Privacy and Confidentiality in the Virtual Classroom: Instructor Perceptions, Knowledge and Strategies

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Executive Summary

The increased use of online education in the University setting has inspired myriad academic inquiries into online education's impact on learning outcomes, teaching strategies, and the interpersonal interactions that are central to the classroom experience. While pedagogical and technological scholars have studied many elements of online learning, the relationship between online learning and privacy has received little attention. Recently, University of Victoria (UVic) student Charlotte Stange studied student perceptions of privacy in UVic's School of Public Administration, in conjunction with Distance Education Services (DES). Stange found that SPA students are primarily concerned about the privacy of discussing workplace examples and experiences in the virtual classroom, and that students lack knowledge about privacy policies. Stange also found that instructor actions and strategies can have a positive or negative influence on students' perceptions of security in the classroom, and recommended further research into instructor perceptions of privacy. This project was created in response to that recommendation.

DES is the client for this report, which has been funded in part by a grant from the UVic Learning and Teaching Centre awarded to Assistant Professors Lynne Siemens and Catherine Althaus-Kaefer in SPA. This research intends to provide a preliminary understanding of UVic instructors' perceptions, knowledge, and strategies with respect to privacy in the virtual classroom by discussing those issues with instructors from the Faculty of Human and Social Development (HSD). This report addresses the following questions:

1. How do University of Victoria instructors perceive privacy and confidentiality issues as they pertain to instruction in an online environment?

2. What do University of Victoria instructors know and do in their instructional design and delivery to accommodate student perceptions of learning security in the online environment to maximize learning and teaching outcomes?

Methodology

This project's multi-method approach includes a literature review, a review of the British Columbia's *Freedom of Information and Protection of Privacy Act* and UVic's privacy policies, semi-structured interviews with 20 HSD instructors, and a grounded theory analysis of the data. HSD was chosen as the research venue because HSD hosts many online programs and was the focus of Stange's earlier research. Additionally, the supervisors and researcher were familiar with HSD, and including all UVic online instructors would not have been feasible within the project's time and resource constraints. The semi-structured interviews were designed to be flexible and exploratory, while gathering data on the same themes for each participant. This type of interview is appropriate due to the lack of available literature to shape the development of the interview guide – an overly scripted interview structure may have excluded important topics.

The focus of the interviews on HSD instructors and the qualitative nature of the research design limit the extent to which the findings can be generalized to other UVic instructors and academic divisions. However, an effort is made in the recommendation and conclusion chapters to examine the potential transferability of the results to UVic's Division of Continuing Studies

(DCS), which also hosts many online programs. This examination of transferability is tentative; more research may be necessary prior to the application of the recommendations to DCS.

Literature Review

The literature review synthesizes and analyzes academic literature relevant to the research questions. No literature exists on instructor perceptions of privacy, and the pedagogical literature suggests few strategies for promoting student perceptions of privacy in the virtual classroom. In lieu of directly applicable literature, the review examines literature on related topics, including online communication and engagement, the role of the instructor in the virtual classroom, instructors' perceptions of technology, and general online privacy issues. The topics chosen for the literature review were selected to provide context for the interpretation of the interview findings.

Interview Findings

Instructors in HSD schools perceive that students have personal and professional privacy concerns. However, the perceived seriousness of those concerns and the perceived impact of student concerns on engagement vary due to the range of class structures, subjects, and discussion topics in HSD classrooms. Instructor knowledge of privacy issues and policies seems to be grounded in (and limited to) professional experiences and training. Some instructors are wary of legalistic conceptions of privacy in the virtual classroom, as they perceive that an emphasis on privacy rules and restrictions could reduce engagement and interaction. Despite instructors' diverse perceptions of student concerns and wide range of knowledge about privacy issues, instructors discussed a relatively consistent set of strategies to promote perceptions of learning security. Instructors primarily discussed communicative strategies, such as cultivating a sense of "presence" and "tone" in the classroom, and "leading by example". Instructors also manage the communication channels that are used for course discussion, by directing sensitive conversations to e-mail instead of discussion forums.

Patterns in the interview findings indicate that instructors' perceptions and knowledge of privacy issues are influenced by their profession or HSD school (e.g., Nursing) their area of academic or professional specialization (e.g., Family Nursing, Nursing Leadership), and the nature of their employment at UVic (e.g., tenured professor, sessional instructor).

Discussion

Instructors' perception that students have professional privacy concerns (e.g., workplace examples and information) and personal concerns (e.g., grades, student numbers) echoes Stange's finding, which identified students' professional privacy concerns, and expands upon that finding by identifying how those concerns differ between HSD schools. As Stange noted, the literature does not discuss this professional element of privacy concern in the virtual classroom.

Instructors' reliance on professional sources of privacy knowledge is not mentioned in the literature, but instructor wariness at the over-legalization of classroom interactions (due to the perceived negative impact on course interaction) is reflected in one study. The article states that the most private learning environment would include little or no interaction between students (Tu, 2002b, p. 300), which would be problematic from a teaching and learning perspective. The literature also mentioned that instructor discomfort with technology and innovation could pose a barrier to online instruction, and Stange observed the negative impact of instructors'

technical struggles on student privacy concerns. Few participants suggested that technological discomfort negatively impacts their ability to foster a secure learning environment. Instructors often supplement formal training with peer support and self-education, and this embrace of peer support corresponds to one article in the literature (West, Waddoups, & Graham, 2007, p. 23-24). Overall, many participants (with a few notable exceptions) did not feel hindered by technological challenges, in contrast with concerns in the literature and Stange's report.

Many instructors perceive that their position in the classroom enables them to influence student perceptions of learning security. However, some sessional instructors felt limited in their actions because they are often asked to teach courses developed by others at the last minute. This dynamic among sessional instructors is not discussed in the literature. Among instructors who felt able to impact the privacy environment, communicative strategies (e.g., cultivating a sense of "presence") are paramount. Those findings correspond to the literature's conceptualization of online instructors as "facilitators" who build a community of inquiry by fostering social presence, immediacy, and interaction. The management of communication channels (communicating via e-mail or another channel, depending on the conversation's sensitivity) was also discussed in the interviews and mentioned in the literature. Lastly, instructors were skeptical of Stange's recommendation to increase student anonymity in the classroom, due to the potential negative impact on responsibility, authenticity, and professionalism in the virtual classroom.

Recommendations

The recommendations draw upon Stange's report and recommendations, the literature review, and the interview findings. The recommended actions are intended to suggest new approaches to instructor training, promote promising teaching practices, ensure that students and instructors are aware of privacy issues in the virtual classroom, and inspire further research. It is expected that both DES and HSD will contribute to the implementation of these recommendations, though other UVic support units (LTC, UVic Learning Systems) may also play a role.

Recommendation 1 – Facilitate standardized privacy notices in schools or programs
Recommendation 2 – Encourage instructors to communicate course expectations in regard to privacy and confidentiality
Recommendation 3 – Raise awareness among instructors about privacy issues and strategies in the virtual classroom
Recommendation 4 – Support and leverage the activities of instructors' informal learning networks
Recommendation 5 – Conduct further research

Conclusion

This report tentatively identifies instructors' perceptions of privacy, strategies for promoting learning security, and areas of misperception or lack of knowledge that require changes to training and pedagogical practices. The findings are based on a small portion of the instructor population, and despite Stange's examination of SPA student perceptions, numerous dimensions of online learning remain to be examined in HSD and across UVic. Additional research would contribute to a more comprehensive view of privacy in UVic's virtual classrooms, taking into account the complex perceptions and actions of students, instructors, and administrators, both as individual actors and as collaborative groups working to maximize learning outcomes.

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Chapter 1 – Introduction

In the past decade, many post-secondary institutions have begun to offer online courses and degree programs. The rapid ascent of online education has been accompanied by a large volume of literature studying the impact of online education on learning outcomes, teaching strategies, and the interpersonal interactions that are central to the classroom experience. However, a notable area of online education that has not been rigorously studied is the topic of privacy in the virtual classroom. Evidence indicates that internet users are becoming more aware and concerned about online privacy risks (Proctor, Ali, & Vu, 2008, p. 308), but little scholarship has focused on examining privacy risks and concerns in the virtual classroom.

The paucity of literature in this area is particularly relevant for the University of Victoria's Faculty of Human and Social Development (HSD) and Division of Continuing Studies (DCS), which offer numerous online degree, diploma, and certificate programs. In acknowledgement of the extensive use of online education at UVic, and in response to the lack of scholarship about privacy in the virtual classroom, UVic MPA student Charlotte Stange recently conducted research into student perceptions of privacy within the School of Public Administration (SPA).

Stange's report, "Privacy Concern and Student Engagement in the Virtual Classroom", found that students in SPA are concerned about privacy in the virtual classroom, and that students may be hesitant to fully engage in online learning and discussions because of their concerns. Stange made several recommendations to DES, including the recommendation that additional research be conducted into *instructor* perceptions of privacy. This research project was commissioned in response to that recommendation. DES is also the client for this report, which was funded in part by a grant from the UVic Learning and Teaching Centre awarded to Assistant Professors Lynne Siemens and Catherine Althaus-Kaefer in SPA.

Instructors play a crucial role in determining the tone, structure, and content of online interactions. In order to better understand instructor knowledge, perceptions, and actions as they relate to privacy and confidentiality, this report examines the following questions:

1. How do University of Victoria instructors perceive privacy and confidentiality issues as they pertain to instruction in an online environment?

2. What do University of Victoria instructors know and do in their instructional design and delivery to accommodate student perceptions of learning security in the online environment to maximize learning and teaching outcomes?

A literature review and interviews with HSD instructors were conducted to address the research questions. Those findings were analyzed in the context of Stange's report, and used to develop a series of recommendations that may be implemented by DES and HSD, or through a collaborative arrangement between online learning support organizations at UVic. The recommendations suggest actions that could improve UVic instructors' knowledge and strategies, as well as additional topics for research.

The report begins with background information to establish the context for this report (Chapter 2) and a discussion of important concepts and definitions that will be used throughout the document (Chapter 3). Next, the most relevant findings and recommendations from Stange's report will be summarized (Chapter 4), followed by a detailed examination of the chosen research methodology for this report (Chapter 5). Chapter 6 contains the literature review, which synthesizes and examines the literature on various dimensions of the research question and identifies several gaps in the literature. Chapter 7 examines the privacy legislation and policies that govern the collection, use, and storage of data in the virtual classroom, and analyzes the implications of those policies for instructors. The interview findings are summarized in Chapter 8, and discussed in the context of the literature, legislation and policies, and Stange's report in Chapter 9. Finally, Chapter 10 includes the report's recommendations, which are followed by a conclusion in Chapter 11.

The structure of this report is intended to provide numerous types of contextual and background information to aid in situating and understanding the range of instructor perceptions in the interview findings. The interview findings are subsequently related back to those contextual elements to identify areas of tension between the perceptions and actions of instructors, Stange's findings on the perceptions of students, pedagogical theories in the literature, and the prescriptions of privacy policies. It is in the areas of tension where the recommendations and opportunities for improvement become apparent.

Chapter 2 – Background

This chapter provides the UVic context for this report, including a discussion of DES' mandate and service offerings, an overview of online learning in HSD and the programs offered in the faculty, and a summary of the online training and technical support provided to instructors by the UVic Learning and Teaching Centre and UVic Learning Systems.

2.1 Distance Education Services

DES is a unit within the Division of Continuing Studies (DCS). DCS offers numerous online programs to adult learners, including diplomas in business administration, public relations, and cultural resource management, among others. DES' primary role is to provide course design consultation and support to DCS instructors. HSD instructors may also access that support through special arrangement, but HSD courses are primarily designed within HSD.

In addition to DES' focused support of DCS instructors, DES also provides several supports that are accessible by all UVic students and instructors, including the Onlinehelp Desk (for technical support) and Infoline services that enable distance learners to access library resources. The public DES website provides instructors information on grading and assessment, academic integrity, online education software, and course management platforms. The website also links to external resources to help instructors learn online learning technologies, develop effective online teaching strategies, and understand their role in the virtual classroom. Lastly, DES conducts proprietary research and coordinates with external researchers to examine issues that are important to distance educators and students.

2.2 Online Learning in the Faculty of Human and Social Development

This research is being conducted in HSD because the faculty hosts numerous online degree programs. HSD offers online undergraduate degree programs through the Schools of Child and Youth Care (CYC), Nursing, SPA, Social Work, and Public Health & Social Policy, and online graduate degree programs in those same schools as well as Health Information Science (HIS) (DES, 2012a). Within those programs, more than one hundred online courses are offered within HSD per year. As a result of HSD's commitment to online education, this research is relevant to HSD and important for maintaining and improving the faculty's educational standards. Furthermore, the large percentage of UVic online courses that are taught within HSD means that the faculty is an appropriate venue for gaining insight into the perceptions and actions of online instructors within the broader UVic context.

The online degree programs within HSD focus on a wide range of subjects, but are united in their focus on developing professionals. HSD programs are designed to enable nascent and mid-career professionals to develop the skills and critical thinking abilities that are required for success in their respective fields. HSD's professional focus is important because the types of students attracted by those programs (and the types of course discussions in those programs) shape the privacy environment of the virtual classroom.

2.3 The Learning and Teaching Center

This research project also supports the mandate of the UVic Learning and Teaching Centre (LTC), which aims to improve the effectiveness of UVic instructors by working with instructors and academic units to increase awareness of "current research and teaching strategies in higher education" (LTC, 2011). The LTC fulfils its mandate by funding original research (including this report), publishing brochures, and providing workshops to UVic instructors. Instructors can use the workshops to improve their course design skills, explore common tools that are used in online education, and experience online courses from the perspective of a student (LTC, 2011b).

2.4 UVic Learning Systems

UVic Learning Systems supports online teaching and learning activities at UVic by offering workshops and professional development opportunities to instructors who want to learn more about Moodle[1], which is the predominant online learning software used at UVic. Many of the training and orientation opportunities described by instructors in this report are now provided by Learning Systems; DES previously delivered some of these supports. Learning Systems also provides technical support to instructors, in the form of one-on-one consultations with instructors on specific problems with learning technologies. Lastly, Learning Systems manages the maintenance and deletion of online course records, in accordance with UVic's Records Management Policy.

[1] Please see Section 3.3 for more information about online learning technologies and Moodle.

