about organizational culture;
- **Memorization**, another form of non-reflective learning, has a broader meaning in Jarvis’ theory than the rote memory work done in school. Rather, it encompasses any learning from authoritative communication, which could involve listening to an expert, consulting with a more knowledgeable colleague, or reading material in a book or on a web page;
- **Non-reflective skills learning** involves imitation (observational learning) and repetitive practice.

Reflective learning offers the opportunity for innovations in knowledge to occur, though it can also be used to acquire a pre-existing knowledge base (Jarvis, 1992, 2004). Reflective learning encompasses contemplation, reflective skills learning, and experimental learning.

- **Contemplation**, a common form of learning, involves thinking about an experience and reaching a conclusion about it;
- **Reflective skills learning** occurs when a professional learns not only how to perform a skill, but also discerns the principles underlying it;
- **Experimental learning** refers to testing theory (one’s own informal theory or an existing public theory) in practice.
Another important feature of Jarvis’ (1992, 2004) model is that he recognizes that non-learning may be the outcome in a given learning situation. That is, although a learning opportunity may be presented or available, the person may not learn. Primary reasons for non-learning are:

- Presuming that you already know everything that you need to know about a particular situation;
- Non-consideration of a learning opportunity because you are too busy or fearful of learning something new;
- Rejection of a learning opportunity because you do not want to change your firmly held opinions or attitudes.

As shown in his “Model of the Learning Process” (Jarvis, 1992, p. 71) figured below, any particular “learning episode” can follow multiple routes through the various types of learning. That is, rather than learning always following an established sequence through the boxes labelled 3-9 in the figure, a particular learning opportunity might result in non-learning, with the sequence stopping at box 4. Alternatively, a learning sequence might involve several loops between boxes 5 and 6 or 5, 6, and 7, before the sequence ends at box 9. Jarvis used the arrows pointing outwards from boxes 4 and 9 to indicate that the termination of a particular learning sequence is open-ended and will lead on to other learning opportunities. Jarvis has stressed that even though complex, the diagram is an oversimplification of how an adult learner experiences the learning process.

Jarvis (1992, 2004) suggested that a given learning episode is initiated by disjuncture. Disjuncture represents a lack of harmony between the person’s interest and/or knowledge and her/his socio-cultural world. The best conditions for learning occur when harmony is disturbed and the resultant disjuncture makes unthinking action impossible. The disturbance can be positive, such as when someone wonders if there is a safer way to operate a machine, or negative, such as when a crisis occurs in a routine procedure.

Jarvis’ model (1992, 2004) indicated that qualities of the person, the social milieu and a particular learning situation will affect what route a learning episode will follow. According to Jarvis (2004, p. 107), what makes a person willing to persist with learning rather than ending a sequence with non-learning “is a crucial question”. Jarvis suggested that understanding when and how people encounter disjuncture is important to understanding how learning will occur.

While theoretically derived from the work of other adult learning theorists such as Knowles, Merriam, and Mezirow, Jarvis’ (1992, 2004) model is empirically grounded in adult learning experiences and illustrates the complexities of informal learning, as well as indicating how informal learning activities can intersect with formal. He developed his model of learning by asking groups of adult learners to describe learning episodes they had actually experienced and then relate their learning experiences to Kolb’s (1984) learning cycle model. The results showed that adult learning is much more complex than Kolb’s circular model suggests, displaying spirals, loops, and backtracks rather than a straightforward progression through a simple learning cycle.
Jarvis was also clear, however, that his model will continue to evolve and change, rather than being set in stone. Wihak (2006) used Jarvis’ model to analyze the work-related informal learning of cross-cultural counsellors in Nunavut and found it very useful for finding commonalities in their individual experiences. Their non-reflective learning activities included seeking immersion in Inuit culture (preconscious learning), learning from cultural authorities by listening to stories told by Inuit Elders as well as seeking cultural knowledge from Inuit and non-Inuit mentors (memorization), and learning traditional land skills through imitation and practice (non-reflective skills learning). Their reflective learning activities included journaling or having discussions with colleagues (contemplation), adapting their professional counselling practice in culturally appropriate ways (reflective skills learning), and developing new ideas and theories of counselling through testing them in practice (experimental learning). This research illustrates how useful Jarvis’ theory (1992, 2004) could be in the informal learning field as a starting point for the “how people learn” dimension of a work-related informal learning framework.
What do People Learn?

/// The 2004 WALL Survey explored what Canadian adults learned on the job (Livingstone & Scholtz, 2006), unlike other large scale surveys of work-related informal learning. The survey questionnaire offered respondents a list of 11 possible topics, which covered broad areas of possible work-related learning:

- New general knowledge;
- Teamwork, problem-solving or communication skills;
- New job tasks;
- Computers;
- Health and safety;
- New equipment;
- Employment conditions or workers’ rights;
- Organizational or managerial skills;
- Politics in the workplace;
- Budgeting or financial management;
- Language and literacy.

/// Since respondents were not offered an open-ended option to identify other learning topics, it can only speculate whether the list is exhaustive. Nevertheless, it does appear to be sufficiently encompassing to serve as an initial and provisional typology of what people learn through informal learning activities.

/// Carliner (S. Carliner, personal communication, Oct. 6, 2008) has also suggested that what people learn might be distinguished in terms of “durable versus perishable skills” and “transferable versus context-specific skills”. Such a distinction would assist in determining who should take responsibility for development of the different types of skills. The employer would seem to benefit most from perishable and context-specific skills and hence should be expected to support their development.

/// Canadian research studies of informal learning discussed in the following chapter present context-specific information on what people are learning informally in various workplaces and occupations.

Who is Learning?

Demographic characteristics of learners

/// The National Adult Education and Training Survey (Peters, 2004), the National Adult Literacy and Life Skills Survey (Rubenson, Desjardin, & Yoon, 2007) and the WALL survey (Livingstone & Scholtz, 2006) collected information on a variety of different learner characteristics. The WALL survey collected the most extensive information, including the following characteristics:

- Gender;
- Age;
- Ethnicity;
- Educational level;
- Social class;
- Political affiliation;
- Parental education level;
- Employment status;
- Occupational class
  - large employers, small employers, self-employed, managers, supervisors, professionals, service workers, industrial workers;
- Union membership.

The ALL survey (Rubenson et al., 2007) reported on a more limited set of personal characteristics: literacy level, education, age, and gender. The categories of “immigration status” and “parent’s education” were, however, added. The AETS report (Peters, 2004) contained information on an even more restrictive set of learner characteristics: age, gender, educational attainment, and country of origin (Canada or other). Analyses of survey data indicated which learner characteristics affected informal learning significantly.

The most important finding from the ALL and WALL surveys is that a high proportion (more than 80%) of all respondents were active in some type of informal learning, regardless of any differences in personal characteristics. The AETS questionnaire imposed a very restrictive time frame for informal learning (i.e. the four week period preceding...
the survey), and hence the findings of a much lower participation rate of 35% are not comparable to the other two surveys, which queried informal learning activity in the year preceding the survey.

/// From the data shown on page 46 of the report on the WALL survey (Livingstone & Scholtz, 2006), it appears that Occupational Status may have some effect on participation in informal learning. In 2004, managers and professionals reported the highest levels of informal learning, exceeding 90%. The absolute difference from levels of other Occupational Classes, whose participation rates ranged from 84% to 88%, is relatively small, and the authors have not indicated whether this difference is statistically significant.

/// Data presented on p. 48 of the WALL survey report (Livingstone & Scholtz, 2006) suggested that Educational Attainment may affect participation in informal learning. Reported participation rates for employed adults lacking a high school diploma were lower at 78% than the rates for those who have completed high school or higher (rates ranging from 86% to 91%). Again, no indication was given as to the statistical significance of this difference.

/// The WALL report (Livingstone & Scholtz, 2006) provided no other information with regard to how the learner characteristics listed earlier affected participation in informal learning. It was also mute with respect to whether such analyses will be forthcoming.

/// In the ALL report (Rubenson, Desjardin, & Yoon, 2007), the data showed that participation rates in different kinds of informal learning activities were affected by some learner characteristics, although overall participation rates in informal learning were not. The report specifically noted that age and gender were not strongly related to rates of participation in informal learning. In contrast, both Literacy Level and Educational Attainment showed:

“[M]ajor differences in activities…like reading manuals, reference or other materials, or attending seminars and talks…[T]hose who have document literacy skills at Level 3 or higher are more likely to engage in informal learning that involves reading reference materials and using computers, and are slightly more likely to engage in learning by themselves.” (p. 55)

/// Another important finding of the ALL report (Rubenson, Desjardin, & Yoon, 2007) was that an individual’s level of skill and the skill requirements of the job have a significant impact on which type of informal learning activities s/he uses. With the exception of very general activities like learning by watching or by doing, those who are low skilled and in low engagement jobs are the least active in informal learning. In contrast, those who are high skilled and in high engagement jobs report the highest participation rate. Finally, those who are underqualified (whose skill level is below what is needed for the job) are more often engaged in informal learning than people classified as adequately or overqualified (whose skill level meets or exceeds what is needed for the job).

/// In reporting on the AET survey, Peters (2004) noted that women had somewhat higher participation rates in self-directed training than men and that younger workers’ participation rate was higher than older workers’. In addition, educational level had a marked effect on participation. Because this study used such a restricted definition of informal learning, however, it is not possible to directly compare these findings to those of the surveys discussed earlier.

/// Taken together, the findings of the WALL and ALL surveys suggest that while informal learning may be “ubiquitous”, as claimed by Cross (2007), some workers have more strategies for informal learning at their disposal than others and/or are more inclined to use them at work. Having a larger informal learning repertoire might make an individual more effective and efficient as a learner. In particular, those with higher literacy levels, higher educational levels, and higher occupational status may have the edge over other workers in terms of informal learning efficacy.

/// Survey findings with regard to occupational differences indicated that more occupation-specific research is needed in Canada to deepen our understanding of how occupation impacts informal work-related learning. Many of the non-Canadian studies we found when researching the literature were focussed on specific occupational groups. Responses to the stakeholder consultation survey also indicated a strong interest in the question of the informal learning of specific occupational groups.

/// In addition, the existing survey research with regard to demographic factors has been focussed on participation rates in informal learning. The research does not speak to how much the different types of workers are learning, the quality of the learning, and how they use this learning in doing their jobs. Research designed to probe more deeply into such questions might indeed find that demographic characteristics such as age or gender do have a significant impact on informal learning.
Personal characteristics of learners

/// Within the field of informal learning, relatively little research has been done on learner characteristics such as personality or motivation that might have an effect on informal learning (Lohman, 2006). The importance of personal characteristics becomes apparent indirectly in the research on the free agent learner (Marsick et al., 2000; Opengart & Short, 2002). These learners are highly motivated and focussed on long-term career development without organizational loyalty. Rothwell (2002) described the free agent learner (FAL) as the workplace learner of the future: “FALs take their own initiative to seek out knowledge, skills, or attitudes to meet their needs without necessarily relying on support, or assistance, from immediate supervisors or institutional providers…and without relying on planned learning experiences organized and scheduled by others” (p. 35).

/// We found only a few studies that looked directly at how informal learning is related to individual motivation and personality. For example, Bamber and Castka (2006) administered measures of personality to employees from university and business and thus identified four factors that related strongly to self-reported work-related learning efficacy:

**APTNESS** (able to promote positive attitudes towards management and other employees);

**ART** (able to innovate creatively but introduce innovations in a tactful way);

**ADVENTURE** (able to pursue radical change, take risks with ideas and relationships);

**ADHERENCE** (able to persist towards a goal but have consideration of effect on others).

/// In a study of teachers’ informal work-related learning, Lohman (2006) found seven personal characteristics that were associated with use of a wide variety of work-related informal learning strategies for professional development purposes. These personal characteristics were:

- Initiative;
- Self-efficacy;
- Love of learning;
- Interest in the profession;
- Commitment to professional development;
- A nurturing personality;
- An outgoing personality.

/// The question of why individual learners/.workers undertake informal learning is related to the purpose aspect of Colley et al.’s (2002, 2003a, b) conceptualization of work-related learning. Those researchers suggested that learning is more informal when the purpose is determined by the learner rather than by an external authority. They also suggested that learning is at the informal end of the formality/informality continuum when it happens as a secondary effect of an activity focussed on another goal (e.g. production or customer service) than when it happens as the primary focus of activity (e.g. attending a course).

/// The National Adult Learning Survey in England (Fitzgerald et al., 2002) indicated that the most common reasons for job-related informal learning were skill development, career development, and increased job satisfaction. Interestingly, none of the major Canadian surveys of informal learning (Livingstone & Scholtz, 2006; Peters, 2004; Rubenson, Desjardin & Yoon, 2007) probed workers’ reasons for engaging in work-related informal learning. The high participation rates, however, suggest the possibility that the basic reason for work-related learning is that human beings are natural learners when their interest (or self-interest) is engaged.

/// Professionals involved in adult learning are increasingly recognizing evidence from neuroscience that the human brain is designed for learning (K. Taylor & Lamoreaux, 2008). Jarvis (1992) has commented that learning is as natural as breathing. Fauconnier and Turner (2002) have presented cognitive science research that indicates how natural it is for humans to create new meanings from familiar material, a process so pervasive in human functioning that it is virtually invisible to the conscious mind. Recent research on brain functioning has indicated that learning something new or solving a problem is its own reward, in that our brains release natural opiates when we do so. Given that employed adults spend approximately half their waking hours in the work environment, it would be more surprising if learning was not occurring.

