A SITUATED COGNITION PERSPECTIVE ON LITERACY DISCOURSES: SEEING MORE CLEARLY THROUGH A NEW LENS

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Abstract

Situated cognition theory is used as an analytical perspective to examine 24 literacy practice vignettes in four domains of learning communities in Canada. This theory helps explain how learning occurs in the social cultural world and how learners become engaged within particular contexts. The analysis portrays that literacy researchers remain constrained by a behaviourist, normative perspective despite the shift in literacy discourse toward a humanist, social perspective. The results provide insight for new directions toward a theory of social literacy in adult literacy research and ways for improving professional development programs for literacy educators by including authentic apprenticeship. The findings demonstrate the potential of situated cognition perspectives to uncover a grounded theory of adult literacy learning through discourse analysis.

Résumé

Dans cet article, la théorie de la « cognition située » est utilisée pour examiner 24 pratiques d'alphabétisation dans quatre communautés d'apprentissage au Canada. Cette théorie aide à expliquer comment l'apprentissage a lieu dans l'environnement socioculturel et comment les apprenants deviennent impliqués dans des contextes donnés. L'analyse montre que, malgré le changement du discours sur l'alphabétisation en direction d'une approche humaniste et sociale, les chercheurs demeurent prisonniers de l'approche béhavioriste et normative. Les résultats fournissent un aperçu des nouvelles tendances au sujet des théories de l'alphabétisation sociale, ainsi que de ses méthodes en vue d'améliorer les programmes de formation pour les alphabétiseurs en intégrant une véritable formation par apprentissage. Par l'analyse de discours, ils mettent en valeur le potentiel des

perspectives de la « cognition située » dans l'émergence d'une théorie ancrée de l'alphabétisation des adultes.

Adult literacy practice and research are littered with problems. For example, two competing perceptions of literacy education's value to society—a technical–rational and a social emancipatory view—have emerged to pose significant problems for adult literacy policy, program planning, and instructional development (see Blunt, 2000). The tensions created by these competing views shape the sociopolitical context within which literacy educators work and researchers seek to better understand literacy learning processes. A clear map of the territory of literacy practice is only now emerging. Literacy providers are aware that programs continue to attract relatively few participants and that withdrawal rates are high; these factors indicate that planning and instruction frequently fail to build upon the provider's prior experience and upon successful program models (Long & Middleton, 2001). The training of instructors also remains a concern; program quality, duration, and credentialing are highly variable among and within provinces (Barker, 1999). The literature has been subjected to neither meta-analysis nor thorough discourse analysis as a means to support the dissemination of knowledge on effective practice or to inform public debates on literacy issues. Collectively, these problems highlight a pressing need for new research approaches that can yield definitive outcomes at all levels of literacy practice.

One promising approach to a deeper and broader understanding of adult literacy practice lies in situated cognition theory (see Kirschner & Whitson, 1997; Lave & Wenger, 1991; Wenger, 1998). This evolving theory focuses on learning within the social world—that is, the world in which literacy learning and applications occur—rather than on the internalized cognitive processes of the individual and the decontextualized role of adult learners. Over seven decades ago, Bryson (1936) recognized the importance of distinguishing between learning in the natural societal setting and the formal instructional setting; since that early differentiation adult education researchers have identified the extent to which individuals engage in informal learning (Tough, 1975) and the importance of informal learning in the new knowledge-based economy (Livingstone, 1999). The characteristics and social roles of adult learners have also long been recognized as important criteria in program planning and instructional design for formal education settings (Knowles, 1970; Verner & Booth, 1964). However, adult literacy education continues to lack a strong conceptual and theoretical base that

incorporates these situated and social processes of learning. We think that the development of a sociocultural approach to understanding literacy holds promise for stimulating research in new directions and for strengthening the theoretical foundations of training programs for literacy planners and instructors.

Conceptual Framework for This Study

In this article we examine whether viewing adult literacy through a sociocultural lens can generate new insights for improving practice in a field that is still in its theoretical infancy. We demonstrate the utility of situated cognition theory as an emerging analytical perspective for the examination of the discourses of literacy practices in different learning communities. Discourse analysis, as used in this study, has its origins in the work of Foucault (1980). He recognized discourse as expressive human behaviour—the language (written and oral) used by people in institutional, social, and cultural contexts to convey meanings and purposes, to construct knowledge and common-sense understandings of their realities, and to make claims about truth and power.

We use Gee's (1997) approach to operationalize discourse as the social, historical co-ordinations among people and objects—including ways of talking, acting, interacting, thinking, valuing, and reading and writing—that allow for the display and recognition of socially significant identities (pp. 255-256). Using discourse analysis, four broad areas of literacy are examined against a template incorporating the essential elements of situated learning. An important point within situated cognition theory is that its principal proponents agree that it is still a work in progress. Therefore, reconciling the multitude of issues raised by situated cognitionists is beyond the scope of this article.

The Concept of Situated Learning

Situated cognition theory interprets learning as a social, cultural phenomenon in which a learner engages, rather than as an individual, internal process of acquiring information for future transfer and generalization from a decontextualized body of knowledge. In this respect, it has its origins in constructivism and cognitivism. Cognitivists pose questions such as: What kinds of mental processes and information processing structures need to be engaged for literacy learning to occur? Situated cognitionists pose questions such as: What kinds of social engagements and interactions provide organic contexts for effective literacy learning to take place within a defined community?