Chapter 3 – Concepts and Definitions

This chapter defines several concepts that are used throughout this report, including "face-to-face", "distance", and "online" education, as well as terms related to communication in the online education environment. This chapter also describes the elements of an "online learning platform", and defines "privacy", "information security", "confidentiality", and "learning security".

3.1 Face-to-Face, Distance, and Online Education, and Blended Models

Face-to-face education refers to "traditional" on-campus education, where students are physically present on-campus, and instructors lecture, mentor, and meet with students in-person. In this paper, face-to-face learning may be referred to as "on-campus learning", or the "traditional classroom", in order to denote that this learning does not take place online. "Distance education" and "online education" are distinct from face-to-face education in that they do not involve the physical interaction of students and instructors in the campus environment. These terms are frequently conflated or used interchangeably in the literature, but the terms do not necessarily refer to the same thing. The term "distance education" encompasses *all types* of education where instructors and students do not typically meet face-to-face and course actions are mediated through the internet, telephone, video recordings, or mail. "Online education" is one type of distance education where the internet is the primary mediating structure.

These conceptual distinctions are blurred by the use of blended models of education, which are present in HSD's offerings. For example, face-to-face courses may be supplemented with online information. This is considered a "web-assisted course". Web-assisted courses are not within this report's scope, because most of the interactions between participants happen in-person. Other blended courses are mostly conducted online, but students gather on-campus for a seminar during the semester. The interactions in these "blended" courses primarily occur within the "distance" or "online" sphere, so those courses are considered "distance" or "online" education for this report. In acknowledgement of the important distinctions discussed above, the blend of online and face-to-face learning is explicitly described when the nature of the blend is relevant.

3.2 Computer-Mediated Communication

Communication is essential to teaching and learning. Most of the communication in the virtual classroom is computer-mediated (except for student-instructor telephone conversations), so this section defines and briefly describes what is meant by "computer-mediated communication" (CMC). CMC is "the domain of human communication in which individuals and groups interact, form impressions, establish relationships, and accomplish tasks using networked computers" (Van Der Heide & Walther, 2009, para. 1). CMC can refer to both "synchronous" and "asynchronous" communication. Synchronous communications occur when online participants communicate in real-time from different locations (e.g., a "live chat"). Asynchronous communications occur when participants communicate at different times from different places, such as on a class discussion forum (Rockinson-Szapkiew, 2010, p. 164). These various communicative structures can elicit different feelings and interactions among students and instructors (Rockinson-Szapkiew, 2010, p. 164).

Asynchronous and synchronous CMC are comprised of numerous communication *channels* that have varying implications for classroom privacy. For example, e-mail and discussion forums are both asynchronous CMC, but e-mail is more private than a discussion forum because course members can only read e-mail conversations if added to the e-mail recipient list. In contrast, discussion forums are typically open to all students, or a specified sub-set of participants. Similarly, one-on-one live chats and full-class chats are both synchronous, but offer varying levels of privacy to participants. In order to understand instructor perceptions and strategies in regard to privacy, it is important to understand the mediating role of CMC in the virtual classroom, and the distinctive types and channels of CMC that may be used in each course.

3.3 Online Learning Platforms

Online learning platforms organize CMC in the virtual classroom and support classroom administrative functions. An online learning platform is software that is sanctioned and maintained by the UVic administration. All HSD online and web-assisted courses are now provided through Moodle, and instructors must use Moodle for their courses. Moodle provides a structure for instructors to post course content and assignment information, return grades to students, communicate with individual students via Moodle e-mail, and coordinate asynchronous discussions. Online tools such as Skype (a videoconferencing tool) are relevant to online instruction, but are not online learning platforms because they do not support classroom CMC or administrative functions, and UVic does not officially support those programs.

3.4 Privacy, Security, and Confidentiality

This section defines the terms "privacy", "security", and "confidentiality". In order to maintain consistency with the previous privacy research conducted for DES, this paper adopts the definitions used in Stange's report. Stange defines privacy as "control over access to one's own information" and security as "the safe storage of, and ability to limit or prevent access to, information stored online" (Stange, 2011, p. 19). Stange mentions that "confidentiality" is primarily used to describe information that is protected, and that this term is difficult to distinguish from privacy (Stange, 2011, p. 20). These terms are typically fused together as "privacy" in general usage and in the literature, or used interchangeably. This report uses the terms "privacy" and "privacy and confidentiality" to encompass all of these concepts.

3.5 Learning Security

The term "learning security" is mentioned in the research questions and will be used throughout this report. Learning security is distinct from technological safeguards described as "security" above. It is not a concrete concept, but rather a feeling of safety perceived by students in the learning environment. This perception encompasses students' confidence in learning technology and data security, trust in the learning community (including instructors, teaching assistants, administrators, and fellow students), and feeling of privacy in the virtual classroom (Siemens & Althaus, 2011, p. 3). This sense of security is important for ensuring engagement and learning among online students (Siemens & Althaus, 2011, p. 3).

The next chapter will discuss Stange's research on student perceptions of privacy in the virtual classroom, which influenced the development of this report.

Chapter 4 – "Privacy Concern and Student Engagement in the Virtual Classroom"

Stange's research on student perceptions of privacy influenced this project's structure, literature review and interview guide. This chapter summarizes the most relevant aspects of that report. Stange's literature review covered many same topics as the review in this report (including privacy online and in the virtual classroom, social presence, and student engagement) though she examined that material from student's perspective. Due to the similar topics covered by the reviews, this chapter will not summarize that element of Stange's report. Summaries of Stange's interview findings and recommendations are included below.

4.1 Interview Findings

Stange interviewed 20 students in UVic's MPA program about their perceptions of privacy and confidentiality in the virtual classroom.

4.1.1 MPA Student Concerns about Privacy in the Virtual Classroom

Stange found that MPA students are concerned about privacy and confidentiality. Students were most concerned about sharing workplace anecdotes or examples in the classroom (Stange, 2011, p. 38), as they worried that candid discussion comments about their workplace might be relayed to a supervisor or otherwise harm the student's career (p. 39). Stange observed that literature on student engagement or online privacy did not discuss workplace-related concerns. Students also expressed concern about instructors' expectation that students would post pictures of themselves and biographical statements with personal information in the virtual classroom. These privacy concerns cause students to engage differently in online courses (Stange, 2011, p. 38). "Different" engagement means that students may be less candid or may disengage from course interactions.

Students' concerns are primarily driven by the limited opportunity for distance students to get to know each other within a short semester, and uncertainty about the confidentiality and security of course data (p. 41). In contrast with students' lack of familiarity or trust in their colleagues, "the majority of students trusted their instructors' intention to keep course and student information private, as well as their ability to do so" (Stange, 2011, p. 49). However, instructor competence (or lack thereof) occasionally detracted from that trust as "several students pointed to examples of past instructors lacking competence with using course platforms, and the negative effects both in terms of the overall delivery of the course, and students' trust in instructors' knowledge of how to safeguard student information" (p. 48).

4.1.2 Student Misconceptions and Lack of Knowledge about Privacy and Confidentiality

Stange's report indicates that student privacy and confidentiality concerns are partially driven by lack of knowledge about UVic's privacy policies. One notable misconception that Stange heard repeated by multiple students was the incorrect assumption that "course information is stored somewhere indefinitely even after a course has been completed" (p. 57). In reality, the course information is deleted after one year, except in special circumstances.

None of the MPA students interviewed for Stange's project had read UVic's privacy policies, and several had not thought about privacy in the context of online education until they were contacted by Stange. This lack of self-education is interesting, because it indicates that even students who reported concern about privacy had not examined the UVic policies on those topics. Instructors are in a position to combat those misconceptions if they are aware of student concerns and are knowledgeable about UVic privacy policies and provincial privacy legislation.

4.1.3 Effective Instructor Strategies

Stange found that a number of instructor actions and strategies are effective in reassuring students of their privacy and promoting student engagement (Stange, 2011, p. 45). The first effective strategy mentioned by students was "when instructors posted brief statements for students that outlined the privacy considerations of their online class. Statements included a reminder that course discussions be kept confidential, and a brief summary of the primary issues relevant to students" (p. 45). This strategy was recommended by students who recalled previous instructors who had employed this strategy, and by students who had never had that experience. However, despite the fact that students expressed trust in their professors to keep personal information *private*, some students were skeptical of the instructor's ability to enforce the *confidentiality* of conversations in the virtual classroom, regardless of the use of a privacy notice or statement (p. 45).

Students also reported feeling reassured and safe if the instructor "led by example" in the disclosure of personal information and experiences (Stange, 2011, p. 46). This demonstration of trust by the instructor made students feel more comfortable about participating fully and honestly in the course. The role of the instructor in the classroom in regard to modeling social behaviour is well-established in the pedagogical literature, which is discussed in Chapter 6 of this report.

4.2 Recommendations

Stange provided five recommendations to DES (p. 59):

1. *Ensure the use of course privacy notices*, which would discuss the privacy risks that result from participating in the course, the privacy features of the online learning platform, the protocol for the disposal of student information, links to additional information, and a reminder for students to inform themselves of privacy policies.
2. *Ensure that instructors provide students with detailed course expectations* regarding the level of formality required in the classroom, and the sharing of workplace information.
3. *Provide more training to online instructors* in the form of a "Best Practices Tool Kit" that would be made available to instructors.
4. *Increase the anonymity of students* by identifying students by first name only.
5. *Conduct further research* outside of SPA, and among instructors.

4.3 Impact on this Report

Stange's findings influenced the development of this project, and this report investigates a number of her recommendations. Most notably, this report is a direct response to Stange's

recommendation that more research be conducted in SPA and beyond, and that an effort be made to understand instructors' perceptions of privacy.

This report also questions and expands upon the substantive elements of Stange's report. For example, the interview script for this project was designed to obtain first-hand information about the strategies instructors use to foster perceptions of learning security, including the use of privacy notices and codes of conduct. This report also responds to Stange's recommendations by asking instructors to talk about their training and discuss the potential impact of student anonymity on classroom interaction. The interviews for this report also sought information on instructors' knowledge of privacy policies, so their level of knowledge could be compared with students. For more detailed information on Stange's literature review, findings, and recommendations, please follow the link to the report in the Bibliography section of this document (Appendix B).

Chapter 5 – Methodology

The methodological approach chosen for this project includes a literature review, a review of British Columbia's *Freedom of Information and Protection of Privacy Act* and UVic's privacy policies, semi-structured interviews with HSD instructors, and a grounded theory analysis of the interview data. This chapter first describes the methodology and explains why the chosen structure is appropriate for answering the research questions. Next, the limitations of the methodology are discussed, as are the efforts to counteract those limitations. Lastly, this chapter establishes the overall soundness of the methodological approach.

5.1 Literature, Legislation, and Policy Review

The literature review (Chapter 6) synthesized and analyzed literature relevant to instructor perceptions of privacy in the virtual classroom, including literature on topics such as online pedagogy, communication, and privacy. Academic journals were searched using UVic e-databases and internet search engines, and books were sought from the UVic library. Legislation (*Freedom of Information and Protection Act*) and UVic privacy and information security policies were also examined in this report (Chapter 7). The legislation was sought from the B.C. Government website, and the policies were obtained from the UVic website. These documents were read closely to determine the implications for UVic instructors.

5.2 Interviews

In order to expand upon the literature and policy review findings and supplement Stange's student-focused analysis, it was determined that instructor interviews would be conducted. Interviews are appropriate when "the purpose of the study is to uncover and describe the participant's perspectives on events" (Marshall & Rossman, 1999, p. 110). Given the lack of directly applicable literature, this exploratory approach was deemed the most appropriate method to uncover instructors' perceptions of privacy and pedagogical strategies.

5.2.1 Ethical Approval

The involvement of human participants in this project necessitated the completion of an Application for Ethics Approval for Human Participant Research. The UVic Human Research Ethics Board approved the application on November 25, 2011. In accordance with the ethics approval, each participant was forwarded a participant consent form that outlined the purpose of the project, the precautions that would be taken to safeguard their identities and confidentiality, and the ways participant data would be used and protected by the researcher.

5.2.2 Interview Structure

Semi-structured interviews were chosen as the primary data collection method for this project. While "semi-structured interview" can refer to various interview models, here it refers to the "general interview guide approach" (Marshall & Rossman, 1999, p. 108). In that approach, a guide is used to ensure that each participant addresses the same fundamental themes (Patton, 2002, p. 343). Within those themes, the interviewer can probe and ask scripted and unscripted follow-up questions based on the participant's initial responses (Patton, 2002, p. 343).

The interview guide approach allowed instructors flexibility to discuss their perceptions of student privacy concerns and their strategies for promoting perceptions of learning security, while ensuring a similar structure for each interview and maintaining a consistent focus on the research topic. An overly rigid interview structure may have excluded important topics from discussion, or limited the nuance of the interview data. The guide is included as Appendix A.

5.2.3 Participant Selection

The study population for Stange's research was limited to SPA students. For this project, the study population was expanded to all HSD instructors, as recommended by Stange. That decision was also influenced by the relatively small number of instructors in each school and the research team's interest in comparing perceptions and strategies between schools. It was also decided that research would be limited to HSD, because the researcher and supervisors are most familiar with HSD, and because expanding the research scope to the entire UVic learning community was not possible within the resource and time parameters of the project.

Any HSD instructor who had taught one online class was eligible to participate in the interviews, regardless of the nature of their employment (e.g., sessional, faculty). A request for participation was sent via e-mail listserv to all HSD instructors. Seven instructors responded to that request and were interviewed. Subsequently, the researcher sent personalized e-mail requests for participation to dozens of individual instructors. Thirteen instructors responded to the personalized request and were interviewed, bringing the total number of participants to twenty.

Each participant had taught an average of sixteen online classes. Participants from SPA (thirteen classes per instructor) and Social Work (fourteen) had more online teaching experience than Nursing participants (seven). Nine participants teach primarily graduate courses, five teach primarily undergraduate courses, and six teach a combination of graduate and undergraduate. The interview findings include both undergraduate and graduate instructional perspectives from all schools, except for CYC (one undergraduate instructor) and HIS (one graduate instructor).

5.2.4 Pilot Interviews

Two participants were recruited by the researcher to act as pilot participants in advance of the interview period. The pilot participants were specifically chosen to ensure the guide would be tested with instructors who have different demographic characteristics and various levels of experience and tenure in HSD. The interview guide was slightly modified after the conclusion of the pilot interviews. Some closed questions were combined into improved open-ended questions, and a few duplicative questions were eliminated. However, the revised interview guide retained the thematic structure of the original, and the interviews followed the same "basic lines of inquiry" (Patton, 2002, p. 343). As a result, the pilot data is included in the analysis.