/// In the following chapter, we will look at the reasons for learning identified in Canadian research on informal learning.
Where are People Learning: Workplace Learning Environments

Billett (2002), Bratton et al. (2004), Fenwick (2001) and M. Taylor et al. (2008) have all argued that workplace learning is a social phenomenon, rather than an individual one. Learning takes place within a particular workplace environment, including a social environment, and hence we need an understanding of how different environments encourage or discourage learning.

Laiken, Edge, Friedman and West (2001) carried out in-depth studies of how four organizations approached embedding learning within on-going work processes. Their findings showed that these factors, listed below, were essential in creating a good workplace learning environment:

- Creating a values-based shared vision of both the organization’s goals and its internal functioning;
- Reflecting the vision in practice;
- Continuously evaluating progress.

These factors are very much related to the notion of a “learning organization”, popularized by Senge (1990). According to Senge, a learning organization is one “…where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together” (p. 3).

As Bratton et al. (2004) have pointed out, informal learning in the workplace is strongly connected to the question of organizational culture. Within the academic literature, however, research on work-related learning has been focussed on individual learning while research on learning organizations has focused primarily on the organization as a whole (Fenwick, 2008). To deepen our current understanding of how work environments affect work-related informal learning, a bridge needs to be made between the literature on informal learning and the literature on the learning organization and learning cultures in organizations. While some studies make this type of link (e.g. Agashae & Bratton, 2001), other studies remain focussed at the level of individual informal learning (e.g. Ardenghi, Roth & Pozzer-Ardenghi, 2001; Hicks, Bagg, Doyle, and Young (2007).
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Large Scale Survey Findings

Livingstone (2005, p. 7) provided a summary of available international data on informal learning up to 2000. In doing so, he stressed the importance of using caution in interpreting the data comparatively since survey methods, definitions of informal learning, and phrasing of questions on informal learning vary from study to study. Consequently, Livingstone warned that the data probably represent “serious underestimates of the actual extent of intentional informal learning” (p. 6). The data that Livingstone presented showed estimates of informal learning participation rates in Canada ranging from 30% to 98%. The wide range of these figures indicates just how much the survey method may be affecting the estimation process.

A number of large-scale surveys addressing informal learning have been published since 2000. Canadian surveys include the Survey of Self-Employment (Delage, 2002), the National Adult Education and Training Survey (Peters, 2004), the National Adult Literacy and Life Skills Survey (Rubenson, Desjardin, & Yoon, 2007), and the WALL survey (Livingstone & Scholtz, 2006).

The Workplace and Employment Survey, conducted in 1999, 2001, and 2003 by Statistics Canada (Canadian Council on Learning, personal communication, 2008) asked if participants had received “informal training related to your job (that is on-the-job-training)?” The way this question is posed ignores much informal learning that is done through solitary observation, reading and so on. Consequently, this survey can be expected to provide much lower estimates of informal learning than studies with more comprehensive definitions.

Internationally, the United States’ National Centre for Education Statistics has published a report entitled “Participation in Adult Education for Work-related Reasons” (Kleiner et al., 2005). Another major US survey is the “Participation in Adult Lifelong Learning” survey (Kim et al., 2004). Reports from a National Adult Learning Survey have been published for England and Wales (Fitzgerald, Taylor, & La Valle, 2002) and Scotland (Ormstrom et al., 2007). The EU created an Adult Education Survey that was conducted in some member states with questions on participation in informal learning (Hingel, 2005). A search of the EUROSTAT website3 located only preliminary data published in May, 2008 and no data as yet on informal learning. Australia adopted the EUROSTAT survey methodology to conduct its own Adult Learning Survey (Pink, 2007), including questions on informal learning.

Following the format used by Livingstone (2005b, p. 7), Table V below compares the overall findings with regard to informal learning in these studies. It is important to note that the studies used differing definitions of “adult” in creating their sample and differing definitions of informal learning. (For an indication of how complex these definitional issues in large scale survey research can be, please see Fuller, 2003b and Ormstrom et al, 2007, p. 117.) Further, the Canadian ALLS and the UK NALS studies did not clearly separate work-related and other informal learning in their findings. Nevertheless, the results can give us some indication of the international perspective on the incidence of informal learning.

The figures in the survey show that when the previous year of experience is sampled, incidence of work-related informal learning is high in Canada, the US and Australia. The percentage of survey respondents who reported participating in informal learning ranged from a low of 63% in the US PALL study (Kim et al., 2004) to a high of over 90% in the Canadian ALLS survey (Rubenson et al., 2007). Only the AETS data, based on the very restricted time period of the month preceding the survey, and the WES survey, with a very narrow definition of informal learning, produced estimates as low as the 30% shown in Livingstone’s summary table of earlier data (2005b, p. 7).

Overall, the survey data indicate that when both informal learning and the time span of interest are broadly defined, informal learning approaches the ubiquity claimed by Cross (2007). The discrepancy between the low participation rates (33%) found in the month before the survey as compared to the high rates found in the year (80% plus) before the survey suggests, however, that informal learning may not be a frequent occurrence for most workers. Nor do the large scale survey findings give any indication of how much people are learning informally and how useful it is for their work.

### Table IV-1. International Survey Findings: Incidence of Work-related Informal Learning

<table>
<thead>
<tr>
<th>Survey</th>
<th>Sample Size (year indicates data collection period)</th>
<th>Total hours</th>
<th>Informal learners (%) (In year preceding survey)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada SSE (2000)</td>
<td>3,840</td>
<td>NA</td>
<td>80</td>
</tr>
<tr>
<td>Canada AETS (2002)</td>
<td>34,000</td>
<td>NA</td>
<td>33 (previous mo.)</td>
</tr>
<tr>
<td>Canada ALLS (2003)</td>
<td>23,000</td>
<td>NA</td>
<td>93+</td>
</tr>
<tr>
<td>Canada WALL (2004)</td>
<td>9,063</td>
<td>5 hrs/wk</td>
<td>80</td>
</tr>
<tr>
<td>Canada WES (2001)</td>
<td>20,352</td>
<td>NA</td>
<td>32</td>
</tr>
<tr>
<td>Canada WES (2003)</td>
<td>20,384</td>
<td>NA</td>
<td>30.6</td>
</tr>
<tr>
<td>US – PALL (2001)</td>
<td>10,873</td>
<td>NA</td>
<td>63</td>
</tr>
<tr>
<td>US – AEWR (2003)</td>
<td>12,725</td>
<td>NA</td>
<td>75 (employed only)</td>
</tr>
<tr>
<td>England, Wales – NALS (2002)</td>
<td>6,668</td>
<td>NA</td>
<td>61 (previous 3 yrs)</td>
</tr>
<tr>
<td>England, Wales – NALS (2005)</td>
<td>4,983</td>
<td>NA</td>
<td>65 (previous 3 yrs)</td>
</tr>
<tr>
<td>Scotland – NALS (2005)</td>
<td>993</td>
<td>NA</td>
<td>67 (previous 3 yrs)</td>
</tr>
<tr>
<td>Australia – ALS (2006-7)</td>
<td>14,190</td>
<td>NA</td>
<td>79 (employed only)</td>
</tr>
</tbody>
</table>

### Canadian Case Studies of Informal Learning

Canadian research on work-related informal learning offers rich information on how people are learning, what they are learning, and factors that affect learning. Many of these studies are focussed on particular occupations, a question of great interest as expressed in our stakeholder consultation. Since the large scale survey data did indicate that occupational factors affected participation in informal learning, we
have organized these studies in terms of the occupational groups arranged by firm size consistent with the groupings used in the WALL survey (Livingstone & Scholtz, 2006), with additional sections devoted to union learning and immigrant learning. (Technical definitions of the categories can be found in Livingstone and Scholtz, 2004.)

**Large Employers (more than 250 employees)**

/// Agashae and Bratton (2001) explored informal learning in a large Canadian energy company. Specifically, they investigated the influence of leaders' behaviour on employees' learning. Their quantitative survey data showed that employees related higher levels of learning with the extent to which leaders engaged in three roles:

- As designers who built organizational structures, policies, and processes that support learning;
- As stewards who shared a personal and organizational vision of learning with their employees;
- As teachers.

/// Bélanger and Larivière (2005) looked at informal learning in two large private pharmaceutical firms and two small firms. The specific focus of the qualitative study was how the organizations supported formal and informal learning for Research & Development (R & D) teams composed of highly educated professionals. Why these workers learned was described this way:

“All staff...is called upon, in a variety of ways, to constantly renew their knowledge and know-how to keep up with scientific advancements in disciplines relating to their work, continual upgrading of equipment and software, evolving corporate partnerships with specialists in other disciplines, modifications to experimental protocols, etc.” (p. 15)

/// This description suggests that these workers learned because they were expected to do so. For research workers, learning is the job. The organizations that Bélanger and Larivière (2005) investigated provided the R & D employees with many opportunities and resources to deploy a wide range of informal learning strategies. The authors identified seven key practices that the companies used to support informal learning for their R & D professionals: access to relevant documentation (e.g. scholarly journals); mechanisms for information exchange and consultation; career development plans for individual employees; providing work environments to facilitate interlearning; focus on innovation; encouraging initiative in daily problem-solving; supporting participation in specialized external, professional networks.

/// Boutilier (2008) researched the learning of public sector employees involved in the implementation of new and highly problematic computer technology. These social service employees were highly motivated to provide service to their clients. That motivation led them to engage in creation of work-arounds, non-standard procedures they developed to circumvent new software in order to meet their clients' needs. These work-arounds were created primarily through individual employees’ trial and error learning, which was then shared both informally and formally through official bulletins. Boutilier stressed that the employees were not supported in this learning, were not financially compensated for creating the work-arounds, and, indeed, felt at risk because using the work-arounds to accomplish their jobs frequently involved them in violating organizational policies. These findings speak to the strength of a client service motivation for informal learning, even within a large, impersonal bureaucracy.

/// Church, Frazee, Panitch, Luciani, and Bowman (2008) used qualitative methods to study the experiences of disabled people employed by the Royal Bank. For these employees, their learning appeared to be motivated by a desire to perform well and be accepted, despite their disabilities. To that end, the disabled employees learned informally how to hide their disabilities, manage their workload so they could keep up with non-disabled peers, teach non-disabled colleagues about disability, and build support networks of colleagues who could assist them without “demeaning or infantilizing” them (p. 152).

/// Mitchell and Livingstone (2002) conducted an ethnographic case study of bank employees who were involved in implementing a new software system for financial services. It appeared that these workers were motivated to learn...
informally because the time allotted to use more formal, self-directed training materials like computer-based training software was inadequate. In order to perform their day-to-day tasks and cope with the stress of the new system, the workers had to learn informally from each other. Although the employer had introduced computer-based self-study materials, the employees organized informal learning groups to help each other master the formalized training materials. They continued to use other informal learning activities, such as asking each other for help, seeking out a coach or mentor, or self-organized cross-training. Furthermore, they reported a strong preference for informal learning activities over more formalized training.

Small Employers (less than 250 employees)

Private sector

The Manitoba Centre for Education and Work (CEW, 2004) carried out an extensive study of informal learning in small and medium-sized firms in Manitoba and Saskatchewan. A preliminary survey of informal learning practices included managers of 40 firms from "agri-foods, manufacturing, wood industry, entertainment, health care, trades, hospitality, retail sales, service, business, communication, banking, and transport" (CEW, 2004, p. 5). The second part of the qualitative study involved in-depth interviews with 46 entry-level employees at 12 firms selected from the preliminary survey respondents.

The study found that employees' informal learning involved seeking out a coach or mentor, observing someone else at work, asking each other questions and trial-and-error. With regard to motivation for learning, the employees described needing to learn to solve problems as they arose on the job. "Employees found most learning to be reactive to a given problem or situation" (p. 9). Employees initiated cross-learning opportunities (learning about other employees' jobs) for two reasons: to be more effective in doing their own jobs and to give "them the advantage when promotions arise or sick leave positions become available" (p.11). The employees' motivation to learn was indicated by the fact that they engaged in informal learning despite the fact that it was not recognized in any systematic way. Cross-training was not offered to employees and cross-learning was not formally encouraged. Moreover, engaging in self-initiated cross-training could even be experienced as threatening to co-workers.

A particularly interesting finding of this study was the evidence of employees' secretive learning (Millar, 2005). The term was used to denote the finding that employees continued to learn "in spite of the dictum not to" (p. 6). That is, workers found a way to do a job more effectively and efficiently, but kept the knowledge hidden from management because it was against policy. From Millar's perspective, the employees believed their work "took ingenuity, imagination, and dedication" (p. 6). Because management did not value the employees' knowledge, these positive innovations were not shared upwards. Keeping knowledge to themselves also gave the workers more control over their workplaces, an increasing issue as technology allows management to monitor workers' activities minutely (Mitchell & Livingstone, 2002). These findings highlight the importance of distinguishing motivation for learning from motivation for sharing the learning.

