Interim Research Report 1:
Learning Communities Project

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Executive summary

This is the first formal report of the Learning Communities Project (LCP), based on results of the evaluation and research activities conducted to date. The major findings of the project, and observations about processes used, are as follows:

1. The project is focused on the learning needs of adults; therefore, *andragogy*, the art and science of teaching adults, forms part of the basic philosophy of the project. Similarly, distance education, focusing on any time/anyplace learning, is assumed to be the most appropriate type of delivery for courses included in the project. Other elements of the project deemed to be suitable, even required, for adults include prior learning assessment and recognition (PLAR), a focus on *essential skills*, and instruction designed to recognize the self-direction and autonomy needs of adults.

2. The above having been stated, the project also recognizes that many adult learners have not experienced self-direction in learning, or do not feel confident exercising full on adult autonomy as students. The LCP therefore seeks to provide support and assistance as individually required, to help students feel comfortable and be successful in any learning projects embarked on within the project. (As part of the concern for individual learning preferences, learning styles and preferences are also focus of research, and are considered in instructional design decisions.)

3. *Distance education* in this project is defined in the classic sense, as learning in which the learner and the tutor are normally separated, technology is used for interaction, there is institutional support throughout the learning process, and the prospect of two-way communication always exists.

4. Based on research to date, potential LCP participants are usually transitory (only a fraction live in the project's regions), often from outside of Alberta, frequently subject to long commutes, and fully employed (many routinely work overtime). This is especially true of potential students in the CNQ

Horizon site. The implications for learner interest and motivation, programming content, instructional design, course and module delivery, and student support, while it is evident there are implications, are being worked out as a core part of the project.

5. Technology is available in the region, due to the availability of Alberta SuperNet, and the technical resources of CNQ (at the Horizon site) and the post-secondary institutions that are already active in the region. As well, agencies such as eCampusAlberta, Alberta North, and the Canadian Virtual University already provide resources and learning opportunities to potential students. Despite these resources, and access to the Alberta SuperNet for broadband Internet connections, it is still true that rural areas are generally less well served technologically than urban areas (especially true of aboriginal communities); however, it is also true that rural residents are often more open to technology-based learning than those in urban areas.

6. Programming interests among CNQ employees or contractors who have inquired about or registered in courses through the project so far are primarily career-related, including business administration, accounting, project management, engineering, Blue Seal, and health and safety courses. In the communities, pre-employment courses, and technology and trades training (especially if including employment-related hands-on experience), have been identified as major areas of interest.

7. Based on survey and interviews, potential students encounter numerous barriers to participation in education and training programs, beginning with the fatigue they experience at the end of long work days, and extending to a potential lack of familiarity, access to, or comfort with technology, lack of familiarity with the distance education as a learning style, and lack of information about the connection between courses, credits, and career advancement.

8. Tracking registrations that result from project activity remains problematic. The project is studying various ways to identify registrations generated by LCP activities, essential to determining the project's impact.

9. The research portion of the project has produced and circulated five occasional reports, and this interim report. The purpose of research to date has been formative – intended to be of immediate use to project planners and participants. Feedback from project participants indicates that these reports have had the desired impact on project development.

10. The research team have under development of paper for peer review, addressing the question of the programming that is currently available in the project's regions, and the rationale for what is currently being offered (or not offered). Additional data are being gathered regarding the uptake and efficacy of programming, including registrations and completions, for a future publication. As well, the research team has plans to present at relevant conferences in the first half of 2008 in Nova Scotia, Ontario, and Alberta.

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Project background and overview

About this report

The Learning Communities Project (LCP) formally commenced in June 2007. Part of the research portion of the project was a commitment to report regularly on the progress of the project, including significant findings, completed and pending activities, any changes to overall goals, and a review of evaluation and research elements. This first major report issued by the research team concerns LCP activities from May 2007 to January 2008.

Preliminary planning

Organizational planning for a project to explore, analyze, and address learning opportunities for residents of aboriginal and remote communities, and for workers at the Canadian Natural Resources (CNQ) Horizon worksite in Northern Alberta, commenced in early 2006 ("Remote and rural community service pilot project," 2006). The Learning Communities Project, earlier called the *Rural and Remote Learner Project*, is a 3-year pilot project, funded by an endowment from CNQ Board Chairman Allan Markin (Attachment 2).

Initial planning team members included Joy Romero, Chair, Athabasca University Governing Council and Director of Bitumen Production, CNQ, Horizon site, and the following Athabasca University representatives: Dr. Frits Pannekoek, President; Lori Van Rooijen, Vice President, Advancement; Dr. Nancy Parker, Director, Institutional Studies; Christine Nelson, Educational Media Development; and Dr. Patrick J. Fahy, Professor, Centre for Distance Education.

Planning principles

As part of initial discussions, the following assumptions and principles, and accompanying implications for project development, were identified, consistent with Athabasca University's delivery model and distance education institutional mandate ("Athabasca University Learning Communities Project," 2006; see also Attachment 6, "Design and delivery, CNRL Project," May 2006):

1. Present educational levels and previous educational experiences of potential participants are relevant in project and process planning:

    a. While it is not unknown for trades training to include computer-managed learning or blended technology and face-to-face approaches for teaching (including simulations), the previous educational experience, and preferred learning model, of potential students was expected to be quite traditional (classroom-based, teacher-paced group instruction);

    b. Existing transfer agreements and prior learning assessment (PLAR) techniques should allow participants to be placed at levels that recognize their demonstrated skills and abilities;

    c. Recognizing that the participants are adults, they should be able to incorporate coursework into their private lives, including work; for this reason, the project plans to use mobile technologies, and materials supplemented by core on-site support through tutors and mentors (Attachment 6);

  d. Some potential participants may require essential skills instruction, including initial basic language and academic skills training. Athabasca University has assessment tools, courses, and specialized learner support for students needing to address these essential skills. As required by the *Campus Alberta* policy ("Albertans will have opportunity to participate in lifelong learning supported by a learning system in which learning providers collaborate to deliver quality and innovative learning opportunities - where and when Albertans need them - to enhance their social, cultural, and economic well-being"; http://www.advancededucation.gov.ab.ca/pubstats/CampusPolicy/default.asp?Chapter=Vision), the project is committed to collaborating with other Alberta post-secondary institutions capable of offering appropriate courses and programs to enrolled students;

  e. We realize that self-directed learning requires skills not all learners spontaneously acquire, and so will try to help students acquire these as part of the learning experience.

2. Programming should incorporate adult (*andragogic*) learning principles (Knowles, 1978, 1980; Dilworth & Willis, 2003):

  a. Adults need to know why they need to learn something;

  b. Adults approach learning as a form of problem-solving; problem-based learning is often preferred by adults;

  c. Adults learn best when the topic can be immediately applied to some real-world problem or issue.

3. Andragogic teaching behaviours include the following (see also Attachment 6):

  a. The reason for learning specific content is explained before teaching begins;

  b. Concepts are applied rather than memorized rote (memorization is rare; open-book exams, if there are exams, are the rule);

    c.   Instruction takes into account the wide range of backgrounds of learners, and provides alternative learning materials, assessment activities, pacing and scheduling, technologies, attendance and performance expectations, etc.;

    d.   Self-direction and individual initiative are permitted and encouraged;

    e.   Learners are involved in the planning and evaluation of their work;

    f.   Student experiences are brought into the learning process.

4.   Courses should be designed and delivered with proper instructional and communications supports and resources (including carefully designed instructional guides, appropriate printed texts, adequate communications, and strong support services), so that barriers and likelihood of failure are reduced, independence and self-direction are increased, and, overall, learning is relevant and successful. Some implications are:

    a.   Interaction and communication are important components of AU's delivery model;

    b.   Students may expect delivery to provide information (teaching), advice and suggestions (tutoring), counseling (beyond course questions), coaching (hints about learning), assessment (feedback on progress), and advocacy (addressing any problems with the system);

    c.   It is also assumed, consistent with adult learning principles, that most students will prefer an atmosphere of collaboration and cooperation, rather than competition.

5.   Instructors and on-site mentors should assist participants to adopt self-directed approaches to study, rather than presuming that this capability already exists.

    a.   Students may have only vague notions of what self-directed study means, and of their own capacity for working within such a format; initial focus is on how to learn in the distance format.

b. Students may be at varying stages of cognitive and psychological readiness for self-directed learning; urging those who are not ready to become more independent may be an impediment rather than a stimulus to their learning.

6. Specific skills and supports of the instructors or tutors who are also mentors are required, including:

a. Methods of establishing and maintaining effective communication between teacher and student, and increasing interaction among students;

b. Strategies for encouraging individual and group motivation to learn how to learn at a distance (including technology use);

c. Planning and managing organizational details, and developing an awareness of the time demands of distance-delivered courses;

d. Techniques for using audio or visual components within print-based courses; accessing information from various sources, e.g., external databases and library resource systems; and training in desk-top publishing, spreadsheets, data bases, and word processing.

7. All components of the project must be educationally rigorous, while being innovative and adaptive to the needs and expectations of different participants and stakeholders.

a. Learners' needs and preferences (sometimes called "learning styles") affect the design process. The fact that the same teaching behaviour can produce different learning outcomes indicates that the process of learning differs in individuals. Failure to adapt to learners' needs and preferences can produce a serious mismatch between provisions and expectations, resulting in lost learning opportunities, or, in worst cases, drop-out or non-completion.

Project expectations, goals, and objectives

The early planning stages of the project set out these expectations, goals, and objectives:

1. The project will have two stages. *Stage 1* will explore and address the learning needs of Horizon site workers. *Stage 2* will explore and address the learning needs of selected remote and rural communities. (In late 2007, the communities for initial project activity were identified as Wabasca, Cold Lake, Three Hills, and Ft. St. John, B.C., in addition to Ft. McMurray and communities in the Wood Buffalo region, including of Ft. MacKay and Ft. Chipewyan.)

2. The focus of the project will be on the learner: once an individual has commenced a program of study, access to learning materials and student services should not be dependent on their location ("Athabasca University Learning Communities Project," 2006).

3. The project will employ flexible delivery, permitting students to use the time and learning opportunities that their work, travel, and home/family schedules permit (Fahy, 2007).

4. The primary goal of *Stage 1* of the project will be to provide meaningful, university-level educational opportunities to Horizon-site workers, in order to:

   a. address company priorities of attracting and retaining a skilled workforce, and to transform the workplace by contributing to the promotion of a learning culture;

   b. address individual goals with respect to career advancement and personal achievement, and to contribute to a better quality of life for workers in the camps;

   c. provide AU with the opportunity to work out new ways of accomplishing the University's mandate in a workplace setting.

5. The primary goal of *Stage 2* of the project will be to explore and address the market demand for meaningful, university-level educational opportunities to be delivered in a variety of rural, remote, aboriginal, and resource-based communities, in order to:

   a. identify and remove barriers to access and to success in university-level studies, which is core to the mission of Athabasca University;

   b. provide flexible delivery systems that promote learner success, without compromising the high standards expected across a rigorous university curriculum;

   c. design a community market and needs assessment framework, respectful of the cultural differentiation across a variety of communities. Particular attention will be paid to the needs of indigenous (including Métis) communities ("Athabasca University Learning communities project," 2006).

Also at these meetings, prospective remote and rural communities were identified for future inclusion. Timelines, necessary resources, and a budget were projected.

Selected literature review

The following were selected from the related literature, to supply context for this first report of the Learning Communities Project (LCP). This review is not intended to be exhaustive, but is intended to be pertinent to the topics raised in the report. The literature review is ongoing in this project; subsequent reports will contain additional information to complement what appears here.

The concept of *distance education*

In this project, the terms *distance education* and *distance methods* are used to define a form of delivery of education and training. The classic definition of *distance education* is usually attributed to Keegan (1990, pp. 42 - 43):

Distance education is that field of educational endeavor in which the learner is quasi-permanently separated from the teacher throughout the length of the learning process; the learner is quasi-permanently separated from the learning group throughout the length of the learning process; a technological medium replaces the interpersonal communication of conventional, oral, group-based education; the teaching/learning process is institutionalized (thus distinguishing it from teach-yourself programmes); two-way communication is possible for both student and teacher (thus distinguishing it from other forms of educational technology).

Keegan concludes the discussion within which the above definition appears with the comment that "[distance education] represents an industrialisation of the educational process" (p. 503), meaning that distance education uses carefully designed *systems* to assure programming meets demands, provides high quality materials, and supplies uniformly appropriate treatments of participants.

Another way of defining distance education is from the point of view of the students, especially how much shifting in the *place* and *time* of learning is permitted to participants, and how much consequent *choice* students are permitted to exercise. This approach to defining distance education recognizes that an essential fact about teaching and learning at a distance is that the *place and time of learning and teaching activities can be shifted*, if the student chooses, to meet needs or preferences (see Figure 1). Students can access materials, study, and submit their work for assessment whenever their personal and work lives permit, and tutors can monitor and respond whenever they are available. (The term *tutor* is used here to mean any teacher, instructor, or trainer who is responsible for monitoring the learner's progress and motivation, including peer-tutors.) The conviction of distance educators is that, even though students, the instructor, and the content may be in different places and may be active at different times, there can still be in an effective learning relationship among them.