5.2.5 Data Collection

Interview data was collected from January to March 2012. Participants were primarily interviewed in-person at UVic, though four participants were interviewed via telephone and one was interviewed via online video chat. The interviews lasted an average of 34 minutes. Reflecting Stange's approach, participants were not notified of interview questions in advance of

the interview, as that foreknowledge could have altered their perceptions. All interviews were recorded with a digital recorder, and subsequently transcribed by the researcher.

5.3 Data Analysis

A grounded theory approach was used to analyze the interview data. Grounded theory generates theory from data, rather than using data to verify a theory, as in quantitative research (Tan, 2009, p. 94). A grounded theory analysis is comprised of several stages. The data is first organized and read, and various themes and categories are identified in the data. Subsequently, those themes and categories are coded to enable comparison and interpretation within a single interview, and between interviews (Siemens, 2007, p. 89). The themes and categories in the data are continually refined and interconnected, and emergent understandings and theories are tested against the data, until the researcher reaches a point of "theoretical saturation", where additional analytical effort will no longer result in an improved understanding of the data (Tan, 2009, p. 106). The result of this process is a theory that provides a general answer to the research question, which "fits" the situation from which it was drawn, and helps participants involved in that type of situation to better manage the situation (Cooney, 2011, p. 18). By those criteria, the theory that is grounded in the interview data for this project should generally "fit" the context of the virtual classroom, and accurately describe the privacy dynamics of the online learning environment.

5.4 Methodological Limitations

The chosen methodology has a number of minor limitations. Those limitations are discussed in this section, as well as the steps taken by the researcher to address the limitations.

5.4.1 Participant Selection Limitations

The first participant selection limitation results from the reliance on volunteer participants; instructors who are interested in privacy issues were more likely to volunteer. Conversely, some instructors may have declined because they had not thought about privacy issues and believed this precluded their participation. The researcher addressed this imbalance by reassuring wary instructors. If an instructor was reluctant to participate because they had not thought about privacy issues, the researcher reiterated the value of all perspectives and repeated the request for participation. A number of instructors agreed to participate as a result of that reassurance.

Another limitation stems from the uneven distribution of participants between HSD schools, due to a lack of interest in the under-represented schools. SPA was over-represented (ten participants out of twenty), while Social Work (four), Nursing (four), HIS (one), and CYC (one) were all slightly under-represented. No instructors from Public Health and Social Policy volunteered to participate. The researcher made every effort in the recruitment process to avoid this imbalance, but this limitation could not be avoided within this project's time and resource constraints.

5.4.2 Data Collection and Analysis Limitations

Qualitative interviewers may influence the *data collection* process through their own interests and biases. When conducting qualitative interviews, researchers employ "a broad range of his or her own experience, imagination, and intellect in ways that are various and unpredictable"

(McCracken, 1988, p. 18). The researcher addressed this element of qualitative research by seeking guidance from the project's supervisors and client to ensure that the interview guide was balanced and relevant, and by consulting *The Long Interview* by McCracken (1988), which provides information on questionnaire construction and interviewer demeanour.

The focuses and interests of the researcher also may influence the *data analysis*. The search for patterns and categories of meaning within enormous amounts of raw data cannot be mechanized, and different researchers may perceive various categories and themes within the data. The researcher addressed this limitation by consulting with this project's supervisors and client. Drs. Siemens and Althaus-Kaefer had access to the raw interview data (and DES accessed aggregate data), and those parties queried the categories, themes, and conclusions drawn from the data.

5.4.3 External Influence

During an interview period, external events and changing conditions can influence participants' perceptions, depending on the timing of the interview. The intrusion of such events cannot be controlled. One event intervened during the interview period, and it is discussed in this section.

The introduction of Bill C-30 may have impacted some instructors' perceptions of privacy. The bill was introduced on February 12, 2012 in the Canadian federal parliament, and would have granted expanded powers to police in the pursuit of internet crime. After the bill's introduction, Public Safety Minister Vic Toews stated that people "can either stand with us [in support of the bill] or with the child pornographers" (Cited in Ibbitson, 2012). Toews' statement catalyzed opposition to the bill, and ignited a social media firestorm. Three of nine participants interviewed after this event indicated that Bill C-30 had caused an increase their personal privacy concerns, and made them less certain about the security of personal data.

5.5 Methodological Soundness

This section establishes the soundness of the methodology. Various models have been created to identify and examine the qualities of "sound" qualitative research design, and this report uses the model developed by Lincoln and Guba (1985), which identifies credibility, transferability, dependability and confirmability as key elements of sound design (Marshall & Rossman, 1999, 192-194). This section explains and examines those concepts in the context of this project.

To establish the **credibility** of a research design, the researcher must "demonstrate that the inquiry was conducted in such a manner that the subject was accurately identified and described" (Marshall & Rossman, 1999, p.192). Lincoln and Guba (2007) identify a number of elements that bolster the credibility of a study including "lengthy and intensive contact with the phenomena (or respondents)", and "in-depth pursuit of those elements found to be especially salient through prolonged engagement" (p. 18). The in-depth interviews conducted for this project constitute intensive contact; indeed Audet and d'Amboise warn that large qualitative sample sizes (more than ten) may cause the researcher to be overwhelmed with data (2001, p. 3). Credibility is also achieved through the interview guide's flexibility, which enabled the interviewer to probe the perceptions that are most salient to the research question.

The lack of **transferability** of findings to other settings is generally thought to be a limitation of qualitative research (Marshall & Rossman, 1999, p.193). Lincoln & Guba (2007) recommend that a detailed description of the research context be provided so that people who wish to transfer the findings to another setting can determine the appropriateness of the transfer (p. 19). Significant amounts of contextual detail are provided in this report, and it is on this basis that DES could potentially transfer some of the findings and recommendations of this report to DCS. Furthermore, this research methodology (including the interview guide) could potentially be transferred to another school, faculty, or university with only minor adjustments.

In order to ensure the **dependability** of the methodology, the researcher must "account for changing conditions in the phenomenon chosen for the study and changes in the design created by an increasingly refined understanding of the setting" (Marshall & Rossman, 1999, p. 194). Section 5.4.3 accounts for changing conditions, and Section 5.2.4 indicates that the interview guide was revised between the pilot interviews and the primary interview period, based on an improved understanding of the setting. Those changes maintained the same "basic lines of inquiry" (Patton, 2002, p. 343), and did not negatively impact the dependability of the data.

Lastly, qualitative researchers must ensure that research findings could be confirmed by another researcher (Marshall & Rossman, 1999, p. 194). The nature of qualitative research makes the concept of **confirmability** problematic. Instructors' perceptions of privacy may change over time, and may have even been changed by the interview experience. Marshall & Rossman (1999) indicate that qualitative researchers should focus on the confirmability of the conclusions that are drawn from data (p. 194). As noted in Section 5.4.2, the supervisors and client for this project accessed the data, and those parties queried and challenged the findings.

5.6 Deliverables

This project produced a number of deliverables. This report is the author's Master's Project, which is a requirement of UVic's MPA program. The report will be defended by the author and approved by SPA and DES. The literature review, interview, data analysis, and recommendation sections of this report are the deliverables that fulfil the requirements of the Master's Project.

Additionally, UVic's LTC funded this project. Under the terms of the grant, the data and analysis may be presented at LTC's workshop series and New Faculty Orientation, to the Canadian Society for the Study of Higher Education, and at DevLearn 2012. Data and analysis from this report may also inform other conference presentations or academic articles.

5.7 Conclusion

It was determined that a qualitative, interview-based research design is most appropriate for this project, and the methods used in the design are described in Sections 5.1 to 5.3. The research design has some inherent challenges and limitations (Section 5.4), but the researcher has addressed those limitations. This chapter also discusses the concept of methodological soundness, and establishes how this project meets that standard (Section 5.5).

The following chapter contains the literature review for this project.

Chapter 6 - Literature Review

6.1 Introduction

This chapter synthesizes literature on the roles and strategies of the instructor in the virtual classroom, and on the factors that may shape instructor perceptions of privacy and confidentiality. This review also examines literature on student and consumer privacy, and infers the implications for instructors. This review did not find any literature on university instructors' perceptions of privacy or specific pedagogical practices for promoting perceptions of learning security. The gaps in the literature are detailed at the conclusion of the review.

6.2 The Instructor in the Virtual Classroom

The research question asks, "What do University of Victoria instructors know and do in their instructional design and delivery to accommodate student perceptions of learning security in the online environment to maximize learning and teaching outcomes?" As mentioned above, no literature examines online instructional design and delivery as it relates to privacy. Given that gap in the literature, this section synthesizes literature that is more broadly related to the role and actions of the instructor in the virtual classroom (with a focus on instructional communication), which provides the context necessary to interpret and understand the interview findings.

This section begins with an examination of communication theory as it relates to online learning, specifically focusing on the need for instructors to promote immediacy, intimacy, and interactivity among classroom participants. Subsequently, this section discusses the various conceptualizations of the role of the instructor in the virtual classroom, and briefly compares the predominant conceptualizations of online teaching and face-to-face teaching.

6.2.1 Online Communication: Fostering Social Presence

As online learning began to expand, many scholars and instructors became concerned that the computer-mediated nature of online communication would alienate online students from their instructors and fellow students, reducing student engagement in the classroom. Subsequently, a body of literature developed examining student perceptions of "social presence", and the need for instructor strategies that would foster social presence and student engagement in the virtual classroom. Social presence has been defined as a person's "degree of awareness of another person and the consequent appreciation of an interpersonal relationship" (Tu & McIsaac, 2002, p. 133), or in the context of the virtual classroom as "the ability of learners to project themselves socially and emotionally into a community of inquiry" (Arbaugh, 2004, p. 172).

When learners are part of a community of inquiry, the feeling is similar to a "sense of community" in a broader societal context, in that they feel a "a spirit of belonging together, a feeling that there is an authority structure that can be trusted, an awareness that trade, and mutual benefit come from being together, and a spirit that comes from shared experiences that are preserved as art" (McMillan, 1996, p. 315). This feeling of community and social presence in the virtual classroom, and particularly the trust that results from the perception of connection and authority, is essential to promoting student and instructor perceptions of privacy.

6.2.2 Intimacy and Immediacy

The literature identifies "intimacy and "immediacy" as two important elements of social presence and community building in virtual classroom (Arbaugh, 2004, p. 7; Tu, 2002a, p. 39; Tu, 2002b, p. 294; Tu & McIsaac, 2002, p. 133-134). Intimacy is created through physical indicators of engagement and closeness, such as making eye contact, smiling, leaning toward the object of communication, laughing, and physical closeness (Arbaugh, 2001, p. 43; Tu, 2002b, p. 295; Tu & McIsaac, 2002, p.133-134). In contrast, immediacy refers to the "psychological closeness" between two communicators, which can be conveyed through speech and inflection, and other non-physical cues (Tu & McIsaac, 2002, p. 134). Intimacy and immediacy behaviours are frequently referred to as "immediacy behaviours" in the literature, referring to the general communicative relationship between the instructor and student in the virtual classroom.

While it was thought that immediacy behaviours are inherently lacking in distance and online education, online learning studies have found that there are numerous actions an online instructor can undertake to demonstrate immediacy behaviours for students and inspire reciprocal behaviour (Richardson and Swan, 2003, p. 69). Those strategies include using students' first names in replies, writing in a conversational tone, including a biographical sketch at the beginning of the course, and supplementing group feedback with personal notes and individualized e-mails (Baker, 2004, p. 11; Conaway, Easton & Schmidt, 2005, p. 25).

Synchronous online videoconferencing tools (such as Skype) are also valuable communicative tools for online learning, because they enable intimacy and immediacy behaviours that are common in the face-to-face classroom but previously unavailable online (e.g., eye contact, smiling). One study of quantitative management science students found that using Skype resulted in a higher level of discussion participation and higher mean grades (Strang, 2012, p. 18). Communications technology (and the related literature) is evolving at a rapid pace, and will continue to impact instructor and student immediacy behaviours in the future.

Immediacy behaviours invite learners to engage in the "community of inquiry", which promotes a feeling of fellowship, trust, and safety within the virtual classroom. The literature indicates that instructors (due to the central role that they play in the classroom) have the ability and duty to promote intimacy and immediacy in the virtual classroom, which is necessary for students to perceive safety and comfort in disclosing information.

6.2.3 Interactivity

The level of interactivity in the virtual classroom is a by-product of immediacy (Tu & McIsaac, 2002, p. 135). Students who feel psychologically connected to their online classmates are more likely to engage in a high volume of interactions, as is demonstrated in the Skype study noted above (Strang, 2012, p. 18). Instructors must facilitate four types of interactions that are either unique to the virtual classroom, or manifested differently than in the traditional classroom: student-to-student interaction, student-to-instructor interaction, student-to-content interaction, and student-to-interface (i.e., Moodle) interaction (Arbaugh, 2000b, p. 14).

It is consistently noted in the literature that increased interactions and perceived social presence within the virtual classroom result in improved student outcomes (in terms of perceived learning)

as well as increased student and instructor satisfaction with online education (Baker, 2004, p. 4-5; Graham & Scarborough, 2001, p. 240). If students do not feel comfortable sharing information or ideas (due to privacy concerns or other reasons), this could cause a reduction in the level of interaction, which may lead to a decrease in their perceived learning in the course.

6.2.4 Conceptualizing the Instructor in the Virtual Classroom

The literature examined above affirms the central communicative role of the instructor in online education, and emphasizes the importance of instructor actions for ensuring that students feel comfortable interacting in the learning community. Certainly, instructors are not the faceless guides of a "high-tech correspondence course" (Baker, 2004, p. 10), nor are they the "sage on the stage" (Bailey & Card, 2009, p. 153) as in a traditional classroom. The words that are used to describe the communicative role of the instructor in the previous sections (i.e. "facilitate" and "foster") indicate a paradigm shift in university instruction, and a new conceptualization of what it means to be an instructor.