Community sector

Clover and Hall (2000) carried out a study of learning in an environmental education organization. The researchers looked at the informal learning activities of members of the non-profit's Steering Committee. Although the study report does not address individual motivation for learning in any detail, the findings did illustrate that a whole organization can be motivated to learn in order to be of service to the community. Members of the Steering Committee participated in public forums, which allowed free discussion of issues such as organic farming, and formed study circles to explore different areas in depth. They also made extensive use of the internet to locate information on topics such as Genetically Modified Foods and attended conferences when they had the opportunity. All participants in the study further noted that their daily involvement in organic gardening and farming, as well as in trying to purchase organic food, was their most important source of informal learning.

INcIDENCE AND CHARACTERISTICS OF WORK-RELATED INFORMAL LEARNING IN CANADA
**Self-employed**

/// At this point, few studies address the question of motivation for informal learning amongst the self-employed in Canada. A major source of information is the Survey of Self-Employment (Delage, 2002), which was conducted as a supplement to the Labour Force Survey. This survey included questions on the topic of formal and informal training. The data showed that the self-employed are motivated to undertake formal and/or informal training to increase occupational skills and their proficiency in running a business. Their participation rate of almost 80% in “informal training” (studying printed material, observing others and discussing with others) is similar to that of employers, although their participation in formal training is significantly lower.

/// We found one qualitative study that explored a particular group of self-employed individuals, namely professional visual artists (Bain, 2005). Informal learning was very important for their on-going creative development and for construction of an artistic identity. Much of this learning took place through participation in artistic communities, which offered frequent opportunities for social interaction with other artists.

**Managers and Supervisors**

/// Rather surprisingly, our literature search did not find any Canadian studies focussed on the informal learning of managerial and supervisory personnel, although international studies do exist on this topic. (See for example, MacNeil, 2001.) As mentioned earlier, Canadian researchers Agashae and Bratton (2001) found that leaders’ behaviour clearly influenced the informal learning of employees but their study did not look at managers’ own informal learning. Presumably, informal learning in this group is being studied, but not as informal learning per se.

**Professionals**

/// Historically, informal learning has been highly important in continuing professional development for a wide range of professions – accountants, doctors, lawyers, nurses, psychologists, social workers, teachers and so on. Professionals are expected to keep their professional knowledge up-to-date through informal learning activities such as reading professional journals and attending professional conferences. They also continually hone and evolve their professional skills through informal learning associated with practice of their profession (Cole, 2004).

/// The Self-employment survey discussed above (Delage, 2002) included professionals in the study sample. In addition, we found a number of studies focussed on informal learning in particular professions. Possibly because interest in the field of informal learning is high within Faculties of Education, several of these studies concerned teachers.

/// As part of the NALL project, Delhi and Fumia (2002) conducted a qualitative case study of teachers during a period of educational reform that involved an effort in several provinces to standardize curriculum and testing. These teachers used informal learning, to form and/or re-form their professional identities at a time when teachers’ competence and diligence was being publicly questioned. In a related study, Smaller, Clark, Hart, Livingstone, and Noormohamed (2000) had teachers participate in keeping time-use diaries and in-depth interviews. The study demonstrated a high level of informal learning among teachers for the purpose of continuing professional development in a wide variety of areas such as computers, subject matter, classroom management, and curriculum policy. These convincing findings were used to support successful resistance to the government’s attempt to legislate professional development courses for teachers in Ontario. Tarc, Smaller, and Antonelli (2006) reported on further data analyses which reinforced the finding that teachers use informal learning for continuing professional development. Informal learning from colleagues through discussion and observation was seen to offer the advantages of relevance, usefulness, and timeliness.

/// English’s (2002) qualitative study looked at Canadian adult educators working in international development. The interview data revealed that participants were “continuously learning” through informal means to relate more effectively to the international context in which they were employed. Through informal learning, they learned their own limits, how to maintain hopefulness about the possibility of long-
change, how to negotiate issues of gender in male-dominated workplaces, and a stronger sense of injustice. Wihak (2006) also found that counsellors immersed in cross-cultural practice in Nunavut used a wide variety of informal learning strategies to learn how to serve their Inuit clients. 

LeMaistre and Pare (2004) have investigated informal learning while following the school-to-work transitions of individuals in the helping professions of education, social work, physiotherapy, and occupational therapy. For these new professionals, informal learning was essential for them to map their recent theoretical knowledge into day-to-day practice. Although this process was necessary, they needed help from more experienced practitioners within their workplaces to “recognize how the abstractions of theory…come to life in practice” (p. 50). In a second report, LeMaistre, Boudreau, and Pare (2006) described how these more experienced practitioners learned to become effective as mentors, supervisors, and assessors of new professionals. For the senior practitioners, the reason for engaging in informal learning was to meet the often-conflicting standards expected by licensing bodies, university departments, and the workplace. Interestingly, the researchers made several recommendations for more formal education in this area.

Ardenghi, Roth and Pozzer-Ardenghi (2007) explored the school-to-work transitions of new dentists with a particular focus on how new practitioners learned to apply ethical principles in day-to-day practice. Their findings suggest that informal learning, in particular through interactions with patients, was essential for new dentists to be able to enact theoretical ideas in practice.

Butterwick et al. (2008) reported findings from a major study of the role of informal learning for women employed in information technology (IT) work. Since most of the study’s participants lacked formal credentials in computer science or information technology, informal learning was essential for their continuing career development. Not only did they need to acquire the continuously changing technical knowledge required for their profession, they had to learn to negotiate the gender politics of a male-dominated field. Their informal learning strategies included trial-and-error, observation, and asking questions. They sought out mentors and coaches and involved themselves in peer networks. They made use of technical materials, such as help manuals, chat rooms, and list-serves. “Lunch and Learn” sessions for information-sharing were particularly valued for employees in workplaces that provided them.

Hicks et al. (2007) looked at both formal and informal learning strategies used by public accountants at different stages in their professional careers (trainees, managers and partners.) For all career stages, the most used strategies were learning from completing new tasks, learning from applying past experiences to new situations and learning from colleagues. Managers and partners reported using reading as a learning strategy more than often than trainees did, while trainees were more likely than managers or partners to report the use of e-learning. The motivation for learning for all three groups was on-going professional development. An interesting finding of this study was that informal learning for this purpose was actually preferred to more formal learning, even though accounting associations put considerable effort into developing and delivering structured training courses aimed at continuing professional education.

White et al. (2000) examined nurses’ informal learning within the context of a managed care environment. Although informal learning is widely prevalent in the health professions, these nurses used it specifically to acquire new ways to practice within a very different environment. In this case informal learning involved learning to negotiate different roles and relationships with physicians, clients, and colleagues. An important finding of the study was that the managed care environment disrupted nurses’ traditional informal learning practice of learning from colleagues, since the new systems involved stripped down staff who worked at greater distances (spatially) from each other. Nurses working in call centres were particularly isolated and reported that training promised to replace collegial informal learning was not provided.

Community economic development workers were the focus of Stratton and Jackson’s (2001) report. These workers were engaged with women’s communities and found their academic preparation to be inadequate. They needed to use informal learning continuously to do their jobs. Much of this informal learning came from direct involvement with
their clients and communities and from reflection on this involvement. Interaction with other practitioners was also highly valued. Through such informal means, they learned about the social factors that affect communities (e.g. economic class and gender), as well as practical business skills. In the process, the researchers suggest, these workers were creating an alternative body of knowledge to what is taught in formal academic contexts.

Carliner et al. (2008) have recently conducted a pilot survey of informal learning amongst training professionals who were members of the Canadian Society for Training and Development (CSTD). Conducted as part of that organization’s membership survey, the study looked at how frequently training professionals read professional literature. Although the majority of respondents indicated that they use theoretical approaches to planning training, other data collected in the study showed that few keep current with the professional literature. While a high percentage of respondents read CSTD’s own newsletter and journal, relatively few respondents (10.1%) reported reading other professional publications consistently. Peer-reviewed research journals were read only very infrequently, and the majority of respondents never read research publications. Blogs and websites were also consulted infrequently by most respondents. Further, few respondents reported attending professional conferences. Instead, respondents indicated that consultation with a colleague was the preferred method of obtaining information needed to solve an immediate training problem.

Service Workers

Despite the importance of the service sector in the Canadian economy, we found only one Canadian study particularly focussed on service workers. Several other studies, however, discussed under the categories of “large employers” and “small employers”, included workers from this occupational class (Boutilier, 2008; CEW, 2004; Church et al., 2008, Millar, 2005; Mitchell & Livingstone, 2002).

Mirchandi et al. (2008) explored the training experiences of contingent workers, including call centre workers and cashiers. Most of the study participants were immigrant women of colour. For many of them, the only training provided was informal, yet the knowledge gained was essential for performing their job tasks. For example, a grocery store worker had to learn codes for all of the store’s products through informal means. They also learned informally about dehumanizing social realities in the workplace, such as lack of control, contrived isolation, and racism.

Industrial Workers

Bratton (2001) investigated learning in unionized pulp and paper workers in the process of collective bargaining. This research offered evidence of “reluctance to learn” among unionized workers in response to management’s desire to enhance and harness the flexibility of craft workers. Reportedly, this reluctance stemmed from the workers’ view that informal learning of new skills posed “a threat to job control and security” (p. 333) rather than from any objection to learning per se. The study highlights the important point that rather than being an unequivocal good, informal learning is “part of the contested arena of productivity and job control” (p. 333).

Fenwick’s (2008) study of garment workers illustrated another aspect of informal learning among industrial workers: solidarity learning. While the garment workers did learn production-related skills informally, they also learned how to work collectively in response to workplace problems that affected all of them (e.g. faulty materials, pay cuts). Their collective action had its roots in the strong social networks they had developed rather than in organized union activity.

Kazi (2008) and Kennedy (2008) both investigated informal learning in fish plant employees through in-depth case studies conducted as part of a larger study of workers with low literacy levels (M. Taylor, 2008). Kazi identified interest as key to a worker’s undertaking informal learning, while Kennedy’s case study identified a more general thirst for knowledge and a desire for a good livelihood as strong motivators for informal learning.

Lee and Roth (2005; 2006) researched informal learning amongst salmon hatchery workers. This type of worker was selected to illustrate the potential for informal learning even in a typically repetitive job. Through observations during their daily routine of feeding fish and through planned fish
feeding experiments, the workers “gained a deeper holistic understanding of fish culture” (Lee & Roth, 2005, p. 249). A deep curiosity about how to perform the feeding task more efficiently (i.e. not wasting time and food) and effectively (i.e. maintain healthy fish) motivated these workers.

Union Members

/// Although not an occupational class, learning by union members has been the focus of several research studies as another important type of informal learning that occurs in workplaces – labour education (J. Taylor, 2001). According to Spencer (1996):

“Most labour union members learn about the union while on the job (what is often referred to as informal or incidental learning). They probably learn more and are most active during disputes (for example in strikes, lockouts, grievances or negotiations), but they also learn from union publications and communications, from attending meetings, conferences and conventions…” (p. 1)

/// Informal learning in unions is highlighted in some of the learning program and practices featured in the recent Labour Education Report (Labour Education Centre, 2007) on innovative learning practices. Storytelling was particularly noted as an important informal learning activity used to transmit the “received wisdom of the movement to the next generation…” (p. 7). Interestingly, the report noted that this long-standing informal tradition has now become more formalized through mentoring programs. For unions, informal learning is also a way to stretch scarce resources.

/// Analyzing data from the 1998 NALL and 2004 WALL surveys, Livingstone and Raykov (2008; 2005) found that union members learn about many aspects of their work through informal means: new job tasks, new technologies and equipment, team work and problem-solving, employee rights and benefits, occupational health and safety information, and public/political issues. Although non-unionized workers also learn about these topics informally, union workers in the 2004 WALL survey were more likely to have learned about health and safety issues and workplace politics than non-union workers.

/// Bratton’s (2001) study of unionized pulp and paper workers and Fenwick’s (2008) study of unionized garment workers were discussed above under the topic of “industrial workers.” These studies noted that labour-management relations influence workers’ engagement in informal learning. Unionized workers may be reluctant to reveal or share their learning with management. In addition, informal learning is an important source of information and knowledge needed to participate actively in union activities and/or resist management practices that are interpreted as being oppressive.

/// Gairey et al. (2006) explored the importance of the role of informal learning within the context of union involvement in anti-racism initiatives. The research is particularly interesting because it used the continuum approach of Colley et al. (2003) to demonstrate how informal learning about racism was intimately connected to and interwoven with more formal training courses on the topic. Participants in the study, who were attending an anti-racism training course in a residential labour education setting, shared meals and social events outside the classroom. Much informal discussion of material introduced in the formal classroom setting occurred, contributing a great deal to the participants’ learning. The researchers also noted the conflicting messages being conveyed by the low participation rates of visible minority and Aboriginal union members in the anti-racism courses.

Immigrants and Cross-Cultural Learning

/// Because of our aging demographic, Canada is increasingly relying on immigrant workers. Recognizing the informal learning that immigrant workers bring with them is an important issue related to Prior Learning Assessment and Recognition. Informal learning is also critical for immigrants learning to function in the organizational cultures of Canadian workplaces and acquire Canadian work experience.

