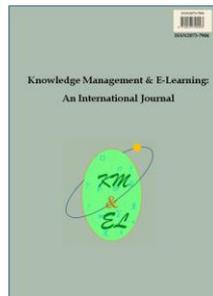

Knowledge Management & E-Learning



ISSN 2073-7904

Deciding what kind of course to take: Factors that influence modality selection in accounting continuing professional development

Kathleen Ross

P&K Ross Consulting Ltd., Canada
Athabasca University, Alberta, Canada

Terry Anderson

Athabasca University, Alberta, Canada

Recommended citation:

Ross, K., & Anderson, T. (2013). Deciding what kind of course to take: Factors that influence modality selection in accounting continuing professional development. *Knowledge Management & E-Learning*, 5(2), 137–152.

Deciding what kind of course to take: Factors that influence modality selection in accounting continuing professional development

Kathleen Ross*

P&K Ross Consulting Ltd., Canada
Athabasca University, Alberta, Canada
E-mail: kathie@pkross.ca

Terry Anderson

Centre for Distance Education
Athabasca University, Alberta, Canada
E-mail: terrya@athabascau.ca

*Corresponding author

Abstract: This study used a cross sectional sample created by self-selection from a researchers' email invitation to accountants in Canada to determine which modalities accountants preferred when selecting Continuing Professional Development (CPD), and the selection factors they used in making those choices. The survey contacted 32,000 accountants in Canada and a total of 428 accountants from across Canada completed the online survey. Live seminars and live webinars were the highest ranked and accountants preferred synchronous over asynchronous courses. The factors most important to accountants are content, cost and CPD hour requirements. The ranking of selection factors for synchronous courses in general did not differ from those for asynchronous courses with the exception of self-paced courses where the selection factors of "pace" and "time away from work" were ranked higher than for other courses. The results of the study indicate a continuing need for providers to ensure that courses are relevant and accessible to accountants. Further research is suggested into the differences noted between genders as well as other categorical differences. Work-life balance was a recurring theme that should also be explored further. Pedagogical use in the design of modalities is a further avenue for future research.

Keywords: Continuing professional development; Distance education; Course delivery modality; Selection factors; Accounting

Biographical notes: Kathleen Ross is an experienced distance educator and course designer. Her research and teaching are focused on adult education and continuing professional development in the accounting field. She has completed her Master of Education (Distance Education) through Athabasca University.

Terry Anderson is a professor and former Canada Research Chair in Distance Education, Centre for Distance Education, Athabasca University. He has published extensively in the area of distance education and educational technology. More details can be found at <http://cde.athabascau.ca/faculty/terrya.php>.

1. Introduction

Accountants, like most professionals, are required to maintain their professional competencies through continuing professional development (CPD). In a perfect world, all CPD provided would be of highest quality, follow an appropriate learning theory and be both of educational and professional value to accountants. CPD courses in Canada (and elsewhere) are offered in variety of ‘modalities’ and accountants are free to select the type of course and delivery modality they choose. These modalities range from face-to-face seminars and courses, to various forms of synchronous and asynchronous distance education. This study explores what CPD modalities accountants are taking and why they are selecting those modalities. The study used a cross sectional sample created by self-selection from a researchers' email invitation to accountants in Canada.

1.1. Continuing professional development

Across Canada there are approximately 160,000 professional accountants under the umbrellas of three separate professional organizations. The Chartered Accountants (CA) have the largest number of members (45%), followed by the Certified General Accountants (CGA) (30%) and the Certified Management Accountants (CMA) (25%). All three accounting organizations are members of the International Federation of Accountants (IFAC). According to IFAC (International Federation of Accountants, n.d.), the requirement to maintain and develop professional competence throughout an individual's career is a fundamental characteristic of a professional accountant.

To assist in assuring the public that accountants with degrees maintain that competence, IFAC requires member organizations to set requirements for CPD for their members. Although there are national and regional differences between the accounting organizations, in general, there is a requirement for 120 hours of formal professional development activities over a three-year rolling average (working out to an average of 40 hours per year) in order to maintain professional status. Thus, approximately 6.4 million hours of CPD is required annually by accountants.

1.2. Delivery modalities

Modality refers to the mode of participating in the CPD. Modalities were classified as either synchronous (S) or asynchronous (A), and either face-to-face (F) or at a distance (D). The study defined the modalities for most popular models of CPD:

- face-to-face seminars (S,F),
- synchronous webinars (S,D),
- recording of face-to face seminars (A,D),
- recordings of webinars (A,D),
- face-to-face full-length courses (S,F)
- online courses (S,D), and
- self-paced computer aided learning (A,D).