Instructor behaviours and roles that were rooted in the traditional classroom (such as the practice of "lecturing") have been deemed insufficient for the virtual classroom, if not entirely obsolete. Given the complex interactions that must be negotiated and the social barriers posed by CMC, assuming the role of "facilitator" is now considered to be very important for instructional success in virtual instruction (Arbaugh, 2000a, p. 36; Bailey & Card, 2009, p. 153; Brower, 2003, p. 24; Coppola, Hiltz, & Rotter, 2002, p. 170; Easton, 2003, p. 89; Goodyear, et. al, 2001, p. 69; Richardson & Swan, 2003, p. 69).

The concept of the facilitator is multi-faceted, and the activities that comprise the role are thoroughly examined by Goodyear et al. (2001). Goodyear et al. divide the facilitation into "content facilitation" (focused on ensuring that learners understand course content) and "process facilitation" (p. 69). In the process facilitation role, instructors welcome students to the virtual classroom, establish ground rules for behaviour, foster a feeling of community among students, manage communications in the virtual classroom, model social behaviour, and establish an identity as an instructor (Goodyear et al., 2001, p.70).

The conceptualization of the instructor in the virtual classroom as a "facilitator" is a natural extension of the communication theory discussed in this chapter. Due to concerns about the efficacy of online communication, increased value has been ascribed to the ability of instructors to elicit fulsome and inclusive electronic communication, interaction, and disclosure. Student concerns about privacy could reduce the amount of communication and interaction in the virtual classroom, which is necessarily concerning for an instructor/facilitator. However, the online instructor must also be wary of privacy protection techniques (such as increasing the student anonymity) that could disrupt the virtual classroom's communicative balance.

6.2.5 Online Instruction: The Cause or Beneficiary of Teaching Innovation?

Much of the online instruction literature focuses on the idea that successful instruction is associated with an alteration or refinement in teaching style, and that instructors accustomed to the traditional classroom may need to re-examine and adjust their practices in order to be successful virtual instructors.

Not all of the authors in the section above explicitly state that the rise in online education has *caused* a shift in teaching style. For example, Bailey and Card (2009) note that "the effective instructor has evolved from the role of teacher to being a facilitator, which has influenced pedagogical practices both in traditional face-to-face classes as well as in online classes" (p. 153). Other scholars, however, believe that a successful transition to online instruction requires a new teaching style. According to Lahaie (2007), online instruction requires "adapting teaching/learning strategies and re-conceptualizing one's role from a disseminator of information to a facilitator of learning" (p. 339). There seems to be disagreement about whether online education has caused a pedagogical change, or benefited from a shift that was already in motion.

Markel rejects claims that distance courses require "a whole new pedagogy" and that instructors must "discard the old talking-head, teacher-centered, passive-student model, substituting instead an independent-learning, student- centered" model (1999, p. 210). This binary comparison is disputed because it compares a widely discarded model of traditional instruction with the best model of distance instruction. Many effective teachers in the traditional classroom had already discarded the "talking head" model, independently of the problems posed by distance education (Markel, 1999, p. 219). A review of pre-Internet pedagogical theory supports Markel's claim. For example, Svinicki (1990) notes that the focus of a class should be "the student, not the content. […] The instructor guides the process, but does not give 'the answer'" (p. 7). The role of the instructor in Svinicki's article is similar to the instructor-as-facilitator model proposed in online instruction texts, despite being published before the rise of online education.

The literature indicates that the central challenges of university instruction – exhibiting immediacy behaviours, encouraging interaction and student engagement, and ultimately fostering student learning – have not changed with the rise of online education. While facilitative pedagogical practices were already being implemented in traditional classrooms, the transition to the online environment drew attention to the shortcomings of the flawed "sage on the stage" pedagogical style, and provided a "sandbox" for instructors to experiment with new methods.

6.3 Impact of Instructor Perceptions of Online Teaching & Learning

In addition to the roles and strategies discussed above, the research question also asks how UVic instructors *perceive* privacy issues as they pertain to online instruction. Instructors' perceptions do not exist in a vacuum; rather, they exist within the instructor's broader perceptions of technology, support and training, and online instruction. This section identifies online education issues that are evident in the literature, and identifies how instructor perceptions of those issues may relate to (or influence) instructors' perceptions of privacy in the virtual classroom.

6.3.1 Instructor Perceptions of the Volume of Electronic Communication

The impact of online instruction on instructor workload is widely discussed in the literature. The discussion focuses on the overwhelming amount of electronic communication in the virtual classroom, which results from the "always-on" nature of the internet. Instructors have reported being overwhelmed with e-mails, discussion forum posts and other electronic communications (Cravener, 1999, p. 43; Darrington, 2008, p. 2-3; Morris et al., 2002, p. 112), which are posted and sent seven days per week, at all hours of the day and night.

Scholars and instructors have developed various informal guidelines and techniques to manage the high volume of online communication. Fish and Wickersham (2008) discuss a number of notable practices, including setting boundaries for students by informing them of the timeframe in which they can expect responses to e-mails (Magnussen, 2008, p. 84), requesting that students post questions on message boards or forums to reduce multiple e-mail questions on the same topic (Gallien & Oomen-Early, 2008, p. 468), and providing clear grading rubrics to reduce e-mails about grades (Darrington, 2008, p. 3).

If an instructor perceived the amount of electronic communication to be overwhelming, the instructor may post more selectively, or respond to the class with one posting rather than responding to individual students. While the real impact of that reduction on student engagement is unknown, it is nevertheless a reduction in quantity of the immediacy behaviours that are important for fostering a safe and trusting learning community (as discussed in Section 6.2).

6.3.2 Instructor Perceptions of Technology and Innovation

The literature also discusses the challenges instructors may face as they adopt the online learning platforms used by their institution and adapt to frequent technological developments and upgrades (Cuellar, 2002, p.10; Lahaie, 2007, p. 339). The way individual instructors react to technological adaptation may influence their perceptions of online learning generally, as well as their perceptions of privacy and confidentiality in the online learning environment.

West, Waddoups & Graham (2007) conducted a study of instructors' experiences adapting to online learning platforms. They found that instructors' adoption experiences generally follow the five steps of technological adoption first proposed by Everett Rogers:

1. *Knowledge* – The individual learns about the innovation
2. *Persuasion* – The individual decides mentally what his/her position is in regards to the innovation
3. *Decision* – The individual decides to adopt the innovation
4. *Implementation* – The individual adopts the innovation
5. *Confirmation* – The individual seeks reinforcement for the decision to adopt, or decides to discontinue using the innovation

(Rogers, 2003)

These steps do not entirely apply to HSD or DCS, because all instructors in distance programs are expected to teach online and use Moodle. This universal expectation changes the "persuasion" and "decision" steps indicated here, but it does not preclude the instructor from forming a "mental position" about an innovation, or feeling positively or negatively about online learning technologies, which may impact their perceptions of online instruction and privacy.

6.3.3 Instructor Perceptions of Training and Administrative Support

The level of administrative support provided to instructors in the virtual classroom is another common focus of the online learning literature, and the amount of support provided may influence instructor perceptions of teaching online. Administrative support can take many forms,

including the provision of basic training and orientation, advanced workshops, and technical support (Tallent-Runnels et al. 2005, p. 168; Lahaie, 2007, p. 339-340), or flexibility in the types of online tools instructors are permitted to use to supplement learning platforms (West, Waddoups & Graham, 2007, p. 23-24). Administrative support may be provided by the instructor's school in UVic, or by other organizations that provide services, such as DES, LTC, or Learning Systems. If an instructor feels that the level of support or training is insufficient, they may feel unprepared to promote perceptions of learning security in the virtual classroom.

This should not be taken to mean that instructors cannot teach themselves how to use online learning technology, or are unable to seek other forms of assistance. Indeed, the literature notes that instructors often "learn about how to use Blackboard from talking with other people in their department" rather than attending university training sessions (West, Waddoups, & Graham, 2007, p. 16). Furthermore, the most challenging situations for instructors in the virtual classroom are not necessarily technical challenges, but rather pedagogical challenges in which instructors encounter "setbacks where it appears that learning is negatively impacted" (p. 18) due to a pedagogical choice. Overall, the level of administrative support for online instruction may impact instructor perceptions of online teaching, but the impact should not be overstated, taking into account the agency and responsibility of the instructor in the online learning environment.

6.4 Instructors and Privacy in the Virtual Classroom

This section reviews online privacy literature and attempts to determine the implications of the literature for online instructors. Due to the lack of literature that directly examines the role of the instructor in regard to privacy, this section often infers the implications for online instructors from articles on student or consumer privacy issues. This is an imperfect and somewhat speculative technique, but it is the most effective method for ensuring these topics are addressed.

The virtual classroom and traditional classroom are different learning and privacy environments (Stange, 2011, p. 20). The supposition that these differences impact both instructors and students is the basis for the inferences used in this section to apply student privacy literature to instructors. Written comments posted on discussion boards in the virtual classroom can be shared instantly by cutting and pasting (Stange, 2011, p. 40; Anderson & Simpson, 2007, p. 136). Verbatim discussions in the traditional classroom cannot be distributed as easily, and students have often developed a certain level of trust with other students and the instructor through face-to-face interpersonal interactions (Stange, 2011, p. 20).

6.4.1 The Role of the Instructor

The literature includes various explicit and implied conceptualizations of the instructor's role in fostering perceptions of privacy in the virtual classroom. The most noticeable conceptualization is not a conceptualization at all, but an absence. The role of the instructor is rarely discussed, and where it is mentioned, the examination is often incomplete.

For example, Goodyear et al. (2001) indicate that individual instructors should "respect the privacy of individuals and group members", but do not explicitly connect the instructor's respect for privacy to the active promotion of a safe and secure learning environment. (p. 70). Anderson (2005) indicates that both students and instructors need to be made aware of the "degree to which

[online] discourse is both a public and a private space" (p. 244), but does not address who should be responsible for that increase in awareness (possibly the university administration), nor the potential role of the instructor as a conduit between students and the administration.

In contrast, Tu (2002b) places the instructor at the centre of fostering privacy in the virtual classroom. Tu examined the different types of communication that may be used in online and web-assisted learning, and concludes that instructors "must take privacy issues into account when they integrate CMC into their instruction" and "understand the level of privacy provided by each of the CMC systems and the learner's perceptions of the privacy provided by each" (p. 315). This conceptualization of the instructor's role indicates that efforts made by instructors to educate themselves about the implications of different CMC channels (i.e. asking students to post questions publicly instead of via private e-mail), can result in increased perceptions of privacy and safety, which in turn fosters social presence and student engagement.

Anderson and Simpson (2007) also consider the instructor to be central to the issue of privacy in the virtual classroom. However, they argue that instructors are a threat to student privacy, primarily because instructors can conduct surveillance of student actions (p. 134). Many online learning platforms enable the automatic collection of information about when a student logs in, what they read, when they post, and how much time is spent on the course website (Anderson & Simpson, 2007, p. 134). Those monitoring tools are perceived to be an invasion of student privacy by instructors and administrators, due to the lack of *informed* student consent in those situations; Anderson & Simpson indicate that many students may forget that surveillance data is collected, in contrast with other forms of data collection in the virtual classroom (2007, p. 135).

Despite the lack of inquiry in this area, the literature suggests that instructors play a central role in fostering student privacy. As a result of that central role, instructors can have a positive impact on student perceptions of privacy, if instructors are aware of student communication preferences and privacy concerns and are mindful not to misuse the virtual classroom's surveillance tools.

6.4.2 Real and Perceived Privacy

The level of privacy perceived by an individual does not necessarily correspond to the real level of privacy in a given situation. The "feeling of privacy" is an "unstable and dynamic factor because it is subjective and constructed in online communication messages" (Tu, 2002b, p. 298). Each individual may perceive the level of privacy in a situation differently, depending on a number of factors. Individuals tend to be less concerned about privacy when they are aware data is being collected, when the data is used for a single transaction, when the information is low in sensitivity, and when the individual is familiar with the organization (Sheehan, 2002, p. 24).

From the instructor's perspective, it is students' perceived privacy that is most important in terms of student engagement; a theoretical environment with perfect privacy and security protection would not cause improvements in social presence and engagement if students do not perceive the environment to be secure. The instructor's role as a "facilitator" within the classroom places the instructor at the centre of the classroom's communicative web, which is an ideal position from which to foster the perception of privacy through strategic communications and actions.

The literature is mostly silent on how instructors should foster student perceptions of privacy. Aside from Tu's suggestion that instructors should "understand the level of privacy provided by each of the CMC systems and the learner's perceptions of the privacy provided by each" (p. 315), the most relevant prescriptions in this area are strategies for fostering social presence and engagement, which were examined in Section 6.2.

6.4.3 Perceived Privacy of Different Communication Channels

Instructors and students may communicate through many different channels, including e-mail, Skype, telephone, public discussion postings, synchronous group chats, and synchronous one-on-one chats. Students perceive different levels of privacy for each of those communication channels. Students consider e-mail to be the most private communication channel, followed by synchronous one-on-one chats, synchronous group chats, and public asynchronous discussion postings (Tu, 2002a, p. 42-43; Tu & McIsaac, 2002, p. 145-146). These studies excluded internet video and non-internet based communication channels.

The perception of e-mail as the most private form of online communication has several implications for instructors. In Section 6.3.1 of this review, literature was examined that included advice for instructors on how to handle the high volume of electronic communication in the virtual classroom. It is recommended that instructors direct private e-mail questions to the discussion board to allow all students to benefit and to reduce duplicate questions. However, in light of the fact that students have identified e-mail as the most private communication channel, instructors must balance their need for workload management with the possibility that emphasizing a less private communication channel may discourage engagement and interaction. Also, though the instructor is not the only recipient of student e-mails (student-to-student e-mails are also an important type of communication in the virtual classroom), this privacy preference implies that students have a relatively high level of trust that instructors will protect their privacy and confidentiality in one-on-one discussions.

6.4.4 Demographic Variables Associated with Privacy Concern

Considering the highly subjective nature of privacy concern, research has been conducted to determine whether demographic variables are associated with different perceptions of privacy. A study of consumer privacy concerns found that approximately one-quarter of internet users are very concerned about internet privacy, one-quarter are not concerned at all, and half are "pragmatic", meaning that their level of privacy concern varies depending on contextual factors (Sheehan, 2002, p. 21). The individuals in the two non-pragmatic groups (no concern and high concern) were older on average, and individuals with higher levels of education exhibited more concern about privacy (Sheehan, 2002, p. 27).

