

Web-Based Learning Needs for Adult Education Centres

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Abstract

This study recounts the experience of the Vancouver School District in planning for web-based instruction in adult education centers. Following a literature review of adult learning and web-based instruction with learners, focus groups were held to identify needs of learners, instructors, and administrators. Results identified learning needs for diverse constituent groups, strengths and limitations of web-based technology with adult students and issues dealing with web-based interactivity, accessibility, support, and collaboration and participation in decision-making. The article concludes with recommendations for future directions that might be pursued by an adult education centre within the Vancouver School Board.

Introduction

Adult education centres provide learners with opportunities to complete educational courses required for secondary school graduation. One innovation is to introduce web-based courses into the adult learning curriculum. Learners must understand how to use web-based technology, instructors must adapt to new instructional roles using a new teaching and learning media, and administrators must be knowledgeable about the use of web-based technologies to fully benefit from these new opportunities.

Providing these educational resources to learners, instructors, and administrators requires examination of the planning and delivery methods developed for adult education centres. There is, however, “far from unanimous agreement on the value and place of technology within the education system” because “the nature and magnitude of technological change pose a challenge to previous basic assumptions about planning, management and decision-making” (British Columbia Ministry of Education, 1999, p. 15). This issue becomes critical when web-based curriculum decisions are incorporated into adult school programming without consultation from learners.

This study invited learners, instructors, and administrators to identify their needs for web-based instruction as an enhancement to the existing classroom program. The program sites selected were adult learning centres in the Vancouver School Board (VSB) in the Province of British Columbia. The purpose of the study was three-fold: (1) to identify whether web-based opportunities would be used by adult learners; (2) to gather information from teachers about their roles in web-based instruction; and (3) to explore with administrators the benefits and challenges in offering web-based opportunities in adult learning centres.

Literature Review

Role of Technology

Technology is a tool that can enrich curricula, enhance teaching, strengthen links between schools and society, and bridge equity gaps for disenfranchised adult learners (Dede, 2000; Imel, 1998; Trotter, 1998). Outcomes depend on many factors, including the quality of the design and delivery of the learning environment. Gardner (2000) recommends that “before embracing any new technology, we need to declare our educational goals and demonstrate how a particular technology can help us to achieve them” (p. 34). Like other learning tools, technology is only as effective as the educational goals and practice underlying its use.

Technology is not neutral; it affects the way we learn and understand our world (Healy, 1998; Postman, 1999). New technologies in education are “changing how students acquire and use information” (Scherer, 1999, p.16), and our understanding of this phenomenon has implications for educational philosophy, including learning theory and practice. For example, attention needs to be given to the instructional strategies used in concert with web-based technologies, and this must be integrated into the learning environment. The new technologies, like any other educational resource, are then used in a social learning environment with dialogues between instructors (Bransford, Brown, & Cocking, 1999) and peers.

Technology alone will not improve the quality of education, but when integrated with learning goals, skilfully interwoven within curricula, and effectively adapted into the learning environment, it can be a powerful educational tool (Bates, 2000; Kearsley, 2000; Palloff & Pratt, 1999). Integrating technology into curriculum and instruction stimulates the development of higher-order thinking and problem-solving skills (Dede, 2000; Gardner, 2000; Imel, 1998; Kearsley, 2000), and adult collaborative learning endeavours can actively be encouraged (Bates, 2000; Palloff & Pratt, 1999; Papert, 1993).

Adult Programming and Technology

Palloff & Pratt (1999) suggest that in a web-based technology curriculum, instructors must be prepared to give up control of what is being learned and how it is learned. This requires a transition from a passive style to an active learning model giving learners the opportunity to make meaning out of a body of knowledge by working with others. Time and distance can encourage the development of new learning strategies, offer new learning approaches, and enable learners to become more independent than they might otherwise be in a traditional classroom. This mixture of curriculum design and technology affects ways in which one:

- learns about oneself and the way technology influences one's approach to web-based opportunities;
- accesses, uses, and develops an easy use of web-based technologies;
- structures and develops flexible procedures for web-based opportunities in learning environments;
- establishes adult participation with web-based learning activities;
- incorporates collaborative strategies within web-based courses; and
- evaluates web-based technologies within the learning process.