Modalities were defined for the purposes of the study (and in the participants interviews) so that all participants made selections based on the same understanding. A

face-to-face live seminar is any seminar that participants attended where physical presence was required. For example, it might include a full-day training seminar or a breakfast that included a speaker. A recorded seminar is a recording of a live seminar - whether downloadable from an online source or distributed on a CD. It must be a recording of a session including a speaker with an audience. A live webinar (sometimes called a webcast) is an online broadcast in real time. A participant is not required to leave their desk, but must watch the live meeting, training or presentation in real time. A recorded webinar is a recording of a previously held webinar. A face-to-face full-length course is a course that required more than one session. An example might be a university course or a week-long executive style training course. An online full-length course is a multi-session course that included an instructor and fellow students. This would include, for example, a paced course at a university or an advanced tax course taken through the accounting association and often delivered using a learning management system (LMS). Normally, these courses would include discussions with fellow students via discussion boards. And finally, a self-paced computer-aided course is a course produced by a course team consisting of subject matter experts, instructional designers and media specialists. All modules and tests are fully computerized. An example would be a course with online readings with quizzes, but no interaction with an instructor or fellow students.

1.3. Modality selection and influential factors

This study did not try to determine the effectiveness of the modalities, but looked only at the modality selection and the factors that influenced those selections. The research questions were (1) which modalities are preferred by accountants? and (2) what selection factors are accountants using when they select their courses? The results will assist course developers and professional organizations in understanding student influences on course selection and whether or not differences are found in selection criteria for face-to-face versus online courses and in synchronous versus asynchronous courses. Obviously, the more course developers and deliverers understand the needs and preferences of learners, the better they can design courses to meet these learner needs.

No previous study was found that asked accountants why they selected the modalities and courses for their CPD; although one UK study did ask why they did not select courses (Paisey, Paisey, & Tarbert, 2007). Selection factors for courses and modalities in this study started with the six suggested in a study of professional librarians (Lynn, Bose, & Boehmer, 2010) and added content (what the course was about) as a factor as suggested by the authors of that study.

2. Theoretical context

Good quality CPD can be found in both face-to-face and distance modalities. Studies have been carried out since the 1950s and have invariably found “no significant difference” between the various modalities of instruction (Saba, 2000). A meta-analysis of education research literature between 1985 and 2002 reviewed more than 200 empirical studies, containing more than 650 independent achievement, attitude and retention outcomes and found that the effectiveness of both distance education and face-to-face courses depends on the pedagogical design and excellence – not on the modality of delivery (Bernard et al., 2004). Others have found no significant difference in programming specifically designed for CPD – for example in medical training (Fordis et al., 2005; Neuhauser, 2002; Schimming, 2008). Anderson (2003) claims that as long as

one level of interaction (student-content, student-student or student-teacher) is of high quality high then quality learning can result.

Besides variety in modality, CPD is based upon a number of different pedagogies (Anderson & Dron, 2011). There has been a growing interest in constructivist based pedagogies in CPD, as well as other forms of formal instruction (Hall, 2012). Some authors (Leflore, 2000; Pongsuwan, Hoksuan, In-udom, & Chalakbang, 2011), when discussing e-learning and web-based learning, highlight qualities that can supported using constructivist pedagogy such as:

- construction of meaning,
- social interaction,
- problem solving in real world contexts,
- creation of knowledge, and
- linking of previous and new knowledge.

Researchers agree that high quality distance based CPD sessions can be created using constructivist theory (Doolittle & Camp, 1999; Hean, Craddock, & O'Halloran, 2009). If we use the four requirements set out by Baviskar, Hartle, and Whitney (2009), we can see examples of constructivist theories in distance CPD.

1. Eliciting prior knowledge. This can be done through the asking of informal questions at the beginning of a synchronous CPD session or conducting a pre-test prior to the start or encouraging profile completion and 'self disclosure; during an asynchronous session or longer course.
2. Creating cognitive dissonance. If the selection of the CPD is based on content; then, at least in some cases, the selection of CPD itself has been an acknowledgment of the need for new knowledge.
3. Application of the knowledge with feedback. Feedback can be done synchronously or asynchronously with group discussions, quizzes or teacher assessment Self-paced computer programs and longer courses can have review questions with feedback or can go even further by using games or simulations to assist students in applying the knowledge.
4. Reflection on learning. Reflective questions at the end of any CPD session will assist the student with this process. In short CPD sessions, questions with choices and polls may be sufficient. For longer courses, students could be required to provide a reflection paragraph, or other similar activities.