The tendency of older and more highly educated individuals to be less pragmatic in their privacy concerns is important for understanding perceptions of privacy in the online learning environment, because these demographic traits may be over-represented among HSD's online students and instructors. Online students tend to be older than students in the traditional classroom (Blair & Hoy, 2006, p. 32), and many of HSD's online programs are graduate programs, which necessarily contain older and more highly educated students.

The literature does not link instructors to the demographic dimensions of privacy concern, either as respondents to the demography of the student population, or as members of a demographic group (e.g. "highly educated"). However, just as Tu (2002b) noted that instructors should be aware of the privacy implications of different communication channels, so too should instructors be aware of these demographic tendencies in themselves and others. While generalizations about students or classes should not be made on the basis of this demographic information, awareness can aid instructors in creating personalized responses to student privacy concerns. This information is also useful because it demonstrates that instructors should not assume that all students have the same level of comfort in participating in candid discussions or disclosing personal information.

6.4.5 Privacy Policies and Notices

Privacy policies ostensibly exist to inform users about the privacy practices of an organization (Stange, 2011, p. 22; Proctor, Ali, & Vu, 2008, p. 309; Culnan & Carlin, 2009, p. 127). UVic's privacy and information security policies are detailed in the next chapter. In the virtual classroom, the instructor is in a position to explain or draw attention to UVic's privacy policies, though the literature does not mention instructors' responsibilities in this area. Instructor involvement is important, as interviews conducted by Stange revealed that students tend not to seek out privacy policies on their own (2011, p. 40). None of Stange's interviewees had familiarized themselves with UVic's policies. Avoidance of privacy policies is not unique to SPA students or students generally, and Stange's finding echoes an earlier study, which examined the log file of a university website and found that only 0.24% of more than 55 000 sessions included a visit to the privacy policy (Jensen & Potts, 2004, p. 477).

Two reasons have been identified as to why people tend not to read privacy notices. First, privacy policies are often incomprehensible and legalistic (Milne & Culnan, 2004, p. 25; Proctor, Ali, & Vu, 2008, p. 326-327; Jensen & Potts, 2004, p. 477), occasionally exceeding a grade 14 reading level (Proctor, Ali, & Vu, 2008, p. 326). The second is that privacy policies are generally written to meet the organization's purposes, not the purposes of the inquiring individual (Proctor, Ali, & Vu, 2008, p. 327; Milne & Culnan, 2004, p. 24). That is, policies may be written to comply with regulations, or to limit liability, rather than to effectively inform the users of relevant privacy issues (Proctor, Ali, & Vu, 2008, p. 327; Milne & Culnan, 2004, p. 24).

Large-scale privacy awareness campaigns are recommended in the literature to ensure that more students are aware of relevant privacy issues within the university setting (Culnan & Carlin, 2009, p. 128). As noted in Section 6.4.1, instructors are in a position to contribute to increased privacy awareness among students, regardless of whether student-friendly privacy notices are implemented in their university, faculty, school, or program.

6.4.6 Disconnection between Privacy and Online Teaching Strategies

Upon review of the pedagogical and privacy literatures, there seems to be a disconnection or trade-off between the promotion of immediacy behaviours and the protection of instructor/student privacy. This tension is briefly addressed in Tu (2002b), where it is noted that an absolutely private learning environment would be hampered by "a lack of social interaction between learners and between teachers and students" (p. 300).

For example, it is often recommended as a pedagogical best-practice that instructors write in a conversational tone and share personal stories in order to develop a feeling of intimacy in the virtual classroom (Brown, 2001, p. 33; Conaway, Easton, & Schmidt, 2005, p. 32; Richardson and Swan, 2003, p. 79-80). Conaway, Easton, & Schmidt (2005) also note that "students supply immediacy behaviours that contribute to a feeling of closeness and encourage disclosure" (p. 26). In these articles, it is suggested that the creation of an online learning community is bolstered by the disclosure of personal information or expressions of vulnerability (Conaway, Easton, & Schmidt, 2005, p. 28). It can be inferred from these studies that any strategy that promotes privacy through an increase in anonymity and decrease in disclosure (with the intended purpose of ameliorating the "privacy concern" barrier to student engagement) could actually negatively impact student engagement.

The literature on student engagement does not examine these potential conflicts between activities that purport to promote student engagement, and the literature on privacy in the virtual classroom is sparse. Therefore, it is difficult to predict the cumulative impact of simultaneous student engagement and privacy strategies.

6.5 Summary Table and Gaps in the Literature

The table below summarizes the findings from each section of the literature review. Presenting the findings in this format clearly demonstrates some of the gaps in the literature, and a discussion of those gaps is included below the table.

Table 6.1 Literature Review Findings

Section	Findings
6.2 The Instructor in the Virtual Classroom	• Instructors use online communication to foster social presence in the virtual classroom and create the feeling of a "community of inquiry". • Intimacy and immediacy are important elements of social presence. "Immediacy behaviours" (such as writing in a conversational tone) result in increased interactivity, and cause students to perceive a higher level of social presence. • Instructors must be "facilitators" in the virtual classroom, not lecturers. Instructors facilitate by establishing classroom ground rules, modeling social behaviour, and guiding participants through course content. • Online education may not have caused the shift from "sage on the stage" to "guide on the side", but the change in teaching environment drew attention to the shortcomings of a flawed pedagogy, and provided a sandbox for instructors to try new approaches.

6.3 Impact of Instructor Perceptions of Online Teaching and Learning	• A number of factors may impact instructor perceptions of online teaching and learning, such as:
	  o The overwhelming volume of electronic communication;
	  o Instructor perceptions of technology and innovation; and
	  o Perceptions of training and administrative support
	• These perceptions may not be directly related to instructors' perceptions of privacy and confidentiality. These areas of the literature demonstrate that instructors' perceptions do not exist in a vacuum. Instructors' attitudes toward online privacy may be shaped by their perceptions of other aspects of online teaching.

6.4 Instructors and Privacy in the Virtual Classroom	• Instructors play a central role in fostering student perceptions of privacy • It is students' perceived level of privacy that impacts engagement and learning, not the actual level of privacy. • Students may perceive some online communication channels to be more private than others. For example, e-mail is perceived to be more private than discussion forums that can be read by anyone in the class. • Privacy concern may vary along demographic lines. Older students are more likely to be very concerned or very unconcerned about privacy issues. Younger students are more likely to take a pragmatic approach to sharing their personal information. • Students rarely read privacy policies or notices. Large-scale awareness campaigns have been suggested to remedy the lack of student knowledge about privacy issues, and instructors are ideally situated to achieve that educational goal. • There may be tension between the online teaching strategies that promote engagement and interactivity in the virtual classroom, and the strategies that promote perceptions of learning security. The pedagogical literature emphasizes disclosure and interaction among instructors and students in the virtual classroom, but protecting privacy sometimes requires participants to disclose less or differently.

The literature does not discuss instructor perceptions of student privacy, or specific pedagogical practices for promoting learning security. These gaps are discussed briefly in the subsequent sections.

6.5.1 Instructor Perceptions of Privacy in the Virtual Classroom

This literature review did not discover any research specifically related to post-secondary instructor perceptions of privacy and confidentiality in the virtual classroom. As a result, there are no sources of information that could give some idea of how instructors think and feel about student privacy and confidentiality concerns or other privacy topics in the classroom. Some articles address student and consumer privacy concerns and perceptions, (Tu, 2002a, for example), but instructor perspectives are not discussed, or mentioned only in passing.

6.5.2 Pedagogical Practices: Online Privacy and Confidentiality

Section 6.2 of this review examines effective practices for teaching and facilitating learning in the virtual classroom. However, those texts do not discuss specific strategies for educating students about privacy issues, or strategies for ensuring that students perceive the virtual classroom to be a safe and confidential environment. Where privacy and security are mentioned, these topics are discussed broadly. For example, Goodyear, et al. (2001, p. 70) recommend that instructors create a "safe environment" for learning and personally "respect the privacy of individuals". This recommendation speaks broadly about privacy in the virtual classroom, but does not specifically consider the instructor's role in fostering perceptions of privacy.

6.5.3 Impact of Gaps on Literature Review and Overall Project

These significant gaps influenced the approach taken in this literature review. Despite the absence of literature that directly addresses the research question, it was important to develop a theoretical understanding of the instructional context that will guide the evaluation and examination of the interview findings. Sections 6.2 and 6.3 provide that theoretical

understanding, by examining the broad role of the instructor in the virtual classroom, the context in which instructor perceptions of privacy are formed, and the classroom and institutional factors that may impact instructor perceptions of online privacy. Subsequently, student and consumer focused privacy literature was analysed to infer implications for instructors. This indirect approach to the literature required some educated speculation on the part of the researcher, but it provides the information necessary for the analysis and understanding of the interview findings.

The gaps in the literature also demonstrate the relevance of this research project. Stange's report revealed that many students have privacy concerns, and privacy controversies that impact the classroom instruction and administration (as with Turnitin[2]) demonstrate that privacy issues are highly relevant to online learning. In that context, it is concerning that instructional and administrative approaches to privacy and confidentiality are not informed by an extensive body of pedagogical and privacy literature. This project aims to make a contribution to the reduction of these knowledge gaps.

6.6 Conclusion

Prior to the presentation of the interview findings, one more contextual topic is addressed: the privacy legislation, policies, procedures that govern the collection, use, disclosure and destruction of personal information at UVic.

[2] Prior to the instructor interviews, the UVic Privacy Officer decided to discontinue use of the Moodle implementation of Turnitin (an academic integrity tool), because the Turnitin Moodle "plug-in" did not comply with elements of British Columbia's *FIPPA*. HSD complied with the Privacy Officer's decision. Turnitin had been used extensively in online HSD classrooms prior to the decision, and some instructors disagreed with the decision.

Chapter 7 – Privacy Legislation, Policies, and Procedures

This chapter summarizes British Columbia's *Freedom of Information and Protection of Privacy Act (FIPPA*, or "the Act"), and UVic's relevant privacy, confidentiality, and security policies. These policies govern the collection, storage, access, and destruction of records within UVic, and have implications for instructors and for the protection of privacy in the virtual classroom.

7.1 *Freedom of Information and Protection of Privacy Act*

British Columbia's *FIPPA* governs the rights of individuals to access information held by public bodies, as well as the protection of privacy as it relates to the "collection, protection, and retention of personal information by public bodies" (Division 1). UVic is considered to be a public body under the terms of the act, and personal information is defined as "recorded information about an identifiable individual other than contact information" (Schedule 1).

Personal information may only be collected if "the information relates directly to and is necessary for a program or activity of the public body" (s. 26(c)). Online education is a university activity, so UVic may collect personal information for that purpose. Within the classroom, instructors determine what forms of disclosure "relate directly" and are "necessary" for online education. The ideal level of personal disclosure in the virtual classroom is debatable, and instructors may expect students to provide varying amounts of information. The Act requires that public bodies inform individuals of the purpose for collecting information, and identify a contact person who can provide more information about collection practices (s. 27(2) (a) & (c)). Presumably, students are aware that their information is collected to further their education. The contact information for UVic's Privacy Officer is posted on the UVic website, enabling easy access for interested students.

The Act also governs the *use* of personal information by the public body, stating that "a public body may disclose personal information" to an individual who is "an officer of the public body or an employee of the public body […] if the information is necessary for the performance of the duties of the minister, officer or employee" (s. 33.1(1)(e) & s. 33.1(1)(e)(i)). This clause enables UVic administrators and instructors to access class records and student information as necessary. It is the responsibility of UVic to determine which employees require access to personal information in order to perform their duties. UVic policies (Section 7.2) do not address how this determination is made; each UVic unit may make that decision independently.

FIPPA requires that personal information be "stored only in Canada and accessed only in Canada", unless the individual has consented to its storage in another jurisdiction (s. 30(1)). This provision is relevant to online education at UVic because some online educational and information storage tools store information on servers outside of Canada. This provision may apply to more instructional practices than many instructors realize. Not only is it possible that instructors are not aware of this section of the legislation, but the hidden nature of server functions makes it difficult to determine if an online service violates this provision.

Once University administrators and instructors no longer require access to course information for their duties, the destruction of the record is the next step in the information cycle. However, the

Act does not provide guidance on the destruction of personal information. It is left to the discretion of the public body to determine when information is no longer relevant to the functions of the institution, and how that information should be destroyed.

7.2 Privacy and Information Security Policies at the University of Victoria

UVic has implemented numerous policies and procedures to comply with *FIPPA* and to govern the collection, storage, and use of personal information in the University. This chapter summarizes the policies, analyzes the relationship between the policies and the role of the online instructor, and discusses instructors' responsibility for promoting and explaining the policies.

7.2.1 Records Management Policy (IM7700)

The Records Management Policy ensures that UVic records are "created, used, disposed of and preserved in a systematic manner, compliant with relevant legislation" and "ensure[s] that Access is provided to records in compliance with *FIPPA*" (UVic, 2010a, p. 1). Any written discussion in the virtual classroom is considered a record, because those texts are "created or received, and retained in the day to day operations of [university] business" (UVic, 2010a, p. 1). Records that contain personal information and have no long-term value are to be permanently destroyed (UVic, 2010a, p. 3).

UVic Learning Systems removes student and instructor content from every Moodle course one year after the course's conclusion, and the information is permanently deleted at that time (Learning Systems, 2012, para. 11). Instructors sometimes keep hard copies of course records for a longer period, but UVic does not appear to offer public information to instructors about how to handle those records. UVic's "Procedures for the Secure Destruction of University Information" are currently under development.

7.2.2 Protection of Privacy Policy (GV0235)

This policy governs UVic's efforts to comply with the privacy elements of *FIPPA* (UVic, 2010b, p. 1). The University Secretary is ultimately responsible for the policy, but "all employees who collect, access, use, disclose, maintain, and dispose of Personal Information are in a position of trust", and must make a reasonable effort to know and comply with *FIPPA* and the Protection of Privacy Policy (UVic, 2010b, p. 3). It is also mandated that employees should only "seek to access and use personal information necessary for the performance of their duties", and employees are directed to report any incidents where privacy is breached (UVic, 2010b, p. 4).

These stipulations apply to instructors as UVic employees. As noted in Section 7.1, instructors need to consider what forms of personal information are "necessary" for instruction in the virtual classroom. That determination is subjective, particularly because the literature review demonstrates that disclosure and interactivity are important elements of student engagement. Depending on whether one reads the clause quoted above narrowly or expansively, the implication for instructors could vary widely.