/// Shragge et al. (2004) conducted research with immigrant women in Quebec. For these women, informal learning from co-workers was important in acquiring knowledge about their basic rights and learning to resist being abused and exploited at work. Maitra and Shan (2007) looked at
the informal learning of immigrant women in contingent employment at call centres, grocery stores, and garment factories. These workers received very little training and had “to learn on their own to perform up to standard” (p. 288). The motivation for this conformative learning was to avoid getting fired. The women also engaged in transgressive learning, focussed on learning and exercising their rights. The authors also noted that in a few cases, the “workers intentionally turned their workplace into a learning setting, with a view to eventually getting out of these sectors and start their careers in their own fields” (p. 293).

Informal learning also plays a key role in intercultural communication and competency. Informal learning is an important resource for equipping Canadian-born professionals to work with immigrant clients. Wihak (2006) described the role of informal learning in the development of counsellors’ multicultural competence. Likewise, the successful re-entry of internationally educated professional immigrants into their chosen profession or occupation in Canada can be supported significantly by their access to a spectrum of formal to informal intercultural and language learning opportunities specifically tailored to their profession or occupation (Wang, 2006).

Commonalities in Informal Learning across Occupational Groups

The Canadian case studies on work-related informal learning discussed above offer detailed information on how people are learning, what they are learning, and factors that affect learning. Although much informal learning is clearly specific to an occupation and/or workplace, we can also find some cross-cutting general trends. While the findings from these primarily qualitative research studies are too rich and complex to be easily summarized, we can make these general observations:

- Management expectations about learning influence employees’ participation in informal learning;
- In many different occupational groups, work-related informal learning may be undertaken either for positive reasons (curiosity, professional or career development) or negative ones (problems or crises);
- Employees may resist sharing their informal work-related informal learning when they anticipate a negative response from management and/or co-workers or foresee a negative impact on labour relations;
- Employees use informal learning both to learn job-related skills and knowledge and to learn how to manage relationships with superiors and co-workers, including union-related learning;
- A lack of time for learning is a real hindrance for employees in all occupational groups.

Relationship of Informal Learning to other Workplace Learning

Both the formality/informality continuum approach (Colley et al., 2003) and Jarvis’ model of adult learning (Jarvis, 1992, 2004) suggest that making a separation between informal learning and formal and/or non-formal learning is not a fruitful way to think about workplace learning. The important question is how to find the right balance between formality and informality in any given learning situation in a way that is responsive to learner needs and available resources. Jarvis’ (1992, 2004) model, discussed earlier in this report, suggested that what the balance will be for a particular learning episode is going to depend on a complex interaction of learner characteristics and environmental supports and/or barriers.

Because informal learning, broadly defined, is so pervasive amongst all occupational levels, chances are high that any worker who has participated in formal post-secondary education programs and/or job-related courses and workshops will also have participated in informal learning. Livingstone and Stowe (2007) analyzing longitudinal data from the 1998 NALL and WALL surveys, reported that over 95% of employed workers who reported participation in adult courses also reported participation in informal learning activities. These findings suggest that workers use a continuum of learning opportunities to reinforce their learning. In-depth interviews with a subsample indicated that while some highly educated individuals denigrated informal learning, most participants saw “their formal education, adult courses and informal job-related learning as complementary and at least potentially interactive” (p. 23).
The National Adult Education and Training Survey (Peters, 2004) made similar observations from a cross-sectional study. “Of all workers who engaged in self-directed learning during the four weeks prior to the survey, fully 87% had also participated in formal training at some point during 2002” (p. 17). As in the Livingstone and Stowe (2007) report, the AETS found that a plurality of workers viewed formal and self-directed training as equally useful.

A similar picture emerged in the Survey of the Self-employed (Delage, 2002) in that almost all self-employed workers who trained formally had also trained informally. Possibly because of barriers to formal training (time, cost, and inaccessibility), however, the majority of those trained informally did not train formally. Overall, only about “a quarter of the self-employed had both formal and informal training…” (p. 41). This survey also asked participants about their perceptions with regard to the relative usefulness of the two types of training. The results indicated that 38% of the sample felt both types of training were equally useful. More self-employed individuals preferred informal training to formal training than the reverse. The reasons given for this were:

- Informal training is more flexible;
- Informal training is more specific to their needs.

The complementary nature of the relationship between formal and informal learning has been noted in case studies of workers with low literacy levels. “Formal training can be a path to informal learning and informal learning can be a path to formal training. Each type of training creates new sparks which ignite into a rich and fulfilling learning experience” (Kazi, 2008, p. 1). Kennedy (2008) also reported that participation in workplace literacy training can spark greater informal learning. This finding is particularly important because low literacy levels have been associated both with lower levels of informal learning (Bélanger, Biron, Doray, Cloutier, & Meyer, 2006) and with a restricted repertoire of informal learning strategies. As suggested by Taylor (2006), work-related educational interventions for workers with low literacy levels may be a necessary strategy to increase their participation in both formal and informal learning.

Employment transition is another area in which the complementary relationship between informal and formal learning is evident. Based on analyses of the WALL data, Bélanger et al. (2006) noted that “life transitions tend to be associated with more intensive participation in active learning either formal or informal” (p. 1). Follow-up interviews with WALL survey participants indicated that initial educational level exerts a significant influence on participation in both informal and formal learning during transitions. Those with less than eight years of schooling tend to increase the intensity of both their informal and formal learning during an employment transition, while those with more schooling are more likely to increase their formal learning without decreasing or increasing their informal learning.

Likewise, immigrants transitioning back into their chosen occupation or profession in Canada have been found to depend on, and benefit from, a combination of formal and informal learning opportunities. Wang (2006) examined three Manitoba educational initiatives designed to transition new immigrant bank clerks, engineers, and doctors into their former professions. Of the three, she found the program for bank clerks was the most successful in that it offered the widest array of formal to informal supports, including mentoring and on-the-job training. The engineering and medical professions were constrained by professional associations and re-credentialing standards that restricted the full participation of the respective workplaces. In contrast, the banks recognized the enhanced customer service and international outreach capacity offered by internationally trained and multilingual personnel, and so tended to invest more in the transitioning process.

All of these studies are pointing at the importance of producing complementarity between informal and more structured work-related learning. “Explicating the tacit” (P. Bélanger, personal communication, Sept. 24, 2008) is essential for ensuring transfer of skills and knowledge through peer coaching or mentoring.
Informal Learning and Performance

/// The sheer volume of major studies addressing work-related informal learning, combined with the enthusiasm of authors such as Cross (2007), suggests that this activity is highly important for organizational success in today’s globalized world. Our literature search, however, found few studies that explicitly measured the quantity and/or quality of work-related knowledge and/or skills learners had acquired through informal means or explicitly addressed the measured impact of informal learning on organizational outcomes.

/// The Canadian Apprenticeship Forum (2006) commissioned a study of the Return on Investment in Apprenticeship training from the employers’ perspective. As discussed earlier in this report, the on-the-job portion of apprenticeship training is more formal in terms of content, purpose, and process than much work-related informal learning. Nevertheless, the study provided an indication of how the relationship between informal learning and performance could be quantified. The study used a complex method to estimate both costs and benefits for 15 different trades. Costs included both direct costs (wages and benefits) and indirect costs (opportunity cost of journeyperson’s time, administration time) while benefits included both revenue generated by the apprentices and tax credits where applicable. In brief, key findings of the study were that investment in apprenticeship training provided a net positive return to the employer. Qualitative benefits included ensuring availability of skilled labour, lower turnover rate, and the better fit between a “homegrown” tradesperson versus an external hire.

/// A UK study (Fuller et al., 2003) used qualitative methods to examine the relationship between informal learning and productivity. The researchers were commissioned by the UK Department for Trade and Industry to create case study material for “a business audience in order to illustrate the range of practice of informal learning and the impact of such learning on business performance” (p. 4). The case studies were of a hairdressing business, an accountancy firm, two National Health Service Primary Care Trust organizations (health care delivery), and a car dealership and were lively, well-written and detailed. The authors concluded that informal learning can be linked to productivity in many different ways. In the hairdressing salon, informal learning about changes in technical requirements was linked to pay increases and promotions. In the accountancy firm, informal learning was required to keep up with regulatory changes. Since the firm used a profit-sharing scheme, the accountants had an incentive to share newly acquired expertise. In the car dealership, pay was directly connected to the number of cars an individual salesperson sold. Since the sales staff were competing with each other inside the firm, little sharing of learning occurred. In the National Health Service, the emphasis on formal credentials and a hierarchy based on those credentials meant that informal learning and its contribution to productivity were not highly recognized. While the case studies helped to spotlight the importance of learning, the findings may seem familiar to readers with a broad background in organizational behaviour and development.

/// Destre and Nordman (2002) used a complex micro-economic model of on-the-job training to explore differential impacts of “learning by watching” and “learning by experience” on the wages of employees in French, Moroccan and Tunisian firms. In their complex statistical analyses, nationality proved to be the only factor that significantly affected wages. Furthermore, the authors commented on the difficulty of measuring informal training, characterizing it as elusive. In large part, this difficulty stems from the social nature of informal learning (e.g. sharing with co-workers, learning from supervisors), making it difficult to assess to what extent an individual worker has participated in informal training.

/// Allan Bailey, a Canadian training evaluation and measurement specialist, (personal communication, Oct. 9, 2008) has pointed out that one of the key challenges of determining the ROI of informal learning is identifying the cost of the time spent by co-workers or supervisors while transmitting knowledge and skills to an employee, and also the cost of the learner’s time. While these costs are relatively easy to determine when training occurs off-the-job, they are much more difficult to pinpoint since so much work-related informal learning is ad hoc; learning episodes often arise spontaneously and last only as long as necessary to meet an immediate learning need. Since much informal learning is done on a one-to-one basis, it could be more expensive to deliver than more formalized training. Given the serious concerns about the effectiveness of off-the-job training, however, informal learning may actually be more cost effective.
Supportive Practices

WLKC was interested in knowing what effective, innovative or promising practices encouraging or supporting work-related informal learning currently exist in Canada. The findings of a Conference Board of Canada survey (Hughes & Grant, 2007) showed, “Despite increased recognition of the role of informal learning, organizations appear no more willing to support informal learning practices today than in the past” (p. 42). This assessment could be tempered, however, by the possibility that organizations themselves may not recognize exactly what they are doing to encourage their employees to learn informally (Bélanger & Robitaille, 2008).

It may be that when an organization is committed to learning, it creates an ambience that allows learning to occur rather than engaging in specific practices to support informal learning. The Conference Board data (Hughes & Grant, 2007) indicated that 56% of organizations, regardless of size, self-identified as “learning organizations,” with Quebec organizations leading the country in this regard. Small organizations (250 or fewer employees) were more likely than other organizations to indicate that they provide a “high learning environment.” Case studies of Canadian organizations can give us some picture of what practices supportive of informal learning might occur in such a workplace.

In their case study of pharmaceutical and biotechnology firms, Bélanger and Larivière (2005) described learning activities as “intensive” and “integrated…in the daily action” of the research teams that formed the focus of this study (p. 1). For the scientific research staff, practices supportive of informal learning included being given time to read journals, participate in conferences and seminars, and exchange knowledge with colleagues within and outside the organization. They also had ready access to scientific and technical literature. The organizations supported their membership in professional associations and paid for subscriptions to specialized journals. The basic work structure was the team, and team members were encouraged to share ideas constantly and work collaboratively on problem-solving.

Work environments highly supportive of learning have been found in other industries as well, as in Unwin’s (2008) case study of a furniture manufacturing company. One of the first supports the company provided for informal learning was structured training in basic computer skills. Having these skills allowed workers at all levels to undertake self-directed learning. The company identified learning “triggers” that encouraged workers to pursue learning both formally and informally. For example, the “success and confidence” (p. 2) demonstrated by workers who had taken formal training provided informal encouragement to other workers. Another trigger was the opportunity to participate in health and safety committees. Workers who were engaged in formal...
leadership training were also encouraged to keep journals to reflect on how they applied what they were learning in their day-to-day work. These learning journals were themselves a support for informal learning to occur.

In our stakeholder consultation survey, we provided respondents with a list of supportive practices for informal learning that we had identified in the literature:

- Coaching/mentoring;
- Employee development plans;
- Providing library and/or internet access to information sources outside your own organization;
- Providing on-line help, FAQs, and/or technical manuals for different jobs;
- Providing wikis, blogs, e-bulletin boards, chat rooms, etc., for sharing work-related learning;
- Telling stories about the organization, different challenges, problems and solutions, etc.;
- Encouraging question-asking about all aspects of the organization;
- Offering placements in other parts of the organization;
- Providing training to develop learning strategies, i.e., ‘learning how to learn’ skills (e.g. develop observational skills, on-line research skills, etc.).

Stakeholders’ responses were encouraging in that all of these methods were used either “occasionally” or “frequently” in most respondents’ organizations. Across all respondent groups, the most frequently used strategy was “coaching/mentoring”, while the least used strategies were “providing wikis, blogs, e-bulletin boards, chat rooms, etc., for sharing work-related learning” and “offering placements in other parts of the organization”.