Finally, the social interaction, a critical component of constructivist design, can be an opportunity to create networks or even communities of practice (Wenger, 1998; Wenger, Trayner, & de Laa, 2011), that extend beyond the usual temporal boundaries of the CPD course.

It is clear that there is no one best technology, nor a single pedagogy that is accepted best practice much less one with compelling research based evidence to dictate modality of CPD of delivery.

Both face-to-face and distance modalities can be used to provide accountants with high quality CPD. This study did not look at evaluating the effectiveness of the different modalities but rather the focus was on the discovery of which modalities accountants prefer and what influences their selection. It seems intuitive that accountants, who lead

very busy lives, would be ideal candidates to select distance CPD modalities because of these modalities' accessibility and possible flexibility in time, location and duration. Certainly, Zhao and Jiao (2012) found it effective in teacher training. However, it is not known if and why they choose (or do not choose) to enroll in DE modes of CPD.

3. Research methodology

An online questionnaire in both English and French was developed by the researcher to be used in this study. The survey questionnaire method was selected for data collection as there was little relevant evidence from earlier studies (Matthews, 2002) and it allowed for the use of standardized responses so that the data could be analyzed systematically and more easily. An online questionnaire was selected because it allowed us to reach the largest number of possible participants in the shortest amount of time - at an affordable cost.

In the questionnaire, participants were asked to rank the overall factors that influence their course selections. Then, each modality was defined and participants were asked if they had taken a course in that modality over the last three years (to coincide with the reporting cycles required by their professional associations). If the participant had taken a course in that modality, they were asked to rank the selection factors that prompted the selection of that particular modality. The participants were then asked to rank generally their preferred modalities. This was done at the end to ensure all participants were using the same definitions for the modalities. Demographical information was collected and an opportunity to add additional open-ended comments was given to participants. The survey was pre-tested by seven accountants, including at least one from each of the three accounting organizations before being made available online.

The survey was implemented online using LimeSurvey® through Athabasca University secure servers. Emails were sent to the regional offices of the three accounting organizations. It was originally planned that accountants would be contacted directly by the researcher using email, but the contacts were actually made in a number of ways during November and December of 2011. Some of the regional offices provided the suggested email to their members, others included the information in newsletters and others allowed access to their LinkedIn site to inform their members of the study. Internet searches were done to gather additional email addresses from a number of other websites (i.e. accounting firms, universities, federal and provincial government websites). A draw prize of an iPad2® was offered to encourage participation and it is possible (but unlikely) that a participant could have responded more than once using different email addresses. In total, at least 32,000 accountants were potentially informed, in some manner, about the survey, however it is impossible to estimate the exact number who were informed about the study in one or more ways. The survey generated 428 responses. Although this is not a large number of responses, had the survey been a random sample selection, it would have been considered sufficient to make valid implications at a 95% confidence level with a 5% margin of error (Raosoft, Inc., 2004).

4. Results

Results from the study were analyzed using SPSS® and Excel®. Descriptive statistics were generated including means and standard deviations. Frequency tables were generated to look at differences between groups and significance levels were determined

by chi-square statistic, Mann-Whitney U, Kruskal Wallis and Friedman tests of this non-parametric data. Responses in the open-ended question were analyzed using qualitative analysis coding looking for emergent themes.

4.1. Demographics

The survey did not ask participants to indicate their main language but allowed them the choice of completing the survey in either English or French. Of the total 428 responses received, 407 were filled out in English and 21 in French. Females represented just over half of the respondents (56%) with 240 female respondents and 186 male respondents (two respondents did not specify their gender). The largest group of respondents were in the 35-44 age group (138), followed closely by the 45-54 age group (133). The 25-34 age group was also well represented (68) as was the 55-64 (73). Very few accountants were under 24 (5) or over 65 (9). Again two respondents elected not to specify their age. As the number of responses included in the under 24 (5 respondents) and over 65 (9 respondents) age groups were considered to be too small for analysis (a minimum of 7 participants per cell, preferably 30 (VanVoorhis & Morgan, 2001)). Therefore, for analysis purposes, respondents aged 24 and under were combined with those whose ages ranged from 25 – 34 and respondents aged 65 and over were combined with those who ages ranged from 55-64.