Effective learning relationships are created and sustained at a distance the same way as they are in face-to-face situations: through interaction among all parties. The

difference is that interactive methods and tools are used, in place of same-time, same-place, face-to-face meetings.

Figure 1, below, shows how *place* and *time* can be rigid or flexible in learning situations.

```
                SAME TIME  |  DIFFERENT TIME
                           |
                           |
SAME PLACE          1      |              2
                           |
-----------------------------------------------------------------------------
                           |
DIFFERENT PLACE     3      |              4
                           |
                           |
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Figure 1: Time and place shifting in distance education.
(Diagram attributed to Coldeway by Simonson, Smaldino, Albright, & Zvacek, 2000, p. 7. A similar typology is also found in Johansen, Martin, Mittman, Saffo, Sibbet, & Benson, 1991, p. 17.)

The types of interaction possible, and the choices available to students in each of the above quadrants, differ as follows:

- **Quadrant 1 – *same place, same time***: <u>site-based</u> interaction; all instruction is *synchronous* (occurring at the same time) and *site-bound* (a special place is set aside for the purpose). Example: traditional on-campus face-to-face classroom, seminar, or lecture-based teaching.

- **Quadrant 2 *same place, different time***: <u>school-, institution-, or learning centre-based</u> interaction, with asynchronous study permitted. Example: use of self-paced correspondence modules in a designated library, learning centre, laboratory, or some other place, where on-site attendance is required, but at a time of the student's choice.

- **Quadrant 3 –** *same time, different place*: <u>synchronous, but not site-bound</u>. Example: teleconference- or audiographic-based learning: students can be anywhere, but they have to be available at the specific time the instructional program is offered (and they have to have access to the required delivery media).

- **Quadrant 4 –** *different place, different time*: <u>virtual and distance learning</u>, at a site and time of the learner's choosing. In its "pure" form, distance education falls in this category. Example: materials, learner support, interaction of all types, and administrative tasks and resources (including library and bookstore) are all available at any time, from any location, as chosen by the student.

In this report, and in this project, use is made of the quadrants to define the features of programming. (See Attachment 1, the evolving *Project Catalogue*, where content available for delivery is shown and categorized, and Attachment 7, where the rationale for identifying and maintaining a course catalogue is provided.)

It should be noted that *all of the quadrants can be present in programming labeled "distance education*," depending upon the definition of the term. Even primarily Quadrant 1 programs can have a "distance" component, and be regarded as *distance education*, if technology is used to provide access to materials, interaction, tutoring help, resources, or other components and strategies; some programs that define themselves as "blended learning" mean by the term the use of technologies for various out-of-classroom, and usually peripheral, purposes such as those above (see http://www.mtroyal.ab.ca/elearning/defined.shtml).

In this and future reports on the LCP, distance education is defined as programming that is *solely* or *primarily* Quadrant 4, anyplace/anytime, though it may also employ some (usually optional) elements of the other three quadrants. Programs or courses that are *primarily* quadrants 1, 2, or 3 (that is, at some point they *require* Q1, Q2, or Q3 attendance and participation), even if they occasionally provide Quadrant 4

learning conditions, are not considered here to constitute genuine distance education programming.

Communities, residents, and mobile workers in northern Alberta

Demographic and employment data. Mobile workers (those who are not residents of the area in which they work) presently constitute about 26% of the population of northern Alberta. The median age of this group is 35 years, with the range from 18 to 65. Just over half of mobile workers are from Alberta (56% from the greater Edmonton area); over half of those from outside of the province are from the Maritimes or Newfoundland. Three quarters live in lodges or residences while on the job. The majority (75%) would not consider moving to the region (Nichols Applied Management, 2007).

A 2007 report (Athabasca Regional Issues Working Group, 2007) noted that in 2006 employment in oil sands operations had doubled from the 1998 total of 6,600, and that by 2012 13,700 such jobs were forecast. The report also noted that in 2006 there were more than 1,500 aboriginal employees in operations jobs.

The "aboriginal identity" population of Alberta in the 2001 federal census ("persons who reported identifying with at least one aboriginal group, that is, 'North American Indian,' 'Métis,' or 'Inuit (Eskimo),' and/or who reported being a Treaty Indian or a Registered Indian, as defined by the Indian Act of Canada, and/or who were members of an Indian Band or First Nation"), was 156,220, of whom 80,775 were "registered" as *Indian* (persons "who reported they were registered under the Indian Act of Canada. Treaty Indians are persons who are registered under the Indian Act and can prove descent from a Band that signed a treaty") (Statistics Canada, 2003, 2007). Aboriginals presently constitute about 5.25% of Alberta's total population; "registered Indians" constitute about 2.7% of the total.

The median age of aboriginals in Alberta as defined above is 23.4 years, as compared with Alberta and Canadian median ages of approximately 35 years (lowest in Canada) and 37.6 years, respectively. In the most recent census, the great majority of

aboriginals reported they had lived in Alberta for at least one year, and almost all reported they spoke English, or English and French (only 25 aboriginal persons reported they spoke French only) (Statistics Canada, 2007). Particularly notable is the fact that 34.5% of Canada's aboriginal population is under the age of 15, which is "far higher" than the corresponding share of 20.1% in the non-aboriginal population (Alberta Chamber of Resources, 2006).

In terms of education, over 40.6% of aboriginals 25 years of age or older reported less than a high school diploma (the rate is somewhat higher for men than women), while 14.7% had some post-secondary training (including trades; the rate was 12.7% for males). Statistics Canada's review of these data concludes with the observation that, despite the continuing disparity with non-aboriginals, the "educational attainment gap in Western Canada continues to narrow" (Luffman & Sussman, 2007).

Overall, the aboriginal unemployment rate was 14.9% (15.7% for males, 14.0% for females), while the overall Alberta unemployment rate in late 2007 was 3.5%, and nationally it was 6.0% (Statistics Canada, 2001; Alberta Finance, 2007). In 2001, the most common occupational category for aboriginal men was *construction trades* (Luffman & Sussman, 2007, p. 23).

Technology access and use. Aboriginal and northern communities in Canada share special circumstances in relation to technology access and use. The following describes conditions in Canada overall (Aboriginal Canada Portal, 2005):

- Ninety per cent of communities surveyed have at least basic Internet connectivity (dial-up access);
- Almost 50% have broadband; some have used the *Broadband for Rural and Northern Development Pilot Program* (Industry Canada; http://broadband.gc.ca) to obtain access; however, this program ceased to accept applications in mid-2007. Alberta SuperNet (see below) was the source for broadband for many communities;
- Four per cent use alternate methods (satellite);

- Five per cent are not connected (note that communities that incur long distance charges for dial-in service were considered to be *not connected*);

- Of "remote communities" in Canada (communities that have no year-round road access, are generally north of 50°, and/or over 30 miles from nearest service centre), 36% have high speed access, 55% have dial-up access, and 7% have no access at all. (Four hundred and forty-five communities in Canada fit this definition of "remote.")

Access and usage vary widely in rural areas of Canada generally, including Alberta: in the predominantly aboriginal Alberta community of Fort Chipewyan, for example, 76% of residents were reported in 2006 to have satellite TV and broadband access to the Internet, whereas the Mikisew Cree community reported no broadband access available to residents ("Wood Buffalo Region," 2007).

The potential benefits of technology adoption by aboriginal groups have been accepted. In 2001, a national report (Greenall & Loizides, 2001) noted that aboriginal groups could obtain a range of beneficial effects from technologies, from protection of culture and language to enhanced in-community education and training opportunities accommodating a variety of learning styles. While the report warned of the potential danger of a "digital divide" developing between aboriginals and non-aboriginals, a later report (Crompton, 2004) did not find such a gap, pointing out instead that any gap that existed was, as it was within non-aboriginal groups, more within the aboriginal community itself, than between the aboriginal and non-aboriginal communities.

The reasons cited by aboriginals for not using technology do not differ substantially from those of non-aboriginals. Voyageur (2001) reported barriers in a variety of central Alberta aboriginal communities to technology use, including most commonly *Not readily available*, *Too busy to learn how to use*, and *Comfortable with present level of technology use*, reasons not unlike those given by urban residents at about the same time in another study (Greenaway, 2002).

Computer access and experience

Access to technologies like broadband is not uniformly distributed across Canada, but is facilitated in Alberta by SuperNet (see below). Regarding general Internet access and usage, Statistics Canada (McKeown & Underhill, 2007) reported that in 2005 68% of adult Canadians had used a computer for personal non-business purposes; 26% of adult Canadians had used a computer for education, training, or school work; 80% of all full- and part-time students reported going online for education, training, or school work; and 90% of all users were able to access the Internet from home. In contrast, the same study reported that one-third (7.9 million) of adult Canadians admitted never having accessed the Internet for personal or non-business reasons.

Technology, and particularly Internet, use in Canada is closely associated with some socio-economic indicators, specifically age, income, and education. Based on a survey by Statistics Canada of over 30,000 Canadians, the following were the contributions of various factors to Internet use:

− *Age*: 85% of Canadians between ages 18 and 44 went online in 2005, compared to 50% of those aged 45 years and older;

− *Income*: Of those individuals living in Canadian households with incomes of $80,000 or more, an estimated 86% went online, compared to 60% of those living in households with less income;

− *Education*: In 2005, eight out of ten (80%) of Canadians with some postsecondary education used the Internet, compared to only about one-half (49%) of adults with less education (McKeown & Underhill, 2007).

Recent advances in the general communications infrastructure in Canada have lowered Internet costs for rural users, and extended Web access, but in 2005 an urban resident was still 50% more likely to be an Internet user than a rural resident (McKeown, Noce, & Caerny, 2007). Another difference concerned the nature of use: in 2007, McKeown and Underhill reported that residents from rural and small towns were less

likely than their urban counterparts to report doing online research, but they were *more* likely to report going online for distance education, self-directed learning, or correspondence courses. This may suggest that rural residents have more appreciation of the utility of technology for learning.

Alberta SuperNet

Developments such as SuperNet in Alberta have directly impacted the options rural residents of the province enjoy. SuperNet is a government initiative intended to "[level] the playing field," by providing rural communities with the broadband access usually only economically feasible commercially in urban areas. As a public-private partnership, SuperNet is intended to "connect Albertans to high-speed services to enhance health care, education and government services" ("Harnessing the SuperNet," 2006). Upon the completion of the physical infrastructure of the SuperNet in 2006, the network linked 429 Alberta communities, with over 4200 connections ("Alberta SuperNet," 2005). The system was designed so that telecommunications companies and Internet service providers (ISPs) could "piggy-back" on to the network, "making it possible for service providers to offer high-speed services to areas that, until now, have been too expensive or difficult to reach" (http://www.albertasupernet.ca/the+project/default.htm).

SuperNet is available in the following LCP locations of present interest, in these forms (http://www.albertasupernet.ca/Progress/):

- Cold Lake - Fibre Optic
- Fort Chipewyan - Wireless
- Fort McKay - Fibre Optic
- Fort McMurray - Fibre Optic
- Three Hills - Fibre Optic
- Wabasca - Fibre Optic

Judging by statements in the rural press at the time of its public opening, expectations of the SuperNet were very high in Alberta, and residents were pleased to

have access to it. Headlines such as the following appeared in local newspapers in the autumn of 2006: "Alberta SuperNet working for rural Albertans," "SuperNet makes life better at Northern Lakes College," "Redwater library impressed by SuperNet," and "New Alberta SuperNet agreements will better server Albertans" (http://www.albertasupernet.ca/the+project/news/default.htm).

eCampus Alberta

eCampus Alberta is a consortium of fifteen Alberta post-secondary institutions (colleges and technical institutes), established in 2002, "to facilitate greater access to high quality online learning opportunities" (http://www.ecampusalberta.ca/index.php?q=node/48). In late 2007, the partnership enabled students from across the province to choose from more than 30 provincially accredited online certificate, diploma, and applied degree programs, and 400 courses. In 2006-2007, 5,189 registrations were recorded, exceeding the target for the year by 30%, and the previous year's totals by 45% (http://www.ecampusalberta.ca/index.php?q=node/51).

Members of eCampusAlberta as of the end of 2007 were:
1. Bow Valley College
2. Grande Prairie Regional College
3. Grant MacEwan College
4. Keyano College
5. Lakeland College
6. Lethbridge College
7. Medicine Hat College
8. Mount Royal College
9. NAIT
10. Northern Lakes College
11. NorQuest College
12. Olds College

13. Portage College

14. Red Deer College

15. SAIT

eCampusAlberta does not itself offer courses; it provides "one-stop access to information about online courses and credentials offered by member institutions and the infrastructure required for online course delivery through WebCT" (http://www.ecampusalberta.ca/index.php?q=node/33) (often using the SuperNet). Member institutions offer a wide variety of certificates, diplomas, and applied degrees (http://www.ecampusalberta.ca/index.php?q=node/11). In relation to the areas of expressed interest of potential students (Attachment 4), the following offerings might be relevant:

· Forest Technician (Northern Lakes College)

· Geographic Information Systems – Basics (SAIT)

· Geographic Information Systems – Field Studies (SAIT)

· Office Administration (Bow Valley College)

· Out of School Programming (Bow Valley College)

· Technical Writing (Mount Royal College)

· Professional Writing (Grant MacEwan College)