This policy also includes detailed procedures for how personal information should be managed within UVic and in individual classrooms (UVic, 2010b, p. 20). These procedures are

summarized on the UVic Archives *Freedom of Information Guidelines* website (UVic Archives, 2012), which specifically identifies student grades, assignments, and the "personal views and opinions" within assignments as personal information that should be protected by UVic information users. The reference to students' personal views and opinions implies that student statements in the virtual classroom should also be treated as personal information (Stange, 2011, 33). It is important for instructors to know these procedures, to ensure that they handle student grade information, assignments, and class lists in accordance with this policy.

7.2.3 Information Security Policy (IM7800)

This policy is intended to define who is responsible for maintaining information security (the protection of information resources and systems) at the University (UVic, 2010c, p. 1). In the "roles and responsibilities" section of this policy, it is indicated that users must "make a reasonable effort to become familiar with this policy and its associated procedures, standards and guidelines" (UVic, 2010c, p. 3). As instructors are users of information resources and systems at the University, knowledge of this policy is required.

The policy also establishes principles for UVic's Information Security program, some of which relate directly to the instructor's role in the classroom. For principle of "education", it is said the "education of system users about security principles and the application of these principles are critical to the success of the security policy" (UVic, 2010c, p. 3). Instructors are in an ideal position to educate students about security policies and principles. Another principle – "proactive" – indicates that UVic employees should take pre-emptive action to prevent security incidents (UVic, 2010c, p. 3). Instructors should draw upon their instructional experiences (and other resources such as Stange's report about student privacy concerns) to build pre-emptive strategies for promoting learning security in the virtual classroom.

7.2.4 Identity Management Policy (IM7205)

The Identity Management Policy is intended to structure UVic's "central registry of user information" in a way that complies with *FIPPA* and ensures that identity information is only accessed by authorized personnel with a valid reason (UVic, 2005, p. 2-3).

This policy is written in such a way that it can be difficult to envision the implications for the virtual classroom. However, if the policy is contrasted with the common classroom practice of asking students to divulge identifying information (e.g., previous work places or other biographical details), and the common understanding that instructors should divulge the same, the inconsistency between this policy and the practice of teaching and learning in the virtual classroom becomes evident. Identity information (defined in the policy as "recorded information of a common interest, pertaining to the identity and characteristics of an entity" (UVic 2005, p.1)) of students and instructors is revealed and recorded in the online learning environment, which is less secure than other venues at UVic where identity information is stored.

7.3 Conclusion

The legalistic nature of these policies can make it difficult to envision their day-to-day application, but here are connections between the policies and common situations within the

virtual classroom. The somewhat abstract nature of these policies serves to further increase the importance of the instructor in this area, as teaching about the practical implications of these policies through use of a policy notice (as recommended by Stange) could help both instructors and students learn more about their shared responsibility in this area. A summary table was created to succinctly state the implications of these policies for instructors:

Table 7.1 Privacy Legislation, Policies & Procedures – Instructor Implications

Policy/Procedure	Implications for Instructors
7.1 *Freedom of Information and Protection of Privacy Act*	• Instructors must only collect information that relates directly to online education, and is necessary for the completion of an online learning activity. • Instructors should carefully destroy redundant or unnecessary course records. • Instructors should not store or access student information outside of Canada.
7.2.1 Records Management Policy	• Instructors are expected to create, use, and dispose of records from the virtual classroom in accordance with this policy and *FIPPA.* • UVic Learning Systems strips instructor and student content from Moodle after one year and permanently deletes that information. • Instructors should educate their students on course records procedures.
7.2.2 Protection of Privacy Policy	• Instructors have a responsibility to know and comply with *FIPPA* and UVic's Protection of Privacy Policy. • Instructors must only request information that is necessary for the completion of their duties. This requires instructors to interpret what types of personal. information are "necessary" for successful instruction in the virtual classroom. • If instructors become aware of a privacy incident or breach, they must notify the University Secretary immediately. • Student grades and assignments (and the "personal views and opinions" expressed in assignments) are considered personal information, and the University Archive's *Freedom of Information Guidelines* inform instructors as to how this information should be handled in accordance with the Protection of Privacy policy. • Instructors should be able to respond to student questions on this topic, if needed.
7.2.3 Information Security Policy	• It is the responsibility of all instructors to be familiar with the Information Security Policy, and to educate others about the implications of the policy. • Instructors are to be proactive in preventing information security incidents.
7.2.4 Identity Management Policy	• Student and instructor identity information is commonly shared in the classroom. • It may not be reasonable to expect that identity information shared in the virtual classroom can be protected under the terms of this policy.

Chapter 8 – Interview Findings

8.1 Introduction to Findings

This chapter summarizes the interview findings for this project. As noted in Chapter 1, the first research question asks how instructors **perceive** privacy and confidentiality in the virtual classroom, and the second question asks what instructors **know** about accommodating student perceptions of learning security, and what **strategies** they implement in that regard. This chapter structures the summary of the interview data around the three primary elements of the research question – perceptions, knowledge, and strategies. The first section of this chapter summarizes interview data related to instructors' perceptions and knowledge and the second section discusses instructors' training experiences and strategies.

The third section in this chapter identifies influential factors that seem to shape instructors' knowledge, perceptions, and strategies. The influential factors are derived solely from the interview findings and include instructors' school within HSD, area of professional specialization, level of technological comfort, level of experience, and the nature of the instructor's employment in the university. These patterns in the data suggest that differences between individual instructors' perceptions and strategies are not random, but are influenced by a small number of factors. Identifying those factors is the first step toward crafting interventions to improve instructor knowledge and strategies.

The interview findings were analyzed separately from Stange's report. Stange's report and recommendations inspired some of the interview questions, but this chapter includes only the knowledge, perceptions, and actions of instructors, which were not cross-referenced against Stange's findings. Comparisons between the findings of the instructor interviews Stange's findings and recommendations are included in Chapter 9, "Discussion".

8.2 Knowledge and Perceptions

This section examines instructors' knowledge and perceptions of privacy issues, including instructors' definitions of privacy, knowledge of privacy policies, perceptions of students' privacy concerns, and the perceived impact of those concerns on engagement.

8.2.1 Defining Privacy and Confidentiality in the Context of the Virtual Classroom

At the start of each interview, instructors were asked "What do the terms privacy and confidentiality mean to you in the context of the virtual classroom?" In response, instructors identified various "dimensions" of privacy and defined the terms "privacy" and "confidentiality". This section summarizes instructors' definitional responses and characterizations, and discusses how the responses relate to instructors' understanding of privacy.

Dimensions of Privacy

Some instructors defined and examined the terms "privacy" and "confidentiality" by discussing the dimensions of privacy in the virtual classroom. A "**dimension**" refers to *a party whose personal information may be posted in the classroom*. For example, students' personal

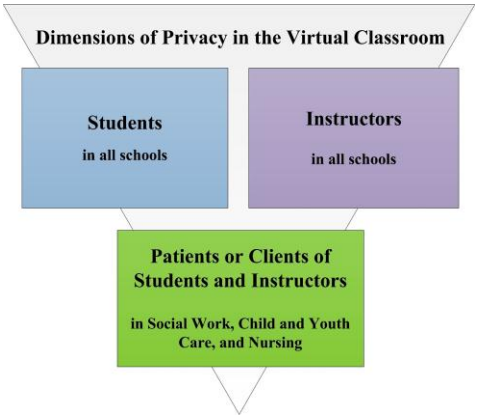
information may be posted in the virtual classroom, so students and their concerns would be one "dimension" of privacy. Instructors' personal information may also be posted in the classroom (though this dimension is not addressed in this paper), so instructors and their privacy concerns are a second privacy dimension. Particularly within SPA, instructors framed their answers by recognizing these two primary dimensions of privacy: student and instructor privacy.

> *"I was thinking of it coming from the perspective of protecting the student, but there's also…he was talking about a case. There were patients. There were doctors. There were other people involved."*

However, instructors within the Schools of Social Work, CYC, and Nursing frequently mentioned that the personal information of clients and patients might also be posted in the virtual classroom. As such, client and patient privacy is a third dimension of privacy. Instructors observed that their interactions with clients and patients in their professional practices influence their privacy perceptions. Furthermore, instructors in those schools noted that students – many of whom are working in hospitals or clinical practices during the term – make statements about patient and client issues that could potentially be damaging or stigmatizing for the patients, or contrary to health information privacy laws. As a result, students are often asked to be mindful of this dimension of privacy and confidentiality.

Figure 8.1 demonstrates the various dimensions of privacy in the virtual classroom.

Figure 8.1 Dimensions of Privacy in the Virtual classroom



Definitions of Privacy and Confidentiality

In addition to discussing the dimensions of privacy, many instructors also defined the terms "privacy" and "confidentiality" in the context of the virtual classroom. Definitions of "privacy" often contained some reference to student numbers, student grades and performance information, phone numbers, and e-mail addresses. "Confidentiality", in contrast, was almost exclusively defined as ensuring that conversations that occur in the virtual classroom stay in the virtual classroom, and ensuring that conversations between students and instructors are not shared with others. After defining the terms, instructors typically conflated the terms and used them interchangeably. Some instructors combined the two definitions noted above under the term "privacy" or "confidentiality", with one instructor stating that the terms "overlap".

One alternate definition was discussed. A SPA participant stated that privacy is "a term that's structured by the federal and provincial legislation, requiring privacy". This instructor's legalistic interpretation of privacy included the same elements (identity information, grades, etc.) as other definitions, but the framing of the definition is notable. The same instructor mentioned using the Human Research Ethics Board's definition of confidentiality, which is intended to ensure anonymity and confidentiality in research, and includes many of the elements of privacy defined in this report. Again, the definition is framed differently but applies to the same general principles mentioned by others, notably that students can expect personal information to be kept confidential. This instructor's framing of the definitions may be influenced by their professional specialization, which involves helping students with ethics applications.

Overall, there was little variation among instructors as to how they defined the specific terms "privacy" and "confidentiality". However, the previous section demonstrated that it is not necessarily the definitions that differ between instructors, but rather the perceived *dimensions* of privacy and confidentiality in the virtual classroom.

8.2.2 Knowledge and Perceptions of Privacy Legislation and Policies

Instructors were also asked to describe their knowledge of *FIPPA* and UVic's privacy policies (hereafter referred to as the "the policies"), and discuss how those polices relate to their role in the virtual classroom. The interview guide did not explicitly ask instructors whether they had read or examined the policies, and some instructors did not provide an indication one way or the other. In spite of this limitation, the interviews produced important information about instructors' levels and sources of knowledge about the policies, the perceived relevance of the policies to the role of the online instructor, and the confusion that exists about the destruction of records.

Levels and Sources of Knowledge

Instructors expressed varying levels of knowledge about the policies, and have obtained that knowledge from various sources. Among instructors who explicitly stated whether they had looked at the policies, three instructors had read the policies and eight had not. The three instructors who had examined the policies were well informed about the contents of policies and the implications for the virtual classroom. Notably, none of those instructors obtained their high level of knowledge through training or as a result of a classroom situation. Two of the instructors had encountered the policies as a result of non-classroom administrative duties, and the third instructor consulted *FIPPA* in the aftermath of the UVic Privacy Officer's decision to discontinue use of the Moodle implementation of Turnitin.[3]

> *"I am very attentive to FIPPA on several different counts, because I am an instructor, because I do hold another professional role outside the University, and I myself have been a part of a breach of privacy and information".*

[3] Prior to the instructor interviews, the UVic Privacy Officer decided to discontinue use of the Moodle implementation of Turnitin (an academic integrity tool), because the Turnitin Moodle "plug-in" did not comply with elements of British Columbia's *FIPPA*. HSD complied with the Privacy Officer's decision. Turnitin had been used extensively in online HSD classrooms prior to the decision, and some instructors disagreed with the decision.

The eight instructors who had not read the policies expressed less knowledge of the policies and the implications for instructors. These participants provided various explanations for their lack of knowledge. Two instructors perceived the information to be irrelevant to the instructor's role; their perspectives will be examined in the next section. Two other instructors acknowledged the policies' relevance, but perceived them to be reference documents that can be consulted if a student raises concerns, rather than foundational pieces of knowledge. The remaining instructors in this group indicated that reading the policies is unnecessary because their practical privacy knowledge is sufficient for understanding the privacy dynamics of the virtual classroom.

The instructors who had not read the policies because they perceived their practical knowledge to be sufficient have much in common with the remaining nine instructors, who did not indicate if they had read the policies, but demonstrated some knowledge of privacy rules and guidelines. When these instructors were asked to discuss privacy policies, they frequently pivoted to their professional experience with privacy issues, particularly among participants from Nursing, CYC, and Social Work.

> *"I don't think I've ever read the policy. And I've never…I would know more about the legislation if I ever bounced up against it. But I've never encountered anything like that. I don't know if that's because nurses are so…it's just beaten into us. Confidentiality is the water we drink."*

Nurses mentioned that privacy knowledge and sound privacy practices were instilled in them as nursing students and practitioners as they learned to protect the privacy of their patients. Similarly, a CYC instructor mentioned working in a "confidential field", and that privacy and confidentiality is simply a "standard that you live by", indicating that CYC practitioners are highly aware of privacy issues because they protect their clients' privacy on a daily basis. The lone HIS participant discussed the high level of knowledge about privacy policies in that profession because of the legal barriers related to obtaining personal health information. The HIS instructor assumed that students learn privacy policies in their workplace, and that it is therefore unnecessary to teach students about those issues in the classroom.

Many instructors rely on knowledge gained through their professional experience rather than seeking out privacy policies from the source. This practical knowledge is valuable (and based upon provisions in *FIPPA*), but it is incomplete because it is limited to common privacy scenarios in each profession. Those professional situations may not inform instructors about important issues, such as the Canadian Storage and Access provisions of *FIPPA*. This reliance on practical privacy information also suggests how instructors learn about privacy policies, with implications for training and awareness-raising practices. Instructors seem to develop their knowledge of the policies when they "bounce up against it" in their professional experiences, rather than through dedicated training or an individual decision to learn more about the policies.