With this change in posing research questions, the unit of analysis shifts from the individual learner to the structures and dynamics of the sociocultural setting in which the learning occurs. The focus on individuals' cognitive structures shifts to a focus on the social structures and inter-relations within the persons' collective activity systems; this shift in focus links the community of practice (Lave & Wenger, 1991) in which learning occurs to broader categories of social and political analysis (Kirschner & Whitson, 1997).

Situatedness, although seemingly simple, is a difficult concept to define precisely (Engestrom & Cole, 1997). Is it a moment in time, a location or place, a social situation, a perspective, or a configuration of relationships? Each of these aspects offers an interpretation of situated cognition and contributes to its use as an exploratory instrument, rather than as a prescriptive theory. Situatedness is a challenge—an initial push towards novel theorizing rather than an answer to be overlaid on prior empirical work.

For Lave (1997), to situate learning is to place thought and action in a specific time, place, and social space. This process means involving other learners, the environment, and the context of literacy activities to create meaning in that learners construct their own knowledge from the materials of their experience. Meaning is derived from a learner's relations with others and through instructional activities such as environmental cues and the social organization that a community of learners develops.

The Elements of Situated Learning and Adult Literacy

The emergence of situated cognition theory has philosophical and methodological implications for adult literacy practice, planning, and research. Situated cognition shifts attention away from the individual learner and the internal cognitive processes of learning to establish a new focus on the learner as a social person interacting with others in a community of practice and engaging in activities in social contexts which require choices and decisions to be made that support learning. Although *situated cognition* is now influencing the design of programs there are few studies available in the adult education literature (Stein, 1998). We use a classification of elements of situated cognition suggested by Stein to examine the theory's relationship to principles of adult learning and adult literacy program practices.

According to Stein (1998), situated learning places the learner in the centre of an instructional process (which is a socially constructed

environment for learning). This instructional process consists of four major elements: content, context, community, and participation. Content includes the facts and processes of the literacy task. As situatedness is a multifaceted phenomenon, a situated learning perspective readily supports the identification and acquisition of higher order tasks (Lave & Wenger, 1991). These are intended learning outcomes beyond those most commonly sought in adult basic education (ABE) programs, which tend to require lower-order propositional knowledge. According to Shor (1996), content situated in learners' daily experiences leads strategically to learning experiences that require reflective and critical thinking· applications of literacy, rather than retention and reproduction, become a defining characteristic of successful instruction. By deriving content from the daily transactions of a learner's life, an instructor and learner can negotiate the meaning of the content and frame it in terms of relevant issues and concerns, provide opportunities to co-operate with other learners to investigate problems, and make content applicable to the ways in which literacy users approach their environments.

Context, the second element, refers to the situations, values, beliefs, and environmental cues through which the learner masters the content. Context involves power relations, politics, competing priorities, and learners' interactions with family, organizations, and community norms and practices (Courtney, Speck & Holtorf, 1996). But simply bringing real life events and problems to the learning environment is insufficient to claim context responsiveness, as the events must be re-experienced and the problems analyzed from multiple perspectives. Instructional processes must draw out and use learners' experiences as a means of intervening in their social and psychological environments. Context may also be used as a means to provide a setting for the re-examination of experience, with the community providing the guiding structures for such a reflective learning experience.

The third element, community, refers to the group of persons with whom the learner negotiates and creates meaning; through community learners interpret, reflect upon, and form meaning from their learning experiences. Community provides the setting for dialogue with others, leading to a recognition of alternative perspectives and insights on experiences and problems. Community allows practice to be joined with analysis and reflection, which results in the creation of shared knowledge in the learning community (Stein, 1998). Community provides the opportunity for learner interaction, whereas participation provides the structural processes through which the learner can acquire meaning from the experience.

The fourth element, participation, refers to the processes of learners working with instructors and peers to solve problems related to daily living. Participation is the interchange of ideas, attempts at solving problems, and the active engagement of learners with each other while using instructional materials. From a situated cognition perspective, meaningful learning occurs in a social setting with other community members when the means of sustaining inquiry, reflection, and dialogue have been established through participation (Lave, 1997).

Lave and Wenger (1991) integrated the two concepts of community and participation to conceptualize legitimate peripheral participation as the engagement of persons seeking new knowledge and skills in the sociocultural practices of a community of persons who possess the skills and knowledge sought. Legitimate peripheral participation allows one to speak about relations between newcomers and old-timers for those activities, identities, and the knowledge and skills that are foundational to a community of practice. Such attention highlights the processes by which new learners travel from having partial memberships (motivation and intention to learn) through to mastery and, ultimately, acceptance as full members into a community of practice. In the next section we analyze these elements of situated cognition within several domains of practice.

Analysis of Literacy Discourses Across Domains of Practice

Research traditions and philosophies of practice have contributed to the formation of a fragmented field of practice characterized by a number of isolated discourses. To bring an overarching conceptual cohesion to current practice and issues, we examine 24 vignettes contained within a recent anthology (Taylor, 2000) which represents the evolutionary state of Canadian literacy's four dominant areas of practice: community-based, workplace, family, and school-based literacy.

