

**EVALUATION OF AN ONLINE
CAREER WORKSHOP**

JULIE DEBOER

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Dedication

Abstract

The purpose of this study was to evaluate empirically the effectiveness of the new online career workshop titled “Ex-Scape” based on career knowledge and skill outcomes.

Although numerous studies have been conducted on distance education classes in various disciplines, little research was found on the effectiveness of web-based learning in career development courses. Quantitative methods were used to determine a numerical score.

Pre- and posttests were calculated and recorded in SPSS 11.5 and paired t-tests

determined whether or not there was significant difference in the scores between the pre-

and posttests. Qualitative methods were used through course evaluations and focus

groups to record student comments of their experience with the online course. Results

revealed that the online method of instruction was effective based on career knowledge

and skill outcomes. Recommendations for further research include continuation of future

research on the outcome success of online career development courses; utilization of a

broader approach to research to include variables such as students’ preferred learning

styles, motivational factors, cost factors, and students’ computer expertise; and collection

and critique of post-résumés to follow up on students’ impressions of their skills.

Acknowledgements

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Chapter 1: Introduction

Ex-Scape

The Ex-Scape (Experience Student Career and Placement Education) project was initiated by the University of Calgary, Student Development and Counselling Services, to develop an in-class career development workshop into a web-based course (Appendix A). The workshop was designed to prepare prospective Co-operative and Internship students who applied for work experience positions. The reason for this initiative was to allow easier access to the course by students planning to apply to Co-operative Education, and to free facility requirements for an increasing number of students. Over 600 students at the University of Calgary participate in this workshop each year. This number has expanded to meet the needs of the colleges involved in the project. Three Alberta colleges including Medicine Hat College, Mount Royal College, and Red Deer College were invited to participate in this project as these colleges transferred the largest number of students to the University of Calgary each year. This type of program represented a new way of providing career services in post-secondary settings.

Justification for Study

Innovative delivery methods for educational programs are being created for a variety of reasons. One of the most important reasons is to accommodate a growing number of students. Other important reasons include increasing accessibility to courses and reducing the time constraints of classes (National Centre for Education Statistics [NCES], 1997). Offering courses via the Internet has become a popular new method of delivery that provides flexibility and accessibility for both students and instructors while

freeing facilities that are increasingly overbooked. Such innovations raise important questions about student learning. One traditional method for examining these questions involves comparing students' knowledge and skills before and after course delivery. Another method for examining these questions involves comparing the knowledge and skills of students taking the new course with students who learn through the traditional method of instruction.

Reviews and evaluations have been conducted on educational courses that have successfully gone online; however, little was found regarding the effectiveness of career development courses that are offered via the Internet (Levin, 1997; Monk, 1996). The most common studies were reviews of the usefulness in using the Internet as a tool for researching career development sites to prepare students for their careers (Brown, 1998; Henshaw, 1997; Lundberg & Thirsk, 1995; Schneider, 1998). Since the Internet is being used to enhance career development courses, it seems natural that the next step is to move to the delivery of courses through distance education means (Peterson, 2000).

Given that little research was found regarding the effectiveness of career development courses offered via the Internet, there was a need to assess the knowledge and skill outcomes of students taking the web-based course. There was also a need to compare the outcome success of students in the web-based course to students who learned through the traditional method of instruction to ensure that the students in the new course leave with the same knowledge base.

Purpose and Rationale of the Study

The main purpose of this study was to empirically evaluate the effectiveness of the new online career workshop titled “Ex-Scape” offered at the University of Calgary, Medicine Hat College, Mount Royal College and Red Deer College based on knowledge and skill outcomes.

As the need emerged for more innovative program delivery methods, web-based instruction has become increasingly popular. Web-based instruction offers a new and exciting avenue for meeting the needs of students . . . and also enables continued involvement in the learning process in an anytime, anyplace orientation (Hill, Rezabek, & Murry 1998, p. 2). Indeed, web-based instruction holds a great deal of potential for the delivery of instruction (Owston, 1997). Peterson (2000) examined the findings and recommendations of two studies from other disciplines to determine implications for career development distance education courses. One recommendation included “Take action to narrow the digital divide” (p. 3), and the implication cited was to convert occupational/career information courses to Web-based courses, and to support counselors who want to learn new technologies.

Educators and others in post-secondary schools continue to explore innovative methods of delivering career development workshops. “Constantly changing technology impacts every aspect of work and personal lives. And career services are no exception” (Noll & Graves, 1996). As the Internet continues to grow, access to the Internet will become a viable alternative to the methods currently used for assisting students in their career development (Lundberg, 1995).

As career centre staff experience greater demands on their time, and as resources become scarcer, career service staff have considered online materials as a vehicle providing students with practical, useful, and current career development information (Lundberg, 1995). With an increasing number of students requiring career development workshops at the University of Calgary, Medicine Hat College, Red Deer College, and Mount Royal College as part of their application to Co-op/Intern Work Experience and other experiential work programs, faculty requirements and facility requirements continue to grow. Unfortunately, demands on existing resources could prevent that growth. "From the viewpoint of faculty and administration, a course offered over the Internet may relieve scheduling difficulties for courses and rooms as well as being a good public relations tool for non-traditional students" (Powers, 1997).

To address the pressure on faculty and facilities, and to acknowledge the need for innovative methods of program delivery, a new online version of the in-class career workshop titled "Career Development Workshop for Prospective Co-operative and Intern Students" was developed with funding from the Learning Enhancement Envelope, Alberta Advanced Education. This new career workshop, titled "Ex-Scape," was delivered through a combination of web-based materials and an in-class exit workshop. The goals of the workshop were:

1. To acquire the knowledge of effective job search strategies including résumé writing, portfolio development, interview strategies, career research, and labour market information;
2. To improve knowledge of personal skills, values, interests and accomplishments related to conducting an effective job search;

3. To acquire co-operative education and internship positions and other experiential work programs;
4. To improve the decisions students make about their choice of educational programs.

Research Questions

Web-based instruction offers a new innovative method of delivering education programs. The career services areas of post-secondary institutions began looking at the Internet as an alternative method of offering career development courses in 1998. This study was designed to provide information that would be useful in improving the new online career workshop. It was also hoped that this study would indicate the effectiveness of an online career workshop based on knowledge and skill outcomes, and indicate how the course compared to a traditional method of delivery. In this study, the researcher addressed the following questions:

1. Did the students who completed the web-based workshop improve their understanding of how to write a résumé, cover letter, and how to do a job interview?
2. Did the students who completed the web-based workshop acquire the skills to write a résumé, cover letter, and participate in a job interview?
3. Did the students who completed the web-based workshop do as well or better in the careers knowledge and skills outcomes of the course as the students who completed the program offered in the original in-class career workshop?

Significance of Study

This study is unique in that it evaluated the effectiveness of a web-based career development program that replaced an in-class interactive workshop in the Student Services area of post-secondary schools. Since little could be found regarding the effectiveness of web-based career development courses, it was important to evaluate this program by comparing learners' knowledge and skill outcomes through pre- and post-questionnaires, and evaluating student satisfaction through course evaluations.

The study provided information to the faculty and administrators of this program to assure that they were providing a quality education through a distance education format. The study also provided research to educators who are considering offering a web-based career development course.

Definition of Terms

The following list of terms and their meanings were used for the purposes of this study.

1. *Career development workshop/Career workshop*. Career topics offered in a course that includes self-assessment, skill assessment, work objectives, occupational research, résumé writing, cover letter writing, portfolio creation, informational interviewing, interview techniques, networking, and job search.
2. *Co-operative/Internship/Coop/Intern*. Paid work experience related to students' field of study.
3. *Distance Education*. Dependence on some form of mechanical or electrical means of communication (Dillon & Walsh, 1992).

4. *Ex-Scape (Experience – Student career and placement education)*. Interactive career workshop offered online.
5. *Experiential work programs/work-based experiential learning*. Unpaid work experience related to students' field of study.
6. *Interactive*. Student-to-student and instructor-to-student e-mail, chatrooms, and bulletin board that are part of the Ex-Scape program.
7. *Online*. The Internet and the World Wide Web.
8. *Pre- and posttest*. Identical knowledge assessment tests given to students before and after the course that measured résumé, cover letter, and interview knowledge outcomes.
9. *Traditional method of instruction*. Learning that takes place when the student and the teacher are in the same location at the same time where immediate dialogue is taking place (Thompson, 2000).
10. *Web-based instruction*. Instruction via the Internet.

Summary

Offering courses via the Internet has become a popular new method of delivery that provides flexibility and accessibility for both students and instructors while freeing facilities that are increasingly overbooked. To address the pressure on faculty and facilities, and to acknowledge the need for innovative methods of program delivery, a new online version of the in-class career workshop titled "Career Development Workshop for Prospective Co-operative and Intern Students" was developed.

This new career workshop, titled “Ex-Scape,” was delivered through a combination of web-based materials and a three-hour in-person workshop. Since little research was found regarding the effectiveness of career development courses that are offered via the Internet, there was a need to assess the knowledge and skill outcomes of students taking the new course. A review of the literature in Chapter 2 illustrated the need for an evaluation of an online career development workshop.

Chapter 2: Literature Review

Theoretical Orientation

According to the Open University of Great Britain (as cited in Simonson, 1997) program evaluation is considered to be the systematic investigation of the merit of a particular distance education program, curriculum, or teaching method and how it might be improved compared with alternatives. Woodley and Kirkwood (1986) describe six categories of evaluation that can be conducted about distance education courses (as cited in Simonson, 1997, p. 89):

1. *Measures of activity*: Measures counts of events, people, and objects. An example of an activity question is, "How many students were served?" The answers may be found in administrative records.
2. *Measures of efficiency*: Includes efficiency questions such as, "How many students successfully completed the course?" These answers may also be found in administrative records.
3. *Measures of outcomes*: Measures adequate learning through course grades and can supplement those with exit interviews to discover students' perception about the course. This category may also measure whether students will enroll in another distance education course, or if other institutions are interested in the course.
4. *Measures of program aims*: Discovers the extent to which the aims of the program were met. A survey of students can be used to establish such aims as whether the program reached learners that would normally not be able to take a course.

5. *Measures of policy*: Identifies policies that may be needed or that may need to be changed. This may include surveying students to determine their success in a course, what can be changed or added to make them more successful, or whether or not the tuition is too high.
6. *Measures of organizations*: Evaluates the delivering institution's internal organizations or procedures to help the organization become more efficient. Evaluation methods include on-site visits, interviews, or journaling by administrators.

One or more of these six categories may be used to evaluate a distance education course. This evaluation was concerned with the third category, "measures of outcomes." Measures of learner outcomes included pre- and posttests, course evaluations, and focus group interviews with students, instructors, and administrators.

Another method of evaluating the effectiveness of distance education courses was suggested by Kirkpatrick (1998) who described four levels of assessment or effectiveness (as cited in Leah & Rampp, 2000, p. 12):

1. *Level I*: Effectiveness is described as the participants' reaction to the distance education course and can be measured by using satisfaction surveys.
2. *Level II*: Effectiveness is the measurement of the learner outcomes from the course and can be measured by using a posttest of knowledge design. For comparative purposes, the pretest and posttest design shows changes that occurred as a result of the course.

3. *Level III*: Assessment is designed to address whether or not the learning has carried over into practical application. This may be gained by having students perform the task under direct supervision.
4. *Level IV*: Effectiveness is described by the cost effectiveness of the course. Due to the difficulty in measuring the direct and indirect costs to all of the stakeholders, it is typically measured by student satisfaction in Level 1 or learner outcomes in Level II.

This evaluation identified the effectiveness of the course comparable to Level I by means of measuring students' reaction of the online course through course evaluations and focus groups. The evaluation was also comparable to Level II in measuring learner outcomes through comparing pre- and posttests of each volunteer participant in the online group and in the last in-class group, and then comparing the results of the online group and the in-class group.

The Need For Evaluation

The evaluation of an online career development course is essential to discover its effectiveness concerning career-learning outcomes. Reviews and evaluations have been conducted on educational courses that have successfully gone online; however, little can be found regarding the effectiveness of career development courses that are offered via the Internet (Berge & Collins, 1995; Levin, 1997; Monk, 1996). Mainly found were reviews of the usefulness in using the Internet as a tool for researching career development sites to prepare students for their careers (Brown, 1998; Henshaw, 1997; Lundberg & Thirsk, 1995; Schneider, 1998).

Evaluations in other studies were found on a variety of distance education classes in the areas of medical, library, science and technology, physical geography, algebra, political science, English, and graduate courses. Through comparative studies using course grades, and measuring student success and satisfaction of the distance learning formats, researchers concluded that students can learn effectively. The most common format used was computer enhanced technology and the WWW. Students enjoyed the interactivity of discussion boards and email between peers, and between themselves and instructors. Some researchers found that the high GPA backgrounds of some students might have an influence on course grades of distance format. These groups of high achievers may also be more likely to respond to satisfaction surveys than the average student, resulting in response bias. Others found that courses that used the Internet as the main focus and yet had enhancement from occasional meetings did better than either the traditional class or the web only courses.

Evaluation of the course and general outcomes is an essential part of the overall process. With this in mind, the goals of the workshop need to be analyzed in terms of the skills and knowledge which will ensure achievement of the workshop (Powers, 1997). As well there is a need to define student outcomes resulting from distance methods of teaching. Fretz (1982) suggests several evaluation strategies to be selected from several key broad categories including career knowledge and skills. In a paper relating to evaluation of career development programs, French, Hiebert, and Bezanson (1994) agree that an evaluation should be conducted of the entire client learning changes (skill, knowledge, attitudes) that may result from a program/service. Hiebert (1997) further supports the evaluation process of career counselling as "a tangible indicator of success,

serves as important incentive for clients" (p. 125). Powers (1997) describes the evaluation process as necessary in order to show if the original goals were faulty, or if problems lie within the choices for assessment or with the technology itself. "Although students taking a course via the Internet will not have an equivalent experience to those students who enroll in traditional classroom instruction, it is expected that they leave the course with the same knowledge base" (p. 3).

Using two studies of the effectiveness of distance learning in disciplines other than career development, Peterson (2000) discussed the findings and recommendations in terms of possible implications for offering career development distance education courses via electronic methods. Implications included finding ways to assess the performance of practicing counselors who are prepared through electronic courses; continuing research on preferred ways of acquiring career information and on how different learning styles of students relate to particular technologies; and converting occupational/career information courses to Web-based courses to narrow the digital divide between the amount of in-class courses and web-based courses that are offered.

Comparison of Online to Traditional Instruction

Numerous evaluations that were conducted on distance education courses used measures of learner outcomes. The course grades of students in distance education classes were compared with the course grades of students taking in-class instruction, and were at times supplemented with interviews and focus groups. Russell (1999) developed an extensive website listing of selected entries from his book, *The No Significant Difference Phenomenon*, which included 355 research reports, summaries and papers.

The studies showed no significant difference in examination scores in distance education and traditional classroom instruction. The “no significant difference” phenomena exists due to three main reasons:

1. The differences among the various treatments were small relative to the similarities.
2. The sensitivity of the measuring instruments was relatively crude.
3. Sub-optimal setting in terms of motivation and intent (i.e., the course was compulsory and extra to regular course work).