The learning and teaching model is technology-based eLearning, which "... incorporates communications media, such as audio and video conferencing software, e-mail and other technologies that enable interactive, online discussions between students and between students and their instructors" (http://www.ecampusalberta.ca/index.php?q=node/31). Offerings range across the quadrants shown in Figure 1 (see also Attachment 1). Course development within eCampusAlberta is systematic: the organization publishes 28 *essential quality standards* of online curriculum development and delivery, as part of its "e-Learning Rubric" designed to "ensure quality standards in online learning development. EQS are a requirement of all curricula resourced by the Online Curricula Development Fund (OCDF)" ("Essential Quality Standards," 2006).

While eCampusAlberta focuses on online learning (the term *distance education* is not prominent in its published information), some apparently contradictory information regarding the learning model appears on the organization's website. In one place (http://www.bowvalleycollege.ca/courses_programs/administration/office_admin_cert_online.htm), this statement appears:

> Bow Valley College's Office Administration Certificate is now available online through eCampusAlberta. Study from home using your own internet service provider to access courses.

> At the Bow Valley College course information site

(http://www.bowvalleycollege.ca/courses_programs/administration/office_administration_faq.htm), however, an FAQ answer states, in response to the question "Where do I study?":

> This program is taught at the downtown Calgary campus at 332 – 6 Avenue SE Calgary, AB.

In response to the question, "Do I need a computer at home?", this answer appears:

> Although having a computer at home is helpful, it is not necessary, as computers are available at the LRS on the 4th Floor of the downtown campus. The LRS is open Monday to Thursday, from 8 a.m. to 7 p.m., and Friday from 8 a.m. to 5 p.m. Saturday from 9 a.m. to 4 p.m.

While this anomaly requires further investigation, it appears that some eCampusAlberta programs may not be entirely Quadrant 4, or may include non-Quadrant 4 requirements when offered by some institutions. Nevertheless, eCampusAlberta course and program offerings should be vetted for inclusion in the LCP course catalogue.

Research and evaluation methodology

Research questions, and tentative findings

The LCP evaluation and research component uses a model which addresses four phases of typical project planning, execution, and evaluation (*diagnose, design, deliver, determine*). To focus the research, questions were devised for each phase. The project has addressed the *diagnose* and *design* phases to date, and some information has been gathered to address these questions. The following presents the questions and the tentative findings identified thus far. Future reports will build upon, and perhaps amend, these findings.

Diagnose

1. *Who are the stakeholders (potential students and their families, funders, companies, education or training provider or/partners), and what are their interests in and objectives for the project?*

CNQ employees and employees of construction contractors are a significant potential stakeholder group. Their interest in the LCP lies in its provision of flexible, relevant learning opportunities responsive to individual interests and preferences. As of the end of 2007, the LCP has tracked and responded to 53 inquiries from employees at the Horizon site, arising out of project launches held at the camp lodges. The inquiries variously pertained to a particular program of study, or asked general questions about the project, based on the launches held at various camp lodges (see Attachment 3).

CNQ management also has a stake in the success of the LCP, because education and training are widely held company values, the company mission being "To develop people to work together to create value for the Company's shareholders by doing it right with fun and integrity."

Residents of selected rural and remote communities are also stakeholders of the LCP. The learning interests of individual communities will continue to be assessed

during community consultations (see below for data pertaining to two communities, Ft. McKay and Ft. Chipewyan).

To date, inquiries have shown that employees and residents of the region are interested primarily in career-, pre-employment, and employment-related programming, especially trades training (see Attachment 3, and *Occasional Report* 5).

2. *What are the prior education and training levels of potential students, including experience with or attitudes toward distance education?*

CNQ employees' education levels vary widely. The minimum hiring requirement maintained by the company is high school completion. Most mid-level to supervisory positions require a college diploma or trades certification, and considerable work experience. Many of the employees who visited the LCP displays at the launches held in camp lodges seemed accepting of the concept of distance learning, several remarking that distance learning made sense for camp workers given their isolation. However, the camp lodges do not have computers available to residents, so workers must own computers in order to engage conveniently in computer-based online learning.

Community residents' education levels are generally known from sources such as census data ("A demographic summary of northern Alberta communities," 2007). Community residents' experience with distance learning is presently limited, although access to distance education technologies is increasingly available in each of the selected communities. Based on initial findings in communities such as Ft. McKay and Ft. Chipewyan of widely varying education levels (see *Occasional Report*s *1* and *5*), the same can be anticipated in other target communities, including the finding that many residents with low education levels have a traditional, conventional (classroom) model of education in mind, which does not usually include distance strategies or technologies.

3. What topics, courses, or subject matter are of interest to potential students?

Information gathered to date at the Horizon site lodges, and subsequent inquiries received based on interest generated by the project launches, suggest a strong interest in business administration, including project management (Blue Seal) business-related certification, Red Seal qualifications (in all trades areas), and health- and safety-related courses. Keyano College offers these courses, but not online. (See Attachment 4 for the list of interests expressed by potential students to date.)

Topics, courses, or subject matter of interest to residents in selected communities are emerging; these include pre-trades and trades training, and a variety of employment-related programs. (See *Occasional Report #5*.)

4. What amounts of time are available to potential students, and when are they likely to have time to engage in learning?

CNQ camp residents have evening hours available to them, but many work long shifts and some report feeling too fatigued to study after work. However, there are those that report they are often bored during evenings, and might be interested in taking a relevant online course. Most employees and contractors spend time commuting to and from the site, and have shifts that regularly provide them with several consecutive days off. At least some of these employees have expressed interest in training programs.

The availability of time to engage in learning by selected community residents is affected by home and family responsibilities. (Keyano College has found [*Occasional Report #5*] that child care is a major need of students in their program at the Ft. Chipewyan campus, and a lack of reliable child care is a major reason for missed classes in traditionally delivered classroom-based courses.) Whether this is also true for CNQ employees remains to be determined.

5. What study facilities and equipment are available?

As mentioned earlier, CNQ camp residents do not have access to company-provided computer technologies in the camps. There is a Skills Development Centre on

site, adjacent to the McKay camp lodge, containing several classrooms and about 30 computers. Employee-owned laptop computers may be used in the lodges, where broadband Internet connections are available in each room.

Facilities exist in all of the selected communities for residents to engage in learning, using public equipment and facilities.

- In Fort Chipewyan, the Keyano College campus is available for classroom learning, and, as a CAP site, there are computers and Internet access for residents' use for distance education. The Fort McKay E-Learning Centre has facilities for 11 fulltime students, and can accommodate more on a part-time basis.

- In Wabasca, three public access computers are available at the public library, which is served by SuperNet, but Wabasca is not a CAP site, limiting the availability of other instructional and support resources. Northern Lakes College has a campus in Wabasca, making classroom and online learning available there.

- Cold Lake has a CAP site located at the Public Library, although the level of access to computers and support is unknown. Cold Lake is served by a campus of Portage College, which is opening a new facility in the town of Cold Lake in 2008.

- Three Hills has a CAP site located in the Three Hills Public Library, limited to library hours. Three Hills also has a Virtual Learning and Business Centre, funded by the Rural Alberta's Development Fund (http://www.ruralalbertasfund.com/), a joint venture of the Town of Three Hills, the Hanna Learning Centre, and the Three Hills Library Board.

6. *What barriers may prevent potential learners from participating in the project?*

The barriers that CQN employees may face in participating in the LCP include lack of supervisor support (perhaps due to a lack of awareness); lack of employee awareness of the LCP and its potential to provide a range of learning opportunities; lack

of confidence in learning at a distance; a perceived lack of time to engage in learning (sometimes related to the previous point: potential students often have in mind a traditional model of learning, and know little or nothing of the potential flexibilities of distance education); family and career obligations; an unwillingness or inability to pay tuition fees, or to purchase instructional equipment or materials; a lack of access to or proficiency with learning technologies; uncertainty about possible career advancement options and their relation to academic credentials; and fatigue due to long work hours.

Addressing all of the above are potential objectives of LCP, as it is likely that these are the same (or similar to) barriers that community residents face.

7. What contribution in time or resources are employers willing to make (if any)?

CNQ makes available $3000 annually to its employees for reimbursement for costs of tuition and resources related to learning. The learning must be directly related to the job, or at least to the learner's career with CNQ. Use of these funds for LCP-related courses may be approved, depending on the nature of the course and the employee's intentions. The usage of these funds should be monitored throughout the project, but at present no agreement yet exists with CNQ to provide this information.

The issue of employer investment in training is one that is regularly studied by the Conference Board of Canada. The findings point not only to an under-investment in employee learning, but also to a misdirection of investment in employee learning:

> Canadian organizations are underinvesting in employee training and development and failing to allocate their training dollars so that they lead to improved business performance. Survey findings from The Conference Board of Canada's Learning and Development Outlook 2005 indicate that Canadian organizations have reached a plateau in dollars spent on employee training. Worse, organizations continue to invest in "traditional" employee-based training programs rather than aligning their professional development expenditures with their overall learning strategy and with organizational goals and objectives. The

question should not only be one of "how much," but also "are organizations investing in the right training? ("The real bottom line on learning," 2005)

To determine the likelihood of various employers in the selected communities supporting employees' non-technical learning (including AU courses), the LCP should understand the nature and size of companies in those communities. The nature of the company suggests the number of white-collar versus blue-collar workers; research suggests employers are more likely to support white-collar workers' learning, and support for employee learning has been found to increase with company size (Peters, 2004).

8. *What expectations are there for programming continuance and maintenance?*

It is likely that LCP registrants may need, on occasion, tutorial or administrative support, to ensure achievement of their learning goals. Regular follow-up by the LCP research team of the success of those who enroll in courses will help document the levels of support provided, and needed.

9. *How are LCP registrations tracked?*

A strategy for tracking registrations has been repeatedly suggested as core to a thorough assessment of project impact, and various tracking methods are being studied. Recently, a member of the project team researched in the Athabasca University *Banner* student registration system to see whether any of the inquiries from the *Inquiry and Request Tracking* process (Attachment 3) became students, and/or registered in a course with AU. There was one match – a CNQ employee registered in Admin 233 was flagged in the *Banner* database – showing that some tracking is occurring upon registration.

It has been suggested that a code might be assigned to the AU course registration form to indicate the registrant is a LCP student contact. *Banner* is capable of recording information about registrants, including the fact that the student was referred from the LCP; however, Registrar staff must, first, be aware the students was referred through LCP, and, next, make the appropriate entry into *Banner*. Project research staff have

suggested that these steps are vital to assessing the project impact, and that every effort should be made to assure the required entries are made during registration.

Design

The following questions are related to findings potentially impacting curriculum design and pedagogy in the project.

1. What models of adult education do potential students hold?

This question has not been directly asked of CNQ employees who made contact with LCP staff. However, it is recognized that many students new to distance education may not be fully capable of self-directed learning, and may initially require instructional support while gaining skill and confidence as independent learners. Courses must be designed and delivered with proper instructional and communication supports and resources (Fahy, 2007; Attachment 6).

This is likely to be true for residents of the selected communities, too, especially as initial findings suggest that Quadrant 4 adult learning experiences have not been common in these areas (*Occasional Report 5*).

2. What on-site help is available and expected?

The expectations of CNQ employees regarding on-site support are probably minimal, especially for those with a considerable educational background, given that they seem to understand and accept the conditions for distance education. However, since most potential students also appear to lack direct experience with distance learning conditions, the LCP intends to offer students the following optional services and resources:

- general information about AU's partner institutions and organizations, including their calendars and brochures, and contact and registration information;

- a classroom or study space in the Skills Development Centre;

- a remote or face-to-face study-buddy program, to connect students with others studying the same courses;