A template was constructed with the four major elements of situated learning (content, context, community, and participation) on the horizontal axis and the four broad domains of literacy practice (community-based, workplace, family, and school-based) on the vertical axis. This template focused our analysis of each chapter of the anthology, and we recorded examples within each cell. Gee's (1997) broad definition of discourse was used to determine whether or not the texts examined embodied the concepts and denotative meanings of each of the four elements of situated learning. Our analysis delved deeper into the texts than a search for key words in the authors' descriptions; we sought for evidence of the four key elements of

situated cognition, as we understood them, within the concepts and contexts articulated by the respective authors. The process approximates the identification, rather than discovery, of underlying themes within transcripts from oral interviews analyzed in ethnographic research or written communications analyzed in institutional ethnography (see Smith, 1987).

Community Based Literacy

All six chapters in the community based literacy section of Taylor's (2000) *Adult Literacy Now* provide descriptions, insights, and critical comments that reflect a constructivist and humanist orientation toward literacy practice. Not surprisingly, therefore, given the origins of situated cognition theory, the four elements of situated learning provided a compatible framework for analysis of these literacy discourses.

Each author highlights aspects of content and context as important foci in exemplary programs that are directly linked to the daily social activities of literacy learners. For example, Richmond (2000) declares curricula based on learners' life experiences and meaning making to be the highest priorities; Long and Middleton (2000) conclude from their review of the literature that inappropriate content reduces participation, and program-related factors (i.e., negative content- and context-related) are the greatest deterrents to participation. Having learned from the failures of programs based on simplifications of community social structures and processes, the authors recognize the complexity of power relations, values, and beliefs in communities as aspects of context. Richmond writes of literacy as a means to community strengthening and notes the widespread and misinformed practices of many ABE programs that are conceptualized around the individual learner, personal agency, and self-directed learning approaches. Richmond's alternative program approach recognizes the value of learners' life histories and learner-centred ABE programs for persons who live multiply-constructed life roles as family members, community members, and workers.

Fagan (2000) uses a case study to illustrate the effects of dominant literacy and its controlling influences on the people's lives in the coastal communities of Newfoundland and Labrador. The historic role of literacy to meet the daily living needs of villagers, as related in this vignette, reinforces the importance of content and context as conceptual markers for adult educators charting new literacy learning opportunities. Villagers are aware that those who exert authority over their lives and have privileged voices—such as the merchants, priests, bureaucrats and politicians—use a dominating literacy to achieve their goals.

A myriad of statistics typically surrounds any attempt to report the incidence of functional illiteracy; one of the challenges facing literacy workers has been to make use of the volumes of statistical reports to support the delivery of programs. Sussman's (2000) vignette presents her work in this regard and her interpretation of the value of literacy surveys for the field of practice. Sussman's good news, from a community-based perspective, is that questionnaire items in recent Canadian and international surveys assess literacy demands in everyday life, rather than traditional, text-based, school literacy; consequently, functional literacy knowledge learned informally is likely to be included in the domain of literacy being tested, and the results are more likely to reflect the daily living applications of literacy than do standardized tests of reading and numeracy used in formal ABE programs.

In the synopsis chapter (Quigley, 2000) addresses the issue of content and community-based literacy programs directly:

> Teachers and tutors find themselves in a unique, even pivotal, situation. Although they can see and engage with the experientially lived knowledge of learners, honouring this knowledge is not part of the literacy teacher's job description. To the contrary, it is typically understood that knowledge of real worth is the codified knowledge found in approved texts. (p. 81)

Two authors in particular engage in a variety of ways with issues related to community and participation and their discourses reflect a humanistic ideology and make reference to the role of reflection and critical thinking in meaning construction, each of which is an essential aspect of these two elements of situated cognition. In the framing chapter Norton (2000), for example, refers to Freirean literacy approaches that recognize the changing of power relations as the most important outcome of community-based literacy work, which can be achieved through reflecting upon and challenging conventional views. From a literacy-as-social-practice perspective, Fagan analyzes ethnographic data to demonstrate villagers' understandings of their community's role in literacy learning, an understanding which mirrors that of a situated learning perspective of community. "Each generation acquired the skills of hard workers as 'learning apprentices.' There was much truth to the saying, 'It takes a community to educate a child.' The community was the teacher" (p. 59). Fagan considers acquiring literacy to be an extension of the community's agency (i.e., the strengthening of the community's capacity to analyze information and options, and to make decisions and to act). In this sense, new community-based literacy learners are engaging in legitimate peripheral participation

(Lave & Wenger, 1991). The introduction of ABE programs and bureaucratic literacy with their text-based knowledge, credentialling, and 'outside' social and economic orientations evaded community accountability and the possibilities for participation, in the situated cognition sense, by being directed solely towards the individual out of family and community context.