Levin (1997) claims that the effectiveness of the interactive web-based course should be compared to the traditional style of learning. In a study at Southwest Missouri State University, two groups of graduate students, a control group (in a traditional classroom) and an experimental group (web-based instruction), were evaluated using exit interviews, surveys, participant debriefing, and a comparison of examination scores. The class was an upper level curriculum course that dealt with administration, development, and evaluation of a school district’s curriculum. The results of the examination scores indicated that the experimental group members' scores compared favorably (90.4 average) with those of the control group (92.5 average). Three short answer questions accounted for the difference in the scores (8). The experimental group outperformed the control group on the objective portion of the test. Participants of the experimental group had positive feelings about course methodology. Some remarks included that the project was something worth doing, the technology added a novel approach to learning and access to research was convenient, guiding questions helped ease the need for the

professor to be there, the learning came from the students, and the group worked well as a team (Wegner, Holloway, & Crader, 1997).

Urven, Yin and Bak (1998) report another successful web-based course at the University of Wisconsin Whitewater involving 26 high school students registered in a university general studies science literacy course. Students met instructors personally at the beginning of the semester and were administered a learning style inventory and a pretest of course content. A comparison of grade point averages (GPA) for traditional and distance education sections of the class were favourable. High school students in the combined WWW/on-site lectures averaged a GPA of 2.69 and high school students in the combined WWW/video lectures achieved a GPA average of 2.20. It was concluded that the combined audio/visual and web-based delivery of course content to high school students for college credit is an effective teaching strategy (p. 6). Two sections of the course were also taught to an experimental group of university students with the exception that the WWW exercises were offered without the video lectures. The lecture time was provided as uninterrupted access to campus computers. Not all students attended these sessions, as they preferred to work on their assignments at their own convenience. The class GPA for the experimental group was 2.13. Three sections were taught to a control group of university students using traditional delivery of instruction and no WWW exercises. The class GPA for the control group was 2.39. The authors concluded that even though there were some barriers involving technology and the study proved more time intensive per student for the instructors of the distance learning method, they felt that the combined WWW/video delivery of the course to be an effective teaching strategy.

At Casper College in Wyoming, a study involving 63 students taking physical geography, precalculus algebra, English composition, and political science entirely on the Internet showed that students felt they learned more in a web-based course than in a traditional course; however, students also felt they had to do more work than was expected. Final grades and exit surveys were used to determine the success of the web-based course delivery. Final grades were favourable to in-class grades (Nelson, 1997). As compared to traditional classes, 10% fewer students in the web-based course remained after mid-break, than in the traditional classes. In each of the classes a proportionate number stopped participating, although there was no clear relationship between these numbers and Internet savvy. Instructors were initially surprised that half of the students registered in the physical geography class, for example, needed training to get them started, and yet they enrolled in the Internet class by choice.

In a research study by Goodyear (1995) historical data was collected for three University of Alaska Anchorage courses in which the same instructor offered the course in both traditional and distance learning methods. Results revealed that there was no significance difference in the grades of students taking the courses either through the traditional method of instruction or distance education. That study came out of a direct observation by Dr. Helen Barrett of the University of Alaska, Anchorage, who observed that there was a scarcity of studies comparing student outcomes between traditional and modern distance delivered courses (Goodyear, 1995). Since that time numerous studies have been conducted comparing student outcomes between traditional courses and online courses.

Jackman and Swan (2000) compared the success of 12th graders enrolled in distance education courses versus face-to-face instruction. Results revealed that the students in the traditional classroom had significantly lower GPA than the distance education learners. Another study by Fredda (2000) compared undergraduate and graduate students at Nova Southeastern University in Florida in both Internet-based instruction and classroom instruction in thirty-four courses. A total of 1613 students were enrolled in these courses. While the classroom instruction was most successful for undergraduate students in completion rates and percentages, with grades 11 to 13% higher and completion rates 14% higher, their final grades were not significantly different between Internet-based instruction and classroom instruction. The graduate students performed better in Internet-based instruction than classroom instruction for overall grades, completion rates, and final grades, with grades over 75% and completion rates over 80%.

In a paper by Hyllegard and Burke (2002) the authors argue that it is no longer appropriate to compare distance education courses with traditional classroom sections of the same course. They argue that it is only reasonable to compare distance education courses that utilize enhanced, computer-based instructional technologies, with traditional classrooms that also enhance instruction with instructional technology. Through faculty development at Borough of Manhattan Community College (BMCC) of the City University of New York in fall 2000, an initiative to assist faculty in developing web-based online courses expanded to include training of a different group of faculty to teach classroom-based courses that utilize advanced instructional technologies. The online and classroom-based technology enhanced courses were introduced at the same

time, minimizing the “novelty effect” which has been identified as a serious shortcoming of research that compares distance to traditional courses (p. 6). The evaluation of this project involved 18 online and 12 technology-enhanced spring and fall 2001 courses. The authors used four types of data including student demographic and collegiate/academic information, course GPA and grades, student survey data, and faculty survey data.

Students were fairly similar in demographic characteristics in both groups and were similarly enrolled in career programs. Online students were typically taking one online course and three in-class courses. Online students on average earned more credits and had higher cumulative GPAs prior to the online course, which may be one reason that online students might outperform in-class students. The results of the evaluation showed the overall GPAs to be almost identical, 2.68 in online and 2.61 in enhanced courses, although this included a higher rate of As and a higher rate of withdrawals in the online group than the enhanced group. The authors found that this was consistent with other studies.

The online group indicated greater satisfaction with the course than the in-class group, and expressed support through faculty feedback. In-class students felt more comfortable in using the Internet as a result of the technology-enhanced instruction. The online faculty felt that their students were more engaged with the course material as a result of the format of the course. The authors noted that even though survey data showed that online students indicated greater satisfaction, nearly half of the online students earned A grades, and the response rate was for the online group was 32% as compared to 76% response rate for the enhanced group, and withdrawals were not surveyed. This suggested possible response bias in the online group as A students may have been

overrepresented. The authors suggested to other researchers of online education to pay close attention to possible response bias.

Students' Impressions

Winfield, Mealy and Scheibel (1998) report success of the instructional design model developed in Lotus LearningSpace delivered using a Lotus Domino web server by the University of Wisconsin Learning Innovations Center. In a 15-week health assessment course offered to nurses in isolated areas, all students were engaged in the activities, and did well on all assignments and examinations (p. 6). Evaluation of the course was completed through student surveys (over 60% return rate). All students reported that they were comfortable with performing the activities; the lectures and case studies were clearly laid out; the 110 graphics were worth the download time; and the links to the WWW were helpful. Students also found the weekly checklist of activities and announcements by the instructor helpful.

In a comparison study by Kleisuk, Homan and Thompson (1997) of student behaviour and instruction in distance education and traditional classes, three groups of students were asked to compare a distance education literacy course to traditional classroom instruction. The three groups comprised teachers and doctoral students, and included one distance education literacy class in each of spring, summer, and fall semesters. The distance education course was prepared following guidelines suggested by Haaland and Newby (1984), Simonson, Schlosser, and Anderson (1993), and Willis (1993). The guidelines included diversification of pace and activities; concise and cohesive verbal presentations with practice beforehand; well-defined statements of

purpose; use of accompanying well-designed prebound printed material; implementation of detailed planning with review of content for presentation ideas; study of distance education; use of on-site facilitators; and use of visuals and graphics (Klesiuk, Homan, & Thompson, 1997, p. 216).

Students were asked to complete a survey form involving student behaviours before and during instruction, and instruction. Students' perceptions of behaviour based on the variables of preparation, attentiveness, small group participation, small group discussion focus, and motivation proved to be equal to or better than traditional instruction on all variables by students in the spring and summer classes. The fall class rated all variables except motivation and attentiveness as equal to or better than traditional instruction. The fall class indicated they needed a face-to-face teacher to maintain motivation and attention span. Students' perceptions of instruction based on the variables of assignment clarity, instructor availability, presentation pacing, material structure, classroom video examples usage, and graphics usage proved to be equal to or better than traditional instruction on all variables by all three groups. The authors concluded that when distance education was prepared according to the guidelines of Haaland and Newby (1984), Simonson, Schlosser, and Anderson (1993), and Willis (1993), there was usually a higher level of learner satisfaction.

In another study, 12 students in a web-based library media course participated in a formative evaluation of the web-based course. Due to technical difficulties, students were required to attend class and were able to talk face-to-face and online, which resulted in a supportive learning environment, as well as provided critical information to assist in the continual improvement of the course. Students provided course evaluations at the

midterm and the end of the course by responding to three statements, including listing three “neat things” they learned; discussing any frustrations and/or successes they experienced; and discussing how it’s going overall. Students felt that the neat things were learning from the experience of others in the class, learning how to use the tools (e-mail, listservs, and the Web), and learning reference techniques since, as media specialists, they would need to assist students with finding information both electronically and physically. Students reported that their frustrations were learning how to use the web-based environment and learning how to find resources on the Internet. Their success was the valuable experience they gained both professionally and personally working in the web-based environment. All of the students thought that the course went well and felt that they had learned more than they expected to. However, they felt that time management in a 6-week condensed course was a concern to them (Hill, Rezabek, & Murry, 1998). Some findings from other studies include faculty reporting large time investments while learning technologies employed in online course delivery. However, in general, most faculty felt “online course delivery was as effective as traditional means, but expressed concerns related to the promotion and encouragement of interaction with students (Hoey, Pettitt, Brawner, & Mull, 1997).

In the career workshop that this research is based upon, students had approximately four to seven weeks (depending on the postsecondary institution) to complete the web-based course as compared to the original 12-hour in-class workshop. Students in the original in-class workshop created their résumé, cover letter, company and occupational research on their own time, whereas in the web-based course, students

compiled their resume online during the program, and completed their company and occupational research online through links provided in the course.

In a study by Velayo (2001) involving an online psychology course at Pace University, online students indicated the most useful features of the distance-education software, Blackboard, in order from first to second most useful, were the discussion board and course materials. The students rated the most beneficial features, from first to second, as the announcements and discussion board (tied), and the assignments. The least useful features of Blackboard were rated by students, from first to second, as the virtual chatroom and student roster. The least beneficial features, from first to second, were again, the virtual chatroom and student roster. The author concluded the study by suggesting that the discussion board be used more extensively to foster discussion, but only at the beginning of the course by the instructor, followed by student led discussion; use of the virtual chatroom may be substituted by direct email (depending on its use); an initial training program was essential to familiarize students with technology at a basic level; expectations of technology used by the instructor should be made clear; and a sense of classroom community be created through discussions that allow students to introduce themselves and give them an opportunity for discussion that is not specifically course-related (p. 16).

In a summative evaluation by Thomson and Stringer (1998) of a course offered at Penn State's College of Agricultural Sciences, *Be a Master Student!*, 142 students were surveyed regarding their satisfaction with the technology. Two-thirds (n = 93) liked the Web for its convenience and abundance of information, although they did express concern regarding the reliability of information found on the Web. Over half of the

students indicated that they considered the source before relying on the information. In a formative evaluation of the same course, students were surveyed about course content, expectations, and use of the WWW. Two-thirds of the students owned their own computers and three-quarters of them were using the Internet daily. Forty-four percent indicated that they enjoyed a web-based supplement to a course.

At one time the view of online learning tools was that technology extends the classroom, now the view is changing to accept that online learning is creating new learning environments. There is a challenge for faculty, students, and colleges and universities to ensure that technology is used to enhance, not degrade teaching and learning (Levin, 1997). Lesh and Rampp (2000) believe that the Internet has joined the list of educational tools, which has modified, altered, or enhanced the practice of teaching (p. 8).

Interactivity

The online workshop, Ex-Scape, has interactivity built into it to provide students with practice and a peer support system. Ex-Scape is described as an interactive website with over 200 audio clips, several employer video clips, an e-mail address, a peer-to-peer-to-instructor chatroom, a bulletin board, links and websites, and special event chatrooms featuring different employers weekly. This is comparable to the study by Winfield et al. (1998) where nursing students enjoyed the graphics and found weekly announcements by the instructors helpful and to the study by Valeyo (2001) where students were introduced to the technology and interaction with peers online at the beginning of the course. In a qualitative case study, Saunders, Malm, Malone, Nay,

Oliver, and Thompson (1997) describe interactivity in learning resulting in higher levels of cognitive processing and increases in learning effectiveness. Multimedia instruction including sound, animation, and/or video can help the learner become actively involved in the learning process (Clark and Lyons, 1999) (as cited in Brown, 2000). Add multimedia to email, chatrooms, and a bulletin board, as in the Ex-Scape program, and students are able to brainstorm, question, and discuss with each other and the instructor. The Ex-Scape program is offered through a combination of web-based and face-to-face interactions at the beginning of the course and at the end of the course as suggested by Abrahamson (1998) in the following study.

Abrahamson (1998) identified four major issues relating to interactive communication in distance education courses. Two issues that were also addressed in the development of the Ex-Scape program, included instructor-to-student, and student-to-student contact. Recommendations included availability of the instructor by the student and having students linked to each other. Also, bringing students together at the beginning of the course was noted to be a minimum requirement to promote interactive communication. Similarly, the instructor-to-student and student-to-student communication in the Ex-Scape program was networked via the Internet using email, bulletin boards and chat rooms. Students were brought together with the instructor in an orientation meeting before the course began when students became acquainted with the instructor and were taught how to use the technology.

In a study on leadership and learning, it was found that through the use of technology, "students work together in more collaborative ways and serve as experts to assist their peers with both curriculum and technology issues," (Dias & Aitkinson, 2001,

[On-line]). A survey of online graduate students revealed a high number of students reported satisfaction with the course and 60% of the students felt that collaborative work reduced their tendency to procrastinate (Kitchen & McDougall, 1998) (as cited in Prester & Moller, 2001). Prester and Moller also cited a study involving several hundred undergraduate online students by Navarro and Shoemaker (2000) which confirmed that learner-to-learner interactions have a high correlation ($p = .24$) to performance than learner-to-instructor interactions ($p = .10$) (p. 4).

Patterson (1999) illustrated in her evaluation of graduate class interaction in face-to-face and asynchronous computer groupware experiences, that given the adult learning model of Knowles,' which states that adult learning is based upon reason, self-concept of the learner, learner's experiences, readiness to learn, and orientation to learning (p. 4), the learning environment becomes more responsive to learners' needs. In terms of a distance education course, this places importance on the degree of interactivity between a student and course content, students and instructor, and students to students.

This view supports Powers, Davis, and Torrence (1999) who pose the question, "how can the environment serve to enhance the development and learning of the student?" (p. 553), when individuals do not typically act outside the context of their environment. The authors conducted a pilot study that examined the classroom climate of a virtual course, by means of surveying 20 students in three different web-based courses. Using the College/University Classroom Environment Inventory (CUCEI) students indicated their level of agreement on a 1-5 scale with 1 being Strongly Agree, 5 being Strongly Disagree and 3 given to no answer. The CUCEI assessed seven factors of the classroom environment including student cohesiveness, individualization, innovation,

involvement, personalization, satisfaction, and task orientation. The highest agreement was given to the Involvement scale since students felt that the instructor was involved with the students and that the students were able to be involved and participate with each other. The other scale that stood out was Personalization as students spent time presenting their work to all students and receiving constructive feedback. Students indicated that they appreciated hearing from their peers which provided them with recognition for their efforts, and forced them to reflect on their own work. The authors felt that for students who need involvement with others, the virtual environment may help them to initiate the development of relationships instead of waiting for others to take the first step (p. 557).

Availability of Computers

The Internet is believed to be an important element for distance education in another study by Barbrow, Jeong, and Parks (1996) involving students enrolled in a foodservice management course. The results of this study showed that availability of computers for students should be given attention by distance education administrators. Since Ex-Scape is offered via the Internet to students who are on-campus at all three postsecondary institutions, computers are readily available in each institution's computer labs.