In addition, learners have opportunities to use diverse learning styles to ensure that breadth, depth, relevance, and interest are consistently experienced throughout the curriculum. Dede (2000) concludes that "parallel to exemplary practices with learning technologies in classrooms, the real power of these media comes not from automating information-transmission, but from enabling students' collaborative, guided construction of meaning" (p. 299).

Technology can enable students to become active, independent learners with access to new forms of representation and of learning. To succeed in this goal, educators need to understand the positive and negative effects of new technologies on learning environments. Technology must be an enhancement to adult learning rather than a limiting factor or underused resource for learners (Educators as Adult Learners Project Committee, 2000; Gardner, 2000; Kleiman, 2000; Teaching, Learning & Educational Technology Advisory Committee, 1999).

Management of Adult Learning

Adult learning theory is rooted in Knowles' assumption that adults are self-directed learners participating actively in their own learning (Boettcher & Conrad, 1999; Walker & Lambert, 1995). This framework promotes a learner-centred focus in which instructors are guides rather than dispensers of knowledge, and where curricula is designed as experiential education to find

meaning in what is learned (Kearsley, 2000). This theory of adult learning, called androgogy, has been extended to include the importance of autonomy and of the implicit value of learner-to-learner interaction in the classroom environment.

Palloff and Pratt (1999) outline an adult education style that highlights the importance of this learner-centred, collaborative environment by establishing a safe, respectful, and active learning community. This is key for the online learning environment. Researchers (e.g., Engler, 2000; Palloff & Pratt, 2001) also indicate that adult learners need to be taught how to manage the online learning process if they are to learn effectively through this medium. Without this, learners feel they may well feel neither confident nor competent in their ability to use this technology in an effective or efficient manner. One solution offered by Merriam (1993) suggests that adult learning is enhanced with instructor-driven guidance to enable the development of knowledge and confidence necessary for student learning. Further, research suggests that not all learners may be suited to online learning (Palloff & Pratt, 2001); in fact, some may be better suited to online learning formats, and others may prefer a face-to-face and online “blended” delivery structure.

Adult Professional Development and Technology

Education institutions wishing to create technology-rich learning environments must consider instructors’ needs (Bates, 2000; Boettcher & Conrad, 1999; Cuban, 1999; Kearsley, 2000). This includes consideration of the hardware and software requirements for web-based learning, ways of providing instructor and learner access to this technology, and the ways these methods could be best applied within the adult learning environment. For example, Ginsburg (1998) identifies the willingness of instructors to develop and adapt to learning with technology as a key component to effective uses of technology. Moffatt (2000) indicates that “the process of planning must include more than avid technology users and early adopters” (p. 75) for users to develop the self-confidence, competence, and ability to use this medium effectively in their work.

Professional development is a key in helping transform the learning environment to one in which technology plays an active role. But this must be more than an occasional workshop. A variety of *ongoing* professional development options gives instructors the flexibility to choose their preferred professional development needs in an effective and efficient manner (Educators as Adult Learners Project Committee, 2000; Teaching, Learning & Educational Technology Advisory Committee, 1999). Moffatt (2000) recommends that districts provide regular professional development opportunities for local staff needs.

Some Current Challenges

There are many challenges involved in using web-based technology in educational institutions; four of these issues are highlighted in this study. First, educators often resist technological innovation in education regardless of the technical support or professional development opportunities within their schools. This is so because technology requires changes in teaching practices—and these changes encompass in-depth curriculum design initiatives, new learning, time, pilot testing, and evaluation. Without ongoing assistance from colleagues and

administrators, instructors may be unwilling to invest the time and effort necessary for the use of web-based technologies.

Second, although research attention has focused on the effect of educational technology and student learning, increased attention must explore the relationship between technology, instructors and curriculum. Cuban (1999) asserts that:

Advocates for more information technologies in classrooms ... will have to accept as worthy the expertise and authority that teachers have accrued over the years; they will have to listen more carefully to the questions that teachers ask about an innovation, questions which differ greatly from what policy makers ask. (p. 10)

Third, inclusive decision-making about how to integrate technology into learning environments is required to share a wider range of expertise and information (Cuban, 1997, 1999; Ginsburg, 1998; Teaching, Learning & Educational Technology Advisory Committee, 1999) with learners, instructors, and administrators.