Respondents also identified other supports being used in their organizations for informal learning. These included:

- Capacity-building opportunities;
- Tying pay to informal learning;
- Creating events and spaces where informal learning is shared;
- Encouraging teamwork;
- Annual work planning days focussed on sharing, brainstorming, and problem-solving;
- Encouraging staff members to volunteer with community organizations;
- Professional portfolio development;
- Prior learning assessment and recognition (PLAR) policies;
- Work-related book clubs;
- Town Hall meetings.

Finally, one respondent pointed out the need to overcome people’s fear of sharing knowledge and skills because of concerns about possible job loss.

Our stakeholder consultations and follow up calls, however, also highlighted respondents’ lack of recognition of many of their own workplace activities as being related to supporting, assessing or recognizing/acknowledging informal learning. As discussions continued, some informants began to acknowledge that possibly they were assessing and acknowledging the informal learning of their workers, but hadn’t thought about it in those terms. Their knowledge of how to support informal learning could be thought of as tacit, rather than explicit. Making such knowledge explicit through reflection might lead to development and/or implementation of practices that are even more supportive than their existing efforts.

Assessment Tools

In the Colley et al. (2002, 2003) continuum model of learning, assessment relates to the “process” aspect of learning, with external assessment of learning being indicative of more formality. White (2008) has cautioned about moving too rapidly to assess informal learning because of the danger of introducing rigidity into a knowledge acquisition and creation process that is by nature fluid and dynamic.

In the assessment of informal learning, another key issue is whether or not individuals recognize their own learning. Livingstone (2005) has discussed the difficulties of getting individuals to see that they have learned informally. The method used to accomplish this in large-scale surveys affects the assessment in unknown ways. Colley et al. (2003) de-
scribed how a teacher interviewed for their research refused to use the term “learning” for anything but the result of formal teaching in a classroom. Furthermore, many experts have great difficulty articulating complex knowledge they have acquired through informal learning because it has become so integrated into what they do that it is no longer easily accessible to conscious description (Kercel et al., 2005).

Nevertheless, stakeholders did express an interest in knowing about what practices and/or tools are available. With regard to recognition of informal learning, a useful source of descriptive information on this topic is the 2007 CMEC (Council of Ministers of Education Canada) document prepared as an OECD (Organization for Economic Co-operation and Development) activity report. The report identified Canadian post-secondary institutions, professional regulatory bodies, employers, and unions as being active stakeholders in using PLAR (Prior Learning Assessment & Recognition) processes to assess informal learning. PLAR was being used for a variety of purposes including award of academic credit, professional licensing, and employment advancement. The report also stated that no national data are available on the extent to which PLAR is being used. Our stakeholder consultation survey results suggested that use of PLAR in the workplace varies from none to frequent. It should be added, however, that in discussions with stakeholders they often were using processes similar to those used in PLAR (e.g. competency-based assessment) but did not recognize them as PLAR tools.

The Workforce Informal Learning Matrix (WILM) is a tool developed by the Manitoba Centre for Education and Work (CEW, 2006) to assist organizations and individuals to assess work-related learning. Based on the idea of Essential Skills, the tool identifies a range of skill levels in areas such as communication, team work, problem-solving, etc. According to the WILM website, over 50 organizations across Canada were involved in developing and refining the assessment tool. Our stakeholder consultation survey, however, indicated that use of the tool is not yet widespread. Although the tool has been extensively piloted, two main concerns remain with the assessment data. First, employees conducting self-assessments may be motivated to conceal their secretive learning (Millar, 2005). Second, the tool can only assess knowledge and skills that the employees are conscious of having and cannot assess unconscious knowledge and skills, such as those acquired through what Jarvis (1992, 2004) has termed “preconscious learning.”

One of our stakeholders recommended the Learning Organization Survey, a recently developed tool for assessing whether an organization is a “learning organization” (Garvin, Edmondson, & Gino, 2008). The tool is based on three “building blocks” (a supportive learning environment; concrete learning processes and practices; and leadership that reinforces learning), each of which identifies what organizations should or should not be doing to support learning. For example, an item on the Supportive Learning Environment scale is: “There is simply no time for reflection in this unit” (p. 112). Based on the idea that learning is multi-dimensional, the tool was benchmarked by collecting survey responses from 125 senior executives attending Harvard Business School courses. The developers’ intention in creating the tool was to promote constructive dialogue rather than critique. Viewing the tool as a diagnostic aid rather than a report card, they recommended using the assessment as a mirror to explore deeply how the organization needs to change. The tool is available on-line, with benchmarking data that allows anyone completing the questionnaire to identify how his or her own organization compares in terms of being a learning organization. The benchmarking data should, however, be interpreted with caution because of the small sample used to create it.

In our stakeholder consultations, many identified a feeling of frustration in not knowing how to assess informal learning in the workplace, or what simple and efficient resources were available to assist them with this. These responses suggest that more information-sharing is needed on the pros and cons of trying to assess informal learning and/or on tools available for this purpose.

4 https://surveys.hbs.edu/pensous/se.ashx?i=38185F533C282FF
Informal learning and Networks

/// In *The Tipping Point*, Gladwell (2000) popularized the notion of “Connectors”, individuals who have much more extensive social networks than the average person and play a key role in disseminating information. While this type of social networking activity seems obviously related to informal work-related learning, we found little specific Canadian data or research focused on the topic. Many of the studies discussed earlier in the report did refer to the social nature of learning and the importance of learning from co-workers. For example, Bélanger (2004) identified the importance of professional networks for research teams in pharmaceutical and biotechnology industries. Professional networks were a vital source of learning for the visual artists in Bain’s (2005) study. The importance of professional networks was also highlighted in studies concerned with the development of teachers’ professional identity (Delhi & Fumia, 2002; Smaller et al, 2000; Tarc et al, 2006).

/// Data from the ALL survey (Rubenson et al., 2007) indicated that the most frequently used form of informal learning was solitary: “Learning by yourself, trying different ways” was used by 90% of Canadians. A social form of learning, “learning by watching, getting help from others,” was, however, the second most frequently reported learning strategy, used by 77% of Canadians. The AET survey (Peters, 2004) reported similar results, with solitary forms of self-directed training being used more frequently (80%) than observing (49%) or seeking advice (56%). The preference to learn alone may possibly reflect Gladwell’s (2000) idea that being a Connector is a specialized social role that not everyone adopts.

/// In the follow-up telephone interviews to our stakeholder consultation survey, a number of stakeholders raised the question of how individuals plan to share their learning with others when discussing learning plans. These stakeholders thought that sharing individual learning for corporate benefit is very important. On the other hand, labour stakeholders expressed concern in their questionnaire responses about “knowledge management,” which can be seen as the uncompensated appropriation of worker knowledge (Bratton et al., 2004).

/// Some stakeholders raised the additional concern that workers tend to worry about taking another person’s time in asking them to demonstrate or explain something. Also, fear of job loss if informal learning about their own work was shared with co-workers was also mentioned as a concern. Both of these fears would discourage the use of networks for sharing informal learning.

Informal E-learning

/// As noted earlier in this report, the development of the World Wide Web has made vast amounts of information available to anyone with access to a computer and the Internet. Cross (2007) has highlighted the importance of the Web for informal learning, while White (2008) has pointed out that the development of Web 2.0 tools has opened the possibility of a quantum leap in information sharing. Because of the interactive nature of the new social networking software, new knowledge is being created and shared simultaneously. Informal learning is thus accelerating exponentially. The growing availability of Web-enabled hand-held devices (cell phones, Blackberries, etc.) for just-in-time learning has the potential to rapidly boost participation in informal learning.

/// Despite the vast potential of informal e-learning for work (Carliner et al., 2006; Cross, 2007), our search found very little Canadian research that addressed this particular topic. This lack may be because much of the e-learning research conducted to date has been focussed on e-learning in the context of formal education and/or non-formal training. To support this idea, we noted that the exhaustive review of e-learning by Abrami et al. (2006) did not contain the term “informal learning.” A recent study by Carliner et al. (2008) indicated, however, that Canadian training professionals made little use of blogs and websites for on-going professional development.

/// In the AET survey (Peters, 2004), using the Internet or computer software for self-directed learning was identified as a less popular method than consulting documents or self-teaching by alternative methods. A Conference Board of Canada study (Murray & Bloom, 2000) also provided some data on how information technology is being used in workplaces for skill development, but it does not ad-
address informal learning specifically. Gray (2004) offered a qualitative picture of how informal e-learning was used by a “community of practice.” Her study illustrated how informal e-learning contributed to the functioning of a professional association (Alberta Community Adult Learning Councils) by providing the means to orient newcomers and provide experienced practitioners with support for on-going development of professional identity.

In the United States, the E-Learning Guild incorporated a question on informal e-learning in their 2006 annual survey of their 20,000 members (Pulichino, 2006). Respondents to the survey ranked “E-learning designed to support and/or enhance informal learning” as fifth of 23 e-learning activities that were likely to increase in frequency during the year ahead. These data suggest that awareness of the significance of the relationship between e-learning and informal learning is rapidly increasing. A similar increase might be expected to have occurred within the e-learning community in Canada.

Our stakeholder consultation results did suggest widespread use of e-learning in providing on-line help, FAQs, technical manuals for different jobs, and/or internet access for workers in Canada. The potential of Web 2.0, however, may be less understood. Many stakeholders responded that they do not use interactive tools such as wikis, blogs, and chat rooms to support informal learning, and very few indicated that these tools are used frequently.

Key Business and Labour Approaches to Work-related Informal Learning

As White (2008) pointed out, interest in informal learning is still in the early adoption stage. While business and labour may be involved in many initiatives that support informal learning, they do not appear to be talking about them as “informal learning,” or at least not in written documents that we could locate through our literature search strategy. The little empirical evidence we did find supports this impression. According to the Conference Board of Canada survey of Canadian businesses (Hughes & Grant, 2007, p. 39), “Only 28 per cent of respondents set aside funds to support informal learning, and few respondents have a good sense of when, where and how informal learning takes place within their organizations.” Most of the recent WLKC report on innovative union learning activities (Labour Education Centre, 2007) is focussed on structured training activities. Although the role of informal learning is acknowledged as important within the union tradition, the report does not describe any innovative approaches specifically focussed on supporting it.

In our stakeholder consultation, respondents from the business and labour groups rated the importance of informal learning lower than did respondents from other sectors. For the present, informal learning would appear to be more of a concern for academic researchers and training professionals than for business and labour.

Government Policies, Programs or Measures to Address/Support Work-related Informal Learning

At this point, Canada lacks an integrated national policy to support adults’ lifelong learning, including work-related informal learning (Rubenson, 2007). Creating such a policy requires the co-operation of both federal and provincial policymakers, an effort that has been underway for a number of years (CMEC, 2005). Notably, while acknowledging the importance of informal learning, the CMEC research report argued against the use of the term, recommending instead that the term “experiential learning” be used in a national policy framework. Rubenson et al. (2007) have argued for “the necessity to anchor a Canadian strategy on lifelong learning in the world of work” (p. 77). Informal work-related learning would probably be one aspect of such a lifelong learning policy, rather than a stand-alone policy area.

Nevertheless, because work-related informal learning is so pervasive in Canada, many existing policies could be seen to have a relationship to this topic. In the CMEC (2005) survey of adult education policies, although “all responding jurisdictions indicated that their departments or ministries of education or higher education were involved in the management of adult education programs, there was no single government organization that claimed overall
responsibility” (p. 6). For example, one area of work-related informal learning that has received considerable government attention both at the provincial and federal level is its assessment and recognition, commonly termed PLAR (Prior Learning Assessment and Recognition). The recent CMEC (2007) report on Recognition of Non-Formal and Informal Learning illustrated vividly the complexities of government support in this area. For now, these and other policies and programs related to informal workplace learning (e.g. public access to the Internet) remain a fragmented patchwork, not a focused policy thrust.

/// Education and workplace training are provincial responsibilities with limited federal coordination or standard setting. Our stakeholder consultations indicated fragmented provincial policies and silos occurring in the field of adult learning. Stakeholders felt that too many provincial departments were involved — adult education, workplace, labour and immigration to name a few.

/// In contrast to Canada, the European Union has adopted an articulated and overarching lifelong learning strategy (Hingel, 2005). The third strategic objective of this policy addresses the relationship between education/training and the wider world, with a specific sub-objective that concerns strengthening links with working life. To support the policy initiative, Eurostat and CRELL (Centre for Indicator-based Research in Lifelong Learning) have worked on assessing and benchmarking self-directed (informal) learning (Haahr & Hansen, 2006; Ormstead, 2005). Another major initiative is the development of indicators to assess learning strategies or “learning to learn” skills (Hingel, 2005).

/// In 2004, the European Commission’s Leonardo da Vinci Programme created INFLOW (Informal Learning Opportunities at Work) to coordinate and conduct research specifically on informal learning opportunities in the workplace. According to the website (http://www.inflow.eu.com/index.asp?s=section&groupid=1&sectionid=1), INFLOW has generated a number of case studies of informal learning in the engineering and hospitality sectors. In addition, the project developed and validated a model for the recognition and accreditation of informal learning in the workplace. The project generated tools for assessing and recognizing workplaces for their support of informal learning and for assessing and recognizing individual workers’ skills acquired through informal learning at work. Although the INFLOW project is now completed, work on the model and validation methodology is to continue through EIPIL (European Initiative for the Promotion of Informal Learning), an organization that is offering services to organizations on a fee-paying basis.