Summary

The methods of evaluation chosen for this study focused on satisfaction surveys and measurement of learner outcomes. A literature review was conducted to show results of other studies that used similar methods of evaluations of online courses. Since no

studies were found that evaluated the effectiveness of an online career workshop, the literature review was based on evaluations comparing distance education to traditional classroom instruction in a variety of educational majors in the areas of medical, library, science and technology, physical geography, algebra, political science, English, and graduate courses. Measures of learner outcomes, student satisfaction surveys, and comparison of grades and test scores were the most common forms of evaluation.

Most studies showed that students were able to learn through distance learning methods as well or better than students learning in a traditional classroom. Russell (1999) compiled a book of 355 research reports, summaries and papers that supported the no significant difference phenomenon in distance education and traditional classroom instruction. Students' scores in distance education and students' scores in-class for several studies were similar.

Results of one study indicate that researchers need to watch for possible response bias. Students in a distance education course had more A grades than in the in-class group. The online group expressed greater satisfaction with the course than the in-class group, which may be due to possible overrepresentation of A students.

In studies regarding students' impressions of the distance education courses, students were impressed with the assignments/activities, graphic download time, weekly postings and announcements by instructors, instructor availability, material structure, and interaction between peers.

Several studies established that interactivity was an important element in distance education. More importance was given to student-to-student interaction than instructor-to-student interaction. Motivation was improved and procrastination was reduced by

students who established peer contact through discussion board, email and chatrooms. Learning was also enhanced through animation, video and audio clips, and online assignments.

Availability of computers was an issue in studies conducted in the middle to late 1990s; however, it does not seem to be an issue any longer due to the increase of computers on postsecondary campuses and due to the majority of households that own a computer and are linked to the Internet.

Chapter 3 will provide an overview of the methodology used to evaluate the online career workshop.

Chapter 3: Methodology

Focus

This study was conducted at the University of Calgary, Medicine Hat College, and Mount Royal College. One requirement for students applying to Co-op/Intern, or work-based experiential learning programs was to attend a career workshop. The online career workshop, Ex-Scape, was a revision of a 12-hour in-class career workshop that was offered at the University of Calgary to Co-op/Intern students. The in-class career workshop was replaced by the Ex-Scape program along with a one-hour orientation workshop, and an in-person, three-hour exit workshop at the University of Calgary. Medicine Hat College and Mount Royal College also offered a one-hour orientation in addition to the Ex-Scape program; however, instructors may or may not have offered the three-hour exit workshop.

This study utilized an empirical research approach that gathered data based on first-hand observations (Simon, 1969). This included a summative evaluation to assess concrete achievement using online knowledge assessments, surveys, personal interviews, and focus groups. The result of the research provided evidence to show whether or not students were effectively able to learn career development through an online instructional method. This study used a summative evaluation rather than a formative evaluation to document evidence to prove the effectiveness of the course instead of analyzing weaknesses and strengths of the program to improve the course through the development stage.

Quantitative methods were used to determine a numerical score. Pre-and posttests were calculated and recorded in SPSS 11.5 and paired t-tests determined whether there

was significant difference in the scores between the two treatments. Qualitative methods were used through course evaluations and focus groups to record student comments of their experience with the online course. The comments were consistent with the numerical score.

Research Questions

The primary focus of the study was to answer the following three questions related to the overall effectiveness of the Ex-Scape online workshop:

1. Did the students who completed the web-based workshop improve their understanding of how to write a résumé, cover letter, and how to do a job interview?
2. Did the students who completed the web-based workshop acquire the skills to write a résumé, cover letter, and participate in a job interview?
3. Did the students who completed the web-based workshop do as well or better in the careers knowledge and skills outcomes of the course as the students who completed the program offered in the original in-class career workshop?

In order to provide answers to these questions, learning outcomes of both online and in-class students were measured through pre- and posttests. Second, interviews were conducted to compare students' perceptions of the online course to the in-class course. Finally, evaluation surveys were used with the online group to gain further insight to students' perceptions. This evaluation process also provided useful information for improving the online program as well as measuring its relative effectiveness.

Delimitations of Study

The study was limited to evaluating the effectiveness of the online career course based on students' career knowledge and skill outcomes. The study did not look at student retention, motivation, learning styles, class conferencing issues, or instructional time spent online or offline. The effectiveness of these issues was not measured in this study.

Limitations of Study

The difficulties in obtaining complete data from student volunteers resulted in prolonging the study to 18 months of data collection. These difficulties resulted in part from the length of the knowledge assessments. There were 48 questions in total, and through telephone conversations, student volunteers reported that they did not have time to complete the posttests. As well, immediately following the completion of the Ex-Scape course, some students left campus to work in their Co-op or work experience positions and were not interested in completing additional course work. This resulted in collecting a small sample of pre-and posttests from the last in-class group, and using self-reports from students through course evaluations to indicate whether or not students were able to write a résumé and cover letter, and perform acceptably in an interview.

Another reason for the difficulty in retaining volunteers may be contributed to the fact the career development course was in addition to regular course work required of students before they could participate in their Co-op/ Intern or work experience placements. Once the course was completed, students may have been glad to leave it

behind them and not want to involve themselves any further with unnecessary additional course work.

Participants

The participants in this study included 291 out of 600 second and third year students who completed evaluation surveys of the online workshop from the University of Calgary and Mount Royal College. In addition, three groups of 50 students each were asked to complete the pre- and posttests at the University of Calgary; however, no students volunteered to complete the posttest requirement of the study. Two groups of first- and second-year students, with 16 out of 25 students from Mount Royal College and 18 out of 18 students from Medicine Hat College, actually completed both the pre- and posttest. One group of 50 students from the last in-class group was asked to complete the pre- and posttest assessments, however only seven students actually completed both pre- and posttests. This data is summarized in Table 1. In addition to the pre- and posttests, four groups of students, ranging from two to eight participants, were interviewed from the three post-secondary institutions.

Table 1

Summary of Student Volunteers

Year	Course	School	Number of Student Volunteers	
			Assessments	Course Evaluations
1999	In-class	U of C	7	
2000	Online	MHC/MRC	34	
2000 - 2001	Online	U of C/MRC		291
TOTAL			41	291

Results from the 291 course evaluations were used to address the first two research questions, while data from the 41 pre- and posttests focused on the third research question.

Instrumentation

Pre- and posttests (Appendix B) were used to measure learning outcomes of online and in-class groups. These measured knowledge outcomes in the areas of résumé writing, cover letter writing, and interview techniques. The résumé section included 20 questions, the cover letter section included seven questions, and the interview section included 21 questions. The pre- and posttests were offered in print form to the in-class group, and in print form or online to the online group. A copy of the online assessment was sent to each participant in the online group via the Internet. Pretests were collected in this manner, but no posttests were received online from this group. Data were compiled using SPSS 11.5 database.

Course evaluations (Appendix C) were utilized to survey skill outcomes and to gather information concerning students' impressions of the online course. The raw data from the surveys was compiled to show frequency of responses. The survey gathered information concerning course objectives, content, instruction, technology, and assignments using a 5-point Likert-type scale. Some participants gave no response or wrote N/A beside a question, therefore, when the information was entered into the SPSS database the categories of No Response and N/A were added. The surveys also included six open-ended questions that surveyed students' expectations, features that should be

removed or added, rating of the course, whether the student would take another online course and general suggestions or comments.

Data Collection

In 1999 students from the University of Calgary, Medicine Hat College, and Mount Royal College applying for Cooperative/Internship Education or work-based experiential learning were asked to volunteer to participate in an evaluation of the new online career workshop, Ex-Scape. The last group of the original 12-hour in-class workshop that Ex-Scape replaced was asked to participate in the evaluation of the in-class workshop to serve as a measurement of the traditional method of delivery for the course. Only seven students in this group volunteered and completed the pre- and posttests; four students participated in a focus group.

Five groups of 16 to 50 students each, from the University of Calgary, Medicine Hat College, and Mount Royal College, were invited to volunteer in the evaluation of Ex-Scape from 1999 to 2001. The response from students was very low (see Table 1). Twenty students from the University of Calgary completed pretests in print or computer form; however, none of these students completed the posttests required for the study. Telephone calls and e-mails sent as reminders to students to complete the posttests met with no success. Students cited that the questionnaire was too long, they did not have time, and many of them were already working in their co-operative positions and were not in classes.

One group of 18 students at Medicine Hat College and one group of 16 students at Mount Royal College volunteered to participate in the evaluation and completed both

pre- and post knowledge assessments in either print or computer form. Pretests were given to students in the one-hour orientation at the beginning of the Ex-Scape course. Identical posttests were given to students in the exit workshop after the students completed Ex-Scape. All participants signed consent forms to participate in the study (Appendix D).

Course evaluation surveys were given to students to complete at the University of Calgary and Mount Royal College over a period of one year. Evaluations were handed to students at the end of the course, and 291 completed evaluations were collected. Focus groups were used as a qualitative measure to “enable the researcher to understand and capture the points of view of other people without predetermining those points of view through prior selection of questionnaire categories” (Kidder & Judd, 1986, p. 24). The focus groups added to the quality of data that was collected, and consisted of approximately two to eight students each who participated in the career workshop. These groups were held to assess the various components of the program and learning system design. According to Kidder and Judd, a face-to-face interview can best establish rapport and motivate the respondents to answer fully and accurately. In addition, one group of eight administrators from the University of Calgary were interviewed, as well as two groups of instructors, one from the University of Calgary and one from Medicine Hat College.

All participants volunteering to complete the knowledge assessments and focus groups were asked to sign consent forms (Appendix D and E). The letter of invitation to participate in the focus groups is in Appendix F. All research participants were offered a

copy of the signed consent forms. Participants' demographical information appears in Chapter 5.

Realities and Issues

Recruiting volunteers to participate in this study proved to be difficult. One comment from a student after completing the pre-knowledge assessment was that the assessment was "too long." Students were asked at the beginning of the program if they would participate, and if they agreed, they were given pre-knowledge assessments before the course, and were then given the identical assessment after the course was completed. Reminders were e-mailed and/or telephoned to each student reminding them to fill out the questionnaires. Unfortunately, very few students participated in relation to the number of students taking the course. Students either did not respond to e-mails or telephone calls, or stated that they were too busy, or were already in their Co-op/Intern placements or work-based learning experiences and did not have the time to complete the posttests.

An issue concerning the completion of posttests may have been that participants of this study had to volunteer freely without promise of monetary or material rewards. Without realizing benefit in completing the posttests, students may have seen little value to continuing in the study.

Summary

This study was conducted at the University of Calgary, Medicine Hat College, and Mount Royal College, and included a summative evaluation process through

measurement and comparison methods of research, using online knowledge assessments, surveys, and focus groups.

This study evaluated the effectiveness of the online course through measuring learning outcomes using pre- and posttests to help determine whether students improved their understanding of the materials, and then compared online to in-class learner outcomes. One group of 18 out of 18 students at Medicine Hat College and one group of 16 out of 25 students at Mount Royal College volunteered to participate in the evaluation and completed both pre-and posttests in either print or computer form. Pretests were given to students in the one-hour orientation at the beginning of the Ex-Scape course. Identical posttests were given to students in the exit workshop after the students completed Ex-Scape. Course evaluations were handed to students at the end of the course, and 291 out of 600 students completed the survey. Chapter 4 provides an analysis of the data collected.

Chapter 4: Results & Findings

The primary purpose of this research was to empirically evaluate the effectiveness of the new online career workshop titled “Ex-Scape” offered at the University of Calgary, Medicine Hat College, Mount Royal College and Red Deer College by asking these research questions:

1. Did the students who completed the web-based workshop improve their understanding of how to write a résumé, cover letter, and how to do a job interview?
2. Did the students who completed the web-based workshop acquire the skills to write a résumé, cover letter and participate in a job interview?
3. Did the students who completed the web-based workshop do as well or better in the skills and knowledge outcomes as the students who completed the in-class career workshop?

In order to address these questions the following data was collected over an 18-month period of time. Over 600 students at the University of Calgary, Medicine Hat College, and Mount Royal College registered in the online career workshop. A total of 291 students completed course evaluations that were provided online or in the exit workshop at the end of the course (Appendix C) and were submitted to the researcher by the instructors. Students completed a 62-question survey based on a 5-point Likert scale of agreement in the areas of course objectives, content, instruction, and technology. In addition, short-answer questions were included to provide an opportunity for students to comment on or make recommendations for the course. The course evaluations were used to address research Questions One and Two.

In addition to the course evaluations, students were asked to volunteer to complete pre-and posttests in the areas of résumé, cover letter and interview knowledge (Appendix B). Only two online groups of 16 and 18 students respectively at Medicine Hat College and Mount Royal College completed a consent form (Appendix D) and volunteered to participate in this portion of the study. The pre- and posttests were used to address research Questions One and Three.

The pre-and posttests included the Résumé Knowledge Assessment, which contained 20 questions; the Cover Letter Knowledge Assessment, which contained seven questions; and the Interview Knowledge Assessment, which contained 21 questions. The questions were a combination of multiple choice, matching and short-answer. Not all students in these two groups completed both pre- and posttests in all three areas. As well, seven students from the last in-class group at the University of Calgary completed both the pre-and posttests. The data from this group were only used to address the third research question.

As well, a total of 27 students were interviewed in focus groups or personal interviews, and 8 administrators and 4 instructors were interviewed in group settings. The interview data of the 27 students is described later in the chapter.

Research Findings

In order to compare the pre- and posttest scores for students taking the online course, the two online groups of 16 and 18 students at Medicine Hat College and Mount Royal College who completed pre-and posttests in the areas of résumé, cover letter, and interview knowledge were combined for the purposes of this study since the groups were

similar in age and program. Of the combined number of students ($N = 34$) only 30 online students completed all the questionnaires. No online groups of students at the University of Calgary completed both of the assessments, citing that the questionnaires were too long and time consuming.

In order to compare the pre- and posttest scores for students taking the in-class course, only 8 out of 12 students (all at the University of Calgary) completed the assessments.

Three research questions were addressed in this study. To answer research Question One, frequency of responses were computed for the course evaluation questions that were concerned with understanding how to write a résumé, cover letter and how to do a job interview. As well, paired sample *t*-tests were applied to the pre- and posttests in the areas of résumé, cover letter and interview. To answer research Question Two, frequencies of responses were computed for the course evaluation questions that were concerned with acquiring the skills to write a résumé, cover letter and participate in a job interview. To answer research Question Three, a comparison was made of the results from the paired sample *t*-tests of the online group and the in-class group. Due to the small sample size of the in-class group, the results only provided an indication of whether or not the online group did as well or better than the in-class group in skill and knowledge outcomes.

Descriptive statistics were used to describe both demographic data as well as the major research questions. Major themes were reported from the interviews. For the inferential statistics the significance level was set at the $p < .05$ level.

Demographic Data

Characteristics of the 291 participants who completed the course evaluation consisted of 274 University of Calgary students in the third year of their four-year bachelor degree program, and 17 Mount Royal College students in their second year of a two-year diploma program. Out of the 291 participants, 290 completed the demographic information on age. Figure 1 displays students' ages.