Fourth, in meeting the opportunities for enhanced learning and teaching with new technologies, administrators as educators must learn how technology can be reasonably used within educational institutions. Bates (2000) warns: "Large investment in technology-based teaching can be justified only if it leads to significant changes in the way we teach" (p.119). Palloff and Pratt (2001) suggest that technologies can contribute to the way in which schools are able to meet the emerging educational needs within society, but *ongoing* dialogue with learners and instructors will be necessary to identify how all can benefit from this experience.

Method

This study examined the issue of adult web-based education through a qualitative research perspective using a focus group approach. Morgan (1988) identifies focus groups as "useful when it comes to investigating [not only] what participants think, but ... at uncovering why participants think as they do" (p. 15). Additionally, focus groups provide rich data sources from multiple participants. A structure for the meeting is developed, pre-arrangement of meeting dates and times ensures participants and the researcher honour time commitments, and finally, transcripts of remarks are made following the meetings.

Study Participants

Learners. Focus Group 1, composed of adult learners, consisted of students who had recently joined an adult education centre grade 11 information technology class. The students had varying degrees of experience with technology and learning, ranging from inexperience through to limited experience with chat and listserv functions. No student had previous experience taking a web-based course.

Instructors. Focus Group 2 consisted of instructors employed in adult education centres. Two of the instructors had experience delivering web-based courses, and an additional three had participated in web-based education as learners. Of the five instructors included in the focus

group, two had a limited background in web-based learning, but both used e-mail and web-based pages when teaching a course through face-to-face delivery.

Administrators. Focus Group 3 consisted of administrators interested in discussing the use of web-based secondary school courses by adult students in the district. Two were principals of adult education centres, one was a principal of a distance education school, and one was a district information technology administrator.

Focus Group Interview

The researcher used a set of five semi-structured guided questions for the three focus groups. These are listed below.

1. What is the role of web-based course delivery in learning, and what is its application in adult education?
2. How can instructors develop web-based learning options for learners?
3. What are the most pressing issues that you deal with as a learner/instructor/administrator? (time constraints, professional development, student issues, instructor issues, etc.)
4. What benefits exist, if any, for learners, instructors, and administrators? How might this affect allocation of funds for learning resources?
5. What challenges would exist?

Focus group meetings were scheduled for February and March 2002 at the VSB offices. Focus groups ranged from four to eight participants, with each session lasting 75 minutes. The semi-structured interview format ensured consistency such that comparisons could be identified within and across in the data analysis phase, in preparation for the final documentation phase of the study.

Preparation for Data Analysis

All of the focus group meetings were taped and transcribed in preparation for data analysis. Participants were given the opportunity to review their comments in the transcriptions. On the basis of coding from the transcripts, recurrent issues were noted and key quotations were identified. These were examined against other transcription segments, and results emerged from the three focus groups. From these, five discussion areas were identified and recommendations were made.

Results

Learner Focus Group

All learners interviewed were without previous experience with online courses and could not compare or evaluate online courses against previous educational work. For these learners, many questions were asked about who would benefit from these web-based opportunities. Would they be for early school leavers? Would everyone have access to these courses, and would these

educational opportunities change the way courses were given? Would courses be offered inexpensively for those who might not have the financial support to pay for these services? These questions were central to this focus group discussion.

If the technology is really up-to-date and you can actually get that interaction on the computer, then [as other participants] were saying for housewives, or disabled people who can't really go out much, or people with disabilities, I guess it would be beneficial for them. But like [other participants] have said, you have to see what you can get out of these courses. (Learner Focus Group, February 2002)

Learners had questions about how online discussion groups might work, and wondered whether video conferencing during web-based courses might assist learners such as ESL students. They also acknowledged that there would be less opportunity for them to develop social skills with reduced face-to-face discussion.

If you're going into business you need to be able to get along with people, basically, it's the interpersonal skills, the social skills that you might lack. You might not develop into a strong asset. I think for adults, for students, who really want to get things done immediately, or at a certain time, I guess it would be really convenient for them ... the comfort of their own home ... but I think if you're looking at jobs and careers related to communication, you would lose a lot by doing web-based courses. (Learner Focus Group, February 2002)

Conversation arose about the type, nature, and degree of satisfaction of the interaction between online learners and instructors, and among learners.