Although all three accounting organizations were contacted, more than one-half of respondents indicated that they had a Certified General Accountant (CGA) (62%) as opposed to a Certified Management Accountant (CMA) (29%) or Chartered Accountant (CA) (11%). Percentages are marginally greater than 100% as accountants may belong to more than one organization. Additional designations were also included such as the Association of Chartered Certified Accountants, Certified Financial Planner, and Certified Fraud Examiners. These results are not representative of the percentages of accountants in Canada but do provide a diversity of responses. Workplace categories were also well diversified as can be seen in Table 1.

Table 1
Workplace by organization

Workplace	Organization								Total
	CGA		CMA		CA		Other		
Public Practice	80	31%	16	13%	9	20%	0	105	24%
Federal Government	12	5%	13	11%	2	4%	0	27	6%
Provincial Government	34	13%	21	17%	4	9%	0	59	14%
Municipal Government	6	2%	4	3%	0	0%	0	10	2%
Non profit	19	7%	13	11%	3	7%	0	35	8%
Education	22	8%	8	7%	10	22%	0	40	9%
Industry	82	31%	38	31%	17	38%	0	137	31%
Other	7	3%	8	7%	0	0%	7	22	5%

4.2. Participation rates in various modalities

Most participants in the survey have taken a face-to-face live seminar (93%) and a live webinar (72%). More accountants watched recorded webinars (41%) than recorded seminars (34%). Full-length courses were taken by many participants with more face-to-face (39%) modalities than online (15%). Almost one-third of accountants (31%) have taken a self-paced computer aided course over the last three years. The three accounting organizations in Canada, while similar, do have differences in courses offered to members as well as slight differences in CPD reporting requirements. Although accountants are not required to take CPD courses only from their organizations, it is likely that many will do so. Accountants self-identified their accounting organization and differences were found in participation rates among the members of the three organizations. Participation rates by organization for the modalities provided in the survey are detailed in Table 2.

Table 2
Participation rates of modalities

Modality	Participation Rate		
	CA	CGA	CMA
	n=45 n (%)	n=261 n (%)	n=122 n (%)
Face-to-face full-length course	14 (31%)	89 (34%)	66 (54%)
Face-to-face live seminar	43 (96%)	247 (95%)	108 (89%)
Live webinar	35 (78%)	198 (76%)	76 (62%)
Online, full-length course	3 (7%)	39 (15%)	24 (20%)
Recorded Seminar	18 (40%)	86 (33%)	43 (35%)
Recorded Webinar	24 (53%)	104 (40%)	46 (38%)
Self-paced, computer-aided course	19 (42%)	76 (29%)	37 (30%)

4.3. Modality preferences

Overall, 95.6% of respondents selected a live face-to-face seminar as one of their preferred modalities and in 62.1% of the cases it was their first choice. This was followed by live webinars, which were selected as a preferred modality by 83.9% of the participants.

A number of respondents ranked recorded webinars (76.6%) higher than recorded seminars (70.6%). The frequencies appeared fairly evenly spread among the rankings for both of these selections. Self-paced computer courses were selected in 76.4% of the cases and the frequencies of ranks were again spread fairly evenly. Face-to-face full-length courses were ranked as a preferred modality by 75% and online full-length courses were selected in 64% of the cases as a modality. More details are provided in Table 3.

Table 3
CPD instruction delivery modality by rank order of preference

Modality	n	Mean	Median	Mode	Standard Deviation
Live seminar ^{c,e,h}	409	1.80	1	1	1.388
Live webinar	359	2.94	3	2	1.563
In-person, full length course ^{b,d,f,j}	321	3.82	3	2	2.135
Recorded webinar ^{a,i}	328	3.97	4	4	1.690
Self-paced computer aided course ^g	327	4.03	4	3	1.809
Recorded seminar	302	4.42	4	4	1.491
Online, full length course ^e	274	4.65	5	6	1.736
Other	31	5.65	8	8	2.905

^aWomen ranked higher than men^bMen ranked higher than women^cEnglish ranked higher than French (includes those not ranked by French)^dFrench ranked higher than English^e55+ age group ranked highest^fFederal government employees ranked highest^gMunicipal government employees ranked highest^hEducation sector ranked highestⁱCAs ranked highest^jCMAs ranked highest

Note. Preferences were ranked on a scale of 1 to 8 with 1 being most preferred.

4.4. Selection factors

Regardless of the modality, content (what was the CPD about) was the number one selection factor for participants. As shown in Table 4, content was indicated as a factor in 96.7% of the cases and was ranked either first, second or third choice in 94.7% of cases. The lowest ranked factor for selecting a course was networking opportunities. This held true in all modalities with the exception of live seminars and face-to-face full-length courses.