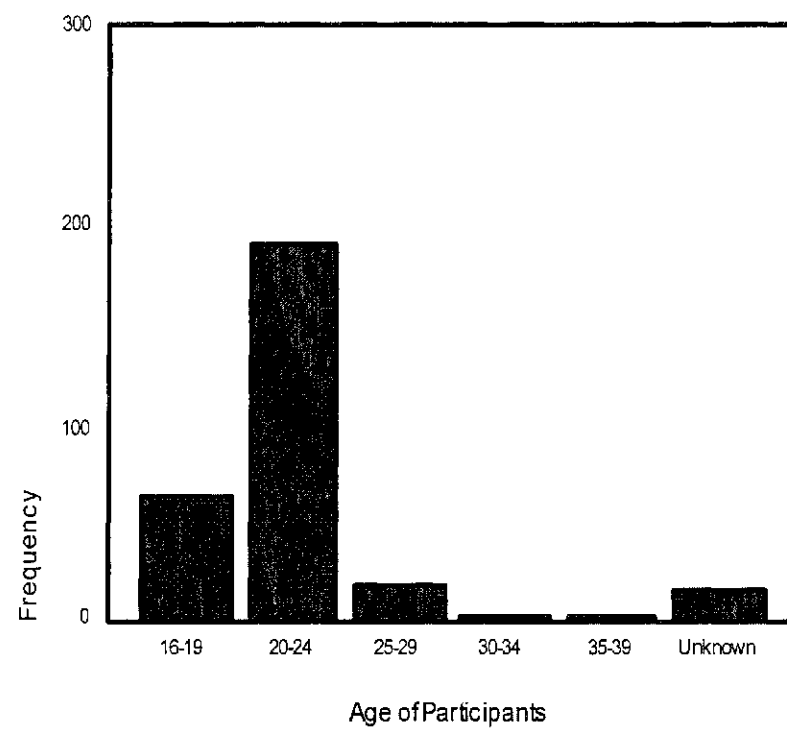


Figure 1. Age of participants who completed the course evaluations.

For this group, the mean age was 22 with a standard deviation of 9.0. These students were in a variety of programs as shown in Figure 2.

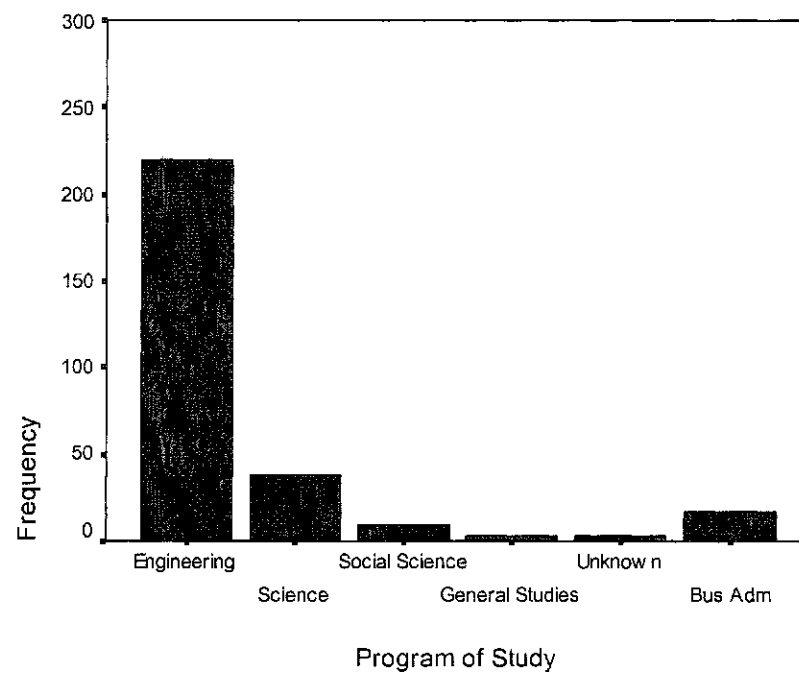


Figure 2. Program of study of participants who completed the course evaluations.

Characteristics of participants varied between the two online groups and the in-class group that completed the pre- and posttests. Table 2 displays students' ages and year of program.

The two online groups of students' ages were similar and they were enrolled in first- and second-year diploma programs, improving the comparability of the groups. Of the 34 students who participated in the online portion of the research, 32 completed demographics information. The in-class group was at a higher level of study, and students were in a variety of majors such as computer science, engineering, and economics. All eight in-class group of students completed demographics information.

Table 2

Comparison of Program Year and Age of Participants Who Completed Pre- and Posttests

	In-class Group (n=8)	Online Group (n=32)
Age Category:		
18-19	1	18
20-24	2	8
25-29	5	3
30-34		2
35+		1
Program Year:		
1	1	25
2	2	7
3	5	
Gender:		
Male	3	4
Female	5	28

Research Question #1

Did the students who complete the web-based workshop improve their understanding of how to write a résumé, cover letter, and how to do a job interview?

There are three parts to this question: understanding of the résumé, understanding of the cover letter, and understanding of the interview.

Résumé. First, consider the data related to the résumé. Bar graphs showing the frequency of responses from course evaluations of the 291 students are shown in Figure 3 and 4. There were two questions on this instrument that addressed the understanding of how to write a résumé. These bar graphs show students' impressions of their own understanding about résumés that they learned from the course.

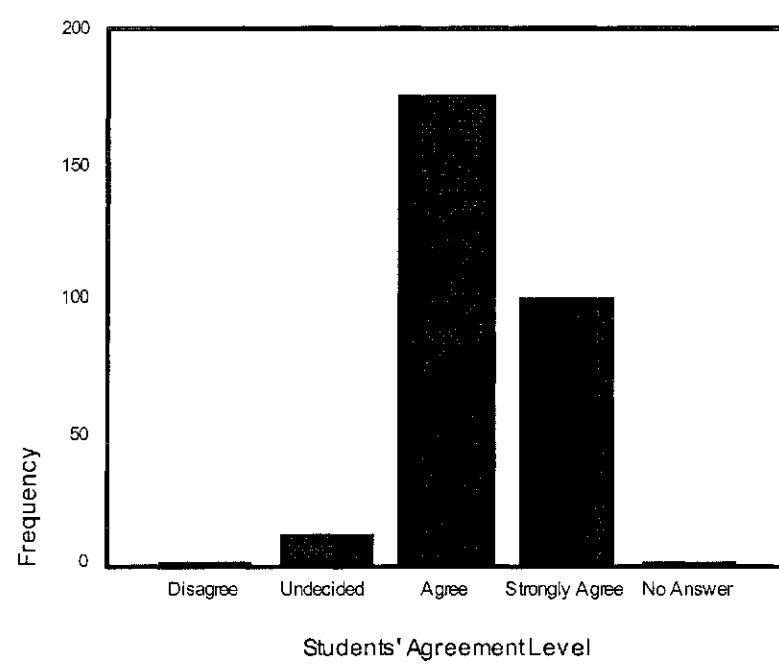


Figure 3: Course evaluation Question One: I have learned how to develop the sections of a résumé (N = 291).

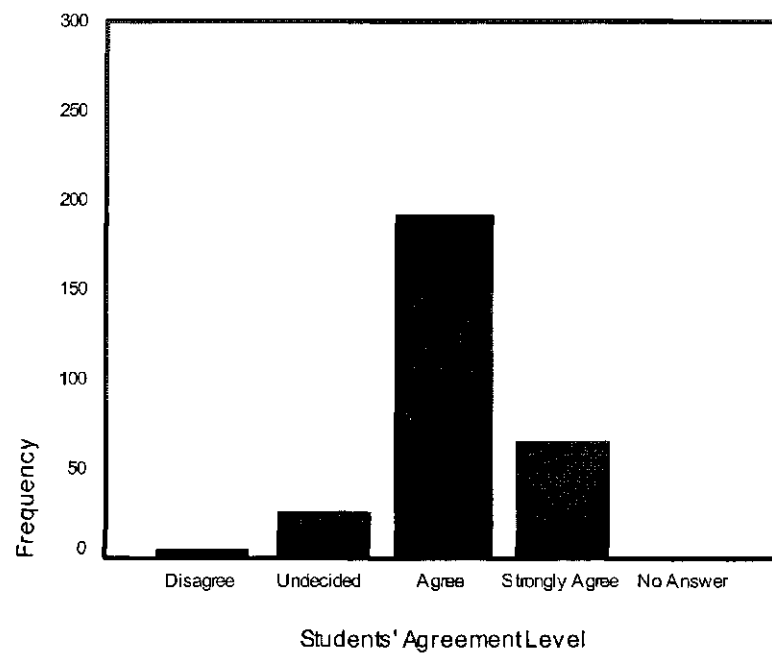


Figure 4. Course evaluation Question Two: I know how to profile my skills in a résumé (N = 291).

The graphs indicate that the students believed that they improved their understanding of how to write a résumé.

Objective data on the students' actual learning was obtained via pre- and posttests. A paired sample *t*-test was used to compare each student's pre- and post-knowledge assessment. The results of this analysis, based on the responses of the 30 out of 34 students who completed both the pre- and posttests, are given in Table 3.

Table 3

Paired Samples t-test, Résumé Knowledge Assessment – Online Groups (N=30)

	Maximum Score	Pretest (Mean)	Posttest (Mean)	Post-Pre (Mean)	t	df	Sig. (2-tailed)
Q1	1	.83	.87	.03	.37	29	.71
Q2	3	1.33	2.50	1.17	2.43	29	.02*
Q3	10	8.50	8.10	-.40	-.67	29	.51
Q4	1	.60	.73	.13	1.07	29	.29
Q5	1	.50	.73	.23	1.89	29	.07
Q6	1	.60	.77	.17	1.31	29	.20
Q7	1	.43	.80	.37	3.27	29	.00*
Q8	1	.27	.53	.27	2.50	29	.02*
Q9	1	.83	.77	.03	.81	29	.80
Q10	1	.17	.40	.23	2.25	29	.03*
Q11	1	.60	.73	.13	1.16	29	.26
Q12	4	1.53	2.20	.67	2.09	29	.05*
Q13	6	1.80	3.03	1.23	4.03	29	.00*
Q14	1	.60	.80	.20	1.80	29	.08
Q15	1	.40	.60	.20	1.53	29	.14
Q16	1	.23	.20	-.03	-.37	29	.71
Q17	1	.27	.63	.37	3.27	29	.00*
Q18	3	1.23	2.10	.87	3.43	29	.00*
Q19	3	1.07	2.33	1.27	5.00	29	.00*

*p ≤ .05

Table 3 supports the finding that students have improved their understanding of how to write a résumé by showing that of the 19 questions, 17 showed improvement with nine of these differences being statistically significant at the 0.05 level. A few of the larger differences may be due to general knowledge of résumés. For example, question two asked for three main purposes of a résumé from an employer's perspective (which may not be general knowledge). The results of the posttest showed a significant improvement of correct answers, whereas, question one, which showed little statistical improvement, asked how many pages a résumé should be and found that most students answered correctly on both the pre-and posttests.

Cover Letter. Next, consider the data related to the cover letter. Bar graphs showing the frequency of responses from course evaluations of the 291 students are shown in Figure 5. Question Four on the evaluation addressed the understanding of writing a cover letter.

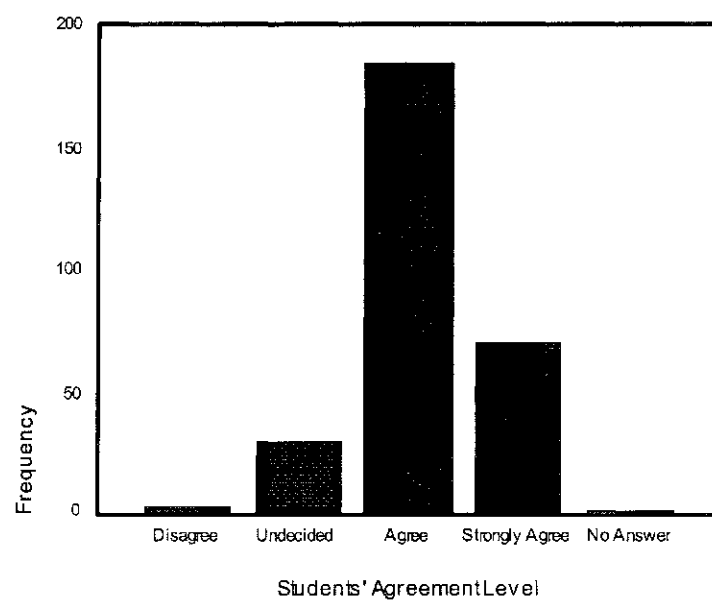


Figure 5. Course evaluation Question Four: I know how to write a cover letter (N = 291).

This graph indicates strong agreement that students improved their understanding of how to write a cover letter.

In addition to the information from the bar graph, a paired sample *t*-test was used to compare each student's pre- and posttests. The results of this analysis, based on the responses of 29 out of 32 students who completed both the pre- and posttests, are in given in Table 4.

Table 4

Paired Samples t-test, Cover Letter Assessment – Online Groups (N = 29)

	Maximum Score	Pretest (Mean)	Posttest (Mean)	Post-Pre (Mean)	t	df	Sig. (2-tailed)
Q1	1	.97	.93	-.03	-.57	28	.57
Q2	1	.97	.86	-.10	-1.80	28	.08
Q3	1	.86	.93	.07	.81	28	.42
Q4	3	1.62	2.96	1.35	4.12	28	.00*
Q5	6	3.27	4.49	1.21	3.57	28	.00*
Q6	1	.76	.90	.14	1.28	28	.21
Q7	1	.38	.79	.41	3.55	28	.00*

* $p \leq .05$

Table 4 supports the finding that students improved their understanding of how to write a cover letter by showing that of the 7 questions, all show improvement with three of these differences being statistically significant at the 0.05 level.

Interview. Now consider the data related to the interview. Bar graphs were used showing the frequency of response from course evaluations of the 291 students are shown in Figures 6, 7, 8 and 9. There were four questions on the course evaluation questionnaire that addressed the understanding of how to perform in an interview.

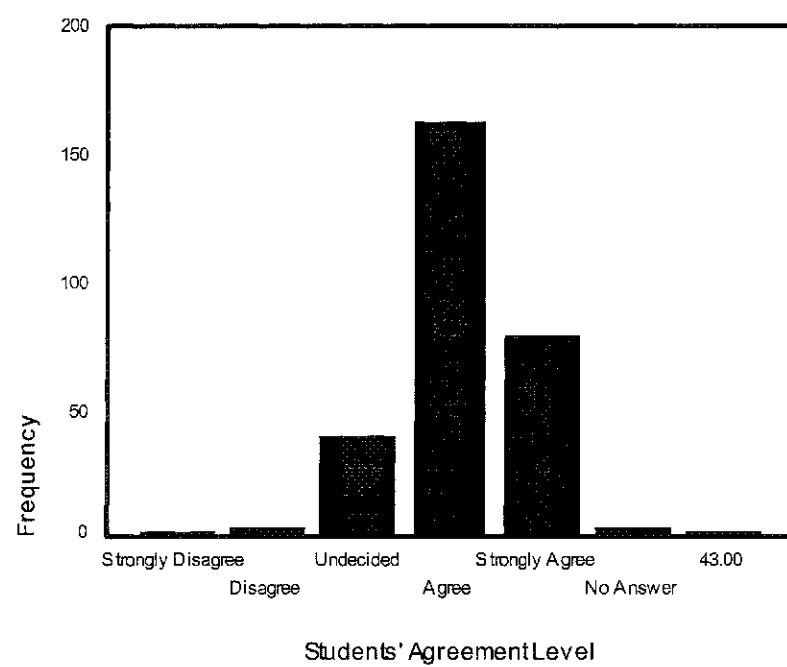


Figure 6. Course evaluation Question 11: I know how to profile my skills during an interview (N = 291).