Although the authors generally (Fagan, 2000 and Norton, 2000 in particular) acknowledge community power relations to be an important influence on literacy education, the discourses fell short of a critical analysis of unequal power relations in community-based literacy practice. A situated cognition perspective, in our opinion, offers a framework for the critique of economic, class, ethnic, and gender-based hegemonic power effects on community members' access to literacy learning resources, prioritization of learning needs, literacy utilization, and attitudes towards literacy acquisition. Rather than an awareness of social relations within community, the discourses reflected an orientation best described as individuals within normative social contexts. The concept of community also remained largely unproblematized. That many communities are, because of power relations, closed rather than democratic and hierarchical rather than egalitarian was not fully acknowledged in the vignettes we assessed.

Workplace Literacy

In the workplace literacy domain in Taylor's (2000) *Adult Literacy Now*, each author acknowledges that the content of a workplace literacy program is a defining characteristic of practice. Wiebe (2000), representing an industry constituency perspective, outlines and establishes the legitimacy of content most precisely as the oral, reading, writing, and numeracy skills needed to perform job tasks in industry training programs. Content, according to Wiebe, is limited by its applications and, in exemplary programs, is stated in measurable and observable terms. Thorn (2000), from a labour perspective, considers the outcomes of workplace literacy and, by inference, its content more broadly by arguing that legitimate outcomes enhance employees' family and community lives, their health, their economic well-being, and their employment decision-making capacities.

Minke (2000), writing from a background of literacy work in government and educational leadership in non-government organizations, reflects pragmatism and compromise in her perception of content. Minke seeks to balance the demands of employers for a more literate workforce and the needs of workers for a literacy that will enhance the quality of their lives. Further, she distinguishes between workplace and workforce education but offers no further clarification of content claims based on this dichotomy. All

six authors in this section comment that stakeholders' interests in content were not congruent, choices in content was a site for ideological struggle, and formal negotiation was the sole approach likely to lead to mutual agreement.

Each vignette also addressed some issues, although to a limited extent, around the context of workplace literacy programming. At the macro-level, Wiebe (2000) asserts industry's justification for programs is future profit, and squarely places the context for workplace literacy education in the global competitive economy. One counterpoint to the drive for efficiency, low costs, and high profits within the aerospace industry (where Wiebe works) is the external demand for quality, driven in part by customers seeking assurances that products are created by knowledgeable, responsible employees: Who wants to be 35,000 feet above the earth's surface, traveling at 500 mph in a jet aircraft built by workers who can barely read and write? A further example of social context affecting workplace literacy programming is provided by Thorn's (2000) description of how labour's historical struggle to achieve social justice and equity goals are the basis for labour–management tensions around the selection of texts and the content of programs. Although management seeks to limit content to that which has technical–rational outcomes, labour seeks to extend program outcomes to include enhanced literacy for the achievement of workers' developmental, democratic, and social equity goals.

Wiebe's (2000) and Thorn's (2000) vignettes also offer contrasting views of the organizational contexts for program development within which industry and labour function: a hierachical corporate culture with economic goals on one hand, and a democratic, populist culture with social goals on the other. Minke (2000) and Steel (2000) acknowledge the complexity of context is largely attributable to the seemingly incompatible priorities of industry and labour. All six authors agree that stakeholders' reliance on labour relations processes to negotiate mutuality of interest and action makes for a complex context for literacy programming, and that this complexity must be a dominant consideration in all aspects of program planning and instruction.

Early work on situated cognition focused on the role of apprenticeship as an adult education method, whereby a newcomer (novice) learns from a master craftsperson (old-timer) the body of knowledge and skills that is recognized by an organized community of practitioners into which the learner seeks admission (Lave & Wenger, 1991). In many apprenticeship programs, worksite learning opportunities are increasingly being supplemented by formal instruction provided by post-secondary institutions

and by directed independent study using programmed texts and media packages. The notion of community, in the situated-cognition-theory sense of the term, received brief consideration from only one author (Steel, 2000). The other authors did consider human dynamics and interactions in the formal classroom as an important aspect of climate for learning from the perspective of andragogy (Knowles, 1970); however, classroom peers may not be workplace colleagues and, if some are, the class will likely exercise little power to negotiate and create meaning from the program content when there is an instructor, likely an outsider, with authority over performance assessment and the granting of credentials (Steel).

Similarly, participation—as a process of learning within the community to which the learner seeks admittance and which focuses on the solution of daily problems—was also afforded minimal recognition. The authors attested to the value of adult education instructional principles, including a focus on concrete applications of knowledge and skills, but their analyses are grounded in behaviourist instructional approaches rather than a constructivist psychology that emphasizes inquiry and reflection. In situated cognition reflection is key to learning. Although instructor-guided reflection was mentioned, learner dialogue to build shared knowledge and understandings within a community of workplace peers having common goals and interests was not explicitly discussed as an organic instructional approach.

Steel (2000) emphasizes the contribution of experiential learning to the professional development of literacy instructors in that she searches from a humanistic perspective for some means to justify the learning of content that is of value to the learner, but not necessary for immediate application to meet stated learning goals. Steel uses the term *ambient* to identify non-essential knowledge and *contextual* to identify the necessary. From a situated cognition perspective, this approach can result in arbitrary decisions being made by persons outside the community that defines the learners' social destination.