Federal government support for work-related informal learning

/// Support from the Government of Canada for work-related informal learning includes initiatives funded through sector councils, literacy other expert organizations. The Textile Human Resources Council’s Skills and Learning Portals marks a decisive move towards the provision of workplace learning resources to the Council’s member companies based on an informal learning model. The Centre for Education and Work’s Workplace Informal Learning Matrix (WILM), CertWORK and Workplace Essential Skills Learning Assessment Tool (WESLAT) all rely on informal learning approaches or seek to recognize informal learning.5

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Mapping the Field of Practice

To promote the practice of supporting and recognizing informal learning, identifying key individuals, groups or organizations in Canada is important. The following section briefly describes the major stakeholders’ areas of activity with regard to informal learning. Individuals, groups, or organizations that may be considered to make up the core community of interest are identified, as well as any particular tools or services they provide.

Employers

At this point, it would appear that only isolated employers have taken a strong interest in “informal learning” as such. The employers that co-operated with the Centre for Education and Work on the development of the WILM tool would presumably have a strong interest in informal learning. The WILM website provides a listing of these organizations (http://www.wilm.ca/en/companies.html).

Many other employers, however, may be supporting work-related informal learning under the “learning organization” or “lifelong learning” rubric. For example, according to Tracy Defoe, a workplace training/literacy expert, Canadian Manufacturers & Exporters (CME) are engaged in training-related activities in connection with developing a “learning organization” to support adoption of “lean” manufacturing. Similarly, employers that served as case study sites for the research that Maurice Taylor and his colleagues conducted (Taylor, Evans & Mohamed, 2008) were selected from among winners of the Conference Board of Canada Awards for Excellence in Workplace Literacy. As these employers appeared to offer active support to both formal and informal training for low skill workers, other employers engaged in workplace literacy training may also demonstrate more support for informal learning. The Conference Board’s website offers case studies of such organizations (http://www.conferenceboard.ca/education/best-practices/case-studies.htm). Amongst government employers, both the Manitoba and New Brunswick civil services refer to “informal learning” in the context of employee “learning plans.” Thus, from the employer perspective, the focus is on supporting work-related learning, whereby informal learning is not viewed in isolation from more formal training activities.

Labour Unions

We received limited response from labour unions to our stakeholder consultation survey, although given the timing of the consultation, the response level may not reflect actual interest in this topic. One of the concerns raised by the labour stakeholders in the survey was that of “knowledge management” and informal learning. From the labour perspective, knowledge management can be seen to involve management’s appropriation of workers’ knowledge gained through informal means without providing increased compensation to the workers for their contributions to increased productivity. Such appropriation is obviously a major issue for the union movement.

The Saskatchewan Federation of Labour partnered with the Centre for Education and Work on development of the WILM tool, indicating a strong interest in informal learning. The SFL was also identified as a partner in the WALL network. Unions identified as partners in the WALL network include the United Steelworkers of America (USWA) in Canada, and the Ontario Secondary School Teachers Federation.

Prior Learning Assessment and Recognition (PLAR) Groups; Career and Employment Counsellors; Human Resource Practitioners

Since PLAR embraces informal learning, the Canadian Association of Prior Learning Assessment (CAPLA) is actively involved in this area. CAPLA is a practitioner, research and policy membership-based organization. It maintains the Recognition for Learning website (www.recognitionforlearning.ca) which contains a database with links to other organizations.
across Canada that are involved with informal learning through PLAR. These include organizations from:

- Government and regulatory bodies;
- Professional and Trade Associations;
- Business, Industry and Sector Councils;
- Community-based Organizations;
- Colleges and Universities.

Along with other PLAR assessment methods, CAPLA promotes portfolio development practices which help adults to identify and document their prior informal and other learning for a variety of purposes including employment, academic credit and career management. The CMEC (2007) report also identified government, post-secondary and other organizations involved in PLAR initiatives.

Practitioners in career counselling, employment counselling, succession planning, professional development, and lifelong learning are also active with regard to promoting and recognizing informal learning. CAPLA partnered with career development and HR associations to develop two reports including information on the use of PLAR in those sectors, which include informal/experiential learning: “PLAR and Career Development Integrated Efforts” (2007), and “Prior Learning Assessment and Recognition (PLAR) and Human Resource Management (HRM): A Valuable Link” (2007). Apart from involvement with PLAR, human resources practitioners are involved with informal learning through such activities as career development plans, performance support systems, non-instructional interventions, and support for learning communities.

In addition to CAPLA’s national and international conferences, the NATCON conference has included sessions related to the issue of informal learning (e.g. PLAR for immigrants, the Canadian Practice Firm Network). Metropolis Canada, a member of an international research network on immigration (http://canada.metropolis.net/index_e.html), is also concerned with the issue of recognizing immigrants’ informal learning and its relation to labour mobility.

Many sector councils are involved in the recognition of informal learning through PLAR and certification programs. Some of these programs are directly funded through the federal government’s Foreign Credential Recognition program to benefit new immigrants and Canadians alike.

Academic and Other Researchers

The WALL network at OISE, headed by David Livingstone, is a prominent academic research centre concerned with work-related informal learning. The WALL network membership includes researchers from universities across Canada, listed on the WALL website (http://www.wallnetwork.ca/people_partners/investigators.htm). Maurice Taylor at the University of Ottawa has headed a large research project concerned with both formal and informal training for workers with low-level literacy skills. Another important academic network is the University of Alberta’s Work and Learning Network, (http://www.wln.ualberta.ca/members.htm), which also attracts members from across Canada. In addition, a number of academics have worked in the area of work and informal learning but are not currently identified as members of the research networks listed above. These include Jane Arscott at Athabasca University, John Bratton at Thompson Rivers University, Saul Carliner at Concordia University, Tara Fenwick at University of British Columbia, Bruce Spenser at Athabasca University, and Christine Wihak at Thompson Rivers University. Robin Millar of the Centre for Education and Work led research into informal learning, particularly secretive learning in workplaces. Finally, the Canadian Policy Research Network has been active in researching workplace learning in association with the Canadian Council on Learning. At this point, however, reports published on their website contain scant reference to informal learning.

Academic researchers usually exert an influence on practice through their roles as educators of new practitioners. Much of the academic research conducted also has significant policy implications with regard to support for work-related learning. The researchers may not, however, necessarily have the ear of policy-makers and hence their knowledge may not be integrated into programs to support work-related learning.
Workplace or Community-based Trainers and Practitioners

/// Organizations in the training field that might be likely to have made work-related informal learning a specific focus do not appear to have done so as yet. For example, the most recent issue of Canadian Learning Journal, published by the Canadian Society for Training and Development, contains no mention of “informal learning,” nor is it mentioned in that organization’s suggestions for Learn at Work Week activities.

/// At this point, Manitoba’s Centre for Education and Work, discussed earlier in this report, would appear to be one of the few workplace-training organizations actively and consciously concerned with informal learning. Our stakeholder consultation, however, indicated that some individuals or organizations in the training field elsewhere are active in supporting informal learning, notably by helping people to develop learning strategies, that is, “learning to learn” skills.

/// In addition, other organizations may be actively involved in supporting work-related informal learning but are not identifying their activities in that way. For example, organizations in the Canadian Practice Firm network use guided informal learning to assist individuals with career transitions (http://www.rcee-cPFN.ca/bienvenue.php?switchlanguage=en). Similarly, trades certification programs in Canada are highly structured in many ways, but their reliance on apprenticeship training also shares characteristics of informal learning.

Governments

/// As discussed above with regard to policy, neither federal nor provincial governments appear to be explicitly active with regard to policy and programs focused on informal learning. Nevertheless, many government policies and programs concerned with adult education in general may also encompass informal learning, without this area being singled out for special attention. The CMEC (2005) report on adult education probably remains the best source of information concerning which government departments in which provinces are active in the general field. Care must be taken, however, when reading reports on ‘adult education’, to consider whether they are only reporting on formal learning through educational institutions.

E-learning Providers

/// While recognizing that the Internet, technical manuals, help files, FAQs pages and instructional CDs are primary sources of informal learning, we found little evidence that Canadian e-learning providers are actively focusing on supporting or promoting informal learning in the workplace. As noted earlier, the American-based E-Learning Guild has only recently (2006) started to raise the question of informal learning in its member surveys. This organization clearly has Canadian members, but we were not able to identify Canadian individuals or organizations that participate and hence might have become involved in supporting informal learning.

/// The Centre for Education and Work has ventured into support for informal learning with the roll out of MAGLE (Multi-media Guided Learning Experience). From the brief description on the website (http://www.cewca.org/guided-learning), this e-learning package has both informal and formal aspects.
Educational Institutions

Educational institutions are typically associated with formal learning, although the value of work-related learning has long been recognized in the form of co-op programs and practicum placements required in many professional programs. Many educational institutions are active in recognizing informal learning for academic credit through PLAR processes. While community colleges across the country have been more active in PLAR than universities, this is beginning to change. Close to 30 universities in Canada identify PLAR policies and procedures on their websites (Whak, 2007).

Thompson Rivers University open Learning (formerly the BC open University), for example, has been active in PLAR since the mid 90s and now has a PLAR department devoted to assisting adult students to have their informal work-related learning recognized. A major work-related PLAR initiative is the successful partnership with Daimler-Chrysler and Humber College. Daimler-Chrysler employees can have both their informal learning and their in-house training programs assessed for credits towards a Bachelor's degree. Courses in high demand are offered at the plant sites. Employees can enrol in other courses at Humber College or complete distance education courses offered by TRU’s Open Learning division.

Athabasca University and Royal Roads Universities are also very active in offering PLAR. Other universities such as the University of Winnipeg identify a more general “Adult Learner Services” centre that includes PLAR and other informal learning connections.

Awareness that much informal learning happens in formal settings (e.g. in spontaneous classroom discussions, in the corridors or coffee shops, with guest lectures, peer study groups) is also spreading (Colley et al., 2003). In addition, educational institutions are showing increasing awareness of the value of work-related informal learning, with community service learning now being a common practice in Canada’s larger universities. For example, UBC has recently launched a Community Service Learning initiative (http://www.learningexchange.ubc.ca/ubc-cli.html) that will allow all students to combine informal work-related learning with course work.
The knowledge exchange plan is based on the following outline:

- Key messages and topics of discussion arising from the research findings; This includes promoting informal learning to employers, unions, trainers, educators and governments;
- Key audiences/stakeholders (decision-makers);
- Key stakeholder roles;
- Possible messengers with the most credibility for various audiences;
- Recommended methods to reach target audiences and to facilitate discussion between and across various audiences;
- Potential impact, value, and benefits of knowledge transfer to various audiences;
- Key knowledge and information gaps, and WLKC’s possible role in addressing them in the future.

The figure below provides an overview of the knowledge exchange process that served as the basis for the entire knowledge exchange plan.

*Figure VII-1. A Framework for knowledge transfer*
Key Messages and Topics for Discussion

The synthesis research in this report provides rich content for awareness of informal work-related learning, and for identification and discussion of its importance, its value to both individuals and organizations, and examples of how it might be better supported and recognized. The value of viewing informal learning as a part of the full spectrum of adult learning (formal, non-formal and informal) is brought forward. Indeed, one of the key messages from this research is a caution about discussing informal learning discretely without including its relationship to more formal learning. In addition, it is clear that in many situations, the lack of awareness of informal learning taking place or what has been learned from it is a key challenge that needs to be addressed. PLAR and career development practitioners know this challenge well, and should be key partners with WLKC in future efforts to help encourage the awareness, identification and support of informal learning.

Based on the findings of the synthesis research and on the goals of WLKC, the main messages that should be considered are:

- Learning as a continuum and the inter-relatedness of informal and formal learning;
- How to identify what and how people learn informally;
- The value of informal learning (and the perception of it), and the importance of supporting it;
- How to increase and support work-related informal learning;
- How to recognize others’ work-related informal learning (i.e. acknowledge, value and reward);
- Identification of gaps in our knowledge, and further research of value regarding work-related informal learning.

It should be recognized that audiences have varying interest in, and time for, receiving communications and engaging in discussions about informal learning. Accordingly, there could be four ‘levels of exchange’ included in the knowledge exchange plan at this stage to address a range of interest and expertise.

General awareness short messages

These messages could describe types of informal learning, its relationship to formal and non-formal work-related learning, and its potential benefits. They could include facts and figures, incidence and use of informal learning, and short case study examples to indicate possible benefits and how learning can be supported.

Descriptive research findings

These exchanges could include more detailed research findings, case studies, and discussion topics that encourage general audience involvement in reflections on informal learning. These could be topics such as:

- How does informal learning relate to formal learning (i.e. training)? Does this vary with different purposes for learning, different environments and different forms/needs of recognition (e.g. regulation, certification and re-certification, continued professional competency, international training and workplace experience)?
- What is being done to support, acknowledge and encourage, and assess and recognize informal learning within the larger continuum of learning in the workplace?
- What are some of the issues and challenges with supporting, assessing and recognizing informal learning that could be addressed in the workplace or through external partnerships?