If you are doing group work or just interacting with the instructor, there's a certain synergy that's gained that you would lose ... if you are going online you don't have that immediate or direct interaction with people. (Learner Focus Group, February 2002)

Learners were quick to comment on the potential accessibility to instructors, time savings, and reduced costs in not having to travel to classes. These opportunities could offer much more flexibility and freedom for adult learners.

In terms of bringing it into the public system, you can relate it to the Internet and the real economy ... An e-retailer will never replace a Wal-Mart, just like online learning is never going to replace the classroom. But it can be used as a resource to enhance the learning process in the classroom. (Learner Focus Group, February, 2002)

Further, one learner observed web-based opportunities would provide learners with the research skills needed if pursuing higher education programs.

Instructor Focus Group

Instructor participants felt they were "falling behind" because the Internet is now a central component in the life of many young people. They identified several qualities learners need to become effective consumers of web-based education. Students must be self-directed, motivated

to learn independently, well organized, and able to function in a group environment. Focus group instructors noted that these learning qualities are present for some learners, but are difficult challenges for others if they also struggle with language skills. Instructors believed that a move to a comprehensive web-based course offering, by reducing the focus on communicative situations for learners, might compromise the students and their educational experiences. To avoid this, instructors favoured a “blended” approach to instruction offering both technology and face-to-face delivery methods for their learners.

Instructors indicated that web-based teaching changed their roles from a text- and lecture-based delivery to a facilitative model involving project-based learning with emphasis specifically on learner-centred opportunities. Suggestions were offered that would enable instructors to help face-to-face learners with the transition to online learning.

To effectively use the web, adult education centres might have a website for course[s], especially for students who miss classes.

I'd like to see everyone [at the centre] put course outlines up on the web. I mean, to me, that's one of the simplest and one of the best applications of online learning, is simply making material available in the class [so] that if the student loses the notes they can read the notes [online]. (Instructor Focus Group, February 2002)

Instructors felt that opportunities to learn how to integrate web-based instruction are pivotal to the online experience. Without this, there will be resistance and barriers to using the new media in program delivery. Many learners need much guidance in the face-to-face environment, and a shift to a web-based environment represents a major obstacle to learning.

I was just more thinking about in class, the students need the motivation, the encouragement. They have to be put in communicative situations where they're speaking English together ... where they're reacting to each other ... where they're listening, looking at verbal cues, visual cues, and all that's taken away on the internet. I mean, we could have web cams, I suppose. (Instructor Focus Group, February 2002)

Instructors favoured a blend of face-to-face instruction with web-based components to address the need for interaction and to make a smooth transition to online learning. Also, they discussed special learning needs of English as Second Language adults. There was concern that because of language difficulties they might have difficulty accessing web-based opportunities, and that online courses would not meet ESL learner needs.

I think a big part of learning English, at least what I'm learning in my classes, is that the interaction is critical. I mean, we already have a school full of grammar experts to help them improve. But really, to make them better at grammar is not what we want to do. It's face-to-face; it's teacher-student, student-to-student contact. (Instructor Focus Group, February 2002)

Instructors also spoke about their own need for further professional development about how to use web-based opportunities in class.

We need real training rather than the introductory-level presentations prevalent at professional development days.

Everybody that's in the lab should actually take the server course, so they know what the lab can do, and what it can't do. (Instructor Focus Group, February 2002)

The adult learning centre instructor salary changes were identified as an area of re-examination. Without appropriate salary arrangements, the likelihood of change in the use, development or acceptance of new web-based opportunities remains limited.

We took a stab at some project-based learning and it was a labour of love ... we're not getting paid for that, so that's a problem.

We need to get past that if you're not in the classroom, you don't get paid. (Instructor Focus Group, February 2002)

The focus group identified strengths and limitations in the move from traditional face-to-face classes to web-based opportunities. It was clear that many were anxious to move into the educational technology arena, yet there were major challenges that serve as obstacles in moving in these new directions

Administrator Focus Group

This group recognized the importance of offering web-based courses to learners. "Putting power in the hands of learners" granted them control of learning decisions, which made possible greater flexibility and pacing of the learners' experience.