Table 4
Selection factor by modality

	Overall	Live Seminar	Live Webinar	Recorded Seminar	Recorded Webinar	Face-to-	Online	Self-Paced
						Length Course	Full-Length Course	Computer Aided Course
Content	1 ^k	1 ^k	1 ^m	1 ^k	1 ^m	1	1	1
Cost	2 ^{c,e,f,n}	2 ^{e,f}	2	2	2 ⁿ	3 ^e	2 ^f	2
CPD hour requirement	3 ⁿ	3	3 ^d	3 ^{c,n}	3	2 ^f	3	3
Time away from work	4 ^h	5 ^h	4	5	5 ^a	5	5	5 ^{c,m}
Instructor	5 ^d	4 ^k	5 ^{c,m}	4 ^m	4 ^m	4 ^d	4 ^j	6
Pace of course	6 ^g	7	6 ^{e,k}	6 ^c	6	7	6	4
Networking opportunities	7 ^m	6 ^{d,m}	7 ^c	7 ^{c,k}	7 ^{b,c,i}	6 ^{d,k}	7 ^h	7 ^c

^aWomen ranked higher than men

^bMen ranked higher than women

^cEnglish ranked higher than French (includes those not ranked by French)

^dFrench ranked higher than English

^e55+ age group ranked highest

^f"Other" employment sectors ranked highest

^gFederal government employees ranked highest

^hMunicipal government employees ranked highest

ⁱEducation sector ranked highest

^jNon-profit sector ranked highest

^kCAs ranked highest

^mCMAs ranked highest

ⁿCGAs ranked highest

4.5. Additional comments from participants

An open-ended question at the end of the survey encouraged participants to provide additional comments. A total of 111 participants added comments.

Cost was the most often mentioned comment with the topic of the course a close second. Many comments from respondents included both such as “overall, it has to be interesting, worth the time (both in PD points and cost) and bring some value to what I do”; and “topic and location are my priorities and cost”. Respondents were also influenced by whether or not their employer paid for the course (“since my employer pays for everything, cost isn't an issue”). For others, the course needed “to be relevant to my employer in order to get financial assistance” indicating that both employer approval and cost were factors.

Respondents indicated that time away from work is an issue, whether it is related to the scheduling of the CPD or the work itself:

“Time away from work with its critical deadlines meant that fitting in a seminar worked best”; “live webinars are almost impossible during work hours”; “I've never been able to sit through a complete webinar without distraction and interruption”

Many of the responses indicated a need for balance in home and work life:

“I am also very busy in my personal life (two kids) so need convenient locations and times for PD courses/seminars”;

“I live in a remote location & have a young family, so attending live in-person seminars/sessions is quite difficult and requires a lot of planning & cost”

The CMAs allow members to earn CPD credits through volunteer hours and some respondents indicated that they made use of this for CPD credits:

“I believe you should also give back to the organization/professional association (i.e. CMA Canada) so I try to stay involved and assist where I can which also qualifies for CPD credits”; “Volunteering is good value for time”

Some respondents preferred the online option:

“I prefer online CPD opportunities because location is irrelevant”; “Although I have not used webinars (live or recorded) or online material I think I would be more inclined in the future to use them because my time and my avoidance of additional travel are very important to me”;

“Webinars are the best alternative”.

Many respondents noted the need for more practical courses:

“Give me practical advice”;

“I do not need to pay money to see someone who feels it important to impart their textbook theory”;

“mandatory sessions . . . did not deliver a lot of useful, practical information”.

And respondents also noted quality and cost issues with online courses. When referring to recorded seminars one respondent remarked that “the questions can't be heard, it drops the conversation, coughing in the background, etc.”. Another found that the “costs of webinars to be high, given the fact that no facility rental is required”.

5. Discussion

5.1. Modality preferences

Overall, accountants prefer to take live seminars with live webinars the second choice. Live seminars and live webinars are both offered at the regional level rather than the national level, so this may indicate that there is a preference for CPD courses that are locally provided, rather than nationally developed.

Modalities with a possibility for student-to-student interaction, such as seminars, webinars and face-to-face full-length courses, were ranked above those where only recordings or computer-to-student interaction occurred. Recorded webinars were ranked higher than recorded seminars. This may be due to the fact that webinars are already designed for viewing on the computer and a better quality is expected, and received, than the recordings of seminars. The online full-length course was ranked the lowest preference by respondents overall. This may be due to a perception of lack of interaction and perhaps a perception that sustaining interest in a long online course may be problematic or may be due to a lack of suitable courses available to respondents.