Instructors' level of privacy knowledge is directly related to their perceptions of privacy issues in the classroom, and their ability to carry out their responsibilities. If an instructor is unaware of the policies and related implications, the instructor cannot develop strategies to promote student perceptions of learning security. This dynamic is most evident in regard to the Canadian Storage and Access provisions of *FIPPA*. Instructors who do not know or understand those provisions cannot ensure that the online tools they use are acceptable under the legislation, as with Dropbox

(which one instructor used to share information in an online course), and Turnitin, which many instructors used before the related legal problems with that service were publicised.

Instructors who indicated a limited amount of knowledge about privacy policies were prompted to discuss whom they would contact to inquire about a privacy issue. Instructors mentioned the director of their program, the head of their school, program coordinators and administrators, technical support staff, the "privacy person in the school", and Bill Trott (the University's manager of Privacy, Access, and Policy). These answers indicate that instructors do not perceive a single authoritative source for privacy policy information, and are likely to consult with colleagues in their school before seeking sources of information in the broader UVic community.

Perceived Relevance and Value of Policies in the Virtual Classroom

Many instructors indicated that privacy policies are relevant to their role in the virtual classroom, regardless of their knowledge level or the source of that knowledge. Even instructors who had not thought about the relationship between the policies and the instructor's role quickly acknowledged the policies' importance. Instructors mentioned their attentiveness to protecting student grades, information, and assignments as examples of their adherence to the policies.

However, a group of tenured and tenure-track instructors (four in SPA and one in Social Work, with varying levels of policy knowledge and teaching experience) questioned the wisdom of considering privacy from a legalistic perspective, even as they accepted the relevance of the policies in the classroom. These instructors were somewhat vague in their critiques of legalistic privacy perspectives, but each instructor seemed to prefer conceptions of privacy grounded in mutual trust and a "culture" of openness, rather than policy or legislation.

> *"When you're teaching you have to be really cautious. I try to be very respectful of my students, but at the same time, I'm a little bit afraid of a legalistic perspective on that carefulness.*

For example, one SPA instructor cautioned that a legalistic focus could reduce the flexibility, mutual respect, and negotiation within the student-instructor relationship, and predicted that "people will want a lawyer every time they open their mouths". Another SPA instructor thought a legalistic approach might require instructors to obtain explicit consent from students to have their statements displayed, as with the consent required for research through the Human Research Ethics Board. The instructor feared that obtaining consent would unduly separate online learning from on-campus learning, where no explicit consent is required. The third instructor worried that attempts to make the virtual classroom more secure would result in legalistic privacy measures and a more "rigid" learning environment. The instructor indicated that rigid policies would be "a big mistake" and would represent a retreat from the challenge of fostering a supportive learning community. The Social Work instructor echoed these statements, and indicated an interest in the interpersonal (rather than legalistic) elements of security in the classroom.

These instructors did not always explicitly state their concern in the language of "engagement", but their statements indicate a perception among instructors that a legalistic approach to privacy could negatively impact student interaction and engagement. The instructor who asserted that students will want legal advice before speaking implied that students will frivolously invoke

laws or policies to avoid interaction. When the other instructor expressed concern about explicit consent, the implied concern is that students could refuse consent, with unpredictable consequences for online learning. One of these instructors discussed the importance of a "balance" between privacy protection and teaching objectives. These instructors perceive that focusing on legalistic conceptualizations of privacy could upset that balance.

> *"You can write policies all you want. Nobody knows about them. And UVic's stance is that it is my responsibility to know all of the inane policies that they create, and I beg to differ. Because we're not on the front line of making policy – policies go up there all the time. They're changed all the time. Nobody tells us anything."*

The final instructor who resisted legalistic interpretations of privacy disputed the assertion that the instructor is responsible for knowing UVic policies and keeping abreast of changes that impact instructor actions. The instructor considers that expectation to be unrealistic, considering instructors' high workload and the poor communication from UVic about new and revised policies. In this instructors' conception of privacy, instructors would be responsible for non-specific and non-legalistic privacy knowledge, which might be included in a "Discussion Norms" statement.

Destruction of Student Records and Perceptions of Student Course Data Concerns

Instructors also discussed their confusion about the appropriate practices for destroying student records in accordance with UVic's privacy policies. The same instructor who lamented the lack of communication from UVic about privacy policies indicated that they had not been informed about rules for the disposal of hard-copy student information, such as grades, assignments, and class lists. The lack of communication is evident in the various practices used for storing and destroying student information. One SPA instructor destroys student assignments immediately after the course. Another keeps assignments for a year before destroying the records, and one instructor keeps hard copies of assignments for a "few" years before destruction. Three out of the five instructors who discussed this topic also mentioned encrypting digital versions of student information, particularly if the information is stored on a portable hard drive. One instructor perceived an increase in University communication about data encryption after the recent computer theft.[4]

> *"I've got a lot of paper. What do I do with it? It usually gets stored in my office that I'm now being told is an earthquake hazard, in boxes, out, not in a locked cabinet or anything like that. And then at some point in time, I probably just throw them out. They've got names and student numbers and grades and what have you. I'm sure they're supposed to be shredded. I couldn't tell you where there's a shredder."*

Though only a quarter of the participants discussed their handling of records in relation to the privacy policies, it is evident that no "common practice" exists among instructors. Instructor practices for handling and destroying records seem to be driven by personal workflow preferences rather than an understanding of privacy policies.

[4] In the first week of January 2012, computer equipment was stolen from the University that contained the personal information of 11 000 current and former University employees (McCulloch, 2012).

Instructors were asked if students had ever inquired about what happens to course data at the conclusion of a course, and instructors answered unanimously that no student had requested that information. A couple of instructors (who expressed low levels of technological comfort) admitted that they were also unaware of what happens to the course data, and would be unable to answer student questions on this topic. As instructors elaborated upon the question, it became apparent that course data management practices differ between HSD schools. For example, a Nursing instructor indicated that students are aware of what happens to the course data, because courses from the first year of the Nurse Practitioner program are accessible throughout the second year. Another Nursing instructor observed that a notice is posted at the beginning of the course to inform students that courses are archived for a period of time. In contrast, many SPA courses become inactive for students immediately at the end of the semester, and no notice is posted in regard to archiving practices. Instructor perceptions of other types of student privacy concerns are discussed in the following section.

> *"I've never had a student ask me about that."*

8.2.3 Perceptions of Student Privacy and Confidentiality Concerns

When asked to discuss their perceptions of student privacy and confidentiality concerns in the virtual classroom, many instructors indicated that students had never mentioned any concerns. A few instructors laughingly related their inability to divine what students are thinking in both the traditional and on-campus classrooms. Two instructors mentioned that the distance inherent in virtual education made it difficult to "read that room", in the sense that instructors cannot perceive student discomfort or disengagement using body language and other non-verbal cues. Despite the challenges of understanding student concerns in this environment, most instructors had encountered student privacy concerns in various forms, or were able to speculate about student concerns. Instructors perceived that students have *professional* and *personal* privacy concerns in the virtual classroom.

> *"It's kind of like in the on-site classrooms, where there's a person who's kind of been a post the entire time, and hasn't said anything, and then at the end of class they'll send you an e-mail that goes on effusively about how wonderful it's been. And you haven't even known if they've been awake through it, so one never knows!"*

Perceptions of Students' Professional Privacy and Confidentiality Concerns

Instructor perceptions of students' professional concerns vary across the professions and areas of professional specialization within HSD. For example, SPA participants discussed students' privacy concerns in the context of the various municipal, provincial, and federal ministries and agencies where SPA students typically work. One instructor discussed a student who was a Canada Revenue Agency employee. The student consistently asked for confidentiality before discussing workplace examples, and evidently censored their postings. Other SPA instructors also noted students' reluctance to provide professional examples in discussions. SPA instructors perceived that students were concerned that statements critical of their employer could be relayed to a superior, resulting in harm to the student's career. Most instructors discussed student risk in the context of the online discussion forums, though one instructor indicated that students had asked for course

> *"Nobody wants to lose their job because they wanted to share something that happened to them."*

assignments to be returned at the end of the course because the assignments were critical of their organization. Despite the high level of awareness of this concern among instructors, no SPA instructors mentioned a situation where students' confidentiality had been breached.

It should be noted that SPA instructor perceptions of student privacy concerns were not entirely homogenous. One inexperienced instructor did not perceive that students have professional privacy concerns, stating that mid-career students are particularly willing to discuss their organization. Another mentioned that on-campus MPA students who take online courses during co-op work terms are less concerned about the privacy of their workplace examples and observations. Finally, one instructor noted that students are self-disciplined in their assignments and postings, and have no reason to be concerned about the confidentiality of those statements.

> *"He was talking about a case. There were patients. There were doctors. There were other people involved. And so that's entirely confidential stuff. In fact, the whole content of the program is confidential stuff, when you get down to that, because it's all very practice-based."*

Participants in the Schools of Nursing, Social Work, and CYC also perceived that students have professional privacy concerns, but those instructors focused more on the client and patient dimension of privacy. Specifically, Nursing instructors mentioned that students might be concerned about protecting patient privacy, the privacy of their supervisors, doctors, and other hospital administrators in addition to their own privacy. Similarly, the CYC participant had encountered students who want all assignments returned to them "because of their concerns about confidentiality. But that's usually about clients. In fact I would say that students usually tend to be more concerned about the confidentiality and privacy of their clients than they do of [themselves]". Similarly, a Social Work instructor discussed a student who did want to provide their location in their introductory statement, because the student worked at a women's shelter in a tiny community. The student perceived that the community's smallness would enable others to identify the student's supervisor and clients from information provided in class postings.

The next section will describe instructors' perceptions of students' *personal* privacy concerns.

Perceptions of Students' Personal Privacy and Confidentiality Concerns

> *"I feel like I want that information to help me be a better teacher. But if I were a student, I wouldn't want my teacher to have that information. I'm sorry – that's just the way it is!"*

Instructors across all HSD schools perceived that students are concerned about their personal privacy, and that student concerns primarily focus on the privacy of grades, student numbers, assignments, and the confidentiality of personal conversations about student performance. These privacy concerns correspond to the definition of "privacy" provided by many instructors at the outset of the interview. In regard to this type of concern, some instructors mentioned that accidentally revealing individual grades to the whole class is a significant fear among instructors.

Beyond the widely held "grades and assignments" perception of student privacy concerns, smaller numbers of instructors raised other personal privacy issues. Two instructors mentioned student concerns about instructors' use of Moodle to monitor the amount of times students access

the course. Both instructors were unapologetic for using Moodle's surveillance powers, and regarded the surveillance capabilities as important teaching tools for identifying students who are not engaging with the material, and subsequently encouraging those students to participate.

Some instructors also perceived personal student privacy concerns that result from unique practices or topics of conversation in a single HSD school. For example, one privacy issue arises from the class structures used in Nursing. In Nursing, a number of sessional instructors may teach different sections of the same course at the same time. During those courses, instructors discuss questions and situations amongst themselves to ensure students in all sections are treated equitably. Some students consider this to be a breach of confidentiality. One instructor who mentioned this concern freely discussed student names and assignments with other instructors, and perceived that students' primary concern is that it prevents them from manipulating instructors. The other instructor shares as few details as possible with other instructors to protect the student's identity and performance.

Social Work instructors discussed students' personal privacy concerns that are unique to the discussion topics in their classes. In Social Work, knowing oneself, knowing and relating to others, and learning to critically examine identity are central to the curriculum. Furthermore, conversations in Social Work courses may focus on sensitive topics such as racism, abuse, addiction, and disability. The relational approach to learning in Social Work and the sensitive discussion topics can lead to interactions that are intense, profound, and raucous. In this context, Social Work instructors reported that students may feel exposed or vulnerable, and uncertain about how much personal information to disclose.

> *"If you're having a conversation online about addiction, is it safe to say, 'Well, I have struggled with addiction in my life"? Is it a safe place?*

Social Work instructors also indicated that perceiving and reacting to students' privacy and confidentiality concerns in real-time is challenging, and the inability to "read" the virtual classroom is problematic. For example, a Social Work instructor discussed a scenario where an online student disclosed intensely personal information. Without knowing the student well, the instructor did not know if the student frequently discusses that information, or if the student is sharing the information for the first time, which could impact the student's level of concern about the confidentiality of that information. The same instructor presented another hypothetical, where a student is not participating in a class discussion. It is difficult to know (without asking directly) if the student is not participating because they feel vulnerable or because they are unmotivated. If the student is not participating for the former reason, a direct challenge from the instructor could cause the student to feel compelled to discuss their vulnerability.

> *"These can be tough rooms sometimes. […] The knowledges that we privilege get challenged. You're not being asked to throw them out, but you're being asked to think about them as not-neutral. And that creates tension, and so do people do go away feeling exposed? Probably so, because you'll see people retreat."*

In the instances of personal privacy concern discussed above, Nursing and Social Work instructors perceived that students in their courses have unique personal privacy concerns that result from the specific course structures or discussion topics in those schools.

8.2.4 Perceived Impact of Student Concerns on Engagement

This section discusses instructors' perceptions of the impact of student concerns on interaction and engagement in the virtual classroom. As observed in Sections 8.2.2 and 8.2.3, instructors find it challenging to perceive and understand student privacy, confidentiality, and course data concerns, because students rarely discuss those concerns with the instructor. That difficulty persists when instructors are asked to gauge the degree to which those concerns impact student engagement, often causing instructor perceptions in this area to be speculative. However, most instructors offered some opinion on this topic, and those instructors can be divided into two groups: those who do not perceive that student privacy concerns impact engagement, and those who perceive that students engage *differently* or engage less because of concerns.

No Impact or Comparatively Little Impact on Student Engagement

The most common response among instructors was that student privacy concerns do not impact engagement, or have comparatively little impact compared to other factors. Among the nine instructors who expressed this view, four instructors mentioned that students had never discussed their privacy concerns, and they assume that privacy concerns are not impacting engagement.

> *"No. I don't think so. And that's an assumption on my part because I don't recall any student raising that as an issue."*

The remaining instructors perceived other factors to have a greater impact on student engagement. Most commonly, instructors pointed out that students' desire for a high grade influenced their behaviour more than privacy concerns. For example, three SPA instructors perceive that students censor their true opinions and attempt to achieve a better grade by "parroting" the instructor's beliefs. These instructors also mentioned that students are "very careful" about their discussion posts, not because they want to protect their privacy, but because they want to achieve the highest possible grade. Other factors mentioned by instructors that impact engagement more than privacy concern include students' "lack of preparation" or nervousness about being unprepared for a live online course, lack confidence in English language skills, and a reluctance to engage in charged Social Work discussions due to misunderstandings and frustrations unrelated to student privacy. While these comparisons of relative impact do not necessarily indicate that instructors perceive student privacy concerns to have *no* impact on engagement, they clearly indicate that these instructors perceive that impact to be insignificant.