In the framing chapter, Blunt (2000) relies on current and historical literature to analyze the foundations of literacy practice within two broad oppositional literacy education paradigms: emancipatory and technical–rational. He reveals how social class and economic interests have shaped and continue to shape public policy and stakeholder interpretations of literacy needs and practice. When read through the lens of situated cognition theory, the chapter provides insights into historical social relations and related ideologies out of which definitions of literacy and priorities for policy and practice have emerged; the value attached to literacy by labour and employer

groups is dramatically highlighted. The struggle by the two constituencies to exert control over literacy learning and applications in the workplace is seen to occur with regard to content, context, community, and participation.

Samuels (2000) confirms that authors' vignettes are grounded in the paradigms described in the framing chapter, and all consider literacy learning to be contingent upon both individual and social factors. Further, she considers the authors to be in agreement that literacy education is a complex process and infers that the greater the conceptual clarity of issues in practice, the greater the likelihood that appropriate, effective actions will be planned and undertaken.

Family Literacy

The authors in this section present different viewpoints of family literacy practice. In the framing chapter, Thomas (2000) maps out the current research related to family literacy development; the next four vignettes highlight various issues that touch on program delivery, content, and other aspects of practice (Craig, 2000; Greer, 2000; Rubin, 2000; Skage, 2000). The concluding synopsis by Hayden and Sanders (2000) underlines the need for programs that are firmly rooted in community.

The argument is made by each author that literacy content situated in the individual's daily life is a cornerstone for instructional development. Thomas (2000) points out that one major problem with many family literacy definitions is that they are imbedded in a deficit model, which focuses on the curricula content of traditional schooling. Further, by limiting content to the criteria of school success, many of the diverse literacy functions in a family unit are ignored. Craig (2000), an instructor and program developer, provides a succinct description of a content unit about housing for ESL learners. Prompted by a dissatisfaction with their current housing arrangements, learners became the centre of an instructional process. In Craig's account, content which touches the daily experience of learners can also serve as a vehicle for critical reflection, which is important in situated cognition terms.

Drawing from an empirical study of family literacy practices in low income homes, Rubin (2000) infers content by acknowledging the value of multiple literacies instead of the promotion of one dominant form of literacy. In light of literacy policy development, Rubin advocates for the voice of less privileged families to be included in the full range of curriculum and content considerations. From an evaluation perspective, Skage (2000) proposes that program planners need to be pragmatic and determine how the content of literacy tasks to be taught will enable learners to meet their goals. Is the

content of what students learn to be an outgrowth of their self-identified goals, or of instructional packages developed by instructors?

The importance of content is also woven through Greer's (2000) vignette about the way fathers and significant males contribute to the literacy development of boys. In this inter-generational vignette, examples of literacy task content are taken from the daily transactions of life on a farm. Greer also draws attention to the importance of using boys' extramural activities (such as sports and hobbies) and their interest in technologies to support learning from the social world.

From different vantage points, context is addressed by all six authors, with each interpretation shedding some light on instructional development and program planning. At a philosophical level, Thomas (2000) emphasizes that programs must reflect the uniqueness of family values and norms that are inherent in multiple literacies, including often-unrecognized local literacies. On an instructional level, Craig (2000) presents context as the environmental cues that occurred when the learners observed appalling living conditions in their neighbourhoods. Skage (2000) views context as an important guiding principle for program planning when choosing methods of evaluation. According to Skage, the selection of assessment tools and evaluation methods cannot take place in isolation; they must be developed in the context of a clear understanding of family literacy learning.

Context in Rubin's vignette (2000) incorporates the value and belief systems of low income women and power politics in a school system. From this viewpoint, aspects of context are a barrier to participation and learning that must be surmounted. For the most part, the women in her vignette believe the school community is made up of middle-class teachers who neither relate to the parents nor validate the everyday learning that occurs as marginal families struggle to meet daily needs. Similarly, Greer (2000) defines context as values, beliefs, and environmental cues that fathers and significant males can provide to encourage the literacy development of boys. Greer describes the positive impact on literacy acquisition contributed by fathers who read at home, are involved in their children's reading, play games, and tell stories.

To varying degrees, the authors' discourses touch upon community or participation. For example, Thomas (2000) describes how factors such as socio-economic status, ethnicity, and cultural heritage define a family learning community. These diverse family communities provide children with a variety of opportunities to process, to interpret, and to negotiate the meaning of oral and written communication. Skage (2000) raises an

important question on the outcomes of participation and program goals: Are learners, after attending a family literacy program, more able to participate in social–cultural community activities, such as using the public library, enrolling in other adult education programs, or becoming involved in their children's elementary schools?

Two vignettes clearly illustrate the notion of legitimate peripheral participation. Craig (2000) reports how English as a second language (ESL) learners first became aware and then involved with neighbourhood improvement and local housing conditions. As an outcome of peer learning, some persons applied for and obtained low rental housing. More importantly though, the meanings of their literacy learning experiences outlived the ESL program as learners continued to visit with each other, went to garage sales, prepared food together, and developed friendships using English they had learned in the program. The notion of legitimate peripheral participation is also evident in Greer's (2000) vignette, which illuminates the important role fathers play in socializing boys into a literate world through oral stories, table discussions, and "back porch" talk. From this vantage point, fathers are the seasoned learners (old-timers) and boys are the new learners (newcomers) who, while members of a family community, aspire to become fully recognized adult members of the larger community.