- onsite mentors to help answer questions, and provide support to new students.

Summary of *Occasional Reports*

Five *Occasional Reports* have been produced to date, on emerging issues or research findings considered significant for the conduct of the project. Occasional reports, as formative evaluation of project activities, are not public documents, but are intended to provide immediately useable information to project managers and administrators. The following is a brief summary of the contents of the five reports published so far.

Occasional Report 1 (17 May 2007): "Statistics Canada 2001 & 2006 Census Data for Fort MacKay and the Regional Municipality of Wood Buffalo." Reports demographic information on age and education of community residents; employment patterns (including unemployment rates) and career interests; and financial data relevant to the residents' capabilities to pay for training.

Occasional Report 2 (25 June 2007): "Implications of meeting with M. Baddeley, 22 June 2007." Summarizes the advice given to the project management and research group by Michael Baddeley, Canadian Natural Resources Ltd. The following were the chief results of the meeting with Mr. Baddeley:

- Plans to launch and promote the project over the summer in the various lodges should be changed to fall, to avoid conflicting with the very busy construction season.
- The target audiences for various kinds of project programming were refined: the interests of white- and blue-collar employees, younger vs. older groups, and employees of contractors were discussed.
- Communications within CNQ's management and supervisory structure was described, and better understood by the project, especially in relation to

project publicity, and the project's intentions to ask managers to promote the project to their supervisees.

· CNQ resources that employees might access (especially the $3,000 annual stipend for training) were discussed.

Occasional Report 3 (29 August 2007): "Implications of a meeting with Keyano [College], 22 August 2007." Describes this meeting and its outcomes:

· Meeting of project coordinators and a researcher with Keyano College administrators and coordinators, responsible for programming in the Wood Buffalo region, including the Horizon site and other oil sands locations.

· Description of the objectives and resources of the project.

· Discussion of the college's aboriginal programming in the region, especially in the communities of Ft. Chipewyan and Ft. MacKay.

· Description of the college's delivery models, and experience with distance education delivery, including its technological infrastructure (SuperNet, and *community access point* [CAP] sites).

· Discussion of possible future collaboration between the project and the college.

Occasional Report 4 (2 October 2007): "Report of the first Learning Communities Project launch, 26 September 2007, McKay Lodge, CNQ Horizon Site." As this was the first official public launch of the project, special attention was paid to its form and its results. The report describes the location, the display, and the deployment of project personnel, as they interacted with CNQ employees returning to the lodge after their work shift. The information requested and distributed, comments of CNQ employees, and suggestions for future similar sessions were recorded. CNQ employees who expressed questions or interest in programs were noted for future follow-up.

Occasional Report 5 (7 January 2008): "Adult education programming in Fort Chipewyan." A project researcher interviewed students, community residents, agency personnel, and Keyano College instructors in the community of Fort Chipewyan in December 2007. The report presents the findings related to present programming, and

student characteristics and enrolments; areas of training interest expressed by students; course delivery models presently employed by Keyano; proposed, requested, or planned future programming; infrastructure and physical plant issues; opportunities arising from present program content and delivery models; and student academic and non-academic support needs.

The Occasional Reports are intended for immediate discussion and use. Feedback from project personnel suggests that the reports are meeting this objective, and have been useful to administrators and in planning.

Overall chronology of the project to date

Table 1 shows the major events of the project to 15 January 2008, in chronological order.

Table 1: Chronology of project events

Date	Event
2007	
10 April	Project Liaison Officer (L. Shaw) commences
30 April	Research Facilitator (N. Steel) commences
3 May	Meeting #1 Review and planning meeting, ELC: F. Pannekoek, Kinshuk, L. Carter, P. Mitchell, R. Mitha, L. Shaw, N. Steel, P. Fahy, L. Van Rooijen (phone)
8 May	Revised research questions shipped to Project Officer (version 4)
18 May	Occasional Report #1, Statistics Canada 2001 & 2006 Census Data for Fort MacKay and the Regional Municipality of Wood Buffalo created and emailed to project team
24 May	Proposal to make a presentation at the ADETA Annual Conference submitted
30 May	Commenced online research for grant program for AU and for individual students
6 June	Meeting #2 Project team meeting in Edmonton: Tim Slaughter, Lois Shaw, Pat Fahy, Nancy Steel, Margo (recorder), Kinshuk, Lisa Carter, Rahim Mitha
7-8 June	First draft of information exchange questions for sessions to be held at CNRL Horizon Project site employees scheduled for week of July 9 First draft of interview questions for Michael Baddeley to learn more about the Horizon site and its employees
15 June	Budget code assigned
22 June	Meeting #3 Team meeting with Michael Baddeley, Horizon Project Human Resources contact
22 June	Occasional Report #2 – Report of the meeting with Michael Baddeley
05 July	Meeting #4 Project team meeting, Edmonton, special guest Leslie Chivers,

	Communications and Creative Services
07 July	Pat and Nancy create Draft 3-year budget for Lisa
10 July	Questions for proposed paper to be prepared by November created and research commenced to address the questions
11 July	Draft budget submitted to Lisa Carter
17 July	Project Liaison Officer goes up to Horizon site to set up office, create an AU presence and informally interview people.
26 July	First AU program inquiry - from Horizon site employee about AU graduate courses in business
30 July	Created community profile for Three Hills
1 August	Research Facilitator met with Project Liaison Officer to debrief about her 2-week visit to the CNRL site
2 August	Project Liaison Officer released 3 reports: Report on activities and observations Horizon Oil Sands Project and Communities; Report on Training Facilities (on site);
13 August	Project Liaison Officer reports that there may be an interest among employees to volunteer to teach a workshop on a topic of their interest and expertise, i.e. Guitar playing
21 August	Meeting by Nancy Steel with Karen Stauffer and Lois in Fort McMurray to determine Karen's role in the Learning Communities Project
22 August	Visit to Oil Sands Interpretive Centre by Nancy, Tim, Lois and Karen to better understand oil sands operations
22 August	Meeting with Keyano College: Mary Lea Jarvis, Kathy Davis-Herbert, Leo Jacobs, Tim Slaughter, Lois Shaw, Nancy Steel, Karen Stauffer
23 August	Occasional Report #3 Draft – Implications of a meeting with Keyano College – sent to LCP members 5 Sept
5 September	Information request email address established – asklc@athabascau.ca
6 September	P. Fahy urged Lois to low-key "launch" project locally, with notice in employee newsletter, simple signs near cafeteria, e-mail to supervisors; objective is to "pick the low-hanging fruit" (those already interested in courses). Logic: if ½ of 1% of current on-site personnel respond, 30 – 40 individuals will be involved, and become potential registrants.
11 September	Meeting #5 Project team meeting, Edmonton. Present: Lisa Carter, Pat Fahy, Tim Slaughter, Lois Shaw, Nancy Steel; by telephone: Lori Van R., Heather Newton, Leslie Chivers, Kinshuk.
12 September	Initial information sharing telephone conversation with Pat Martin, Workplace Learning Services, Bow Valley College
14 September	Lois received 2 inquiries from 2 CNQ trainers: inquiry about whether AU has an institutional partner that can deliver autocad training by distance; Lois referred this question to Tim. Inquiry about whether Lois is aware of an institution that could deliver millwright training onsite; Lois suggested that the trainer check with NAIT in Motion.
15 September	Karen Stauffer spoke with Amgad Rushdy, associate superintendent of the Fort McMurray Public School district about the possibility of providing mobile learning opportunities to secondary school students in the surrounding remote communities. Tim Slaughter encouraged her to explore this collaboration.
18 September	Inquiry and Request tracking form sent to Lois to use as a vehicle for recording

	inquiries and request, which will be then sent to Nancy, who will maintain a master list of inquiries and requests.
18 September	Information about Government of Alberta's Renaissance Fund received. Nancy sent to Lois for her information and use.
18 September	Pat replied to Lois's requests for feedback on *Website Content* and *Website Student Content*.
21 September	Lois receives permission from CNQ to host 2 launch/awareness raising events on Wednesday, September 26 at the McKay Camp, 1 hour at noon and then again 4-8 pm. Nancy will attend to observe.
21 September	Nancy met with Pat Martin, Bow Valley College, Calgary, to interview her about the College's programming at the Horizon site.
25 September	LCP website launched
26 September	Learning Communities Launch #1 at Fort McKay Lodge
27 September	Karen Stauffer invites Keyano College to be present at the next two Launches planned for October 2, 3. This was done at Lois's request as she was unavailable to do this before the next launch.
1 October	Teleconference call with Keyano College to describe the Learning Communities Project and to gain information about their activities on the Horizon site. On the call: AU - Tim, Karen Nancy; Keyano – Janice Lawrence Harper (Associate Dean, Workplace Training), Coordinators Hildy Hanson, Lorraine Humphrey, Miyuki Shultz, Maria Hodgins
1 October	Telephone conversation with Vicky Busch, Canadian Virtual University
2 October	Launch event at Chelsea Lodge, with Keyano College display beside our AU display. AU – Lois, Karen (Nancy observing) Keyano – Janis Lawrence Harper, Velika Kapitanof
3 October	Launch event at Calumet Lodge, with Keyano College display beside our AU display. AU – Lois, Teresa Keil (Nancy observing) Keyano – Janis Lawrence Harper
3 October	Lois tells Nancy that Joy Romero remarked on September 28 at an AU function that there have been 7 registrations as a result of the September 26 Launch. Lisa confirmed this in a telephone conversation with Nancy on October 5, but had no information about how the registrations were noted, how they will be tracked or how Joy knew this information.
5 October	P. Fahy writes a note to Lisa to express concern re inclusion of non-Quadrant 4 Keyano programming in the project *Catalogue*
9 October	Nancy and Pat create interview questions for BVC consultants conducting workshops at Horizon site, and then send them to Pat Martin, Accounts Manager, BVC, for her review. She approves the questions, but suggests that Nancy wait until November to conduct interviews. By then, the consultants will have delivered 2 workshops each and will have better insights to offer.
10 October	Lois asks Patrick (AU Editor) to find out: a) if the original project media announcement will be released or if a new one is under development; b) if having CNRL on the LCP website is acceptable; c) what AU's involvement was in Three Hills' application for Rural Development funding.
10 October	Response from Patrick (AU Editor) to the above: a) the original press release will not go out as such and any copies should be destroyed; a press release is planned for later in October and Patrick will ensure that we get copies; b) no

	information from Patrick on this point; c) AU was involved as a funder in an initiative in Three Hills to open a "Virtual Learning and Business Centre", or VLBC development
15 October	Serita selected to be the primary AU Advisor for LCP inquirers about courses and programs
18 October	1st presentation of the project, at ADETA conference, Edmonton "Audiences, Content, and Strategies for Distance Programming in Remote Alberta Communities"
22 October	Allan Markin report sent to Lisa by Lois
23 October	Literature Review description and sample sent to Lisa by Pat
23 October	Nancy sent current collection of 39 annotated reports to Pat
24 October	Pat and Nancy considering submitting a response to a call for papers for a conference hosted by St. Francis Xavier University entitled "Regional Studies and the Rural-Urban Dynamic: An Interdisciplinary Perspective" to be held in Antigonish, June 26 – 29, 2008. A panel presentation is being considered.
24 – 26 October	Nancy visited Fort Chipewyan and conducted 4 Keyano College student focus group discussions; 1 interview with the Campus Director (to be followed up with a 2nd interview; 5 interviews with instructors; and 1 interview with the Skills Centre Aide. Plans are underway for telephone interviews with 1 more instructor and at least 1 community leader.
30 October	Launch #4 at Beaver River Lodge, attended by Lois, Theresa, Lee Weissling, Nancy and Pat
31 October	Discovery made that the Lois Shaw business cards carry the wrong phone number, 780-917-7087 rather than 780-914-7087
8 November	Meeting #6, present: Lois, Rahim, Lisa, Tim, Pat, Kinshuk, Nancy. Teresa Keil took notes
17 November	Allan Markin thank you ad placed in Edmonton Journal and Calgary Herald
19 November	Allan Markin thank you ad placed in Town and Country
19 November	November report for Mr. Markin submitted.
20 November	Allan Markin thank you ad placed in Advocate
7 December	Field tested the inquiry follow-up questions – 5 CNRL employees who submitted inquiries
7 December	Lois contacted new camp manager, Mike Murphy, to explain the LCP and to request support for: 1) LCP bulletin boards outside the dining hall in camps, 2) information sessions held in camps, 3) workshops on topics that have identified by camp residents, 4) creation of a computer room for workers who want to take online courses, but who haven't a personal computer
13 December	Meeting #7 in Edmonton, 10 am – 12:30 pm. In attendance: Tim, Lisa, Lois, Rahim, Nancy, Theresa; by telephone: Pat and Kinshuk.
17 December	Formal memo received from Janice Green granting Ethics approval of our research. We are required to submit an interim progress report at the end of January, 2009
18 December	Dates established for AU President's visit to Horizon site: February 5 & 6, 2008, later revised to February 11, 12, 13th, 2008
19 December	LCP has presence on the main AU website homepage and a new, abbreviated website address: http://www.athabascau.ca/lc

20 December	First CLP tracked registrant – Theresa determined that student who earlier made an inquiry during the Camp launches is now registered in Admin 233.
2008	
3 January	Scheduled January 10 meeting cancelled
4 January	RA2 project position requested and job description submitted
16 January	Meeting of research and mobile learning teams, Edmonton
24 January	Meeting of LCP team with President Pannekoek, Edmonton
18 January	Draft *Interim Report 1* released
4 February	*Interim Report 1* released

Discussion of selected chronology activities

Meeting Summaries

Seven project team meetings have taken place to date, all at Athabasca University's Edmonton Learning Centre (ELC). The meetings were attended by project team members either in person or by teleconference.

Key discussion points and decisions made in the various meetings are described below.

Meeting #1, May 3, 2007: AU President, Frits Pannekoek, and Lori Van Rooijen, Vice President, Advancement, provided project background information and information about the donor.

Meeting #2 – June 6, 2007: Articulation of roles and responsibilities of team members; presentation of project organizational chart, official project start date established as June 1, 2007.