Live seminars were preferred more by those accountants who completed the survey in English than those who completed the survey in French. It may be that there are fewer seminars available in French and choices may be more limited. The oldest age group most highly preferred the live seminars and the youngest age group ranked them the lowest of the groups. This indicates that the preference for live seminars may be reduced as older accountants retire. The education sector preferred the live seminar more than other groups, with industry ranking it the lowest among the groups. This may be a factor of the relevance of topics needed mentioned in the additional comments as those teaching accounting would be interested in a much broader range of subjects than those in specific industries.

Women preferred to watch recorded webinars more than did the men in the study. This may be because of the work/life balance issues noted in additional comments as watching the recorded webinars allows them to schedule their time most effectively. The study did not reveal gender differences in the selection of recorded seminars. Although these are both distance modalities, it is the source of the recording that is relevant. The quality of recordings, particularly in recorded seminars, was noted as an issue by some respondents and this may have affected their selection.

Face-to-face full-length courses had many differences among the groups but there were no significant differences seen in face-to-face full-length course preferences in age groups. This is interesting because it does not seem to make a difference where they are in their career, full courses may still be of interest to accountants. Online full-length courses did not rank as high as other modalities. This may be because there are not as many online courses available.

Self-paced computer aided courses were preferred more by municipal government employees and least by provincial government employees. This is most likely to be a result of the number of available courses in the topic areas needed.

5.2. Selection factors

The results of the Friedman test indicate that accountants are likely using the same criteria when evaluating distance and face-to-face modalities as well as synchronous and asynchronous modalities.

Overall, and in live seminars and recorded seminars, the CAs had a higher ranking than other designations for content whereas in live webinars and recorded webinars the CMAs ranked content higher. This may have to do with the availability of the content as the CAs offer a large number of live and recorded seminars when compared to other groups.

Cost was ranked second and CPD hour requirements ranked third in all modalities except the face-to-face full-length course where the rankings are reversed. As full-length courses offer a large number of CPD points, it is possible that some full-length courses are being taken only to fulfill CPD requirements. The 55+ age group found cost significantly more persuasive than other groups overall as well as when taking live seminars and face-to-face full-length courses. This does not necessarily indicate that the younger age groups were not concerned about the cost of the course but that it was a stronger factor for those older age groups. Live seminar, online full-length course and when looking at courses overall were all ranked higher by "other" employment sectors. This may stem from the difficulty in finding suitable content related courses. CGAs indicated that cost was a factor overall and in recorded webinars.

Federal government employees did not rank cost or CPD hours as a decision factor. This may be because there are many accountants employed by the Canada Revenue Agency and they are taking employer required courses. As indicated in the additional comments, as these courses fulfill the CPD requirements and are paid by the employer, there is no need for either to be a selection factor. The fact that CGAs ranked CPD hour requirement higher than other designations may indicate a higher focus on that requirement by their governing body.

When asked about their overall rankings, respondents ranked the instructor as a higher factor than time away from work. However, when ranking specific course selection, the opposite was true. This indicates that the instructor, while normally a selection criteria, did not factor as significantly in the particular courses taken during the time frame for the survey.

With the work/life balance being an indicated factor in the additional comments, it is not surprising that time away from work is ranked high. The time away from work when selecting the recorded webinar, which can be watched at any time, was indicated as more of a factor for women than men. Perhaps indicating that women are looking at this factor more often. The ranking of this factor in the middle of all the factors should increase the desire for more accountants to take distance modality courses as they offer greater flexibility.

Most differences in the ranking of the instructor were found between the language of respondents or among the designations. As the modality responses were based on individual courses, the great variability of ranking for each of the modalities may indicate the strength of the instructor for that particular course taken only rather than an

instructor's influence overall. The instructor was not ranked differently for synchronous versus asynchronous courses.

When looking at the differences between live seminars and live webinars, time away from work is a greater influential factor in the distance modality. This does not hold true when the course is a full-length course as the ranking was the same for distance versus online in that case.

It was expected that the pace of the course would be a stronger influence for distance modalities than face-to-face modalities. This was, in fact, the case and ranked the highest in the self-paced computer-aided course modality. Not surprising as students can set their own pace for these courses. Although federal government employees ranked the pace of the course higher overall, that did not translate into actual courses taken by those employees (no individual modalities were also ranked higher by federal government employees).

Not surprisingly, networking opportunities ranked highest in the face-to-face courses although there was variance among the various categories within the ranking. Although CMAs ranked the networking opportunities higher than other designations, this was only repeated in live seminars.