From a situated cognition perspective, both of these vignettes offer some insights into the meaning of what Lave (1997) refers to as functioning in a micro-ecology. Participating in neighborhood improvements and back porch socialization are examples of material environments endowed with cultural meanings. In events such as daily life transactions on a farm or visiting a municipal housing unit, people are being acted on directly with the cultural tools and material systems of words, signs, and other symbolic values. According to Lave (1997, pp. 38-39), as people we join others in their ecological doings and their situated meaningful activities as a legitimate peripheral participant. Our activity, our participation, our cognition is always bound up with and co-dependent with the participation and activity of others—be they persons, tools, symbols, processes, or things.

School-Based Literacy

The complexities of school-based literacy are revealed in each vignette and author's reflections on school learning. In the framing chapter, Hébert and Racicot (2000) examine the range of views shaping literacy for child and adolescent learning in schools. The following four vignettes of practice highlight learning, instructional and assessment strategies, and issues around

citizenship and social action (Chapman, 2000; Dillon, 2000; Froese, 2000; Helfield, 2000). In the synopsis chapter, Paré (2000) reinforces the notion that literacy is elaborate, dynamic, plural, and deeply social.

The situated cognition element of content is evident in the six authors' chapters; they provide insights into the need for instructional developers to provide learners with higher-order literacy tasks. For example, Hébert and Racicot (2000), write that literacy content for ESL learners in the first stage of settlement in a new country tends to focus on language functions and tasks; however, once learners move beyond these immediate goals to acquire literacy content for integration (such as citizenship engagement and social mobility) their focus needs to change to higher-order literacy functions, including reflective thinking and analysis. Building on empirical evidence, Chapman (2000) asserts that children's literacy best develops in real-life activities and situations for real-life purposes. She reports that literacy content is learned most effectively through engagements with authentic tasks and interactions with others. Through the eyes of a classroom teacher, Helfield (2000) sees content as needing to emphasize higher-order cognitive processes (such as reflective thinking) and suggests that certain subject-matter knowledge leads learners to become more involved in their communities of home, school, and neighbourhood.

Dillon (2000) delves into the content issue by examining literacies that support different types of citizenship. He contends that classrooms where lower-level cognitive activities and literacy tasks (such as drill practices) occur provide a different type of setting for examining experience than those classrooms where higher-level cognitive tasks are encouraged (such as debates and decision-making simulations). Froese (2000) points out that the very nature of school literacy content is not congruent with other forms of functional literacy. School literacy tasks may consist of exercises as *curricular* ends in themselves, whereas adult literacy content serves adults' needs, activities, and careers.

Three authors draw attention in their vignettes to the importance of context in the overall program planning process. Helfield (2000) and Dillon (2000) discuss context in terms of power relationships that are part of the classroom community. The focus is on the student–teacher relationship in the vignette by Helfield. When both teachers and students were seen to share the same reason for the educational enterprise, each partner took responsibility for creating a safe environment and examining the learning experience. In the vignette by Dillon, the focus is on the values and attitudes that teachers and children bring to a classroom. Dillon points out that middle-class teachers

often have different expectations of children from advantaged and disadvantaged backgrounds. When this difference is coupled with children's attitudes, which are influenced by parents—who have either been failed by the school system or helped to succeed by it, and who have enjoyed either little or much success in the job market—the tension between these values has a powerful impact on the classroom environment. For Froese (2000), the process of literacy diagnosis is directly connected to context, situations and environments where children show literacy awareness. Froese contends that, when we as literacy educators speak about multiple literacies, we need to use multiple tools, environments, and settings for making judgements about learners. From this perspective, contextual variables are important in determining the purposes of literacy acquired as children participate in school and home activities.

Across the six vignettes, two key elements of situated learning—community and participation—are used as analytical reference points to provide a broad understanding of the literacy learning process. Hébert and Racicot (2000), for example, claim that ESL learners in separate secondary school programs, with a separate curriculum over an extended time, are denied access to the mainstream community. This situation results in the development of an identity with their own social-cultural ESL community. They maintain that, when racial minority students are placed on the lower rungs of the socio-academic ladder, it reinforces their participation in the community at the bottom rung of the ladder.

From a sociolinguistic perspective, school literacy is a process of socialization or induction into a community of practitioners (Chapman, 2000). Literacy is intricately related to the classroom and school micro-communities which are extended by home literacy experiences. Chapman's vignette portrays literacy education as the process by which a person becomes a member of a community of people who practice literacy. Through the lens of legitimate peripheral participation, Dillon's (2000) vignette can be interpreted as a macro-level analysis of the process problems experienced by new learners as they become part of a community of practice. Dillon sees school based systems fostering a disempowering, learned helplessness—a form of dependancy perpetuated by a lack of critical thinking. The identities of learners formed within such a community built around prescriptive knowledge influences individuals' future participation in social-cultural practices. The question curriculum designers need to ask is: How can young people, who acquire their literacy through a transmission approach, move *toward full* participation in a "healthy" community of social practice?