Decisions made:

1. regular (initially, weekly) reports to be provided to the CNQ donor;

2. an intranet and internet site to be developed for the project;

3. identify project student registrations at point of registration, so they can be tracked for research;

4. develop a LCP course/program catalogue, showing programs, courses, and modules available, and delivery model (see Figure 1, and Attachments 1 and 7);

5. develop and maintain Gantt chart for project activities and timelines;

6. develop an information sheet about mobile learning, for potential students and CNQ management;

7. plan a formal launch of the project at Horizon site for autumn 2007;

8. establish a project office at the Horizon site.

Meeting #3 – June 22, 2007: Meeting with CNQ contact Michael Baddeley produced important information about the Horizon site operations and employees. (*Occasional Report 2* contains a summary of this information.)

Meeting #4 – July 5, 2007: Clarification of respective roles of the operational and research sides of the project; discussion about the selection of the four rural and remote communities (no decision made); necessity of an LCP course/program catalogue emphasized; decision made to develop a three-year budget plan; decision made to create LCP banner for use at launches and other project events; discussion held about inviting Allan Markin to be guest speaker at the Fall launch.

Meeting #5 – September 11, 2007: Team review and discussion of draft website; agreement that reports to CNQ will in future be circulated to the group for review prior to sending, and will be monthly reports rather than weekly; decision that Karen Stauffer will attend any launch(es) to demonstrate PDAs; notice that Nancy and Pat will make a presentation at the Alberta Distance Education and Training Association (ADETA) conference in Edmonton, in October; suggestion that project team meetings could be held virtually; decision that a slate of monthly meeting dates will be circulated.

Meeting #6 – November 8, 2007: Notice that four occasional reports have been completed to date; report that inquiries at the launches and inquires resulting from the launch are being tracked, and the responses to inquiries are being evaluated; confirmation that a first Interim Report (this document) will be made available by researchers in early 2008; clarification of and caution about the term "needs analysis": in the context of the LCP, and especially if the programming other post-secondary institutions is referenced, the term means to assess the learning preferences of and additional programming opportunities in selected communities (the term does *not*

suggest that the present efforts of other institutions are "not meeting the need"); report that researchers are working on a baseline study of and paper on learning activities, outcomes, and opportunities in the selected communities; decision that the LCP will include an online mentoring component; selected communities for LCP activity identified (in addition to Wood Buffalo region communities already included): #1 - Three Hills, #2 - Cold Lake, #3 - Wabasca, #4 - Fort St. John, B.C.

Meeting #7 – December 13, 2007: Report that Lisa and Lois will make a presentation to the Executive Group in January 2008; project priority identified as learning opportunities assessments for target communities; note that an intern from the Collaborations department will be available to assist with needs/opportunities assessment; decision to shorten the LCP website address to http://www.athabascau.ca/lc/; note that a submission has been made to Lori to hire a consultant to develop promotional materials; explanation of "quadrants" of learning delivery (Figure 1); revised Gantt chart presented (to be revised soon and regularly); further discussion about the nature of the course catalogue initially discussed and proposed at the 6 June 2007 meeting (no decision made).

Project Launches

While early in the project it was thought that a formal project launch would be held at the Horizon site (see notes for the meeting of 6 June 2007, above), after reviewing the hectic pace and lack of facilities at the site it was decided that a series of informal launches and information sessions, at selected camp lodges, would be a better vehicle for introducing LCP to Horizon employees. Launches were held at the McKay Lodge (26 September 2007), the Calumet Lodge (3 October), the Chelsea Lodge (2 October), the Beaver River Lodge (30 October), and the Jocelyn Creek Lodge (21 November).

Launch venues. Each lodge has a high-traffic lobby area, which proved to be useful for the LCP display. In some of the camps, there is a Tim Horton's coffee kiosk in the lobby, and many people who visited the kiosk also stopped by the LCP display to browse, take materials away, ask questions, and sometimes to request more information.

In two of the lodges, McKay and Calumet, there is a flight check-in kiosk, and people waiting in the area sometimes stopped by the LCP display. The lobbies are also the central conduit for workers entering the secured area of the lodges, where the cafeteria and rooms are located.

Promoting the launches. CNQ employees were informed about the locations and times of the launches via a site-wide email, sent by the Project Liaison Officer. People occasionally emailed in response to indicate that they would not be able to attend on that day, and inquired when the next launch might be, and at which camp. Posters were put up at the Jocelyn Lodge to announce that upcoming launch, but this was not done at any of the other lodges because approval was not obtained in time to do so.

Launch displays. At each of the launches, in addition to project staff in attendance (see below), the following promotional materials were on display:

- the stand-up floor banner depicting Athabasca University's "Stand Out" promotion;
- business cards, customized to the Learning Communities Project, featuring the learning communities website and email address;
- three Learning Communities banners, one hanging on the wall behind the display table, and two on the display table, like a table runner;
- Athabasca University course calendars (print);
- Blue Seal program brochures;
- MBA Program brochures;
- Canadian Virtual University information;
- mobile learning information flyer;
- black and white handouts describing the LCP;
- Keyano College *Workforce Development* calendar.

The launch displays were staffed by a variety of Athabasca University personnel, including the Project Liaison Officer; Project Researchers; Project Program Analyst (Mobile Learning); the Corporate and International Relations Manager, Centre for

Innovative Management (MBA Program); and an Administrative Assistant, Collaborations, Learning Services.

Launch data-gathering and findings. At each of the launches, information was recorded regarding questions, requests for follow-up information, as well as how Athabasca University personnel responded to the inquiries and requests. (Attachment 5 shows the information collection form.)

Peoples' questions were wide-ranging. Some of the questions related to the Learning Communities Project, such as "What is this project about?"; some of the questions related to Athabasca University, such as "What programs does this university offer?"; some of the questions related to specific programs or courses, such as "Does Athabasca University offer a project management program?"; and some of the questions related to distance education as a delivery method, such as "What do I need in order to engage in distance education?"

Some people simply made comments about continuing their education, expressing interest or non-interest. Some visitors to the displays suggested courses that might be of interest to lodge residents, such as fitness, language, and music.

Emails were received at asklc@athabascau.ca after the launches, regarding specific course information. (See Attachment 1 for a detailed description of the email inquiries.)

Launch collaborations. At each of the project launches, the following efforts were made to assure the project was perceived as collaborative.

1. The Project Officer, who was responsible for organizing the launches, worked closely with lodge managers to establish dates for the launches, to make display tables available, and to obtain meal vouchers for Athabasca University personnel. She worked with on-site Garda Security to obtain security clearance for the Athabasca University staffing personnel.

2. At the McKay Lodge, which houses mostly trades people, several people expressed an interest in technical or trades courses. These people were referred to Keyano College's *Workforce Development* course list.

Later, it was learned that Keyano College intended to survey CNQ workers during the dates of the Calumet and Chelsea launches, so Keyano College was invited to attend those LCP launches to distribute their survey, and to talk with people about the College's technical and trades offerings. At these launches, the Research Facilitator asked the Keyano College representatives if she might obtain a copy of the survey findings, and the representatives thought that this would be agreeable to them. (To date, despite several follow-up emails to those representatives, the Research Facilitator has not received this potentially useful information.)

Awareness raising displays in the lodges continue: for example, a launch is planned for the Poplar Point, and a noon-hour MBA program presentation will occur in February 2008, at the McKay Lodge.

Because of the mobile nature of the CNQ workforce, LCP awareness raising displays are maintained at all of the lodges.

Mobile learning

The mobile learning (m-Learning) component of the Learning Communities Project aims to deliver learning opportunities to mobile workers anywhere, anytime, and on a variety of mobile devices. In realizing this goal, mobile learning researchers are creating the infrastructure functionality needed to deliver learning opportunities in this mode, creating learning environments that are suitable to individual learner styles and modes, and developing collaboration techniques with other digital learners. This section of the report was provided by the mobile learning research team.

Initial mobile learning research proposal

The initial research proposal is depicted in figure 1.

[WiFi]
- Content
- Offline
- Pre-fetch
- Asynchronous discussions

Content customization approaches:
- Standard protocol based approach
- Adaptive mechanism
- One encyclopedia per student

Athabasca University
Digital Reading Room

Internet [broadband]
- Content sync
- User profile sync
- Authentication

Local Server
- Content
- Synchronous interaction archive
- Asynchronous discussion
- Learner profiles
- Pre-sync content [*Stereotyping learner model*]
→ FAQs
← Questions to instructors
→ Individual answers from instructors
→ New FAQs
   - Async discussion monitoring

MyAU
moodle

M-device
Bluetooth/802.1 1b,g/GPRS
Java/Flash/Web
Native OS SDK

- Transformation style-sheets
- FAQ creation-distribution mechanism
- Individual query mechanism
- Content creation and update

Multimedia inputs
- Text
- Digital ink
- Audio
- Camera shots

Ad-hoc Groupnet [WiFi]
Synchronous discussion archive

Bluetooth   Bluetooth
Bluetooth

Groupnet:
Interaction archive transfer component
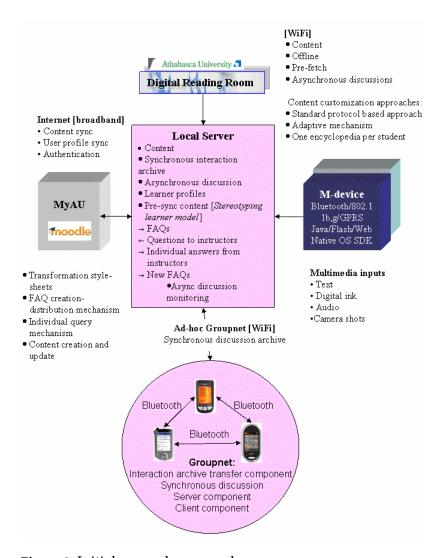Synchronous discussion
Server component
Client component

Figure 2: Initial research proposal

The Mobile Learning (m-Learning) research proposal takes advantage of already existing Athabasca University online delivery mechanisms, and aims to extend them through various value-added services so that learning opportunities can be provided on various mobile delivery platforms. Flexibility and interaction are the key components of the proposed infrastructure; content adaptivity for individual learners will ensure that effective learning occurs.

The work started with existing previous attempts to convert courses for mobile learning, beginning in 2007. This work provided the development team with good understanding of the issues as they progressed the research further.

Since Athabasca University uses Moodle as its main Learning Management System (LMS), Moodle is used as the base technology in the project. A component-based approach is used, similar to Moodle, which means modules for mobile learning will be plugged in as and when they become available, and are needed by students. This approach allows for quick availability of the overall system, without having to wait for the availability of all modules. The approach is also generic, not specific to a particular course or subject matter.

The project is based on a multi-agent based environment, where the communication among various components/modules is done by various agents. This keeps modules independent of each other, and allows for a plug-and-play approach to module assembly. Various mobile learning components (the learner model, the location awareness service, the context-awareness service, the social networking mechanism, etc.) communicate with each other using agents. In terms of providing adaptivity, the environment uses the performance-based learner model that is already available within Moodle, and supplements it with a learning style-based learner model. The project uses the security and privacy elements already available in Moodle.

The baseline for client technology is low enough so that most of the PDA-level technology (and certainly anything over it, such as laptops, desktops, etc.) will work with the environment.

Mobile learning personnel

One programmer started on 1 October 2007, for programming tasks in the mobile learning component of the project. In addition, various faculty members of the School of Computing and Information Systems agreed to take part in the research, in addition to their regular academic workload. Karen Stauffer, of the School of Computing and Information Systems, has agreed to be the technology facilitator for the mobile learning component of the project. Various international researchers are also involved in parts of the project, effectively providing knowledge transfer from Canada to the world:

- Austria: Ms. Sabine Graf visited for two weeks, and remains involved in research and design of the learner modeling.

- New Zealand: Ms. Kathryn MacCallum visited for 13 weeks, and is involved in designing a multiple input mechanism for mobile devices.

- Prof. Nian-Shing Chen visited for two weeks to provide research collaboration on a GroupNet model for synchronous discussions.

- Norway: Mr. Oyvind Smestad is expected to visit in early 2008, for collaboration on value-added services such as FAQs, study groups, and Q&A service.

Academic dissemination of mobile learning findings

Based on the research activities of the mobile learning group, a research paper has been submitted and accepted:

> Graf S., MacCallum K., Liu T.-C., Chang M., Wen D., Tan Q., Dron J., Lin F., Chen N.-S., McGreal R. & Kinshuk (2008). An infrastructure for developing pervasive learning environments. Fourth IEEE International Workshop on PervasivE Learning (PerEL 2008), March 17 - 21, Hong Kong.

In addition, presentations on the research of mobile learning group have been given to several academic communities:

1. *Adaptation in Mobile Learning* (21 December 2007), delivered by Kinshuk, Vienna University of Technology, Austria.

2. *Widening access through blended synchronous and mobile learning* (5 October 2007), delivered by Kinshuk, National University of Tainan, Taiwan.

3. *Adaptivity approaches in multi-platform learning environments* (3 October 2007), delivered by Kinshuk, National Cheng-Kung University, Tainan, Taiwan.

4. *Enhancing learning experience through mobile learning* (2 October 2007), delivered by Kinshuk, National Chia-yi University, Taiwan.

5. *Blended synchronous learning in mobile learning environment* (14 – 15 July 2007), delivered by Kinshuk, Technology Enhanced Learning Conference 2007 (TELearn 2007), Jhong-Li, Taoyuan, Taiwan.

Content selection for mobile learning pilot study