6. Conclusions

As expected, the results show that there are a variety of modality preferences and selection factors used by accountants in their selection of CPD with individuals and groups preferring one modality over the other. It appears that there is market (perhaps shifting) for all and that traditional student-teacher preference may be lessening in younger accountants due to a variety of reasons discussed in the summary.

6.1. Implications for providers

One of the expected results was that the ranking for CPD hour requirements would be a strong factor and this was, in fact, the case. Although content was the most important factor in this study, course providers and accounting organizations will need to continue to monitor future results. In this regard, accounting organizations may also want to look further into a learning output method of CPD or a mixed input/output method with the emphasis on the training and currency rather than on the counting of CPD hours.

The accessibility of CPD courses was a recurring theme among those respondents providing additional comments. Whether it is the cost, location or a combination of factors, participants are concerned that they do not have sufficient access to courses. In addition, distance courses are considered much "greener" than face-to-face seminars (Anderson & Anderson, 2009). Distance and mobile technologies may also be a viable way to provide accountants with high quality CPD that is accessible from more locations.

Modality selection differences and comments provided by respondents indicate a need for work/life balance. The provision of distance, online, and on-demand courses will assist accountants in selecting course that best fit their work/life scheduling requirements.

The differences in selection factors among the three organizations may lead to some interesting discussions in the currently on-going amalgamation discussions for the three designations in various provinces. Quebec has agreed to amalgamation and some of the other provinces are still negotiating CA/CMA or CGA/CMA amalgamations. As the

Chartered Professional Accountant designation (or other amalgamation) goes forward, how one organization will satisfy the varying CPD preferences that are indicated for the three organizations will need to be looked into.

It is suggested that CPD providers ensure that they are providing a variety of courses in all modalities. As the accountant population ages, there will be a greater number of members with a strong comfort level with technology and mobile applications. This may mean an increase in the preference for online and distance modalities.

Respondents noted the need for more practical courses for CPD as well as more relevant courses (such as courses specific to individual sectors). Providers need to look at ways to provide a wider variety of courses in order to satisfy the needs of more of their members. Again, online options may be more economical for this purpose.

Formal educational institutions should be encouraged by the number of respondents who indicated that full-length courses were a good way to satisfy CPD requirements - when those courses were relevant. These institutions may want to offer more certificate programs that can be taken after the accounting degree.

6.2. Suggestions for further research

Additional comments from respondents highlighted that recorded webinars and seminars can be lacking in quality. Another issue anecdotally noted was that work distractions often make the viewing of these non-productive. While they definitely serve a purpose for those accountants who cannot attend the live seminar or webinar, we need to determine if accountants are receiving value from these modalities. Both of these modalities are lacking in social interaction but can have valuable topical information. Further research is suggested on accountants' actual use and value of recordings.

This study did not look at the effectiveness of the various modalities. Further research is suggested to determine whether or not accountants are increasing/maintaining currency from the various modalities being offered.

Currently, there are a very limited number of CPD courses being offered using mobile technology. There is potential for use of mobile technology in live webinars, recorded seminars, recorded webinars as well as self-paced computer-aided technology. Some conferencing providers are already offering conferencing abilities on the iPad (e.g. WebEx) and recordings and e-learning production are slowly starting to be available. Further research is suggested on the potential use of mobile technologies and accountants' reception and use of mobile technologies for CPD courses.

Work-life balance was a repeated factor in additional comments made by participants. Although the requirements for CPD have been established for a number of years, it is only in the past decade that they have become more formalized by the accounting organizations. This has been perceived by some to add an additional burden to already busy lives. It is suggested that further research be undertaken to review how accountants are accomplishing the demands of CPD along with their work and family and if time shifted asynchronous modalities will become more prevalent to address these challenges.

Last, but definitely not least, various statistically significant differences were found in the rankings done in the categorical factors explored. There were differences between men and women, between respondents who filled out the survey in English and those who filled it out in French, among the age groups, workplace groups and

designations. Further research should be done to explore why these differences exist and explore the cultural and gender effect associated with modality selection.

Acknowledgements

This research is supported by an Excellence in Research Scholarship from Athabasca University. The authors would thank Dr. Cynthia Blodgett-Griffin for her valuable guidance and support to this project.