A situated cognition lens reveals that the chapter authors acknowledge the importance of learning in networks of activities that are interdependent on one another and enable one another. These networks are constructed differently by different groups and by different individuals. On this point, Lemke (1997) maintains that as we (individuals) participate in networks of activities, we change. Our identity and practice develops, for we are no longer autonomous persons in a model of learning, but persons in activity. "We are somewhat different as persons from one activity to another and as participants in one community of practice or another" (p. 39). In some respects, each vignette and author's reflections on school-based literacy have raised a series of issues on networks of activities: the importance of access to the learning potential of given settings, the uses of language in learning in practice, and the way in which knowledge takes on values for the learner in developing identities of full participation.

Reflections on the Discourse Analysis

The various chapters in *Adult Literacy Now* reflect a cognitivist, humanist, social ideology that stands in opposition to the behaviourist, normative, individualist ideological foundations of practice which have characterized Canadian adult literacy for the last century. Although those authors who were field-based practitioners had high levels of experience, worked in positions of leadership to design and implement literacy programs, and (in some cases) had earned graduate degrees, they did not use conceptual models to frame their descriptions and analyses of practice. The framework elements of situated cognition serve to highlight important aspects of practice, and to identify some areas of practitioner training that need to be addressed. In the workplace literacy section, for example, power relations were frequently mentioned as an important factor influencing content, context, participation, and community. However, only a cursory understanding of the processes of power relations was expressed beyond labour–management relations, and adult education processes were conceptualized as being neutral.

Several authors confirmed claims previously made in academe, and inferred in our introductory paragraphs of this article, that adult literacy is not a well theorized field of study and practice. Long and Middleton (2000), in particular, stated that the "literature remains largely descriptive and unconnected to larger theoretical frameworks. The concepts discussed are piecemeal and contradictory making it difficult to compare or determine patterns" (p. 19). We acknowledge that the exemplary literacy practices

described by the anthology's authors may not widespread; however, our point here is that if these practices are to become widespread, a strong conceptual foundation for their explication and adoption needs to be put in place.

We think Canadian literacy discourse resonates deeply within the situated learning perspective we used to frame our analysis and argue that situated cognition theory provides one option that is congruent with current initiatives to theorize the broad field of adult education in general. In the adult education literature Usher, Bryant, and Johnston (1997) have recently argued, "There is a need to stop seeing experiential learning ... as a natural characteristic of the individual learner ... [rather it needs to be] seen in terms of the contexts, socio-cultural and institutional, in which it functions and from which it derives its signications" (p. 105).

Adult education research has generated knowledge that needs to be integrated into future studies using situated cognition. For example, we are aware that simplistic notions of voluntary participation have frequently been adopted in adult education research (see Stalker, 1993) and future studies of participation from a situated cognition perspective will need to incorporate more valid understandings of individuals' decisions to engage in learning. Recent research has also revealed the mythology that program planning processes are typically democratic and that adult education's presence in a community is neutral (Cervero, Wilson, & Associates, 2001). These and other studies have brought into sharp focus the role of power relations in adult education participation and program planning processes. Future situated cognition-based studies may better reflect these new understandings of the social structures and processes in adult education whereby power is generated and wielded by interest groups.

Furthermore, most authors in *Adult Literacy Now* treated the instructor's presence as benign while facilitating learners' acquisition of normative program goals and objectives. The potential for the instructors' authority, social class, gender, and employment relations to have an impact upon the learning environment were not fully acknowledged. A situated cognition theory perspective—with its focus on social relations and networks which support the transition of learners from noviciate to skilled community member—requires researchers, programmers, and instructors to attend to the full range of activities and social exchanges in which learners engage. Moreover, because knowledge within situated cognition theory is an abstraction, rather than an artifact (much like energy in physics theory) curricula content becomes less important than learners' engagements in

literacy applications with others. The role of the instructor and program planner therefore falls within the social context to join other variables in need of observation and analysis. Here social does not simply mean *with others.* Learners' actions are social and socially situated because they are *constrained by* a learners' understanding of his or her *place in a social process,* within a particular social context. From this analysis, we extract implications for theory construction and for literacy instructor development.

Towards a Theory of Social Literacy

Writing about the epistemological foundations of adult education, Blunt (1994, p. 200) has argued for a re-examination of the discipline and focus categories of adult education research. Blunt points out that research can be judged as "hard" or "soft" by the extent that it is linked with the conceptual frameworks of the harder social science disciplines (e.g., sociology and psychology) as compared to the softer disciplines (e.g., social work and training development). Within this model, the primary focus of basic research is to contribute to adult education as a field of academic study; for example, basic research might assist the development of explanatory models in an area such as adult learning. In contrast, the primary focus of applied research is the improvement of practice such as finding solutions to problems associated with program planning or instruction. Because adult literacy and basic education are an integral part of the adult education landscape, parallel arguments can be made for categorizing adult literacy research. A case in point is this study's use of a conceptual framework based on situated cognition theory to critically analyze adult literacy discourse. The results of this analysis indicate that the essential elements of situated learning as an organizing framework can point educators in some new directions for literacy research at both the basic and applied levels.