Discussions took place on what subject matter should be used for pilot study using mobile environments, who the target group should be, who would use the devices, etc. The findings of the research being conducted by the project were also consulted. It was suggested that Basic English and/or English as a Second Language (ESL) might be a possible domain. In addition, Athabasca University's Library has been involved in a separate project on mobile ESL, and there is the potential to combine the results of that project with the mobile learning part of LCP. Another suggestion was to use Business topics, as there seems to be some demand for these at the CNRL site (Attachments 3 and 4).

The mobile learning team are exploring how to integrate multi-agent components in the learning environment, providing learners with a rich learning experience. This environment supports pervasive and mobile learning as well as problem-based learning. Furthermore, it aims at providing personalized and adaptive support for students.

The following criteria will be examined as part of this process:

1. Motivation of students

2. Learning style models

3. Adapting a course to a learning style

Research questions for mobile learning

The following four research questions will guide our work:

1. What are the effects on the students' learning of enabling students to use mobile devices to access the Personal Learning Environment?

2. What impact does using multimedia to interact with the Personal Learning Environment have on the quality of the solutions given to problems?

3. How did the students perceive the use of *asynchronous online discussion* in solving problems?

4. How did the students perceive the use of the *reflection log* in solving problems?

Current implementation progress in the mobile learning project

1. A programmer was hired as of 1 October 2007.

2. A test Moodle server has been installed and configured, along with various required modules.

3. Research on J2ME (Java-based technology for mobile environments) is under way.

4. A small ad-hoc synchronous discussion prototype for PDA was developed using Wi-Fi technology by our Taiwanese collaborators and we are now looking into conversion of technology to use Bluetooth technology. This will allow us to have ad-hoc synchronous discussions using Bluetooth, while maintaining contact with server using Wi-Fi.

5. We are also trying to obtain the source code of Digital Reading Room (DRR) technology, so that an appropriate Application Programming Interface (API) may be developed to interact with DRR in order to obtain content.

6. We aim to implement first three modules in the following priority: Multi-Agent Architecture based integration, Location-based Service, and Q&A Service.

Summary of project findings to 11 January 2008

The project, of which this is the first substantial report of progress. is planned to continue until early 2010. The intent of this report is to document activity to date, report

findings (even though preliminary and tentative at this time), and, wherever possible, to highlight findings or trends that suggest areas where changes in the project appear to be warranted. Because this is an interim report, and the emphasis is emphatically on formative objectives, the researchers provide their interpretations, impressions, and suggestions, based on the data and on their observations.

Findings

The major findings of the project's evaluative and formative research to date are listed and discussed below.

1. The *catalogue*, a list of modules or courses chosen because they are flexible in time and place of learning (Quadrant 4, Figure 1), and adult-appropriate, remains under construction, and is still incomplete. As a result, the core content offered by the project, and how the LCP's content differs from that offer by other institutions, may not be not clear to potential students (Attachments 6, 7).

2. Because genuine distance education programming has been relatively rare prior to the LCP in the project's primary locations, adults in the communities and worksites in the regions probably have not had direct experience with DE, do not know clearly what the term refers to, and may be suspicious about its relevance to them, especially what it takes to be a successful distance learner.

3. To date, registrations due to LCP activities have been low (Attachment 3). To create interest and promote enrolments, the project should focus on courses that research has shown are of potential interest to employees and residents (Attachment 4):

   · Business administration, undergraduate and graduate level, including *project management* courses (Red Seal eligible);

   · Trades and technician training, and Blue Seal exam preparation;

- Health and safety courses, modules, including hands-on training sessions;
- Technology-related training (e.g., *Microsoft Office*, Auto cad);
- Language training, including ESL.

4. Despite its importance to the project, a reliable method of tracking registrations resulting from project activity, at Athabasca University or any other participating institution, has not yet been developed.

5. The mobile learning component of the project has identified potential students who might benefit from the support mobile devices can provide, and subject matter that can readily be delivered using these technologies.

Conclusions and implications

1. <u>Course catalogue:</u> The *course catalogue*, as used in this research, is illustrated by the contents of Attachment 1 (rationale provided in Attachment 7). It is a list of education and training content, showing potential students these aspects about courses shown:

    - Name of offering post-secondary institution;
    - Topic or program area;
    - Courses or module name;
    - Course length;
    - "Quadrant," or learning format, from full face-to-face to genuine *anytime, anywhere* distance education format (illustrated in Figure 1);
    - Credential to which the course applies.

    The purpose of the catalogue is two-fold: 1) to document the courses that have been identified and reviewed a part of the project, and judged to be appropriate for the project because they can be flexibly delivered (Quadrant 2, 3, or, ideally, 4, Figure 1); and, 2) to inform potential students of the content that is available through the project, *and the form in which the content*

can be accessed. The *access* part of the catalogue tells the potential student the amount of choice and flexibility they will experience when they enroll. As shown in Figure 1, *Quadrant 4* offerings are the core of the project, as, in true distance education format, they are accessible to students anyplace and anytime.

   The fact that potential students have heavy work schedules (often including overtime), almost half are from outside of Alberta (with long commutes), and most do not reside in the area (requiring shorter, but regular, commutes), short, module-length offerings, as alternatives to courses, should also be available. Modules that can be completed in 5 to 10 hours, and that can be combined to constitute courses, might be more attractive than 150-hour courses.

2. Students who do not know what "distance learning" is need to have the advantages of this form of learning explained and demonstrated to them. The project should consider using carefully designed pilot and demonstration projects to introduce distance delivery to those who are unfamiliar with this style of learning. Pilot projects require explaining in detail what distance education has to offer, and how it works, from the student's point of view; identifying opportunities and audiences for appropriate programming in distance format; designing relevant initial offerings; adjusting instructional and support elements as required; and responding promptly to any problems or suggestions that arise. Those familiar with distance education know that it is not for everyone; successful learning at a distance requires higher levels of learner autonomy, self-direction, and determination than face-to-face learning usually does. The LCP should identify potential students possessing, or capable of acquiring, the required characteristics and skills for distance learning, and then offer them access to appropriate programming, if necessary on a trial basis.

It would be paternalistic to conclude that residents of remote regions of Alberta, because they have relatively less experience in formal learning, are sometimes technologically challenged, and express most interest in non-academic subjects like trades and technologies are somehow less eligible for or worthy of the opportunity to learn under "distance" conditions, which provide – and require – greater learner choice and responsibility. LCP offers the opportunity to individuals who have not had it before to learn on their own terms, adjusting their learning to their time and energies, rather than the reverse.

3. The catalogue should be built around training that is of definite interest and relevance to potential students. In addition to the business and academic areas mentioned above, pre-employment, trades, and technological training should be considered. Some of this type of training might be accomplished by use of procedural trainers or simulators, which have been shown to be effective in training a range of procedures, for surgeons, pilots, negotiators, nuclear power plant operators, drivers, emergency personnel, and miners ("Getting serious," 2007).

Numerous course offerings are already available in the project communities, through various Alberta post-secondary educational institutions. Most of these offerings, however, are not Quadrant 4 (Figure 1) – that is, they require at some point either *same time* or *same place* attendance by students. It is because genuine Quadrant 4 programming (*anyplace, anytime*) is relatively rare that this project is focused on providing it. Quadrant 4 programs provide maximum flexibility to the employed, those with families and other responsibilities, and students who simply prefer highly flexible learning conditions. The logic for the LCP is that non-Quadrant 4 programs are already ubiquitous, and numerous institutions not specializing in distance education are already available and anxious to provide them in Alberta's remote regions and workplaces. There is no need

for LCP to promote anything other than Quadrant 4 programming (although, as shown in Attachment 1, the *Catalogue* lists, and categorizes by type of delivery, all available courses). There is every reason that Athabasca University should, for the potential student audience identified for LCP, attempt to demonstrate the advantages of distance education, because DE is designed for adults with constraints on their time and energy. It is a basic assumption of this research that programming which does not provide maximum choice to students is *ipso facto* likely to be less appropriate for the busy people who are the project's target participants. Without a listing of a variety of Quadrant 4 courses, the project cannot advertise itself as offering programming different from what is already available in the region. The course catalogue should consist of programs, courses, and modules that might be relevant and accessible by its target audience. The recommendation of LCP that a course be considered should indicate to potential students that the course has been reviewed, that it is legitimate, robust, and flexible, and that someone who might not be able to take such a course in face-to-face (or in non-Quadrant 4) form might consider taking it through the LCP, because LCP-promoted courses assume that face-to-face, group-paced, instructor-led learning does not suit many adults.

Given its importance for the credibility and success of the project (reflected in registrations), it is recommended that a catalogue of relevant distance education courses, available for immediate delivery, kept current and augmented throughout the project whenever new offerings are identified, be developed by the LCP.

4. Because no reliable method of tracking registrations has been implemented, either within Athabasca University or with its potential collaborators in the Alberta post-secondary system, determining who has registered because of the project is presently impossible. Added to this the known delay in the effect of promotions and information about learning opportunities (students

typically think carefully, and sometimes at length, about such a momentous decision before acting on it), the researchers predict that, unless this situation is addressed, the eventual impact of the project will be underestimated, perhaps seriously.

5. The mobile learning group plans to offer mobile devices initially to existing student volunteers in business and basic English courses. The use of mobile devices for purposes of interaction in this way is consistent with theories about the importance of dialogue and structure in reducing students' perceptions of isolation in distance learning (Moore, 1991), and with the types of interaction that are believed to support and facilitate online learning (Moore, 1989). These planned implementations of mobile devices also draw on the fact that, in 2006-2007, Athabasca University enrolled over one hundred students in School of Business courses, and sixteen students in basic English courses (English 155 and English 255), in the Wood Buffalo - Fort McMurray area, suggesting there is already an potential audience for this research (Rick Powell, personal communication, 17 January 2008).

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ATTACHMENT 1: Project course catalogue (draft in process)

Table 2: Course catalogue elements (to 31 December 2007; ongoing)

Institution/locations	Topic	Courses	Course Length	Quadrant	Credential
Northern Lakes College					
Fort McMurray	**Leadership Skills**	Team Goals	2 days	1	No
	Supervisor Skills	Communication	2 days	1	No
		Effective supervision	2 days	1	No
		Intervention	2 days	1	No
		Leadership for success	2 days	1	No
		Performance mgmt	2 days	1	No
		Resolving conflict	2 days	1	No
		Staying positive	2 days	1	No
		Working together	2 days	1	No
Fort McMurray	**Admin Assistant**	Business Writing	2 days	1	No
		Customer Service	2 days	1	No
Wabasca	**Safety**	H2S Alive	1 day	1	Certificate
		Standard First Aid	1 day	1	Certificate
		TDG	Half day	1	Certificate
		WHMIS	Half day	1	Certificate
Wabasca	**Academic Upgrading**	Adult Basic Education	1 year	1, 3	Equivalency Gr 9
		Adult High School	1 year	1, 3	GED
Wabasca	**Career Programs**	Business Administration	8 months	3	Transfer to Grant MacEwan Mgmt. Studies Diploma
		Aboriginal Community Liaison	On-going	3	Certificate
		Health Care Aide	5 months	1,3	Certificate Completion
		Office Administration	1 year	3, 4	Certificate
		Petroleum Employment	1 year	1	Unknown

		Power Engineering 4 class	8 months	3, 4	Certificate
		Production Field Operators	1 year	3, 4	Unknown
		Teacher Assistant	Up to 3 years	3	Certificate
		Survey Theory & Calculations	On-going	4	Certificate Completion
Wabasca	**University Studies Program**	Health Education	1 Term	1, 3	Course credit
		Drama	1 Term	1, 3	Course credit
		Psychology (4)	1 Term	1, 3	Course credit
		Sociology (2)	1 Term	1, 3	Course credit
		Political Science (2)	1 Term	1, 3	Course credit
		English (3)	1 Term	1, 3	Course credit
		Communications	1 Term	1, 3	Course credit
		Forestry	1 Term	1, 3	Course credit
		History (2)	1 Term	1, 3	Course credit
		Anthropology	1 Term	1, 3	Course credit
		Computer Applications	1 Term	1, 3	Course credit
		Geology	1 Term	1, 3	Course credit
		Movement for Children	1 Term	1, 3	Course credit
Wabasca	**Workforce Development Programs - by Industry Request** * Courses in this program approved toward Blue Seal	Aboriginal Art & Design	3 day workshops	1	No
		Advanced Leadership Skills * Essential Skills for Healthcare Leaders	2 day modules	1	Certificate
			2 day modules	1	No
		Essential Skills for Admin Asst Essential Skills for Supervisors *	2 day modules	1	Certificate
			2 day modules	1	Certificate
		Safety Skills for Supervisors *	2 day modules	1	Certificate
		Class 1/3 Driver Training	4 days	1	Certificate
Online, Everywhere	**Maintenance Mgmt Certificate Program**	MM Skills & techniques	15 hours	3	Course Credit