References

- Anderson, L., & Anderson, T. (2009). Online professional development conferences: An effective, economical and eco-friendly option. *Canadian Journal of Learning & Technology*, 35(2), 3. Retrieved from <http://www.cjlt.ca/index.php/cjlt/article/view/521>.
- Anderson, T. (2003). Getting the mix right again: An updated and theoretical rationale for interaction. *The International Review of Research in Open and Distance Learning*, 4(2). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/149>.
- Anderson, T., & Dron, J. (2011). Three generations of distance education pedagogy. *International Review of Research on Distance and Open Learning*, 12(3), 80–97. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/890/1826>.
- Baviskar, S., Hartle, R. T., & Whitney, T. (2009). Essential criteria to characterize constructivist teaching: Derived from a review of the literature and applied to five constructivist-teaching method articles. *International Journal of Science Education*, 31(4), 541–550. doi:10.1080/09500690701731121
- Bernard, R. M., Abrami, P. C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., Walseth, P. A., Fiset, M., & Huang, B. (2004). How does distance education compare with classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research*, 74(3), 379–439.
- Doolittle, P. E., & Camp, W. G. (1999). *Constructivism: The career and technical education perspective*. *Journal of Vocational and Technical Education*, 16(1), 23–46.
- Fordis, M., King, J. E., Ballantyne, C. M., Jones, P. H., Schneider, K. H., Spann, S. J., Greenberg, S. B., & Greisinger, A. J. (2005). Comparison of the instructional efficacy of internet-based CME with live interactive CME workshops: A randomized controlled trial. *JAMA: The Journal of the American Medical Association*, 294(9), 1043–1051. doi:10.1001/jama.294.9.1043
- Hall, S. (2012). Modelling a constructivist approach to continuing professional development through e-Buddies. *Innovative Practice in Higher Education*, 1(2). Retrieved from <http://journals.staffs.ac.uk/index.php/ipihe/article/view/28/63>.
- Hean, S., Craddock, D., & O'Halloran, C. (2009). Learning theories and interprofessional education: A user's guide. *Learning in Health and Social Care*, 8(4), 250–262. doi:10.1111/j.1473-6861.2009.00227.x
- International Federation of Accountants. (n.d.). *IES 7 continuing professional development*. Retrieved from <http://www.ifac.org/sites/default/files/publications/files/ies-7-continuing-professi.pdf>.
- Leflore, D. (2000). Theory support design guidelines for web-based instruction. In B. Abbey (Ed.), *Instructional and Cognitive Impacts of Web-based Education* (pp. 102–117). Hershey, PA: IDEA Group Publishing.

- Lynn, V. A., Bose, A., & Boehmer, S. J. (2010). Librarian instruction-delivery modality preferences for professional continuing education. *Journal of the Medical Library Association : JMLA*, 98(1), 57–64. doi:10.3163/1536-5050.98.1.017
- Matthews, D. (2002). The use of the postal questionnaire in accounting history research. *Accounting, Business & Financial History*, 12(1), 113–129. doi:10.1080/09585200110107984
- Neuhauser, C. (2002). Learning style and effectiveness of online and face-to-face instruction. *American Journal of Distance Education*, 16(2), 99–133.
- Paisey, C., Paisey, N. J., & Tarbert, H. (2007). Continuing professional development activities of UK accountants in public practice. *Accounting Education*, 16(4), 379–403. doi:10.1080/09639280701646554
- Pongsuwan, S., Hoksuan, S., In-udom, W., & Chalakbang, W. (2011). Development of an e-learning model based on the meaningful learning process through a constructivist theory. *European Journal of Social Science*, 24(4), 625–633.
- Raosoftware, Inc. (2004). *Sample size calculator*. Retrieved from <http://www.raosoftware.com/samplesize.html>.
- Saba, F. (2000). Research in distance education: A status report. *The International Review of Research in Open and Distance Learning*, 1(1). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/4>.
- Schimming, L. M. (2008). Measuring medical student preference: A comparison of classroom versus online instruction for teaching pubmed. *Journal of the Medical Library Association : JMLA*, 96(3), 217–222. doi:10.3163/1536-5050.96.3.007
- VanVoorhis, C. W., & Morgan, B. L. (2001). Statistical rules of thumb: what we don't want to forget about sample sizes. *Psi Chi Journal Of Undergraduate Research*, 16(2), 58–72.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.
- Wenger, E., Trayner, B., & de Laa, M. (2011). *Promoting and assessing value creation in communities and networks: A conceptual framework*. Ruud de Moor Centru, Open Universitat, Netherlands, 18. Retrieved from http://www.open.ou.nl/rslmlt/Wenger_Trayner_DeLaat_Value_creation.pdf.
- Zhao, J., & Jiao, J. (2012). A podcasting-based pre-service teacher training model. *Knowledge Management & E-Learning*, 4(1), 123–128.