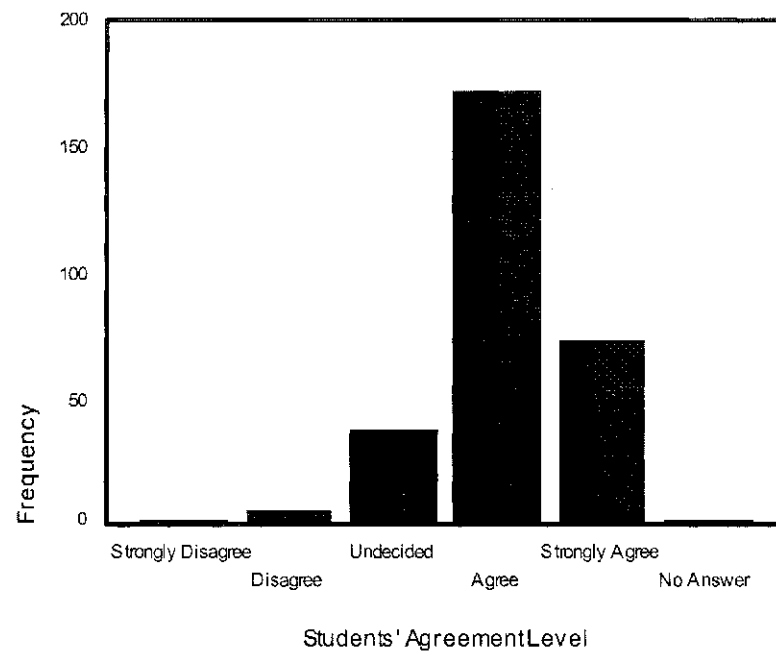


Figure 7. Course evaluation Question 12: I have increased my understanding of how to effectively handle the stages of an interview (N = 291).

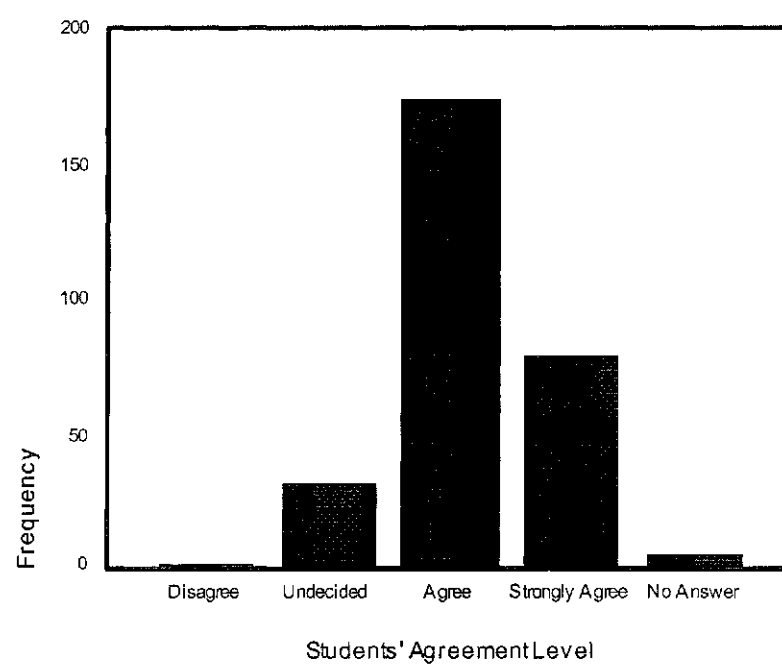


Figure 8. Course evaluation Question 13: I understand how my values are important in an interview (N = 291).

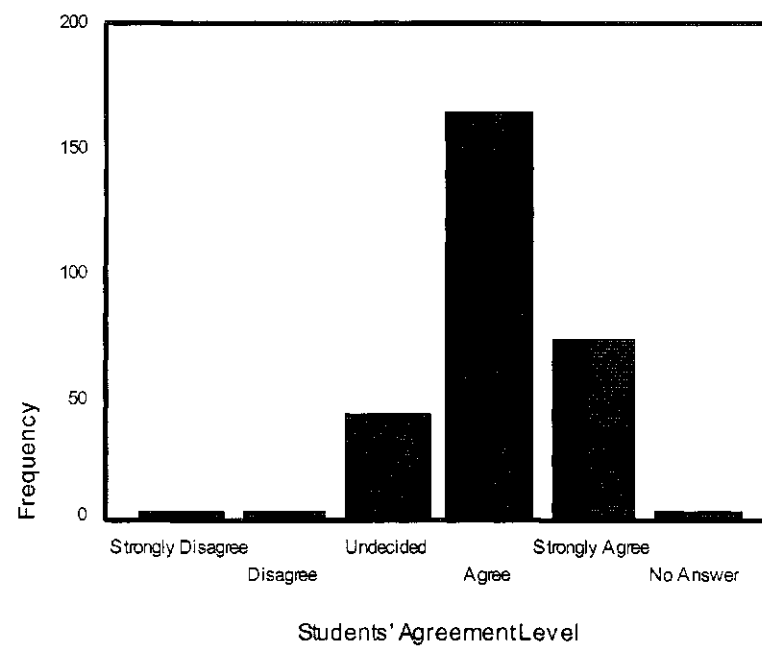


Figure 9. Course evaluation Question 14: I can draw from my past experiences to answer Behaviour Description Questions (N = 291).

These graphs indicate strong agreement that students improved their understanding of how to perform in an interview.

In addition to the information from the bar graph, a paired sample *t*-test was used to compare each student's pre- and posttests. The results of this analysis, based on the responses of the 32 students who completed both the pre- and posttests, are in given in Table 5. Table 5 supports the finding that students improved their understanding of how to perform in an interview by showing that of the 21 questions, 20 show improvement with 18 of these differences being statistically significant at the 0.05 level.

Table 5

Paired Samples t-test, Interview Knowledge Assessment – Online Groups (N = 32)

	Maximum Score	Pretest (Mean)	Posttest (Mean)	Post-Pre (Mean)	t	df	Sig. (2-tailed)
Q1	3	1.44	2.41	-.97	3.52	31	.00*
Q2	5	3.97	4.63	-.66	2.45	31	.02*
Q3	3	1.09	2.56	-1.47	5.97	31	.00*
Q4	2	.47	1.06	-.59	4.72	31	.00*
Q5	1	.34	.31	.03	-.30	31	.77
Q6	1	.81	.97	-.16	1.97	31	.06
Q7	1	.69	.91	-.22	2.52	31	.02*
Q8	3	2.10	2.74	-.65	3.07	30	.01*
Q9	3	.52	2.45	-1.94	8.91	30	.00*
Q10	5	1.87	3.42	-1.55	2.95	30	.01*
Q11	2	.55	1.68	-1.13	5.62	30	.00*
Q12	4	2.19	3.94	-1.74	5.37	30	.00*
Q13	2	.19	1.32	-1.13	7.11	30	.00*
Q14	1	.16	.45	-.29	3.06	30	.01*
Q15	1	.47	.94	-.47	4.68	30	.00*
Q16	4	.47	3.13	-2.66	7.73	31	.00*
Q17	9	7.28	8.56	-1.28	3.91	31	.00*
Q18	1	.50	.88	-.38	4.31	31	.00*
Q19	1	.94	1.00	-.06	1.44	31	.16
Q20	1	.72	.97	-.31	2.78	31	.02*
Q21	3	1.16	2.81	-1.21	7.76	31	.00*

*p< .05

Results of Question #1

Based on results from course evaluations and paired samples *t*-tests performed on pre- and posttests, students who completed the web-based workshop improved their understanding of how to write a résumé, cover letter, and how to do a job interview.

Résumé. A total of 291 students from the University of Calgary and Mount Royal College taking the online program responded to a survey question asking if they have improved their understanding of how to develop a résumé; 95 percent of students agreed or strongly agreed that they did improve their understanding of how to develop sections of a résumé. See Figure 3 for results.

The online group of students showed statistically significant improvement in questions 2, 7, 8, 10, 12, 13, 17, 18, and 19 on the Résumé Knowledge Assessment. Since all other questions showed a value of significance greater than .05, the answer to question one must be positive. See Table 3 for the statistical results.

Cover Letter. The course evaluation included one question addressing whether or not students have improved their understanding of how to write a cover letter; 88 percent agreed that they improved their understanding of how to write a cover letter. See Figure 5 for results.

As well, students showed significant improvement in questions 4, 5, and 7 on the Cover Letter Knowledge Assessment where the value of significance was less than .05. Since all other questions showed a value of significance greater than .05, the answer to

research Question One must be positive. See Table 4 for statistical results.

Interview. Students responded to a survey question on the course evaluation asking if they felt they have improved their understanding of how to prepare for an interview; 97 percent agreed that they improved their understanding of how to prepare for an interview. See Figures 6, 7, 8 and 9 for results.

Students showed statistically significant improvement in most questions on the Interview Knowledge Assessment where the value of significance was less than .05, except for questions 5, 6, and 19 where a value of significance was greater than .05. Since students overall did as well or better on the post-knowledge assessment, the answer to research Question One must be positive. See Table 5 for statistical results.

The paired samples *t*-tests indicated that students in the online group did improve their understanding overall of how to write a résumé, cover letter, and how to prepare for a job interview. In addition to the *t*-tests, the course evaluations were well over 50 percent for the three areas of understanding; they support the *t*-test findings. Therefore, the answer to research Question One must be positive.

Research Question #2

Did the students who completed the web-based workshop acquire the skills to write a résumé, cover letter, and participate in a job interview?

There are three parts to this question: skills to write a résumé, skills to write a cover letter, and skills to participate in a job interview.

Bar graphs showing the frequency of responses from course evaluations are shown in Figures 10, 11, and 12. The bar graphs showing the frequency of responses from course evaluations for items that asked students if they acquired the skills to write a résumé, cover letter, and participate in a job interview will indicate students' perceptions of their own abilities. See Figures 10, 11, and 12 for results.

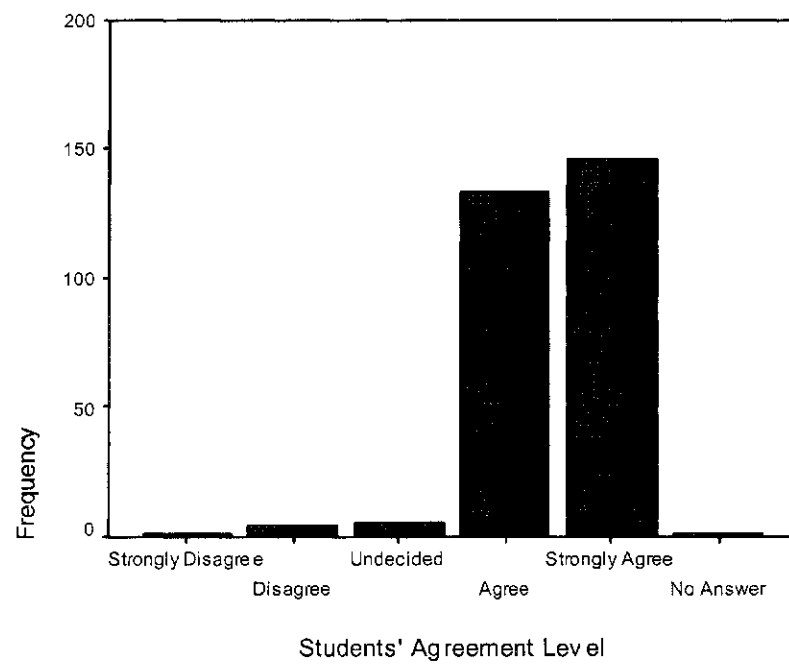


Figure 10. Course evaluation Question 20: I have drafted a résumé (N = 291).

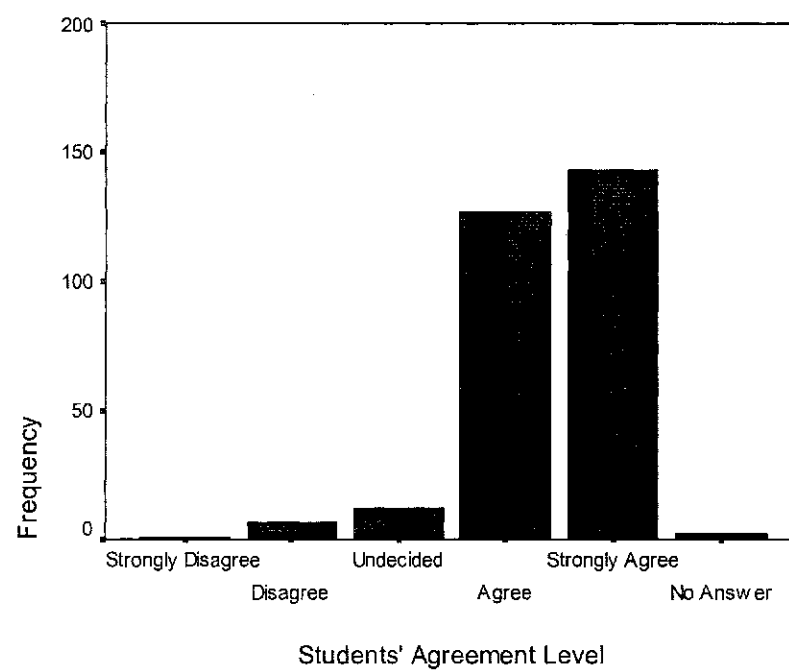


Figure 11. Course evaluation Question 21: I have drafted a cover letter (N = 291).

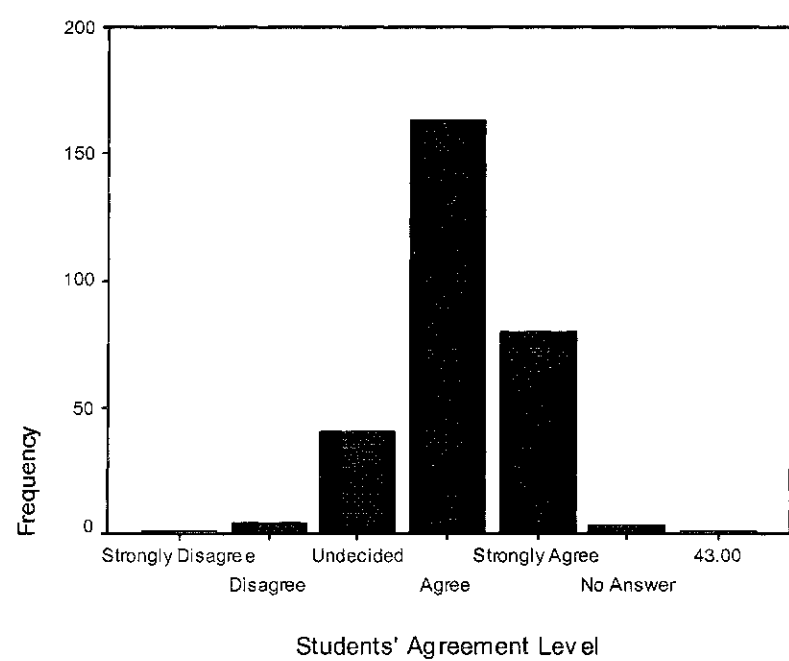


Figure 12. Course evaluation Question 11: I know how to profile my skills during an interview (N = 291).