Establishing a community of learners and asking them to learn online is building a community of learners. It is good for them because it meets their time criteria and their location criteria and their pace criteria, because as adult learners we learn at different rates. We don't come out and tell you that. (Administrator Focus Group, March 2002)

As competition is increasing in the adult education field, administrators felt the potential of delivering some web-based opportunities would attract some adult learner groups, and would mean new opportunities in the future.

From people I know, talk with, read ... everyone is moving away from a strictly online environment to think—how we are going to build interactivity and make sure that we retain students. Especially adult students who vote with their feet. (Administrator Focus Group, March 2002)

The group agreed that recent directions of the provincial government will increase the demand for schools to replace classroom-based opportunities with web-based, distance education opportunities. Much needs to be done to prepare for this shift in delivery. As stakeholders within the system, they observed that until adequate funding is provided, it is difficult to plan for new

and expanding web-based opportunities. As such, they feel caught in a dilemma in which there are no winners.

Administrators desire an infusion of new professional development opportunities. However, they acknowledged that new strategies require time, money, and professional development opportunities to enable instructors to learn new ways of dealing with this technology. At the moment, it is very much a two-tier situation. Although staff members are attempting to do their own online learning, instructors also are required to accomplish learning objectives with adult learners. This is not helped by the professional development structure for instructors working in adult learning centres.

We have two professional days a year, one that is a district-wide day and one that is a centre-based day. The rest of the time we are open basically 24/7 offering classes, and there is no time when people can get together and even hold a meeting, let alone do professional development. That is a huge issue for us. (Administrator Focus Group, March 2002)

Administrators understood that responding to more with less is a challenge. Discussions in the focus group included the setting of reasonable priorities, identifying how they might collaborate together, offering some flexibility to those who are seeking change within the organization, and offering opportunities that are not dependent on financial gain for returns.

There are lots of challenges, particularly for [distance education], probably coming up or different challenges than you are going to face in the next year, but wherever there is a challenge, there is also an opportunity. Not to be a Pollyanna, but we may be able to have some opportunities that right now only seem like they are going to be problems to us. (Administrator Focus Group, March 2002)

The focus group raised issues critical to the present and future development of adult education centres with regard to information technology innovations. There was a healthy acknowledgement that change is necessary and required if adult learning centres are to respond to the expanding needs of adult learners and to provincial education guidelines.

Analysis

The three focus groups identified five areas of commonality. The remarks of learners, instructors, and administrators suggest the process of transition is emerging from five perspectives. In each case, findings from this study were reinforced by the literature reported at the outset of the study.

Web-Based Teaching and Learning

All three focus groups reported that web-based learning could be an effective tool for the teaching and learning process (Dede, 2000; Palloff & Pratt, 2001). It offers the potential to increase student motivation (Kearsley, 2000), and provides attributes for student convenience not often considered in traditional course instruction (Imel, 1998). Participants also experienced common concerns cited in the literature. These included the need for additional time and incentives for adequate development and instruction via the web, and instructor and

administrator respondents stressed the need for technical support and training as a necessity for successful online course delivery (Cuban, 2001; Educators as Adult Learners Project Committee, 2000).

Interactivity and Online Learning

Participants from the three groups indicated that those that had experience with web-based learning were positive and enthusiastic about electronic communication, including e-mail and listservs. They believed that the use of these tools had enhanced instruction and learning. Moreover, several participants also identified e-mail as a tool that offered advantages that could be utilized as enhancements to further to face-to-face, instructor-student learning interactions.

Learners and instructors who had not experienced web-based applications emphasized the need for greater instructor-student dialogue and collaborative involvement in the learning process. Care needs to be given to the unique learning needs of students as they go through the transition to online learning. There was discussion of whether interactivity in an online environment can really meet all the learning needs of, for example, ESL students. To address these diverse needs, focus group findings suggested web-based courses need to have well-designed and well-managed discussion group capacity for the interactivity desired by participants. Students must be able to use the discussion boards, and they must be able to accomplish different types of discussion activities within this interactive technology. The importance of knowing how to use the discussion board and the value of interactivity to the online environment are identified by Palloff & Pratt (1999) and Bransford et al. (1999) as critically important to the online instructional development field. As well, current publications now exist (e.g., Salmon, 2002) outlining the use of technologies to create e-activities with students.