		Production & operation	30 hours	3	Course Credit
		HR mgmt	30 hours	3	Course Credit
		Financial mgmt	30 hours	3	Course Credit

		Predictive Maintenance	30 hours	3	Course Credit
		Computerized Maintenance	30 hours	3	Course Credit
Online, Everywhere	**ED2Go courses**	Computer Applications (21)	All courses 6 weeks	4	No
		Basic Computer Literacy (7)	All courses 6 weeks	4	No
		Graphic Design (15)	All courses 6 weeks	4	No
		Web Page Design (9)	All courses 6 weeks	4	No
		Web & Computer Program (13)	All courses 6 weeks	4	No
		PC Troubleshooting (8)	All courses 6 weeks	4	No
		Digital Photo & Video (15)	All courses 6 weeks	4	No
		The Internet (5)	All courses 6 weeks	4	No
		Web Graphics & Multimedia (8)	All courses 6 weeks	4	No
		Database Mgmt (20)	All courses 6 weeks	4	No
		Certification Prep (8)	All courses 6 weeks	4	No
		Languages (10)	All courses 6 weeks	4	No
		Entertainment Industry (7)	All courses 6 weeks	4	No
		Personal Fin & Wealth (8)	All courses 6 weeks	4	No
		Personal Enrichment (15)	All courses 6 weeks	4	No
		Art (3)	All courses 6 weeks	4	No
		Accounting (11)	All courses 6 weeks	4	No
		Start Own Business (13)	All courses 6 weeks	4	No

		Business Admin (21)	All courses 6 weeks	4	No
		Law & Legal (17)	All courses 6 weeks	4	No
		For Teaching Professionals (23)	All courses 6 weeks	4	No
		Writing & Publishing (30)	All courses 6 weeks	4	No
		Test Prep (7)	All courses 6 weeks	4	No
		Health, Nutrition, Fitness (12)	All courses 6 weeks	4	No
		Childcare & Parenting (4)	All courses 6 weeks	4	No
		Math, Philosophy & Science (3)	All courses 6 weeks	4	No
		Grant Writing/Non Profit Mgmt (9)	All courses 6 weeks	4	No
		Personal Development (24)	All courses 6 weeks	4	No
		Sales & Marketing (6)	All courses 6 weeks	4	No
		Health Care Con Ed (9)	All courses 6 weeks	4	Certificate
Northern Lights (BC) Online, Ft St John, B.C.	**Applied Business Technology Certificate Program**	Legal (10)	Varies by course	4	Course credit
		Accounting (3)	Varies by course	4	Course credit
		Computer - Intro Internet	Varies by course	4	Course credit
		Word processing	Varies by course	4	Course credit
		Spreadsheets (2)	Varies by course	4	Course credit
		Presentation software	Varies by course	4	Course credit
		Desktop publishing	Varies by course	4	Course credit
		Database	Varies by course	4	Course credit
		Outlook	Varies by course	4	Course credit
		Business math calculator	Varies by course	4	Course credit

	Business English	Varies by course	4	Course credit
	Business communication	Varies by course	4	Course credit
	Employability skills	Varies by course	4	Course credit
	Records Management	Varies by course	4	Course credit
	Administrative procedures	Varies by course	4	Course credit
	Office simulation	Varies by course	4	Course credit
	Student success	Varies by course	4	Course credit
Academic University Transfer Courses	Anthropology (3)	All 45 hours	4	Course credit
	English (5)	All 45 hours	4	Course credit
	First Nations Studies	45 hours	4	Course credit
	Intro to Humanities (2)	45 hours	4	Course credit
	Intro to Linear Algebra	60 hours	4	Course credit
	Marketing (2) Not online	Both 45 hours	1	Course credit
	Intro to Social Welfare	45 hours	4	Course credit
	Women's Studies	45 hours	4	Course credit
Adult Basic Education Diploma (Dogwood) Fundamental courses = gr. 8 Intermediate courses = gr. 10	Computers	60 hours	4	Course credit
	Computers	60 hours	4	Course credit
	Personal and Career Plan	90 hours	4	Course credit
	English (3)	Varies by course	4	Course credit
	Math	150 hours	4	Course credit
Advanced courses	Biology	120 hours	4	Course credit
	Computers	80 hours	4	Course credit
	English	120 hours	4	Course credit
	Math (3)	All 160 hours	4	Course credit
	Physics	120 hours	4	Course credit
	Social Sciences	60 hours	4	Course credit
Provincial level courses = gr. 12	Biology	120 hours	4	Course credit

		Computers	60 hours	4	Course credit
		English (2)	Varies by course	4	Course credit
		Physics	120 hours	4	Course credit
		Psychology	120 hours	4	Course credit
		Social Sciences	90 hours	4	Course credit
Classroom, Ft. St. John	**Academic University Transfer Certificate Programs**	Arts (2)	Varies by program	1	Certificate
		Elementary Education	30 weeks	1	Certificate
		Engineering	30 weeks	1	Certificate
		Humanities	30 weeks	1	Certificate
		Pre-medicine	30 weeks	1	Certificate
		Social Sciences	30 weeks	1	Certificate
		Criminology	2 years	1	Certificate
		Social Services Worker	60 weeks	1	Certificate
	Apprenticeship Programs	Automotive Service	4 X 6 week blocks	1	Journeyman Certificate
		Commercial Transport	26 weeks	1	Journeyman Certificate
		Electrician (2)	Varies by program	1	Journeyman Certificate
		Heavy Duty Technician	4 X 6 week blocks	1	Journeyman Certificate
		Heavy Duty Transport	32 weeks	1	Journeyman Certificate
		Instrument Mechanic (2)	Varies by program	1	Journeyman Certificate
	Business & Management Programs	Applied Business Technology	39 weeks	1	
		Business Management cert.	30 weeks	1	Certificate
		Business Management dipl	30 weeks	1	Diploma
		Office Management	Unknown	1	Diploma
	Education & Teaching Programs	Early Childhood Ed	10 months	1	Certificate
		Early Childhood Ed	Unknown	1	Diploma

	Education Assistant	10 months	1	Certificate
	School Age Childcare	39 weeks	1	Certificate
Industrial & Workforce Train Programs and Courses	Heavy Equipment Operator	13 weeks	1	Certificate
	Workforce courses (96)	Varies by course	1	Varies by course
Oil & Gas Programs	Land & Resource Mgmt	62 weeks	1	Diploma
	Land Administration	36 weeks	1	Diploma
	Oil & Gas Field Operation	18 weeks	1	Certificate
	Power Eng & Gas Process	12 months	1	Certificate

Quadrant	Type
1	Same Place, same time
2	Same Place, different time
3	Different Place, same time
4	Different Place, different time

ATTACHMENT 2: Press release, *Learning Communities Project,* 4 December 2007

* * *

$1.3 Million Donation Will Help AU Deliver Education to Remote Areas of Alberta

A $1.3 million donation to Athabasca University by distinguished philanthropist Allan Markin, chair of the board of Canadian Natural Resources, will fund a unique three-year pilot project to develop distance-learning systems for remote, rural and northern communities.

The Learning Communities Project will help people in remote areas, particularly those in northern Alberta work camps, to earn a university degree while they work. The goal of the project is to allow people who are working away from home for extended periods to focus on their educational activities during their off-work hours.

"I believe that education is one of the things people need to reach their full potential and to have a quality of life that they otherwise might never have," Markin said. "The need for further education has been identified in the North, and the solution came from Athabasca University. The goal is to foster career advancement and eventually transform remote communities by giving people opportunities to address personal and professional educational goals. This way, we can increase capacity and meet current and future needs in remote areas. A more educated workforce benefits workers, communities and the province."

Athabasca University president Dr. Frits Pannekoek sees the Learning Communities Project as another way for the university to fulfill its mandate of increasing educational opportunities for adult learners. "We are very appreciative of Mr. Markin's support," he said. "This very generous donation will allow us to research and then tailor our program delivery to the needs of rural and remote learners. At Athabasca University, we take education to our students, and the flexibility of our distance and online

delivery system allows people to obtain a quality post-secondary education wherever they are, whatever their schedule."

During the first stage of the pilot project, researchers will conduct a detailed assessment of learning needs in a number of communities in northern Alberta. Among other factors they will examine current education levels, participants' goals and infrastructure availability.

A major focus of the project will be researching and testing the use of mobile technology in the delivery of courses. This delivery method was recently studied by Athabasca University in partnership with the Mennonite Learning Centre in a project where cell phones were used to help immigrants learn English.

For more information, contact:

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Web Services, Advancement - Last Updated December 04, 2007, 10:15:47 MST/MDT

ATTACHMENT 3: Inquiry and request log

Table 3: Selected LCP Inquiries and Results

Date of Inquiry	Name	Nature of inquiry	AU response	Follow-up information
25 September, 2007	Bharat	Currently cost estimator. Wants to complete undergrad degree in Mechanical Engineering. Wants to know if he can do this online from AU and if not, what advice has Lois for him? Email	(25 Sept) Lois forwarded the inquiry to Vicki Busch, who advised Lois that partners of CVU are developing engineering online courses but have not yet assembled an entire program. Lois let Bharat know this information, and added that Memorial University has many engineering courses online.	(17 Dec) Nancy sent follow-up email. He replied (18 Dec) to say that his questions were answered and that he is thinking about enrolling in a course, but hasn't done so yet.
25 September, 2007	Shaalini	Wants to enroll in Human Resources and Labour Relations. Cannot attend Sept. 26 session – when is the next session? Email	(25 Sept) Lois replied that we would be having Launches at the Chelsea camp on Oct. 2 and the Calumet Camp on Oct. 3	Theresa Kiel determined that Shaalini has registered in Admin 233. (19 Dec). Nancy will follow up with her in a month's time to determine her satisfaction with the course and enrollment process.
25 September	Elizabeth	Can't attend September 26 session; can she attend at a later date? Email	(25 Sept). Lois replied that Elizabeth is welcome to attend any of the launches, and that she should watch for emails citing dates.	No follow-up needed.

26 September, 2007	Arlene	What are the options for taking an accounting program, how long is the course, fees, and are courses from her degree in Business Administration, which was take from outside Canada, transferable? At Launch #1	(10 Oct) Lois emailed her to say that she has forwarded her request to AU Advisors. (12 Oct) AU Advising emailed to suggest she look at Bachelor of Commerce program and provided web link; the Bachelor of Management program, and provided a link; and the University Certificate Accounting program and provided a link. AU Advising also directed her to a web link that describes course fees and transfer credit policies.	(17 Dec) Nancy sent follow-up email. Arlene replied (19 Dec) that she received the information that she requested, and that she is likely going to enroll in a course, but is concerned about finding the time to take a course.
26 September, 2006	Marty	Is there a Safety Certification program available anywhere? At Launch #1	(11 Oct) Lois telephoned and left a message regarding his inquiry. Gave him CVU website address (although he may not have computer access), a phone number for AU Advising and her phone number.	(17 Dec) Nancy telephoned him, took his email address, and sent him a link to Keyano's Safety Certificate program. She also sent him a link to BCIT, which offers the program by distance education.
25 October, 2007	John	What AU basic Microsoft office courses are available? Also interested	(25 Oct) Lois emailed him to say she had passed along his inquiry to AU	(7 December) Nancy sent follow-up. He replied (7 Dec) to say that he

| | | in Math upgrading so that he may be able to finish his 3rd class steam ticket. I live in the community of Fort McMurray.

By email | Advising, and also suggested he check out e-campus and look at Norquest College offerings for Math or Pre-apprenticeship math. AU Advising emailed John (Nov 5) and suggested that Math 100 might suit his needs and provided him with a link to the course details. AU Advising also recommended CMIS 245 that addressed his question about basic Microsoft Office courses. | received the information that he wanted, but wanted information about courses related to gas plant operations. Nancy replied that AU does not offer these courses, but provided him with a link to Northern Lakes College, which offers such courses via distance education. |
| 15 November, 2007 | Dena | Where is the university located?

By email | (15 Nov) Lois replied that the university is located at the Horizon site in the Skills Development Centre... She provided Dena with her cell phone number and suggested that they could meet for coffee when Lois is next up on site. | No follow-up required |

27 November, 2007	Moraima	How can I initiate the process for registering in AU courses such as ENGL 155, ENG 189, ENG 255 By email	(27 Nov) Lois emailed her to say that she would pass along her inquiry to AU Advising. AU Advising responded to her inquiry on 29 Nov., and outlined the registration process.	(7 December) Nancy sent follow-up email to determine satisfaction. Moraima responded (10 Dec) to say that all her questions had been well answered and that she has no more questions at this time.
10 January, 2008	Bob	What scholarships or financial support might be available to me to help with the cost of the MBA program?	(10 Jan) Nancy sent his question to Lee Weissling and asked Pat who else, at AU, might have some information for Bob. Lee replied (10 Jan) to Nancy with information, which she then supplied to Bob. (See inquiry email box for details). Bob has agreed to contact Nancy if he enrolls in a program or course as a result of this contact with the LCP.	No follow-up required

ATTACHMENT 4: Course and program inquiries

Table 4: Course & program inquiries, horizon site launches and employee inquiries

Program/Course type	Number inquiries
Business Admin/business type	20
Blue Seal	13
Health & Safety	13
Project Management	9
Microsoft Offices courses	6
Technical trades training	4
Engineering	4
MBA	3
Spanish	3
Foreign languages	3
Basic skills	3
APEGGA exam prep	3
Social sciences	3
Auto cad	2
Human resources	2
ESL	2
Computer science	2
PMAC	1
Emergency management	1
Technical writing	1
Waste and Water treatment	1

ATTACHMENT 5: Information collection form, project launches

Information Collection Form,
Learning Communities Project

Location/date:_____

1. Inquiry:

2. Follow-up information requested by (name and contact info):

3. Response/information already provided:

   ❑ Referred to CVU
   ❑ Referred to another institution
   ❑ Referred to AU website/catalogue
   ❑ Referred to: _____
   ❑ Other information provided:

   ❑ Notes, comments

ATTACHMENT 6: Suggested design and delivery principles

DESIGN AND DELIVERY, CNRL PROJECT

Patrick J. Fahy

May 24, 2006

BACKGROUND

The following are proposals for addressing design and delivery issues in the CNRL project. The key assumption is that the CNRL project must be educationally rigorous, while being innovative and adaptive to the needs and expectations of various participants and stakeholders.

DESIGN

Adult learning principles

Attracting students who are likely to succeed in distance studies is an immediate challenge. Some fundamental assumptions might drive promotion, advisement, and selection activities in this project:

1. A primary goal of this program, as of all Athabasca University's programs, is to enhance self-direction in learners, while they achieve academic goals through course completion. While career and work advantages will accrue, the central goal is to help adult learners become more independent and self-directed.

2. It is recognized that self-direction is situational – in varying situations, individuals differ in the amount of self-direction they exhibit. (That's why capable people may have others do their taxes and change their oil.)

3. We also believe that, while self-direction is advantageous, *there is nothing inherently wrong with dependent learning*. Students who are and remain relatively dependent for whatever reasons will still be served by the project.

4. Self-direction can be learned (as can dependency and helplessness). We do not expect students to be proficient self-directed learners from the start, or know what to expect from distance learning. Mentoring and facilitation will provide support to those unfamiliar with this mode of learning.