Audience-specific messages

Research and case studies available that are audience specific (e.g., HR practitioners, unions, professional associations) or other case studies, can have reflective questions attached to encourage discussions on how findings can be adapted to the audiences’ own environment. Discussion on informal learning within the learning continuum and how it can be identified, supported, assessed and recognized within their specific environment would be key.

Public policy implications

Information and rationale about the incidence, use, and value of informal learning and its place within the larger
adult learning and lifelong learning concept would be important to draw from the report for policy and program development audiences. This information can be framed to be used: a) to advocate for improved policy and program development of adult learning; b) in employment and immigration policy and program development; and c) within government, education, and certification and assessment bodies in Canada.

It should also be noted that even when addressing specific stakeholder audiences, there will be a range of message ‘levels’ required. For example, within the HR and employer audiences, some will only be ready for (interested in) general awareness items while others will be ready for more in-depth discussions. WLKC will need to work with various contacts and associations to identify the message and discussion levels appropriate for specific events or communications.

Key Audiences and Stakeholders

As has been indicated through the research findings, general awareness of work-related informal learning, and its inclusion in bottom line productivity improvement business planning, is limited. It is possible that it is incorporated under other terminology, but the emphasis is still limited. As a result, awareness and increased reflection on and discussion of work-related informal learning and its ‘connectors’, is imperative with all audiences. General awareness messages can be targeted to all. However, WLKC must work with those stakeholders and ‘messengers’ who are most interested in informal learning in the workplace and engage them as partners, and not try to involve everyone. The ‘early adopters’ need to be encouraged and showcased as models for others.

In addition, specific audiences can be identified to make communications and knowledge exchange more direct and the discussion applicable to specific interests.

Many different methods of categorizing audiences are possible, but from existing research on work-related informal learning and possible discussions, it might be valuable to consider the following ‘categories’ of workplace audiences for initial exchanges:

- Human resource management (HR) practitioners;
- Business/industry associations or organizations (including sector councils), and through them reaching employers, managers and self-employed;
- Unions;
- Professional associations or organizations (including certifying bodies);
- Career/employment counsellors;
- PLAR practitioners and credential assessment agencies;
- Private trainers, corporate trainers, community trainers;
- Policy-makers and program deliverers (i.e., government);
- Educators;
- Immigrant service agencies.

Stakeholder Roles

When developing messages and accompanying discussion questions it is essential to understand the roles that various stakeholders play in relation to work-related informal learning. With this in mind, the most applicable examples and information can be incorporated in the exchanges with specific audiences. Table VIII-1 summarizes the roles to be taken by various stakeholders, which are discussed in the following section of text.

Develop awareness and identify learning

- Assist with awareness of individual, team and corporate learning, including informal learning;
- Assist individuals to identify their learning/competencies; those that they currently have, and/or new ones as they are developed;
- Assist individuals to document and demonstrate/prove their continued learning, including informal learning;
- Identify and communicate the benefits of learning (including informal learning), for the individual, for the organization, and for society.
Support and recognize learning

- Support, encourage and acknowledge all types of learning, including informal learning;
- Assist individuals with goal setting and future learning options;
- Provide time and applicable resources (could be from identifying individuals to working with to a full knowledge management system, or other resources) for learning in the workplace;
- Assist with development of knowledge management system or providing a system for sharing of learning and information within the organization or team, or sector;
- Assist with acknowledgement and recognition through a range of means of individual, team or corporate learning, including informal learning;
- Develop policies to encourage and support all types of learning (including informal learning) and subsequent recognition of it.

Table VII-1. Stakeholders’ roles in work-related informal learning

<table>
<thead>
<tr>
<th></th>
<th>Develop Awareness</th>
<th>Support &amp; Recognize</th>
<th>Facilitate Learning</th>
<th>Assess &amp; Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR Practitioners</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Employers, Managers &amp; Self-Employed</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Business/Industry Assoc. &amp; Sector Councils</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Unions</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Certifying Bodies</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Professional associations and organizations</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career &amp; employment counsellors</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLAR Practitioners</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private, corporate and community trainers</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Policy makers &amp; government programs</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educators</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Credential assessment agencies</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant service agencies</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic &amp; other researchers</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-learning providers &amp; groups</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Facilitate learning

- Assist with actual individual and organizational learning (or identifying how learning could take place) for personal and organizational benefit;
- Assist individuals to share their learning with others for individual and organizational benefit.

Assess and evaluate learning

- Assess or help assess individual learning and/or group/team learning;
- Assist with assessment, evaluation and recognition of all types of learning in order to maximize the value of individual knowledge and competencies for individual and corporate benefit;
- Foster a culture of clear learning outcomes and continuous evaluation and assessment of the outcomes.

Key Messengers

/// When looking at knowledge exchange activities, WLKC must really look at two sets of audiences. The identified stakeholder groups are one audience, as they must be informed and included in key exchanges. For this, WLKC is the key messenger through their meetings, communications and their membership. The second audience is the workplaces and individuals that the identified stakeholder groups represent. For this audience, the stakeholder groups become the main messengers, along with support and partnership of WLKC (for example, individual employers, managers and self-employed can be reached through business/industry organizations and sector councils).

/// When planning and implementing knowledge exchange, WLKC must identify local experts or those individuals and organizations whose views are respected within certain sectors or bodies to translate the findings in an appropriate way to the ultimate end-users or audiences. In some cases this may involve WLKC working with organizations in the organization’s environment, in other cases it may mean including individual leaders or contacts as speakers or messengers at WLKC events. Wherever possible, by relying on intermediary experts or local leadership, the value of informal learning is instilled by high profile early-adopters and is more likely to be conveyed directly or indirectly to others in that community of practice. We strongly recommend the approach of ‘story-telling’ through case studies and individual example wherever possible.

/// Table VIII-2, on the following page, presents a preliminary list of messengers that WLKC may wish to seek as partners to reach the identified stakeholder groups.
<table>
<thead>
<tr>
<th>STAKEHOLDER</th>
<th>POTENTIAL PARTNERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR practitioners</td>
<td>• IHRMPA - HR Management Professionals Association, Canada</td>
</tr>
<tr>
<td></td>
<td>• CHRA - Canadian Council of Human Resources Associations and provincial affiliates</td>
</tr>
<tr>
<td>Employers, managers &amp; self-employed</td>
<td>• Chambers of Commerce</td>
</tr>
<tr>
<td></td>
<td>• Women Business Owners Associations</td>
</tr>
<tr>
<td></td>
<td>• Entrepreneurs’ Organization</td>
</tr>
<tr>
<td></td>
<td>• CME - Canadian Manufacturers &amp; Exporters</td>
</tr>
<tr>
<td></td>
<td>• TASC - The Alliance of Sector Councils</td>
</tr>
<tr>
<td>Business/Industry associations (+ sector councils)</td>
<td>• Chambers of Commerce</td>
</tr>
<tr>
<td></td>
<td>• Women Business Owners Associations</td>
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<tr>
<td></td>
<td>• Entrepreneurs’ Organizations</td>
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<td></td>
<td>• CME - Canadian Manufacturers &amp; Exporters</td>
</tr>
<tr>
<td></td>
<td>• TASC - The Alliance of Sector Councils</td>
</tr>
<tr>
<td>Unions</td>
<td>• Labour members of WLKC</td>
</tr>
<tr>
<td>Certifying bodies</td>
<td>• Listing available. Begin with those who are WLKC members</td>
</tr>
<tr>
<td>Professional associations &amp; organizations</td>
<td>• Listing available. Begin with health and education.</td>
</tr>
<tr>
<td>Career &amp; employment counsellors</td>
<td>• CCDF - Canadian Career Development Foundation</td>
</tr>
<tr>
<td></td>
<td>• CACEE - Canadian Association of Career Educators and Employers</td>
</tr>
<tr>
<td>PLAR practitioners</td>
<td>• CAPLA - Canadian Association for Prior Learning Assessment</td>
</tr>
<tr>
<td>Private, corporate, &amp; community trainers</td>
<td>• CSTD - Canadian Society for Training &amp; Development</td>
</tr>
<tr>
<td>Policy-makers &amp; government programs</td>
<td>• HRSDC, CIC, CMEC and provincial counterparts</td>
</tr>
<tr>
<td>Educators</td>
<td>• ACCC (Association of Canadian Community Colleges)</td>
</tr>
<tr>
<td></td>
<td>• AUCC (Association of Universities and Colleges of Canada)</td>
</tr>
<tr>
<td>Credential Assessment Agencies</td>
<td>• ACESC - Alliance of Credential Evaluation Services of Canada</td>
</tr>
<tr>
<td>Immigrant Service Agencies</td>
<td>• Listing available. Begin with WLKC members</td>
</tr>
<tr>
<td>Academic &amp; Other Researchers</td>
<td>• Adult Education departments at Canadian universities</td>
</tr>
<tr>
<td>E-learning providers &amp; groups</td>
<td></td>
</tr>
</tbody>
</table>
Best Methods for Reaching Target Audiences

/// Considerable scholarly research on the nature and importance of informal work-related learning in Canada has accumulated in recent years. Some of this information is quantitative, but much is qualitative. This information needs to be put in the hands of employers, unions, and trainers/educators in user-friendly formats.

/// WKLC can play a role in interpreting and popularizing scholarly research. One effective way to do this would be to take a story-telling approach that presents case study research reports with real-life examples of workers engaging in informal learning and/or organizations supporting workers in informal learning. These could be used to illustrate or introduce best practices and/or assessment tools. Ideally, information dissemination would be done in multi-media formats, using some information technologies and Web 2.0 tools in combination with WLKC’s existing knowledge exchange networks.

/// WKLC can also play a role in bringing scholarly research on work-related informal learning and the messages it conveys to the attention of policy makers such as Human Resources and Social Development Canada (HRSDC), Canadian Council on Learning (CCL), Citizenship and Immigration Canada (CIC), the Council of Ministers of Education Canada (CMEC) and all the provincial/territorial counterparts. In doing so, WLKC can press for the development of an overarching lifelong learning policy for Canada that encompasses informal learning.

/// We recommend some specific tools for awareness building and knowledge exchange activities as follows, based on the four types of exchanges identified earlier in this report.

General awareness short messages

/// This level of awareness is needed for all stakeholders and extended audiences. We recommend the development of:

- A listing of very short “Did you Know?” items of facts and findings from the research that can be used as banner-type messages in newsletters, on web-pages, in knowledge exchange meeting programs, at conferences, and in presentations;
- Short ‘interest items’ from the research that might be up to a page in length that could be used in newsletters and on web-pages that provide specific findings on how and why people use informal learning, and the value of informal learning in particular.

Descriptive research findings

/// This type of information can be used for more in depth knowledge exchange with stakeholders. For this type of exchange we recommend the development of:

- Presentations on the research findings, which could be used at WLKC events and at specific audience conferences of stakeholders of WLKC. It would be valuable if presentations could be made using a WLKC representative plus a stakeholder who could speak personally about informal learning where possible;
- Knowledge exchange sessions for specific audiences hosted by WLKC with short presentations, facilitated discussion and resources. These might develop into ‘communities of interest’ on the topic in the future;
- “Checklists for reflection”, which could include listings from the research on topics such as why people use informal learning; how individuals, teams and organizations learn through informal learning; what types of things people learn through informal learning (to help people identify learning); how informal learning can be supported; how informal learning can be assessed; and how informal learning can be recognized and acknowledged in the workplace. These checklists could help individuals and workplaces be more aware of informal learning and support it;
- The writing of case studies in a story-telling mode (by a professional writer), using both examples from the research and examples of innovative approaches found in telephone interviews with stakeholders;
- Articles written about informal learning for association, corporate and professional newsletters and trade magazines. These should highlight an organization, company or person to facilitate a ‘connection’ with the specific context if possible. Otherwise there might be some consideration of how findings might relate to the specific audience;
- Short blogs on association, corporate or organizational websites, presenting a research finding and raising a question for consideration;
- Web casts related to the research findings, with interactive discussion and questions;
- A resource listing of tools available with a request for identification of others of value, along with some of the checklists, offered on the WLKC website (with links from member sites) for download and adaptation.
**Audience-specific messages**

- Adaptation of all of the above methods of communication can be done for specific audiences. For example, articles written about informal learning (adapted to a specific audience where possible) for association, corporate and professional newsletters and trade magazines. These should highlight related case studies or some organization, company or person within that specific audience;
- Questions specific to audiences could be developed to be used in articles and in-person knowledge exchange activities to help the readers consider the findings in the context of their own environment;
- Additional telephone interviews could be conducted with specific stakeholder contacts to gather a broader range of case examples;
- Use sessions such as the short “Smart Sessions” hosted by WLKC and CME to engage owners and managers in short interactive sessions at breakfast or lunch.

**Public policy implications**

/// For policy makers, presentations and papers to raise awareness, support and recognition of informal learning need to be developed.
/// In addition, policy makers need to be invited to knowledge exchange activities of other stakeholders so they can hear what is being said. In involving these stakeholders, WLKC can facilitate the development of an overarching lifelong learning policy for Canada that encompasses informal learning.