Transitional steps were also identified by preparing web pages to offer course outlines, assignment details, and more advanced training opportunities for instructors and administrators, also noted by Cuban (1999), Bates (2000), and Kearsley (2000). Using a blended combination of web-based and face-to-face instruction, as suggested by Palloff & Pratt (2001), was identified as a way to address ESL students who may be able to benefit from features offered through both delivery styles.

Web-based Accessibility

The study demonstrated that for some participants the convenience potentially afforded by online learning is a definite advantage. Learners indicated web-based opportunities could offer access to an increased number of adult students when learners are freed from having to attend a program at a particular place or time.

All focus group discussions dealt with access issues, from concern about prohibitive costs to a dearth of professional development opportunity. Of further concern was accessibility to computers and the Internet either at educational centres or in the home environment (Bates, 2000; Cuban, 1999). Technologically based media may respond to specific individual and group learning styles and needs, but access currently compromises the effective use of this technology.

Although learners were less familiar with online courses than were instructors and administrators, all groups identified web-based opportunities as providing flexibility in course delivery and location. The potential for high student motivation when learning enhancements were provided through computers was noted by many participants and is pointed out by Palloff and Pratt (1999) and Kearsley (2000).

Instructors noted the benefits that web-based technology offers for electronic record keeping, publishing, and ease of lesson and assignment information for students. They also were quick to note their own professional development opportunities through the Internet as potential benefits accruing from this new technology. Administrators identified student benefits, with many referring to the Internet as a strong source of information, a tool for incorporating current technology into instruction, and a vehicle for meeting the needs of nontraditional students. Learners, instructors, and administrators identified the need for new kinds of professional collaboration at their respective schools, as noted by authors such as Healy (1998) and the Teaching, Learning and Educational Technology Advisory Committee (1999).

The commonality of perspectives demonstrates that instructors and administrators have similar interpretations of the qualities and characteristics related to the use of new web-based opportunities. This strong bond of agreement indicates a critical knowledge of educational technology as a teaching and learning tool and a familiarity with its emerging role in the future of education (Cuban, 2001; Gardner, 2000). Conversely, adult learners who have less exposure to the theory and practice of online learning have more questions about ways in which web-based courses could meet their needs. They underscored the value that online learning offers increased numbers of adult learners in terms of enhanced opportunities for student learning, motivation, and secondary school advancement.

Participative Decision-Making

The study indicates a need for the establishment of a clear purpose for educational technology at the district and provincial levels. These decisions need to be focused on learning processes rather than expenditures on hardware, software, technical support, and professional development. Program planning and implementation will develop with the establishment and agreement of learner needs and outcomes as other authors have suggested (e.g., Educators as Adult Learners Project Committee, 2000; Gardner, 2000).

Recommendations

The findings and recommendations from this study are based on a review of literature, documents drawn from the Vancouver adult education centres, and opinions expressed during focus group meetings. They are offered as a case study indicating how one school board is handling the implementation of web-based learning opportunities for adult learners.

Participant Interest in Online Learning

The VSB adult education centres have the capacity to adapt and maintain themselves in the face of internal and external changes. The organization has been able to adapt over the past 10 years

to changing learner demographics and an exponential increase in enrolment. This inquiry found that there is interest in pursuing web-based learning initiatives, and that a future plan for implementation is needed.

Recommendation 1: That a task force or advisory committee on online learning be established with terms of reference collectively developed. The task force will assist the district in responding to the change in the new context for student learning in a technology-rich environment.

Participative Decision-Making

The three stakeholder groups have perspectives that must be included in any changes to educational policy and/or course delivery. The importance of gaining input from all three groups was clear in the study findings.

Recommendation 2: That members of the task force be drawn from a cross-section of instructors and administrators to reflect the diversity of perspective and background regarding online course delivery. Meaningful input from adult learners should be sought, whether it is learner membership on the task force or through some alternative way of representing learners in future online planning endeavours.

Interactivity and Online Learning

The consensus of the educators and learners is that learning is most effective when the learner is able to interact freely and often with instructors and fellow learners. This point was noted in all focus group meetings. Clearly, any online learning initiatives must address how this need can be most effectively met.