5. We realize that self-directed learning requires skills not all learners spontaneously acquire, and so will try to help students acquire these as part of the learning experience.

Accepting the above principles, others follow:

· In attempting to match learning experiences with the learners' stages of self-direction, and to enhance growth in independence, students may be grouped into cohorts, to make available the advantages of a supportive peer-based social environment.

· Collaborative learning opportunities will be included, as feasible and desirable, so provide a social learning experience.

· Instructors will try to become motivators, guides, and facilitators, more than directors of learning. (The learning experience, including tutor behaviour, should reduce learner dependency, and increase intrinsic motivation, including goal-setting, subject-matter selection, and identification of evaluation opportunities.)

· The learner-centred distance education model used here requires the teacher to augment prepared study materials by providing explanations, references, and reinforcements for the student. Independent study stresses learning, rather than teaching, on the principle that learning is based on what students do, not what teachers do. The institution's function, and the task of its instructional personnel, is to facilitate and enhance that process--despite the distance--to achieve optimum learning outcomes.

· Various technologies will be employed to support interaction and communication.

Online tutors needs special skills and attributes. Research has shown that the most valued characteristics in instructors, as seen by students, are interpersonal and communication skills, such as empathy, understanding, approachability, and accessibility. Work skills such as promptness in responding to queries and in

returning assignments, and good organizational skills, were also highly valued, as was enthusiasm for the subject. The characteristics of lecturers which annoyed students most were being disorganized, and providing slow or poor feedback.

Learners' needs and preferences (sometimes called "learning styles") also enter into the design process. The fact that the same teaching produces different learning outcomes indicates that the process of learning differs in individuals. Failure to adapt to learners' needs and preferences can result in a serious mismatch between provisions and expectations, resulting in lost learning opportunities, or, in worst cases, drop-out or non-completion.

The model also recognizes that many students may not be fully capable of self-direction, and cannot adapt readily to a totally andragogical system. At one time, adult educators maintained that adults could and should be self-sufficient; experience taught that this was a dangerous and inaccurate assumption. It is a goal of the model to increase self-direction and independence, but it is assumed that these qualities are only rarely fully present in participants at the outset of programs which assume them, especially if learners are older, inexperienced, from another culture, possess a low-level of previous educational attainment, or lack confidence.

In detail, and in summary, some of the assumptions about independent learners (andragogy) as different dependent (pedagogy), applicable in these cases, include:

Assumption	Andragogy	Pedagogy
Concept of the learner:	Adults are self-directed	Dependent learners require direction
Role of learner's experience:	A rich source for learning for self and others	To be enhanced and built upon, more than used as a resource
Readiness to learn:	Develops from life's tasks and problems	More or less uniform, by age and curriculum level
Orientation to learning:	Task or problem-centred (pragmatic)	Subject-centred
Motivation to learn:	Internal, intrinsic	External, extrinsic

(adapted from Knowles, 1978; Wright, 1991)

DELIVERY

Design-based delivery

Instructors' tasks and roles change in the distance learning model; chief tasks of the instructor-as-mentor-and-facilitator include:

- Diagnosing the student's readiness to learn;
- Monitoring student progress toward objectives sought;
- Recognizing and discovering a student's learning difficulties;
- Stimulating and challenging students to further efforts;
- Evaluating the quality of a student's learning; and,
- Assigning a grade or an assessment to learning outcomes.

Courses are designed and delivered with proper instructional and communications supports and resources (including effective instructional guides, appropriate printed texts, adequate communications, and strong support services), so that barriers are reduced, likelihood of failure is reduced, independence and self-direction increase, and, overall, learning is successful and enjoyable.

Adult educators (instructors) and on-site mentors who subscribe to the aim of increasing learners' self-direction, ease participants into self-directed modes of study, rather than presuming that this capability already exists. Students may have only vague notions of what self-directed study means, and of their own capacity for working within such a format; initial focus is on how to learn in the distance milieu. Learners may be at varying stages of cognitive and psychological readiness for self-directed learning; urging those who are not ready to become more independent may be as an impediment rather than a stimulus to their learning.

Specific skills and supports of the instructors or tutors who are also mentors might include: methods to establish and maintain effective communication between teacher and students and increasing interaction among students; strategies for encouraging individual and group motivation to learn at a distance; planning and managing organizational details, and developing an awareness of the time demands of distance delivered courses; techniques for adding audio or visual components to print-based courses; accessing information from various sources, e.g., external data bases and library resource systems; and training in desk-top publishing, spreadsheets, data bases, and word processing.

In the design model proposed here, needs analysis is primary. The literature suggests that many training programs fail to satisfy all involved because they are based on personal wants rather than identified needs. In this model, needs analysis is conducted, including use of the observations and insights of the participants and sponsors. The model tries to uncover various training "needs," including those not directly related to advancement in present employment.

Another assumption of the delivery model is the importance of interaction and communication. It is assumed that students will expect delivery to provide information (teaching), advice and suggestions (tutoring), counseling (beyond course questions), coaching (hints about learning), assessment (feedback on progress), and advocacy (helping with any problems with the system). It is also assumed that most students will prefer collaboration and cooperation to competition.

Self-pacing, which has for some time been shown to result in learning rate increases, will also be a part of the model.

Learner support

In this model, learner support is provided at crucial points in the learning experience: pre-enrolment (recruitment, admissions, orientation, assessment of readiness and expectations, pre-academic courses); as part of tutorial services (tutorial centres, telephone tutoring, pacing systems, CMC); and in the form of counseling and advising (personal, career, academic).

Cohort learning, noted earlier, is offered as a way of supplementing the support services the University can offer itself. Cohort-based programming provides an instructional delivery system incorporating more active, cooperative, and collaborative learning strategies than more traditional methodologies. The structure of a group of students who enter and complete the program through a series of common learning experiences over a period of time respects the self-directed aspect of the adult learner, while offering a context in which social support can nurture learning. Instruction provided in this manner builds trust, empowerment, and support while movement is made toward a shared educational goal. Ideal cohorts are 5 to 15 in size, though groups of 8 to 30 have been used successfully.

In cohorts, adult learning principles are recognized and preserved:

1. Readiness to learn depends on the amount of previous learning.
2. Intrinsic motivation produces a pervasive and permanent learning.
3. Positive reinforcement is effective.
4. Material to be learned should be presented in an organized fashion.
5. Learning is enhanced by repetition.
6. Meaningful tasks and material are more fully and easily learned.
7. Active participation in learning improves retention.
8. Environmental factors affect learning, and should be considered.

Effective support in the form of advising and counseling can, in addition to reducing drop-out, increase the impact of training, and the morale and outlooks of trainees. Some of these effects are gendered: in one study, females were found to respond to advisement by completing more units; also, advisement affected both attendance and achievement of participants, when only attendance was expected to be affected.

Study centres have also been proven useful. In an Australian study, these facilities, though costly to provide, were seen as offering a valuable service in facilitating two-way contact between staff and students. Reasons students used the facility included:

- availability of tutorial assistance;
- need for continued support and interaction as students tackled more advanced subjects;
- the physical setting;
- friendly and supportive staff;
- availability of essential resources such as library materials;
- opportunities for interaction with other students;
- need for a quiet place to study away from family distractions. (pp. 3-8).

In many programs for distance learners, lack of contact with tutors is a problem, increasing feelings of isolation, and weakening learner's commitment and self-discipline. Study centres provide clarification of expectations, a personal touch, concrete assistance with questions, and interaction opportunities with others – all viewed as valuable by distance learners. Other studies have shown that distance tutors must also be comfortable and proficient with technology, which can be facilitated with a learning centre.

<u>Technology</u>

The program will use technology to link learners with tutors, resources, and each other. While various technologies will be central to the program, participants should understand and accept that online learning is not necessarily cheaper or faster than face-to-face learning; that it is not necessarily for everyone – not everyone is temperamentally suited, not everyone is computer literate; it is not organized or delivered like face-to-face courses, and adjustment have to be made for the differences; it is not a single, pure medium - on-line teaching can employ a variety of media; it is not politically identical to face-to-face teaching – peers can assist each other, and peer interaction may become essential to success (the root reason for the cohort approach).

Multimedia will be a component of instruction in the proposed model, as it provides opportunities to individualize the learning experience. Multimedia change the role of the learner and the tutor, with key role differences as follows:

Key role changes for **the teacher:**	
A shift from:	A shift to:
Always being viewed as the content expert and source of all answers.	Participating at times as one who may not know it all be wants to learn.
Being viewed as the primary source of information, which they then feed to students.	Being viewed as a support, collaborator and coach for students as they gather and evaluate information.
Always asking the questions and controlling the focus of student learning.	Actively coaching students to develop and pose their own questions and explore alternative ways of finding answers.
Directing students through preset step-by-step exercises so that all achieve similar results.	Actively encouraging individuals to use their personal knowledge and skills to create unique solutions to problems.
Key role changes for **the student:**	
A shift from:	A shift to:
Passively waiting for the teacher to give directions and information.	Actively searching for needed information and learning experiences, determining what is needed and seeking ways to attain it.
Always being in the role of the learner.	Participating at times as the expert/knowledge provider.
Always following given procedures.	Desiring to explore, discover and create unique solutions to learning problems.
Viewing the teacher as the one who has all the answers.	Viewing the teacher as a resource, model and helper who will encourage exploration and attempts to find unique solutions to problems.
(From Newby, Stepich, Lehman and Russell 2000, p. 7).	

Multimedia allow the learning system to recognize and adapt to learning differences among students, such as:

- developmental level
- intelligence
- learning style
- gender

- ethnicity, culture, language
- socio-economic status
- special needs
- motivation
- knowledge and skills.

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ATTACHMENT 7: Rationale for a project *course catalogue*

Developing a Catalogue of Potential Course and Module Offerings, Learning Communities Project

9 February 2007, 4 April 2007

Patrick J. Fahy
Centre for Distance Education

One of the basic and initial tasks of this project is to establish a *course catalogue*, containing offerings available and relevant to the project's clients.

Courses, or portions of courses (modules), of the following may comprise the initial course catalogue for this project. Courses are listed on the basis of their likely relevance, and their accessibility for students in the project. The list is subject to regular revision as new sources are identified, and as the needs and interests of the target clientele are clarified. (Some of the courses shown may require revisions to meet fully the needs and expectations of the project. Before this list is published in any form, it should be vetted with the offering Centre.)

Contacts who have provided information and advice in the assembly of this list include:
- Kinshuk
- Bob Heller
- Mike Gismondi
- Linda Chmiliar
- Veronica Baig
- David Brundage
- Janice Thiessen
- David Annand
- Tim Slaughter
- Norquest College: Norma Schneider, Dean (644-6458); Ms. Doni Miller (644-6282); Martin Schouldhouse (644-6000); Paul Holmes (644-6751)

Athabasca University

1. ADMN 100 (*Basic Business Skills*) (In final development; available fall 2007)
2. ADMN 232 (*Administrative Principles*)
3. ADMN 233 (*Writing in Organizations*)
4. ADMN 253 (*Introduction to Financial Accounting*)
5. ACCT 250 (*Accounting for Managers*)
6. COMP 200 (*Introduction to Computing and Information Systems*)
7. COMP 361 (*Systems Analysis and Design*)
8. COMP 378 (*Introduction to Database Management*)
9. PSYC 389 (*Introduction to Learning Disabilities*)
10. EDPY 200 (*Introduction to Educational Psychology*) (in development)
11. EDPY 351 (*Introduction to Exceptionality*)
12. English Language Proficiency Program (no credit)
    a. ENGL 140 (*Grammar*)
    b. ENGL 143 (*Writing for Academic Purposes*)
    c. ENGL 146 (*Reading for Academic Purposes*)
    d. ENGL 149 (*Advanced Speaking and Listening Skills*) (ESL only)
    e. ENGL 155 (*Developing Writing Skills*)
13. ENGL 177 (*English for Academic Purposes*)
14. ENGL 187 (*Writing and Speaking for Business: An ESL Approach*)
15. ENGL 255 (*Introductory Composition*)
16. Graduate programming
    16.1   Graduate Diploma in Distance Education (Technology) [GDDE(T)]
    16.2   Master of Distance Education (MDE) degree
    16.3   Master of Arts in Integrated Studies (MAIS)

Norquest College, Northern Lakes College, Keyano College, others
1. Apprenticeship Preparation, Academic Upgrading
   a. Math
   b. Science
   c. Listening, writing
   d. Safety
   e. WHMIS
2. English as a Second Language