**Possible Impact, Value, or Benefits of Knowledge Transfer to Various Audiences**

/// When developing a knowledge exchange plan, it is important to identify some potential impacts as a result of the knowledge transfer and exchange. We recommend consideration of the following impacts in any assessment plan for knowledge exchange activities: Increased awareness of informal learning and its potential benefits; Greater interest in learning about informal learning in the workplace; Greater participation in informal learning; Documentation of informal learning taking place; Acceptance of the complementary and continuum nature of informal and formal learning and the value of both; Increased resources (time, processes and money) and support dedicated to (informal) learning in the workplace; Increased policy and program support from government, learning bodies and assessment/certification bodies; Identification of further research of value.

**Key knowledge and Information Gaps**

/// One component of the knowledge exchange plan is to identify areas where further research beyond the scope of this project would be beneficial. As part of the knowledge exchange activities, these topics could be validated as beneficial to stakeholders and detailed as to what they might encompass if future research were to be carried out.

**Development of a shared vocabulary**

/// The results of both our literature review and the stakeholder consultation made it clear that a plethora of different terms continue to be used as synonyms for “informal learning” or used to distinguish themselves (terms) from “informal learning.” While reaching consensus on a common vocabulary may be impossible, deepening our understanding of how these various terms map on to each other in different contexts would be helpful.

**Greater recognition of the inter-related nature of all workplace learning**

/// Colley et al. (2003) have argued that making distinctions between formal, non-formal and informal learning is no longer a fruitful way to think about learning as elements of formality and informality exist in all learning situations. Workers themselves do not necessarily distinguish between structured training and informal learning but see them as mutually supportive. This point was also reiterated in many of the Canadian surveys and case studies we reviewed. Since our objective is to encourage work-related learning, promoting a focus on exploring the interrelationship between different types of learning will probably prove more fruitful than continuing efforts to single out the category of informal learning for particular focus.
**Better measurement of how people are learning at work and how much they are learning**

Canadian surveys of informal work-related learning do not collect sufficiently detailed data on the activities that workers use to learn, particularly with regard to their social learning. Of particular importance will be research initiatives to clarify how people are using information technologies and Web 2.0 tools for informal work-related learning.

Another significant gap is the lack of information on the extent and level of workers’ informal learning, including the quantity and quality of work-related learning. Existing large scale surveys have only addressed whether workers are learning informally and how much time they spend on it. They do not address the learning outcomes of informal learning activities. Many qualitative studies suggest strongly that workers are learning substantive knowledge and skills informally, but the evidence is highly anecdotal. More rigorous evidence is required to make a stronger case to businesses to support and/or facilitate informal learning at work. In short, WLKC needs to encourage designers of large-scale studies to investigate the “how” and “how much” questions of work-related informal learning with more precision.

**More information on effective informal learning strategies for specific types of workers**

Large-scale surveys suggest that workers with low-level skills may have an impoverished repertoire of informal learning strategies. This question needs to be investigated more systematically. In addition, the relationship between literacy training and engagement in informal learning activities, which has been probed in qualitative case studies, would benefit from larger-scale quantitative exploration.

In the Canadian literature, the range of occupational groups whose informal learning has been studied is quite limited compared to that in the international literature. Accordingly, more Canadian studies of informal learning within different occupations or sectors are required. Furthermore, it may be that studies of informal learning are being conducted under research on “professional development” within specific professional communities. So, there could be a fruitful interchange between researchers focussed on informal learning and researchers focussed on professional development.

WLKC can play a role in encouraging researchers to undertake types of studies of different occupational groups and/or to exchange information with researchers involved in professional development studies.

**More information on how learners’ personal characteristics affect informal work-related learning**

Within any given workplace and/or occupation, some workers are spending more time on informal learning and are learning more than others. More information is needed on what motivates an individual worker to be a more active learner. Much of this information may already be available within other bodies of literature. WLKC could play a role in bringing researchers from these other areas together with researchers involved with informal learning.

**More Information on the relationship between work environments and informal learning**

The nature of the work environment and its effect on the quality and quantity of workplace informal learning is an important question. While this question may have been addressed within the literature on organizational behaviour, management, etc., those findings need to be explicitly linked into the conversation about work-related informal learning. One key area this research might address is the role of informal learning in promoting a “learning organization”. WLKC can play a role in bridging this disciplinary gap.

**Increasing awareness of tools for assessing informal learning and work environments**

At this point, awareness of tools used to assess informal learning, like the WILM, appears to be low. Furthermore, specific occupational informal learning outcomes could be further developed and/or used more widely to assess
informal learning within specific occupational or professional groups. Assessment of individual worker’s learning also needs to be complemented by assessment of what an organization is doing to support or impede learning. The search for identifying useful tools from the career, HR and PLAR fields may need to be widened to include those listed under related topics such as ‘work skills analysis’, ‘skills assessment’ or ‘identifying and documenting learning’. WLKC could have a role in widening the search for additional listings, and then both in promoting awareness of available tools for both individual and workplace assessments and demonstrating their utility.

Addressing the question of how informal learning affects work satisfaction, worker retention, performance and productivity

Quantitative information is lacking on how participation in informal learning affects workers’ quality of working life, satisfaction and retention levels, and organizational productivity. Again, other bodies of literature may contain relevant information but a bridge needs to be built to the informal learning field. In addition, this issue must be addressed in the context of the differing perspectives of workers and management. Real conflicts can exist with regard to who is reaping the benefits of informal work-related learning.

WLKC can play a role in promoting a dialogue on this topic between researchers focussed on workers and those researchers focussed on management to bring a more holistic picture. The same can be done for encouraging discussion and cooperative action between the business and labour communities. Research and stakeholder consultation have emphasized the need for eliminating the ‘silos’ and supporting joint visions and supportive activities.

Policy options for Canada that would facilitate the development of actual policy or policy frameworks

Further work is needed on how different policy initiatives being adopted in other parts of the world (e.g. the EU, Australia) to support informal learning could be adapted to the Canadian context. This research would contribute to the development of policy frameworks for Canada.
REFERENCES


REFERENCES


APPENDIX A

RESEARCH METHOD

The Request for Proposal (RFP) specified that the synthesis research report would be based on a literature review and consultation with experts and stakeholders, including business, labour, educators, researchers and community trainers, and others as identified. A research advisory committee, with members from major stakeholder groups, reviewed the proposed research method. This committee was consulted on major decisions affecting the direction and design of the research.

Literature Review

Search Strategy

As described in CAPLA’s proposal to the WLKC’s RFP, the literature search was conducted by drawing on existing electronic databases including Academic Search Premier, CBCA, and ERIC. In conducting the literature search, the terms “informal,” “learning,” “work,” and “Canada” were combined using Boolean operators in the search engine fields. Recognizing that previous synthesis work had been done, the search was confined to articles published in 2000 or later. In addition, adult and higher education journals such as those listed on the Work & Learning Network website (http://www.wln.ualberta.ca/resources.html) were searched individually.

Recognizing that many documents are published by non-profit or governmental organizations in Canada, the search was extended to the World-Wide Web. For example, the WALL network at OISE has a website that contains many current and relevant research reports (http://www.wall-network.ca/resources/workingpapers.htm), as does the CCL’s own website (http://www.ccl-cca.ca). Likewise, the Manitoba Centre for Education and Work has published recent research on informal learning at work (http://www.cewca.org/index). The National Adult Literacy Database contained a number of studies on informal learning among workers with low literacy levels. The Conference Board of Canada, the OECD, some EU countries, and EU Commission-affiliated organizations have also published pertinent workplace learning reports.

In order to locate any French language literature on this topic, the search terms “apprentissage informel” and “travail” were used. These terms produced no hits from Academic Search Premier, CBCA, and ERIC, and we were not able to locate or access equivalent French language databases. Some French language articles were located by entering these same terms in Google Scholar, though they did not prove to be highly relevant. We also searched the bibliography of the recent WLKC report work-related learning in Quebec (Bélanger & Robitaille, 2008) to see if it contained recent French language references concerned with informal learning.

In using the selected search terms “informal learning” and “apprentissage informel,” we deliberately excluded related literature that we might have located by using terms like “action learning,” “apprenticeship,” “communities of practice,” “coaching,” “experiential learning,” “incidental learning,” “implicit learning,” “mentoring,” “observational learning,” “on-the-job learning,” “self-directed learning,” or “tacit learning.” Each of these terms has a vast associated literature (c.f. Kolb and Kolb’s bibliographies of experiential learning research, available at http://www.learningfromexperience.com). Reviewing and integrating the research derivable from such an expanded search surpassed what was possible given the time and resource constraints of this project.

For the purposes of this research, the term “work-related” was understood to refer to paid work and union-related work, rather than volunteer work and/or housework. This distinction is important because it differs from the understanding of “work” that was used in the WALL study, the major
Canadian project on this topic to date (Livingstone, 2001). This interpretation was confirmed with the Research Advisory Committee before the literature search was commenced.

**Timeframe**

Given the tight deadline to complete this project, we restricted the scope of the literature review to current publications. We limited the literature search to the 2000-2008 timeframe as prior literature had been reviewed in existing synthesis papers (Colley, Hodkinson, & Malcolm, 2003a; Livingstone, 2001) and research projects. See for example, Luciani (2001).

**Stakeholder Consultation**

The intent of the stakeholder consultation was to:

- Gain feedback on findings from the literature review;
- Supplement the literature review by soliciting information with regard to additional resources or practices, important issues in the field, and examples of innovative or best practices that could be documented in the report.

Our proposal stated we would send a maximum of 100 stakeholders an e-mail link to an electronic survey, and then do follow up calls with up to 20 individuals. The task initially was to identify the ‘categories’ of stakeholders and to identify 100 individuals within those categories to contact regarding participation in the survey. This was a definite challenge, as the workplace is so vast and includes such a range of types of businesses, organizations and associations representing both business and labour.

The project team developed a matrix of stakeholder categories, which included:

- Industry/Business;
- Labour;
- Groups/Professional Associations (occupational groups, professional associations, certification bodies);
- Facilitators (training companies and organizations, PLAR practitioners, career/employment counsellors, immigrant serving agencies, etc.);
- Researchers.

We also generated a list of contacts likely to complete the survey, as well as people who might be able to provide additional contacts for the survey. WLKC and the Advisory Committee provided feedback and additional names and contact information for potential respondents.

The draft survey was vetted through the Advisory Committee and WLKC, and the committee made a few suggestions for revisions. Following that, WLKC suggested that we revise the survey for business in particular, reducing the number of questions while ensuring that some questions were similar enough to have some composite compilation. The final four versions of the electronic survey were:

- Industry/Business and Labour;
- Groups/Professional Associations;
- Facilitators;
- Researchers.

The survey took 10-15 minutes to complete, depending on how extensive the responses were to open ended questions. Individuals were able to respond to the survey anonymously, but were invited to provide their contact information at the end if they were willing to be contacted by telephone for a follow-up interview.

Over 100 invitations were sent directly by the project coordinator, and then a follow-up e-mail was sent with the link to the online survey. We used SurveyMonkey for the online survey, and requested that respondents complete the survey within a week. A reminder was sent a week later with an additional link to the survey.

Some contacts agreed to send the invitation directly to contacts they knew to request their participation, but because of organizational policies, they were not able to share these contact names with us. Therefore, we do not have contact numbers or names for the additional 20-30 individuals who were contacted in this manner.

For those who did provide contact information, follow up calls were made to clarify or enhance survey responses if necessary to ensure that we understood the noted informal learning practice and rationale.
The table below summarizes the stakeholder consultation contacts at August 31, 2008.

<table>
<thead>
<tr>
<th>Category of Stakeholder</th>
<th>Surveys sent</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business/Industry</td>
<td>29</td>
<td>18</td>
</tr>
<tr>
<td>Labour</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Groups/Professional associations</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Facilitators</td>
<td>27</td>
<td>14</td>
</tr>
<tr>
<td>Researchers</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Advisory Committee</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Totals</td>
<td>110</td>
<td>59</td>
</tr>
</tbody>
</table>

It should be noted that there is some overlap in the ‘categories’ of those responding. For example, someone who responded in the Facilitator category also presented information regarding his or her own business. Groups and associations often provide information related to the businesses or organizations they represent.

The response rate for the surveys sent directly was 54%, which is very good for a survey of this nature. Because the project start-up was delayed until April of 2008, the consultation did not take place until the latter part of June and early July, which is not the best time of the year for an expeditious turn-around consultation. The strong response, despite the inopportune timing, appears to be an indication of stakeholder interest in the area.

We recognize this limited stakeholder consultation does not provide a statistically valid response, nor can it be considered representative of the Canadian workplace with its numerous variations. Because the survey contacts came from people associated with WLKC or other project network contacts who were already involved in promoting life-long and life-wide learning, their interest is probably more intense than in the general world of work in Canada. For that reason, we have refrained from providing quantitative information with regard to stakeholder consultation responses in the body of the report. To do so would lend a spurious validity to the information.

What the consultations did provide, however, were snapshots of a selection of workplace contacts in regard to:

- Whether contacts had considered the topic or cared enough to respond in anything more than a cursory manner. For example, many respondents only filled in questions where choices were provided, not the open ended questions;
- Additional terms, practices, challenges and recommendations about where they saw informal learning fitting within the full continuum of learning;
- Some potential cases or examples to use in knowledge exchange discussions, particularly in relation to how informal learning is seen within the continuum of learning, the value of informal learning, and specific examples of how it can be supported and recognized in the workplace.