Contributions to situated cognition theory are being made in sociology, cultural psychology, and anthropology. These contributions provide new ways of understanding the social, historical, and contextual nature of learning that is initiated by human activity (Wenger, 1998). To date, however, little attention has been given by adult educators to the situated character of adult literacy learning. Based on the origins of situated cognition thinking in constructivism and humanism and the results of this discourse analysis, we think it plausible to view literacy through the lenses of situated cognition theory. To varying degrees, the elements of situated learning can be used to analyse literacy practices ranging from settings such as the family dining table, local library, museum, bookstore, workplace, college classroom, adult education centre, and other social communities of literacy practice.

As an explanatory model, the elements of situated learning provide an alternative way of viewing literacy. It lends support to recent work (Barton, Hamilton, & Ivanic, 2000) that draws on sociolinguistics to link literacy to an understanding of social practices and the means people use to make sense of their lives through an examination of everyday events. At a basic research level our findings support the notion of literacy practice as a core unit of a social theory of literacy. Two key propositions embedded in such a theoretical orientation are that literacy is best understood as a set of social practices inferred from events that are mediated by written texts, and that there are different literacies associated with different domains of life.

Using the elements of situated learning also helps explain how literacy is used in cultural ways and how learners draw upon events from their ordinary lives to construct meaning. These practices demonstrate what people do with literacy and how the social processes involved purposefully connect people with one another. The results of our study provide evidence that literacy practices are currently being understood and planned by leading practitioners in terms proposed by Barton et al. (2000); that is, current practice increasingly places literacy in social and cultural relationships among people and within communities, rather than in psychological sites where individuals rely on internal properties to acquire literacy from decontextualized sources.

Building on the broader theoretical foundations of literacy, a possible next step is the systematic examination of literacy practices using Wenger's (1998) conceptual perspective of a social theory of learning, which focuses on community, practice, and socialization. Wenger describes the core of this learning theory as social participation and refers not only to the local events of engagement, but to a "more encompassing process of being active participants in the practice of social communities and constructing identities in relation to these communities" (p. 4). In an initial inventory of the components necessary to categorize social participation as a process of learning and knowing, Wenger speaks about the integration of four elements: meaning, practice, community, and identity. These elements are interconnected and enable learning to be viewed as learning experience, learning doing, learning belonging, and learning becoming. Many of the literacy practices described in our analysis confirm a congruency with these learning conceptualizations; we hope our study will serve as another step towards a search for a grounded theory of social literacy learning.

Instructor Apprenticeship

One implication of this study lies in the potential utility of situated cognition theory to strengthen the theoretical foundations of professional development programs for literacy educators. This study points to the need to test the concepts of authentic instruction and cognitive apprenticeship as cornerstones for literacy worker education. Our use of an analytic framework of situated learning leads to the conclusion that literacy instruction is no longer being conceived by leading Canadian literacy practitioners as located in a traditional paradigm of decontextualized content and processes. As Wilson (1993) has argued, adult education should be based on the actual practices of learners, that is, located in authentic activity. Situated learning focuses the educator's attention on the fusion point between a learner's previous knowledge and the new knowledge to be acquired—as defined by practitioners in a knowledge community. It is at this fusion point that the literacy worker creates personal knowledge of professional practice. The social process engaged in to apply the old knowledge, experience the new, and re-construct the personal is authentic activity.

Brown, Collins, and Duguid (1996) use the term authentic activity to describe instruction that unifies, for the learner, the cultural understanding of a knowledge domain with the experience of situated activity. This can be understood as promoting the ability to look for, to recognize, to evaluate, and to use information resources productively. Authentic activity can also be portrayed as commonplace literacy practices that are situationally defined, tool dependent, and socially interactive. For all ages, authentic activity requires that learning and knowing be located in the actual situations (organic instruction) of their creation and use, not the simulations (official instruction) constructed in some educational practices. Viewed in this way, learning and knowing are a process of socialization rather than knowledge acquisition.

Situating authentic instruction for learners through a cognitive apprenticeship model is an approach supported by Vygotskian instructional theory (Brown et al., 1996). The term cognitive apprenticeship emphasizes the centrality of activity in learning and highlights its context-dependent nature. Through situated modeling, coaching, and fading educators promote learning by first modeling strategies in an authentic activity, supporting learners' attempts to perform the task, and finally empowering them to continue to learn independently (p. 39). In Vygotskian terms, these processes are referred to as scaffold builders. Cognitive apprenticeship outcomes are those mental capacities, usually sought through conventional formal instruction, that are associated (often erroneously) with higher-order

intellectual functioning, as compared to the pyschomotor outcomes usually associated with apprenticeship training. The intended outcomes of cognitive apprenticeship are the capabilities to recognize and resolve ill-defined problems, typical of authentic activity, as compared to the well-defined problems typical of exercises in formally designed classroom instruction. From an instructional perspective, this view implies that it is essential for learners to engage in authentic activity because it is the only way they can act in a truly meaningful manner. It is the meaningfulnes of real responses and real activity, in real settings, that shapes and hones their learning.

In closing we emphasize that once knowing and learning are located in their naturally occurring settings, the best means to acquiring them are through social interactions (see Wilson, 1993). Literacy learning, therefore, logically becomes inseparable from the tools, social interactions, and activities for literacy applications. Further research on literacy learning and practice must shift toward those social science perspectives that bring the social processes of literacy learning and literacy applications into clearer focus.

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