Results of Question #2

Résumé. A total of 291 students from the University of Calgary and Mount Royal College taking the online program responded to a survey question asking if they acquired skills to develop a résumé; 98 percent of students agreed or strongly agreed that they did draft a résumé. See Figure 10 for frequency counts.

Cover Letter. From the same group of students, 91 percent agreed or strongly agreed that they did draft a cover letter. See Figure 11 for frequency counts.

Interview. A total of 86 percent of the same group of students agreed that they have acquired the skills to participate in a job interview. See Figure 12 for results.

Since the responses to the survey questions are well over 50 percent for the three areas of acquiring skills, they indicate that the answer to research Question Two must be positive.

Research Question #3

Did the students who complete the web-based workshop do as well or better in the skills and knowledge outcomes as the students who complete the program offered in the original in-class career workshop?

Results of the pre- and posttests from the online groups were compared to the in-class group. The sample size of the in-class group is too small ($N = 8$) to compare it to the online group. The statistics do, however, provide an indication that improvement of

knowledge and skills took place in both the in-class and online groups suggesting that the online group improved their knowledge and skills in the career workshop just as the in-class group of students generally improved their knowledge and skills in the career workshop. This allows the researcher to reason that students cannot only learn from an online career workshop, but they can do as well as those students taking the career workshop in class. See Tables 6, 7, and 8 for statistical results of the online and in-class groups in the areas of cover letter, résumé, and interview knowledge outcomes.

Table 6

Paired Samples t-test, Cover Letter Knowledge Assessment – Online and In-class Groups

	Online groups n=29			In-class group n=8		
	<i>t</i>	df	Sig.	<i>t</i>	df	Sig
Q1	-.57	28	.52	1.53	7	.17
Q2	-1.80	28	.08			
Q3	.81	28	.42	-1.53	7	.17
Q4	4.12	28	.00*	6.61	7	.00*
Q5	3.57	28	.00*	3.00	7	.02*
Q6	1.28	28	.21	1.00	7	.35
Q7	3.55	28	.00*	2.05	7	.08

*p< .05

Table 7

Paired Samples t-test, Résumé Knowledge Assessment – Online and In-class Groups

	Online groups n=30			In-class group n=8		
	<i>t</i>	df	Sig.	<i>t</i>	df	Sig
Q1	.37	29	.71			
Q2	2.43	29	.02*	1.43	7	.20
Q3	-.67	29	.51	2.24	7	.06
Q4	1.07	29	.29	.81	7	.44
Q5	1.89	29	.07	-1.00	7	.35
Q6	1.31	29	.20	1.00	7	.35
Q7	3.27	29	.00*	1.53	7	.17
Q8	2.50	29	.02*	3.00	7	.02*
Q9	.81	29	.80	1.00	7	.35
Q10	2.25	29	.03*	.00	7	1.00
Q11	1.16	29	.26	-1.00	7	.35
Q12	2.09	29	.05*	2.05	7	.08
Q13	4.03	29	.00*	1.04	7	.20
Q14	1.80	29	.08	.00	7	1.00
Q 15	1.53	29	.14			
Q16	-.37	29	.71	.55	7	.60
Q17	3.27	29	.00*	-.55	7	.60
Q18	3.43	29	.00*	1.87	7	.10
Q19	5.00	29	.00*	2.65	7	.03*

*p< .05

Table 8

Paired Samples t-test, Interview Knowledge Assessment – Online and In-class Groups

	Online groups n=32			In-class group n=8		
	<i>t</i>	df	Sig.	<i>t</i>	df	Sig
Q1	3.52	31	.00*	3.04	7	.02*
Q2	2.45	31	.02*	2.38	7	.05*
Q3	5.97	31	.00*	.75	7	.48
Q4	4.72	31	.00*	2.65	7	.33
Q5	-.30	31	.77	1.43	7	.20
Q6	1.97	31	.06	1.53	7	.17
Q7	2.52	31	.02*	1.00	7	.35
Q8	3.07	31	.01*	1.53	7	.17
Q9	8.91	31	.00*	2.39	7	.05*
Q10	2.95	31	.01*	2.91	7	.02*
Q11	5.62	31	.00*	3.42	7	.01*
Q12	5.37	31	.00*	3.32	7	.01*
Q13	7.11	31	.00*	3.86	7	.01*
Q14	3.06	31	.01*	.00	7	
Q15	4.68	31	.00*	.00	7	1.00
Q16	7.73	31	.00*	2.38	7	.05*
Q17	3.91	31	.00*	1.25	7	.25
Q18	4.31	31	.00*	4.58	7	.00*
Q19	1.44	31	.16	.55	7	.60
Q20	2.78	31	.02*	1.25	7	.25
Q21	7.76	31	.00*	4.58	7	.00*

*p< .05

Qualitative Analysis

Open-ended Qualitative Data

In addition to collecting quantifiable information, the course evaluation also contained a section for qualitative data collection. Short-answer questions were used to provide students with an opportunity to express their views regarding their course learning experiences. Out of the 291 students who completed the evaluation survey (Appendix B), 66 students responded to the short answer questions. Not all of the 66 students who responded to the short-answer questions provided a comment for each question.

Major Themes for Students Completing Course Evaluations

The following comments of the 66 students indicate their impressions of what they felt were the most important issues surrounding the web-based course.

Question 1. Please indicate if you had any expectations, other than those listed, for this program that were or were not met by this program:

- a. Expectations for the course were met (N = 30).
 - i. Comments:
 1. "I had hoped this program would help create a better résumé for me, and it has."
 2. "Everything I expected was in this course."
 3. "I was really happy that the program focused on interviewing as this seems to be one of my weaknesses."

4. "All expectations were met and then some (I only expected details on how to write a résumé & cover letter, but there was much more)."
 5. "Learned how to make a better résumé. Got a better idea of the application process."
 6. "I expected to get professional critiquing of my résumé and that help is offered at career services . . . excellent!!"
- b. Require more time to complete website (N = 20).
- i. Comments:
 1. "More time to do web site stuff."
 2. "I expected more time to do the requirements i.e. résumé, cover letter before 3 hour session."
 3. "Too rushed—should be greater than one week for completing the web site."
 4. "Quite frankly, I have not been able to look at the course much in one week right in the middle of mid-terms!"
- c. Require more information on specific job search topics.
- i. Comments:
 1. "More emphasis on networking would be nice."
 2. "More on how to research companies."
 3. "Deciding between potential employers."
 4. "I was hoping to see more sample résumés, cover letters."
 5. "Job shadowing, interviewing."

d. Would like more interaction with peers, instructors (N = 8).

i. Comments:

1. "Expected more small group activity, changing the groups for different areas we're working on - expected small group work on specific résumé sections and job search strategies."
2. "Greater balance toward personal over Internet."
3. "It is hard to brainstorm ideas alone at a computer."
4. "I believe the online concept made interaction totally unavailable."

e. Wanted accurate time line for completion of the course (N = 6).

f. Wanted to know clearly what each faculty is responsible for (N = 3).

g. Wanted résumé and cover letter critique by professionals (N = 2).

i. Comments:

1. "Specific one-on-one critiqued résumé by a professional."
2. "I expected professional help with résumé and cover letters written by students instead of another student checking my work."

Summary. Survey closed-ended data indicated that students were able to improve their understanding of résumés, cover letters, and job interviews, as well as acquire the skills to develop a résumé, cover letter, and participate in a job interview. Open-ended qualitative data was consistent with this finding. The students indicated that overall they were able to learn from the course.

Question 2. In the future, I would take another online course because:

- a. Online course is flexible (single largest response).
- b. Can work at own pace.
- c. Able to go back and review material.

Summary. Open-ended qualitative data indicates that students found the online course beneficial because it allowed them flexibility that traditional learning did not.

Question 3. In the future, I would not take another online course because:

- a. Prefer interaction with instructor and peers (single largest response).
- b. Computer and Internet access caused problems.
- c. The online course took too long to complete.

Summary. The majority of students indicated that they would take another online course; however, those who said they would not had valid reasons including learning style preference, frustration with technology, and some students felt that the course took more time to complete than if they had taken it in a traditional setting.

Focus Groups

A total of 27 students from the University of Calgary, Medicine Hat College, and Mount Royal College participated in focus groups or personal interviews. Group interviews provided students with an opportunity to express their view regarding their learning experiences. Those students who were not able to attend a focus group either responded to the questions in Appendix F by email or telephone interview. Students'

comments have been organized into major themes that emerged from the qualitative data analysis.

Major Themes for Students in the Focus Groups

The following comments of the 27 students indicate their impressions of their learning experiences.

Theme 1. Students liked the flexibility of working online.

Comment 1: "You could do it at your own pace...if you want to do it for a few hours straight you can or if you just want to do it for a few minutes here and there, you can."

Comment 2: "And it didn't matter what time you went on."

Comment 3: "...you could go at your own pace, and if you had to go back you could go back and review a whole section. It wasn't a class that you are going to do this today and then next class you are on to this...you could go back, you could go back and forth between whatever section and kind of do what you wanted."

Comment 4: "...cause if you understand, like if you knew your skills already, you could just go to the next part, kind of breeze through it and focus on what you really needed to do."

Theme 2. Students were able to use the strategies learned online.

Comment 1: "I found it helpful...interview strategies, what to do, how to behave, what the employers look for."

Comment 2: “And tips of what to do in an interview, like everything, it was just great, it was really good.”

Comment 3: “Ya, I still go back to it.”

Comment 5: “After I took this course I learned how to evaluate myself (skills) ... at least I know what I have and what I have to improve.”

Comment 6: “...values and what you have (skills) you need to discover them, so you can present it into the résumé ... then we got into how to write résumés and the cover letter. We did it right before we had to apply for our job, so that we can kind of get some idea how to write them (résumés).”

Theme 3. Ex-Scape offered variety.

Comment 1: “I liked having sort of the variety ... getting ideas from everybody and being able to pick your own styles.”

Comment 2: “Like they have lots of different types of résumés and cover letters. It wasn't just “this is the format” follow it.”

Theme 4. Special features of the program were helpful.

Comment 1: “Just the tips from different companies and especially because you knew what the company was what their position (referring to audio clips). The fact that they were someone hiring co-op students, so just hearing what they had to say and we could sort of, pick up some of those tips.”

Comment 2: "I found it (audio clips) helpful. I like the representatives, like from some of the different companies, within Calgary and area give their opinions on interviews and what they look for in résumés and that."

Summary of Focus Groups Themes

The special features of Ex-Scape as well as the learning environment and course content are elements of the course that helped students to improve their understanding, and acquire the skills, to write a résumé, cover letter and do an interview.

These results are consistent with the statistical analysis of the pre- and posttest results. This data provided a look at the significant contribution that the online program made to learning outcomes.

Uncategorized Responses

Theme 1. The technology was slow for the capabilities of the online course.

Comment 1: "Sometimes the examples are not available."

Comment 2: "They would take a really long time to load on to my computer."

Comment 3: "Some things take a long time to download. I'm using cable at home so if I'm working at home then its fine, but if I want to work at school then it takes a long time."

Theme 2. Lack of communication through Ex-SCAPE was frustrating for some students.

Comment 1: “The only thing that I didn’t like about the online was that I couldn’t talk to someone, like if I had a question ... if it wasn’t making sense to me or how should I word this or how can I put this skill into a sentence relating to whatever job I was doing. It is easier to talk to someone about that than just reading it on a computer and not understanding.”

Comment 2: “...cause if you had one question and it (email) answered this, then it might raise another question, so that instead of playing email tag we could take 5 minutes and get everything answered.”

Comment 4: “We didn’t ever use that (email and bulletin board).”

Comment 6: “...the part with the bulletin board, I know I would have used it more if I’d known people better.”

Theme 3. In class instruction enhanced online learning.

Comment 1: “She (instructor) just gave us a lot of good tips and, not just from her point of view, but from like past students giving her feedback and stuff.”

Comment 2: “I thought it helped out a lot, cause there are some questions, like it clarified things, like if I didn’t quite understand how it was worded, or it was kind of fuzzy to me on the online, you could go into class and your question would be answered cause you could get it across like to talk about it. There was interaction back and forth.”

Comment 3: “...if you just do it online you don’t really have the help of a teacher and the feedback, but she helped us out really good on that.”

Theme 4. Retyping lost work was the greatest source of student frustration.

Comment 1: “Maybe something that pops up and says, “Did you remember to submit it?” Cause I know I had a lot of problem losing my work, just cause I would exit out of it and not be able to keep any of it.”

Comment 2: “so if you had the different windows or something (that you could go back & forth without losing work)”.

Comment 3: “...(if) I wanted clarification, then I’d go back to the section, like it was your cover letter, I’d go back to that, look it up, then I’d go back and do all the answers so I didn’t have to re-type everything again.”

Summary of Uncategorized Responses

These comments, while being uncharacteristic of the results as a whole, are important issues for the redevelopment of the program, and for future use for the people in the field who are looking toward online career workshops. Recommendations from these comments have been included in Chapter 5.

Summary

The primary purpose of this research was to empirically evaluate the effectiveness of the new online career workshop titled “Ex-Scape” offered at the University of Calgary (U of C), Medicine Hat College (MHC), Mount Royal College (MRC) and Red Deer College (RDC). The following three research questions were being addressed:

1. Did the students who completed the web-based workshop improve their understanding of how to write a résumé, cover letter, and how to do a job interview?

2. Did the students who completed the web-based workshop acquire the skills to write a résumé, cover letter and participate in a job interview?
3. Did the students who completed the web-based workshop do as well or better in the skills and knowledge outcomes as the students did in the in-class career workshop?

Students were asked to participate in this study without material or monetary reward. Out of 600 students registered in the online course at the U of C, MHC, and MRC, only two groups of 16 and 18 from MHC and MRC respectively agreed to complete both pre- and post-knowledge questionnaires. Over 290 students completed course evaluations from the U of C and MRC. Descriptive statistics, paired sample *t*-tests, and summary of frequencies were used to report the findings. Major themes were reported from the interviews. Reasons for non-participation included the knowledge questionnaires were too long, students were too busy, and students were already off campus in their Co-op or experiential work positions.

Statistical results through paired samples *t*-tests for Question One indicated that students in the two online groups did improve their understanding overall of how to write a résumé, cover letter, and how to do a job interview. In addition to the *t*-tests, results from course evaluations supported the *t*-test findings.

Responses from the course evaluations showed students' agreement level for Question Two were well over 50 percent for the three areas of acquiring skills, indicating that the answer to research Question Two must be positive.

Results of the pre- and posttests from the online groups were compared to the in-class group; however, the sample size of the in-class group ($N = 7$) was too small to

compare it to the two online groups. Indications are that improvement of knowledge and skills took place in both the in-class and online groups suggesting that the online group improved their knowledge and skills in the career workshop just as the in-class group of students generally improved their knowledge and skills in the career workshop.

In addition to the statistical analysis major themes were reported from comments provided on the course evaluations and focus groups. The data collected indicated that students were able to improve their understanding of résumés, cover letters, and job interviews, as well as acquired the skills to develop a résumé, cover letter, and participate in a job interview. Chapter 5 provides a further discussion of the results of this research study as well as recommendations for improving the effectiveness of the Ex-Scape program.

Chapter 5: Summary, Conclusions, and Recommendations

Summary

This study was intended to empirically evaluate the effectiveness of the new online career workshop titled “Ex-Scape.” With an increasing number of students taking co-operative education, internships and experiential work programs, there was a need to accommodate the growing number of students registering in the pre-requisite career workshop. With increased demands on faculty and facilities there was a need to develop innovative programs. Web-based instruction for post-secondary institutions was becoming increasingly popular as an innovative method of instructional delivery. This method of instructional delivery was no exception to the career services area.