Recommendation 3: That the task force review and make recommendations regarding how online learning initiatives will meet the needs of learners and educators.

Information Sharing

Focus group respondents identified a general lack of knowledge regarding how web-based learning could be introduced and implemented into adult learning centres. Many comments expressed the difficulty of obtaining current information about educational technology, software, online resources, and online course delivery. Participants identified information sharing as one way to include educators who may be resistant to these new learning initiatives.

Recommendation 4: That the task force collect data on the range of web-based learning programs/options available internally and in other districts; review other major research papers and reports; and consider the implications of web-based learning options for adult education centres, including adult and ESL learners.

Opportunity to Learn

Instructors and administrators in the focus groups stressed professional development as a primary issue of concern for their continued personal and professional development. This includes opportunities for resource sharing and the need for multi-level training in educational technology applications. Ways and means for strengthening the professional support infrastructure might include listservs, Usenet, SIGs, online mentoring, e-mail, and real-time access to technical and educational support. Learners indicated they would like to receive training for online applications to become more effective learners.

Recommendation 5: That adult educators form an interest group to explore web-based learning issues and possibilities. The group should give recommendations to the adult education centre professional development committee for centre-based and district-wide professional development and training. The interest group could determine ways to assist educators to find models of successful practice and offer peer coaching in educators' areas of practice.

Recommendation 6: That learners receive seminars through the adult education centres on use of the Internet for learning and research across the content areas.

Co-ordination of Effort

There is an increasingly blurred profile of the "typical" adult learner. This trend was discussed amongst focus group participants. There is an increase in students under 19 years of age at the adult education centres, and a significant and growing number of distance education school students are over 18 years of age. So adult learners are accessing distance education courses while teenage students are registering at adult education centres. At the administrator focus group meeting and afterwards, participants expressed their belief that there is value in educators from different sectors meeting together to discuss learner needs.

Recommendation 7: That the task force consider the role of adult education centres with respect to the Greater Vancouver Distance Education School and the pilot "virtual school" it initiated in 2002–03. Adult learners should be informed and involved in the virtual school courses. Learners under 19 years of age who have left high schools may find alternative education in adult centres, or in concert with online learning courses offered by virtual schools.

Access to Technology

Learners and instructors raised the issue of access to reasonably up-to-date computers and to the Internet as major areas of concern. Learners stress that online learning needs to be accessible and affordable for all, regardless of income, while instructors noted that labs at the centres were often underused because of scheduling problems, and access was difficult because computers were too slow or needed technician attention. Further, many content area instructors do not have access to a computer in their classroom, and/or an Internet connection is not available for their adult learners.

Recommendation 8: That the school district and the task force on web-based learning consider accessibility to computers and to the Internet in all plans for learning, so that all prospective learners have access to these course options where desired.

Funding For Educational Technology

There are funding issues related to web-based learning. They range from payment for course development, support, professional development (e.g., instructor release time; support expertise), course maintenance, learner orientation, computer accessibility, and Internet and server/platform service. The related issue of course ownership was also raised. Several focus group participants suggested better use be made of existing resources and expertise, and that largely untapped shared funding opportunities might well exist for sharing within the school district and across school districts.

Recommendation 9: That seed money for the task force and its initiatives be provided from locally generated revenue, and that the task force make recommendations for funding of educational technology initiatives.

Conclusion

The findings and recommendations of this study, although gained from one school district in Canada, may be utilized by other school districts and adult education providers. This study offers recommendations to include learners and instructors in the planning phases of web-based programs, and administrators may use the research findings to guide future planning and implementation within this school board.

Notes

1. The Vancouver School Board (District #39 in British Columbia) has 18 secondary schools ranging in student enrolment from 450 to 2,000. There are seven adult learning centres ranging from 150 to 1,000 in full-time and part-time student enrolment. The city has a multicultural population of about 735,000 people and an economy supported by a diverse infrastructure including fishing, forestry, farming, service, business, and tourism sectors.
2. The Greater Vancouver Distance Education School offers high school credit courses to students of any age pursuing secondary school completion. It offers both traditional paper-based courses and, increasingly, web-based delivery.

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