Chapter 1 presented the purpose of this study as well as a brief literature review supporting the need to conduct a research study on the effectiveness of a web-based career development course. The main purpose of this study was to empirically evaluate the effectiveness of the new online career workshop titled “Ex-Scape” offered at the University of Calgary, Medicine Hat College, Mount Royal College and Red Deer College based on knowledge and skill outcomes. A point to note is that the Ex-Scape program replaced the original 12-hour in-class workshop titled “Career Development Workshop for Prospective Co-operative and Intern Students” offered at the University of Calgary. Therefore the study was conducted to improve the program rather than to go back to the traditional workshop. The research questions were as follows:

1. Did the students who completed the web-based workshop improve their understanding of how to write a résumé, cover letter, and how to do a job interview?

2. Did the students who completed the web-based workshop acquire the skills to write a résumé, cover letter, and participate in a job interview?
3. Did the students who completed the web-based workshop do as well or better in the careers knowledge and skills outcomes of the course as the students who completed the program offered in the original in-class career workshop?

Literature Review. The literature review in Chapter 2 began with a look at methods of evaluating a distance learning course (Leah & Rampp, 2000; Simonson, 1997). This study utilized measures of outcome, using pre- and posttests, course evaluations, and focus groups with students. The pre- and posttests of each volunteer then compared the results of the online group to the in-class group.

The literature review then discussed the need for evaluation. Given that little research was found on career development courses that have gone online there was a need for conducting this research (Levin, 1997; Monk, 1996). Program evaluation is necessary to ensure if the program goals were met, or if problems lie in the technology itself (Powers, 1997).

The selection of literature provided an examination of studies of a wide variety of post-secondary and high school courses in humanities, social sciences, library science, nursing and graduate studies that compared test scores and student impressions of distance education to traditional classroom instruction. However, the apparent lack of research for career development courses was evident, illustrating the need for this study.

The comparison of online to traditional instruction provided an overview of courses that showed the effectiveness of distance education and reported no significant difference

between the effectiveness of distance education to traditional instruction (Fredda, 2000; Goodyear, 1995; Jackman & Swan, 2000; Nelson, 1997; Russell, 1999; Urven, et al., 1998; Wegner, et al., 1997;).

In addition to comparing grades and test scores, the literature review examined students' impressions of distance education, and the importance of interactivity in distance education courses, which emerged as a theme in studies of web-based courses. Students' impressions were favourable towards distance education courses citing that they were impressed with the assignments/activities, graphic download time, weekly postings and announcements by instructors, instructor availability, material structure, and interaction between peers (Hill, et al., 1998; Kleisuk et al., 1997; Thomson & Stringer, 1998; Velayo, 2001 Winfield, et al., 1998). One study by Klesiuk, et al. (1997) indicated that when distance education classes are developed following guidelines by Haaland and Newby (1984), Simonson, et al. (1993) and Willis (1993) there was a higher level of learner satisfaction. The guidelines included diversification of pace and activities; concise and cohesive verbal presentations with practice beforehand; well-defined statements of purpose; use of accompanying well-designed pre-bound printed material; implementation of detailed planning with review of content for presentation ideas; study of distance education; use of on-site facilitators; and use of visuals and graphics (p. 216).

The literature review found that some of the concerns expressed from students were time management in a condensed course (Hill, et al., 1998), and students felt they had more work to do in a web-based course than they had expected (Nelson, 1997).

The theme of interactivity emerge out of the literature review indicating that interactivity was a benefit to web-based instruction, especially student-to-student interaction.

Student to instructor interaction was also viewed as beneficial to student motivation, as well as the use of email, bulletin boards, chatrooms, animations, and video and audio clips (Abrahamson, 1998; Brown, 2000; Patterson, 1999; Powers, et al., 1999; Prester & Moller, 2001; Saunders, et al., 1997). In one study of a virtual course students indicated that Involvement and Personalization scales ranked the highest in student agreement. Both scales indicated positive feelings toward interaction with peers, and the ability to share their work and receive feedback from peers (Powers, et al., 1999).

A theme that emerged out of earlier studies on web-based instruction was the concern for availability of computers, however, this concern does not seem to emerge in later studies as more students own their own computers, and computer labs in post-secondary schools have expanded.

Methodology. The research design of this study is described in Chapter 3, and utilized identical pre-and posttests administered to an online group of 34 students from Mount Royal College and Medicine Hat College registered in two-year diploma programs, and administered to 12 students in the last in-class group of the original Career Development Workshop for Prospective Co-operative and Intern Students offered at the University of Calgary. This was a 12-hour career workshop that was replaced by the Ex-Scape program. The research design also included 291 course evaluations collected from the University of Calgary and Mount Royal College students, as well as focus groups conducted with 27 students from the online and in-class course from the University of Calgary, Mount Royal College and Medicine Hat College.

The pre- and posttests were developed out of the Ex-Scape course curriculum and covered the areas of résumé, cover letter, and interview. The three assessments included 48 questions. The course evaluation included 62 questions that surveyed students in the areas of course objectives, content, instruction, technology, and assignments using a 5-point Likert-type scale. Six short-answered questions were also included. The focus group questions were administered in person to five groups of students ranging from two participants to eight participants in each group. The assessments were offered in printed form to the in-class group, and either online or in-class to the online group. The course evaluations were offered to the online group, online or in print form, and the focus groups were conducted in person. The researcher marked all pre-and post assessments and received the course evaluations from the instructors of the in-class or online group. The data from these instruments were entered into SPSS 11.5 for statistical analysis of the results. Paired-sample *t*-tests, and frequency of responses were used to test the results. The focus groups were taped onto cassette tape and transcribed by a professional transcriber, and analyzed for major themes.

Findings. The study was conducted over an 18-month period due to the difficulties in securing volunteers to participate in the pre-and posttests. An online group of 18 students at Medicine Hat College and 16 students at Mount Royal College completed both the pre- and posttests. Not all students in this group completed both the pre- and posttests in all three areas, or all of the questions on the tests. Throughout the 18-month period many pretests were collected but the posttests proved difficult to obtain with students citing that they were too busy, they were off campus in their experiential work programs, and/or the tests were too long. Approximately 600 students at the University of Calgary and 30 students at Mount

Royal College registered in the Ex-Scape program during a 12-month period of time. During that time 291 students completed and submitted the course evaluations.

The results of the pre- and posttests in the areas of résumé, cover letter, and interview helped to understand research Question One. The results showed overall significant difference in the paired samples *t*-test of each volunteer in the online group and the in-class group, thus indicating that the answer to research Question One “Did the students who completed the web-based workshop improve their understanding of how to write a résumé, cover letter, and how to do a job interview?” must be positive. The result of research Question One is a reasonable answer because it indicates that after students completed the coursework they increased their career knowledge in these three areas.

The course evaluations contained 62 survey questions using a 5-point Likert-type scale based on level of agreement, as well as six open-ended questions. Over 90% of students indicated that they did draft a résumé and a cover letter, and 86% of students agreed that they could perform in an interview setting. These findings indicated that the answer to research Question Two “Did the students who completed the web-based workshop acquire the skills to write a résumé, cover letter, and participate in a job interview?” must be positive. The result of research Question Two is a reasonable answer as students drafted a résumé and cover letter as they proceeded through the assignments on the Ex-Scape program. In addition, students studied, developed, and answered interview questions through the various assignments provided on the Ex-Scape program. Also available on the Ex-Scape program were various one-minute video clips of interview situations, and numerous audio clips of employers and previous work experience students providing advice on what employers look for on a résumé, cover letter, and look for in answers to interview questions.

In understanding research Question Three, test results of the online group and the in-class group were compared. No significant difference showed between the two groups' test results indicating that research Question Three "Did the students who completed the web-based workshop do as well or better in the careers knowledge and skills outcomes of the course as the students who completed the program offered in the original in-class career workshop?" must be positive. Although the in-class group was a small sample size, the results provide an indication that there were no significant differences between the two groups.

The focus groups further supported these findings. The results were consistent with the statistical analysis of the pre- and posttest results. The no significant difference result was not a surprise due to sub-optimal setting in terms of the condition that the coursework was mandatory and in addition to regular studies. Students were not intrinsically motivated to take the class regardless of the instructional method. Just as there was no guarantee that students would gain knowledge in a classroom setting (i.e., due to daydreaming, sleep deprivation, or similar circumstances that could impede their learning), there was no guarantee that students would complete the coursework online.

Conclusions

The study demonstrated that learning a career development course online is an effective method of instruction based on knowledge and skill outcomes. The research showed in the areas of résumé, cover letter, and interview that students overall did as well or better on the posttests, and that students reported that they were able to draft a résumé, cover letter, and perform in an interview.

The study also supports the literature on the effectiveness of distance education courses by providing evidence that there was no significant difference between the online group and the in-class group in each volunteer's individual pre- and posttest scores, and that there was no significant difference when comparing the online group and in-class groups' overall test scores. Students' impressions of distance learning were consistent with other studies, in that the majority of students surveyed enjoyed the flexibility and self-pace of the program. Students also indicated that they were able to use the strategies learned online and they enjoyed the special features and variety of the Ex-Scape program. However, some students felt that the online course was too long and required more time to complete than was expected and expectations for each faculty were not clearly laid out.

Similarities between the online and the in-class groups were that both groups wanted more feedback from instructors, both groups gained confidence for the interview and prepared an effective resume, and both groups felt that the course information was valuable. As this is a mandatory course and only offered online as of 1999, the Hawthorne Effect did not appear to be a factor for performance of the online group. Participants were made aware of the ongoing evaluation of the course, however, they were not aware that this was a new method of instructional delivery for the course.

Recommendations

Based on participants' comments on the online career development course, the following recommendations appear warranted:

1. Provide a reasonable amount of time to complete the course (i.e., 6 – 8 weeks).

2. Add more information on job search topics including networking, company research, deciding between potential employers, more samples of resumes and cover letters, and job shadowing and interviewing.
3. Include a time line for completion of the course.
4. Supply clear expectations for each faculty.
5. Provide an initial meeting of students either in person or online so that students feel comfortable interacting with peers and instructors.
6. Incorporate a workshop mid-way through the course to answer questions or to enhance students' knowledge.
7. Provide an exit workshop to review and debrief students of their experiences.

Flexibility is key to these recommendations and in-person workshops should be on a voluntary basis only.

Recommendations for further research in the area of online career development courses includes:

1. Future research should be conducted on the outcome success of online career development courses. This may be the only study of its kind in the area of career development and may provide a basis for future research studies.
2. Due to the narrow scope of this study other studies can be conducted taking into consideration a range of variables such as students' preferred learning styles, motivational factors, cost factors, and student's computer expertise.
3. To attract volunteers to participate in the study a shorter pre-and posttests should be designed for the purposes of comparison.
4. Critique post-résumés to follow up on students' impressions of their skills.

This study has provided evidence that learning career development courses via the Internet is an effective method of instruction. With the growing amount of students in post-secondary schools requiring career services, web-based instruction provides a viable method of instruction. The data provided a look at the significant contribution that the online program made to career learning outcomes. This study will be important as technology and demands for career services continue to grow.

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Appendix A

Experience Student Career and Placement Education (Ex-Scape) Outline

Target Audience/Learner Analysis

- Undergraduate university transfer and college students who will shortly be looking for work experience, possibly through the Co-operative Education program offered at the University of Calgary, and/or the practicum placements offered at Medicine Hat College, Mount Royal College, or Red Deer College

Content Analysis

- Primarily factual and procedural content will be presented.
- Learners will be required to use the information presented in order to conduct their own job search (self-assessment, resume, cover letter, interview, job search)

Delivery Environment

- Web-based.
- Access in lab or at home.

Needs Assessment/Opportunity Description

- Desire to give students more flexible access to this content than an in-class workshop format can provide.
- Desire to give access to more students.
- Desire to create quality, up-to-date materials that will improve student motivation.

Goals - Course

- To provide students with quality, useful materials through a web site that will assist them with skills and knowledge to obtain a work experience.
- To find meaningful work upon graduation.
- To improve the decisions students make about their choice of educational programs; particularly students transferring to the University of Calgary.

Goals- Instructional

- The students will understand the purpose of the resume in the job search process.
- The students will complete a personal resume which can be used for job search.
- The students will understand the purpose and content of a covering letter.
- The students will understand how to research an occupation and company through the use of printed and electronic materials, people, and experience.
- The students will learn from current and past co-op, intern, and practicum students information regarding successful resumes, interviews, job search strategies, and the nature of their work experiences.
- The students will practice information interview questions.
- The students will understand how to prepare for an interview.
- The students will understand the stages of an interview.
- The students will understand the goals of all parties in an interview.

- The students will learn how to develop questions to ask in an interview.
- The students will increase their awareness of their preferred working conditions in preparation for the job search.
- The students will learn about the most effective job search strategies.
- The students will learn about the strategy of networking.
- The students will learn about the direct contact approach.
- The students will learn how to target resume for particular disciplines
- The students will have access to information about job search such as employer's expectations, attitudes, job market information, hiring procedures, networking, and job search strategies.

Instructional Paradigm/Overall Structure

- The instructional approach will be primarily tutorial; presentation of information followed by assignment which will then be submitted to the instructor for comments; example assignments (i.e. resume sections) will be available as models.
- The students will be required to do some exploration activities to find out specific information related to their particular interests.

Review of Existing Materials

- Print-based materials being used in the in-class workshop were revised and formed the foundation of content for the web site.
- Web sites exist which address similar content but in limited depth, without as much participation by potential employers and without an interactive component.

Feature List

- The web site contains:
 - text-based content;
 - photos and other graphic images accompanied by audio recordings and text;
 - an electronic means for learners to submit assignments for instructor comments;
 - accessibility by instructors to view student work while under construction on the web site;
 - non-synchronous or synchronous chat room with employers that can be archived;
 - on-line evaluations.

Methods of Learning/Instruction

The curriculum is offered through a combination of interactive computer/web site sessions, video-tapes of employers, and facilitation of group sessions involving discussion and experiential exercises. The combination of individual study sessions and group discussions will contribute to the achievement of students' personal professional development goals. The content of the curriculum will be based on a set of core competencies students will acquire during their participation in the course. A standardized competency based assessment tool will assess whether program objectives have been achieved.

9. Dates on résumés are usually given in the following order
- no particular order is required
 - least recent to most recent
 - correspond to the most related education or work experience that is being described.
 - most recent to least recent
10. Grade Point Average should be included if it is above ?/4.0 or ?/9.0.
11. It is helpful in the Education section to outline all major courses taken and their course number, so that the employer can relate these to your transcript. (True/False)
12. High school information will be included on a résumé if (check all of the right answers):
- graduation was recent, within the past five years
 - major awards or high grades were received
 - a specialized program was taken, such as an International Baccalaureate
 - it links the person geographically with an area he/she is applying for jobs in
13. Name three courses you have taken that could be highlighted on the Education section of your résumé.
- What were the criteria you used for choosing these three courses?
14. A Special Skills section is not useful if it
- highlights foreign languages spoken
 - repeats information which is clearly seen in other sections of the résumé
 - indicates only names of computer programs
 - highlights transferable and self-management skills
15. A Chronological résumé:
- is not preferred by employers
 - lists work experience beginning first date of employment
 - highlights the tasks and duties performed for each of the work experiences listed
 - is good for most students who have summer employment experience
16. A Functional résumé is not good for individuals:
- who are changing careers
 - with varied experience from paid employment, volunteer, and extra-curricular activities
 - with a spotty work history
 - with a long work history in the field in which he/she is applying

17. A Combination résumé combines both

- a. education and work experience in one résumé
- b. the chronological order with highlighting functional skills
- c. work experience with highlighting tasks and skills
- d. work experience with extra-curricular or volunteer experience under one heading of professional experience

18. Matching

- | | |
|-------------------------|---------------------------------------|
| a. Combination Résumé | 1. highlights dates and tasks/duties |
| b. Functional Résumé | 2. highlights dates and skills |
| c. Chronological Résumé | 3. highlights skills |
| | 4. highlights skills and tasks/duties |

19. Name three Action Verbs and write bullets for your résumé that would use these verbs.

20. Name ten mistakes in the attached résumé (insert résumé with numerous mistakes)

Cover Letter Knowledge Assessment

1. The maximum length of a covering letter preferred by most employers is _____ page/s.
2. You should include a covering letter if you:
 - a. want to link your skills specifically to the position being offered
 - b. have extra information to present than what is in your résumé
 - c. want to highlight information in résumé
 - d. all of the above
3. In a business letter, the date, name and address of the recipient of the letter should be included in the top left hand section

True or False

4. Covering letters have _____ (give a number) main sections, which include (list the sections).

5. The opening paragraph of a Covering Letter should indicate:
(circle all of the correct answers)

- a. the position being applied for
- b. your name
- c. the name of the company you are applying to
- d. where the advertisement for the position appeared
- e. the name of the person who referred you
- f. your interest and enthusiasm for the position

6. The main purpose of the body of the covering letter is to

7. It is acceptable with most employers to take initiative and indicate that you will contact the employer in the future. True or False

Interview Knowledge Assessment

1. Name the three parties involved in the interview and give at least one purpose for each of the parties during the interview:

	Parties	Purpose
1.	_____	_____
2.	_____	_____
3.	_____	_____

2. Information you want to know prior to attending an interview include
(circle all of the correct answers)

- a. who will be conducting the interview
- b. time
- c. titles/positions of the interviewers
- d. date
- e. place

3. In researching prior to the interview, what types of information should you gather:

Company/Organization - _____

Occupational field - _____

Position applying for - _____

4. In preparation for an interview you should review _____
and _____.

5. The interview begins

- a. when the interviewer greets you in the waiting area
- b. as soon as you are invited for the interview
- c. as soon as you enter the organization's offices
- d. when the interviewer asks the first question

6. You should arrive _____ minutes ahead of your interview.

7. Give one technique you could use to relax yourself prior to or during an interview:

8. Match the Purpose with each Section of the Interview

- | | |
|------------|---|
| a. Opening | 1. to exchange information |
| b. Body | 2. to determine the next steps in the process |
| c. Closing | 3. to develop rapport between the interviewer and interviewee |
| | 4. to provide name and address |

9. Name three strategies that you can use during the Opening of an Interview.

10. Answer the common interview question, "Give five words to describe yourself" and illustrate with your answer using two of the guidelines for answering interview questions.

11. Answer the common interview question, "What is your greatest strength and what is your greatest weakness?" and describe the strategy you are using in forming your answer.

12. Give four other common interview questions

- 1. _____
- 2. _____
- 3. _____
- 4. _____

13. Why is it important to have examples prepared for

- a) Common Interview Questions - _____
- b) Behavioural Description Interview Questions - _____

14. Behavioural Description Questions are constructed by:

- a. making up difficult questions in an effort to stump the interviewee
- b. interviewing the supervisor of the position
- c. reviewing the tasks, duties, and skills of the position
- d. making up role-playing scenarios that the interviewee will have to handle during the interview

15. Behavioural Description Questions always ask for a past _____

16. Explain what "STAR" stands for as an acronym in helping you answer Behavioural Description Questions

- S - _____
- T - _____
- A - _____
- R - _____

17. The interviewer will be judging you on the following criteria:
(circle all of the correct answers)

- a. rapport
- b. skills
- c. age
- d. common sense and good judgement
- e. marital status
- r. listening
- g. initiative
- h. poise
- I. interest shown in the position and organization

18. How would you deal with a concern, if necessary during an interview
(for example: you failed a course, were fired from a previous job, had a disability, suspected the interviewer had a concern about you)
19. It is fine to ask the interviewer to clarify a question, if you don't understand it.
True or False.
20. The questions an interviewee asks during an interview indicate:
 - a. the research the interviewee has done on the company
 - b. the values of the interviewee
 - c. the interviewees future career objectives
 - d. all of the above
21. Give three strategies to use during the Closing of an interview:

Appendix C

Course Evaluation

This program was designed to meet certain objectives. Using the scale below, please indicate whether you agree or disagree with the following statements by checking the box closest to your opinion.

Objectives

I have learned how to develop the sections of a resumes.	SA	A	D	SD	NA
I know how to profile my skills in a resumes.	SA	A	D	SD	NA
I know how to create a resume to send electronically.	SA	A	D	SD	NA
I know how to write a cover letter .	SA	A	D	SD	NA
I know how to create a portfolio.	SA	A	D	SD	NA
I know how to present a portfolio.	SA	A	D	SD	NA
I can conduct an information-gathering interview.	SA	A	D	SD	NA
I know how to research an occupation.	SA	A	D	SD	NA
I can research a company.	SA	A	D	SD	NA
I understand the importance of preparing for an interview.	SA	A	D	SD	NA
I know how to profile my skills during an interview.	SA	A	D	SD	NA
I have increased my understanding of how to effectively handle the stages of an interview.	SA	A	D	SD	NA
I understand how my values are important in an interview.	SA	A	D	SD	NA
I can draw from my past experiences to answer Behaviour Description questions.	SA	A	D	SD	NA
I know how to use the STAR model to respond to Behaviour Description questions.	SA	A	D	SD	NA
I can develop questions to ask in an interview.	SA	A	D	SD	NA
I am aware of my preferred working conditions.	SA	A	D	SD	NA
I know the most effective job search strategies.	SA	A	D	SD	NA
I learned about networking as a job search tool.	SA	A	D	SD	NA
I have drafted a resume.	SA	A	D	SD	NA
I have drafted a cover letter.	SA	A	D	SD	NA
I have learned about the expectations of current Employers.	SA	A	D	SD	NA
I understand how to use research to target the resume and interview.	SA	A	D	SD	NA

For each of the following statements, rate your level of agreement. The feedback you provide will be used to improve the course for future students.

Content

The content was presented clearly.	SA	A	D	SD	NA
The content was error free.	SA	A	D	SD	NA
The content was well organized.	SA	A	D	SD	NA
The objectives were clearly stated.	SA	A	D	SD	NA
The sequencing of learning activities was appropriate.	SA	A	D	SD	NA
The learning activities were relevant and practical.	SA	A	D	SD	NA
The examples were relevant to my area of study.	SA	A	D	SD	NA
The number of examples provided was adequate.	SA	A	D	SD	NA
The exercises helped me to grasp the material.	SA	A	D	SD	NA
The evaluation criteria were clearly stated.	SA	A	D	SD	NA
The availability of computers limited my access to the program.	SA	A	D	SD	NA
Limited internet access restricted my access to the program.	SA	A	D	SD	NA
A hardcopy printout of the material would have been useful to me.	SA	A	D	SD	NA
The chatroom sessions helped me learn the content.	SA	A	D	SD	NA

The Instructor/Facilitator

Was accessible.	SA	A	D	SD	NA
Responded to questions within the timeframe indicated at the start of the course.	SA	A	D	SD	NA
Displayed technical competence needed to teach online.	SA	A	D	SD	NA
Utilized the on-line learning environment effectively.	SA	A	D	SD	NA
Provided appropriate directions	SA	A	D	SD	NA
Provided helpful feedback.	SA	A	D	SD	NA
Used a variety of techniques and learning activities.	SA	A	D	SD	NA
The face-to-face component of the course helped to enhance my understanding of the course content.	SA	A	D	SD	NA
Feedback/comments on written work was constructive and helpful.	SA	A	D	SD	NA

Technical

The website was well organized.	SA	A	D	SD	NA
The interface was intuitive.	SA	A	D	SD	NA
The download speed was reasonable.	SA	A	D	SD	NA
The website was visually pleasing.	SA	A	D	SD	NA

The options for assignment submission provided enough flexibility for me.	SA	A	D	SD	NA
I encountered problems submitting assignments.	SA	A	D	SD	NA
Technical assistance was readily available.	SA	A	D	SD	NA
The technical person was able to promptly resolve the technical problem I experienced.	SA	A	D	SD	NA
The technology did not interfere with my learning.	SA	A	D	SD	NA
The pre-requisites accurately described the technical skills I needed to complete the course.	SA	A	D	SD	NA
The online environment suited my learning style.	SA	A	D	SD	NA
The online environment motivated me to learn.	SA	A	D	SD	NA
The online environment encouraged me to accept responsibility for my own learning.	SA	A	D	SD	NA
The online environment allowed me to organize my time flexibly.	SA	A	D	SD	NA

Please indicate if you had any expectations, other than those listed, for this program that were or were not met by this program.

New features I would like to see incorporated into the course include:

Features I would like to see removed from the course include:

Overall, I would rate the course as ___ excellent ___ good _____ poor ___ dismal

In the future, I ___ would ___ would not take another online course because

Additional comments:

Appendix D

Consent for Participation in Evaluation (Ex-Scape Registrants)

Research Project:

Evaluation of an Online Career Workshop

Investigator: Julie DeBoer

I am conducting a study of evaluation of an online career workshop, "Ex-Scape." The purpose of this study is to evaluate the effectiveness of the career workshop, "Ex-Scape," that is offered through a combination of online and in-person methods to post-secondary students. I anticipate that you and others will benefit from participation in this study by receiving the feedback on the knowledge and skills you have acquired during the program. There is no possibility of harm from your participation. Your participation in the study may benefit other students who will take Ex-Scape in the future as the feedback from the results of this study will be utilized to revise the program. You are invited to participate in this study because you are currently registered in Ex-Scape and your experience will be compared to the students who participate in the workshop Ex-Scape is replacing. This consent form is to request your consent to become a part of the study.

As part of this research you will be required to provide a copy of a current résumé and cover letter and participate in a 15-minute mock interview before the program begins and again after the program. You will also be asked to complete 3 short questionnaires before and after the program, that will take about 10 minutes to complete in total. You will also complete the technology questionnaire (Appendix H) after the completion of the program. At the end of the program, you will be asked to participate in a two-hour focus group to discuss your experiences in the program. This group will be audio-taped and transcribed by a professional who is trained to work with confidential information.

Please note that all information will be handled in a confidential and professional manner. When responses are released, they will be reported in summary form only. Further, all names, locations and any other identifying information will not be included in any discussion of the results. You also have the right to withdraw from the study without prejudice at any time.

Some of the participants in this study will be asked to participate in the next step of our study that would involve participation in a focus group. I will phone you within a week after the completion of the program if I want to ask you for further participation in the focus group.

If you choose to do so, please indicate your willingness to participate by signing (signing) this letter in the space provided below, and return the letter to the school with your child.

I very much appreciate your assistance in this study. If you have any questions please feel free to call me at 403-529-3825. Also feel free to contact the Principal Investigator of this study, Dr. Vivian Lalande, University of Calgary, at 403-220-5893, or the supervisor of my study, Dr. Dale Burnett, University of Lethbridge, at 403-329-2416 and/or any member

of the Faculty of Education Human Subject Research Committee if you wish additional information. The chairperson of the committee is _____ .

Yours sincerely,

Julie DeBoer, University of Lethbridge 403-529-3825

(Please detach and forward the signed portion)

EVALUATION OF AN ONLINE CAREER WORKSHOP

I _____, agree to participate in this study.

Name

Signature

Date

Appendix E

Consent for Participation in Evaluation Focus Group

Research Project:

Evaluation of an Online Career Workshop

Investigator: Julie DeBoer

I am conducting a study of evaluation of an online career workshop, "Ex-Scape." The purpose of this study is to evaluate the effectiveness of the career workshop, "Ex-Scape," that is offered through a combination of online and in-person methods to post-secondary students. I anticipate that you and others will benefit from participation in this study by receiving the feedback on the knowledge and skills you have acquired during the program. There is no possibility of harm from your participation. Your participation in the study may benefit other students who will take Ex-Scape in the future as the feedback from the results of this study will be utilized to revise the program. You are invited to participate in this study because you were registered in the Career Development Workshop for Prospective Co-op and Intern Students or Ex-Scape, or you have students who participated in this program. This consent form is to request your consent to become a part of the study.

This evaluation study will require you to participate in a two-hour focus group to discuss your experiences in the program. This group will be audio-taped and transcribed by a professional who is trained to work with confidential information.

Please note that all information will be handled in a confidential and professional manner. When responses are released, they will be reported in summary form only. Further, all names, locations and any other identifying information will not be included in any discussion of the results. You also have the right to withdraw from the study without prejudice at any time.

Participation in this study will not directly benefit you; however, there is no possibility of harm from your participation. Your participation in the study may benefit other students who will take Ex-Scape in the future as the feedback from the results of this study will be utilized to revise the program.

If you choose to do so, please indicate your willingness to participate by signing this letter in the space provided below, and return the letter to the school with your child.

I very much appreciate your assistance in this study. If you have any questions please feel free to call me at 403-529-3825. Also feel free to contact the Principal Investigator of this study, Dr. Vivian Lalande, University of Calgary, at 403-220-5893, or the supervisor of my study, Dr. Dale Burnett, University of Lethbridge, at 403-329-2416 and/or any member of the Faculty of Education Human Subject Research Committee if you wish additional information. The chairperson of the committee is _____.

Yours sincerely,

Julie DeBoer, University of Lethbridge 403-529-3825

(Please detach and forward the signed portion)

EVALUATION OF AN ONLINE CAREER WORKSHOP

I _____, agree to participate in this study.

Name

Signature

Date

Appendix F

Letter of Invitation to Participate in Focus Groups

Request for Volunteers

Research Study:

Evaluation of an Online Career Workshop

Researcher: Julie DeBoer, University of Lethbridge

The main purpose of this study is to evaluate the effectiveness of the new online career workshop “Ex-Scape” that is offered through a combination of on-line and in-person methods to post-secondary students. The results of this study will allow us to improve Ex-Scape for students who will take the program in the future.

If you agree to participate in this study, you will be part of a 2-hour focus group consisting of 10 other people. The focus group will be audio-taped and transcribed, and the data will be analyzed. All information will be kept confidential.

If you would like to volunteer to participate in this study or would like more information, please contact Julie DeBoer at 403-529-3825 or e-mail me at jdeboer@acd.mhc.ab.ca

Appendix G

Focus Group Questions for Students

1. Please comment on how your experience of registering for the program and whether the program scheduling met your needs.
2. What did you learn from the program you just completed?
3. What was good about how the instruction was delivered?
4. What was bad about how the instruction was delivered?
5. Was the instructor/facilitator helpful?
6. Did you find the information given by students and employers helpful?
7. Were you able to develop tools and strategies that will help you to find or participate in your work/practicum placement?
8. Please give any suggestions you have for improving this program.
9. Do you have any additional comments?

For students who completed the on-line program:

- Please comment on the benefits you experienced of completing this program on-line.
- Please comment on the difficulties you experienced due to the program being offered on-line.