Different Engagement and Reduced Engagement

A second group of instructors perceived that student privacy concerns impact engagement. These instructors noticed that students engage *differently* or *less* within the classroom due to privacy concerns. These perceptions of student engagement are similar, but distinct. A student who engages differently continues to interact at a "normal" rate, while demonstrating a heightened level of carefulness in regard to personal and professional information. In contrast, a student who is less engaged because of privacy concerns disengages from day-to-day classroom activities.

One instructor perceived that students engage "differently" in the virtual classroom because they are aware of privacy risks, but also want to share professional information and stories, and want

to learn from others as much as possible. Instructors who perceived "different" engagement observed students implementing strategies to mask or alter personal and professional information, which enabled students to learn from each other without making themselves vulnerable to confidentiality breaches. Instructors in this group approve of this modified engagement, because classroom interaction remains at an acceptable level.

> *"I just find that students are careful, but they want to share that information."*

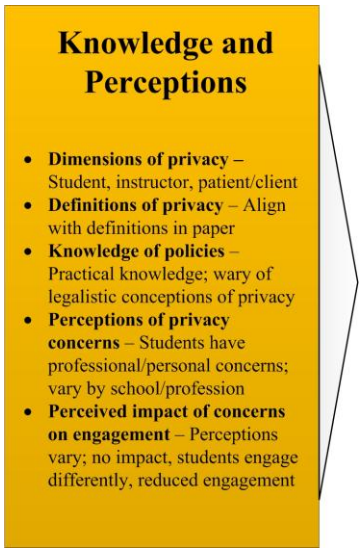
> *"You'll see people retreat."*

Only two instructors perceived that students engage *less* because of privacy concerns. These instructors are the same Social Work participants who discussed the unique student privacy concerns caused by the intensely personal discussions in their classrooms. These instructors mentioned instances where a student had obviously retreated from a discussion, or evidently regretted sharing personal information.

8.2.5 Conceptual Framework – Knowledge and Perceptions

This section discussed instructors' knowledge of privacy policies, perceptions of privacy issues and student privacy concerns, and the perceived impact of student concerns on classroom engagement. The first element of the conceptual framework (presented below) summarizes those findings. Additional elements will be added as more interview findings are discussed.

Figure 8.2 Conceptual Framework –Knowledge and Perceptions



8.3 Strategies for Promoting Perceptions of Learning Security

This section discusses how instructors translate contextual influences, knowledge, and perceptions of privacy issues into strategies to promote perceptions of learning security. The first part of this section discusses instructors' training and preparation for teaching in the virtual classroom. Training and preparation ensure that instructors are proficient with online learning technology and possess the necessary skillset to implement effective classroom strategies. Subsequently, this section examines the instructional tools and strategies used to promote

perceptions of learning security, and instructors' perceptions of Stange's proposed strategy that students should be more anonymous in the virtual classroom.

8.3.1 Translating Knowledge and Perceptions into Action: Training and Preparation for Online Teaching

Instructors discussed numerous sources of training and preparation information: courses offered by LTC, DES, UVic Learning systems, and the participant's school, support from administrative staff, advice from colleagues, and self-education. Perceptions about the accessibility and effectiveness of each option varied widely among participants, in a way that did not necessarily correspond to each participant's level of technological comfort.

> *"I could clearly use more [training]!"*

Many instructors have taken courses offered by LTC and UVic Learning Systems, or orientation courses offered by their schools. Instructors indicated that those courses were primarily technical in nature, and included (at most) only a cursory discussion of online privacy issues. The most common perception of those courses and orientation sessions is that they are "quite good", but not sufficiently tailored to instructors' needs. Some advanced users found the courses to be too basic, and instructors who expressed a low level of technological comfort found the courses to be too advanced and not sufficiently focused on fundamental skills. One intermediate user found the courses to be either too basic *or* too advanced, with no options in between.

> *"[The Learning and Teaching Centre courses] were too basic for me. Or, they were too complicated."*

For that reason, one-on-one training and learning opportunities were more popular among participants. One source of one-on-one training is the technical and administrative staff in each HSD school, as well as the technical staff who serve the wider University. UVic Learning Systems is more typically contacted for specific technical problems, while the school-based technical and administrative staff provide more general knowledge and advice to instructors. One Nursing instructor mentioned that the technical person in the School is always willing to do one-on-one training sessions, and has been the instructor's primary source of knowledge about online privacy issues. Others also discussed the effectiveness of one-on-one training sessions with administrative assistants, program coordinators, and directors in their schools.

> *"He talks about what his experience is and how he approaches the courses that he teaches, and I do the same. We basically share information and stories.*

Another form of one-on-one learning mentioned by participants is the advice and assistance shared among colleagues. Instructors discuss pedagogical and technical issues amongst themselves, and those discussions can progress beyond simple problem solving to an exploration of what the "possibilities [of the online learning platform] are and how they actually work".

Lastly, fifteen of twenty instructors stated that self-education is an important part of their preparation, though some instructors are more comfortable with that mode of preparation than others. Trial and error (referred to as "playing" with the software) was the most commonly mentioned self-education technique. Self-educating instructors also use Google searches to solve problems, and draw upon personal knowledge of computer software and programming. Some

instructors indicated this was their preferred method of learning, due to their comfort with learning new technologies, and the inconvenience and inapplicability of the training sessions.

8.3.2 Pedagogical Strategies for Fostering Student Perceptions of Learning Security

Instructors utilize the skills gained through training and preparation to employ strategies to promote perceptions of privacy, confidentiality, and learning security in the virtual classroom. This section describes the most common strategies. Instructors publish privacy or confidentiality statements and codes of conduct, issue cautionary reminders to students, cultivate "presence" and "tone" in the classroom, encourage students to mask or change details, and manage the communication channels that are used for certain conversations. Instructor practices for introductory statements – a common teaching strategy that has caused privacy concerns among SPA students – will be considered separately in the next section.

Privacy or Confidentiality Statements and Codes of Conduct

The strategy mentioned most often by instructors in the virtual classroom is the use of explicit privacy statements, confidentiality statements, or codes of conduct. Eighteen instructors reported using some form of this strategy, or thinking that the use of this strategy is a good idea.

Instructors in the Schools of Nursing, Social Work, and CYC indicated that some form of privacy or confidentiality statement is standard for all online classes in the school. Instructors sometimes called the statements "Tips for Online Discussion", or "Netiquette", and these documents discuss confidentiality as well as other tips for civil and constructive interactions. One Social Work instructor discussed their confidentiality statement, which goes beyond the standardized Social Work statement by asking students not to share confidential information and also pointing out the relevant dimensions of privacy (e.g., student, instructor, and client privacy). Another Social Work instructor also mentioned a strategy that also goes beyond the standard confidentiality statement. This instructor occasionally asks students to develop their own code of ethics for the course, which could include provisions for confidentiality.

> *"I make a point right at the beginning that we use the Chatham House Rules, which basically says, 'whatever is said stays in the classroom', so that we can be open."*

Though SPA does not have a standardized privacy notice, a couple of SPA instructors mentioned crafting their own "tips for online discussion". Two other SPA instructors tell students to apply the Chatham House Rule when considering how to share information from the virtual classroom.[5] Two sessional SPA instructors indicated that they did not perceive an opportunity to add a privacy or confidentiality notice to an existing course, because they are usually asked to teach courses developed by others at the last minute. Those instructors perceive that it is not their role to suggest those types of improvements. This feeling of inefficacy

[5] The Chatham House Rule states that participants in a meeting are "free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed" (Chatham House, 2002).

demonstrates how the nature of instructors' employment in UVic can impact their strategies for promoting perceptions of learning security.

In addition to using formal privacy notices, instructors across HSD use an informal type of privacy notice that could best be described as a "cautionary reminder". These statements are distinct from definitive privacy statements because they are informal, reactive statements, rather than formal, anticipatory notices. These reminders are written in conversational language, and are only used if the instructor perceives that the content of the course discussion requires an instructional response to remind students about privacy. For example, when instructors perceive that a sensitive topic of discussion warrants a reminder, instructors post statements such as "what gets said in the room stays in the room", to remind students not to copy-and-paste those sensitive discussions, or discuss those issues with others beyond the class.

Some instructors do not currently use a formal or informal privacy statement, but indicated interest in the development of a standardized statement, either at a School or University level. Instructors also indicated that they would like Moodle to include links to *FIPPA* and UVic privacy policies so interested students can be easily directed to those materials, and subsequently become more comfortable or well-informed. While instructors generally use or support the use of a brief privacy statement, two SPA instructors objected to the idea that an instructor should provide a detailed summary or interpretation of privacy policies. They perceive the interpretation of the policy to be the responsibility of the concerned student.

Presence and Tone

Eleven instructors mentioned that cultivating a sense of "presence" and "tone" are also important elements of their strategy to promote perceptions of learning security. This group includes instructors from across HSD, and also includes the instructors who were most wary of "legalistic" interpretations of privacy in the classroom. "Presence" refers to the intangible techniques that instructors use to cultivate a feeling among students that the instructor is actively observing classroom activities and ensuring that interactions are proceeding productively and safely. "Tone" could be considered a by-product of presence in the sense that an instructor's presence can help create a tone or atmosphere that is more conducive to learning and interaction. These two elements of a secure learning environment are discussed separately in this section.

> *"The notion of privacy and the sense that people are being treated confidentially or respectfully has to do with the way in which instructors interact with students. And that in my view comes down to building a sense that instructors are actively online. And so, if you can promote that notion, then my own experience is that concerns about whether information is confidential and so on are background things"*

The SPA instructor in the quote excerpted to the right summarizes the importance of an instructor's presence in the virtual classroom, and the belief that an instructor can reduce concerns about privacy by being present, visible, and active. Types of presence-cultivating activities mentioned by instructors include posting cautionary reminders, posting personal biographical sketches, responding to students directly and encouraging conversation, and commending students who take "appropriate risks" when disclosing information in the virtual classroom. An "appropriate risk" is a statement that

reveals some personal information with the purpose of illustrating a concept or theory in the course material. That type of disclosure ultimately helps students to relate to each other and to the course content, and contributes to the formation of a community of inquiry.

Four instructors described their method of presence in the classroom as "leading by example". In contrast with cautionary reminders, or commending students who take appropriate risks, leading by example involves demonstrating appropriate forms of disclosure without explicitly stating privacy principles. For example, one SPA instructor discussed choosing specific moments to share their own "take" on a topic, where they might share personal information and opinions in a way that is closely integrated with the course subject matter. This type of disclosure demonstrates the appropriate integration of personal experiences into the course discussion.

"I think that my being a role model [for discussion] is appropriate."

Given the intangible nature of presence in the virtual classroom, it is perhaps understandable that some instructors perceive presence differently. For example, one Social Work instructor indicated that "presence" in the virtual classroom does not always mean being "active". "Presence" can also take the form of selective inactivity. This instructor tries to be "the guide on the side" rather than "the sage on the stage", but has realized that an instructor's voice is always the loudest in the room and can displace student contributions despite the instructor's good intentions. In that sense, maintaining the right amount of instructor presence in the virtual classroom sometimes requires allowing students to discuss issues amongst themselves, and only stepping in if the conversation ceases to be grounded in evidence, or if students are clearly angry or hurt by remarks in the discussion.

A few instructors indicated that they had to set boundaries for students in regard to the periods in which they would be "present" in the virtual classroom. For example, two instructors told students that they would not generally be available over the weekend, or late at night. These instructors indicated that the problem was not necessarily the volume of student communication, but the persistence and pervasiveness of the communication, and the expectation that instructors would be available 24/7. None of these instructors indicated that the volume of electronic communication impacted their level of presence in the classroom, which indicates that this variable has little influence on instructor strategies for promoting learning security.

Instructors also discussed the positive "tone" or atmosphere that is cultivated in the virtual classroom through the instructor's active (or occasionally inactive) presence. However, instructors did not necessarily agree on the ideal tone. One instructor mentioned that an "informal" tone is most appropriate for online learning, which means that the course discussion is a friendly conversation, rather than series of formal mini-essays. In contrast, another instructor attempts to cultivate a "scholarly" tone, which means that all student statements are evidence-based, and "grounded in facts or data". The cultivation of an "informal" tone promotes student perceptions of learning security by ensuring that students feel comfortable engaging with the classroom material and each other, and are comfortable informally disclosing their personal experiences with those concepts and topics. Cultivating a "scholarly" tone promotes perceptions of learning security by ensuring that values and opinion-based discussions and arguments do not occur in the virtual classroom, which reduces the possibility for controversial conversations and *ad hominem* criticism that may cause students to feel students insecure or offended.

The next strategy also focuses on discouraging students from posting sensitive or personal information in the virtual classroom.

Professional Privacy Concerns: Masking or Changing Details

Four instructors indicated that they counsel students to mask or change details of professional examples to protect their privacy. As noted in Section 8.2.3, one instructor had a student who was Canada Revenue Agency employee. The instructor encouraged the student's decision to mask details of professional examples, as it was the only way the student could fully participate in the class. The instructor observed that the student was able to provide useful insights to the class while still maintaining the confidentiality of the student's organization and clients.

> *"I responded, 'That's absolutely fine. Make something up. Or say, 'A friend of mine' of give an example of somebody else that you know, or an example that you read from a journal article'."*

These instructors suggested that students could change names of actors within an example, say that the example happened to a friend, or mention that the example came from a journal article. This strategy is predicated on the idea that if the example relates to the theories and principles in the course material, the broad context and actions are most important, not the names of the principal actors or the organization. However, instructors must be careful that they are consistent in applying this strategy. If students are asked to name their organization in their introductory or biographical statement, later attempts to mask their personal information may not be effective.

Managing Communication Channels

In contrast with encouraging student to mask or change details, the intention of managing communication channels is to direct entire conversations to a more private communication venue. Nine instructors in all HSD schools mentioned managing communication channels to promote perceptions of learning security. These instructors perceived e-mail and Skype to be more private than Moodle discussion forums and attempted to direct sensitive conversations toward those channels. As an example of sensitive discussions that instructors direct toward e-mail, an SPA instructor mentioned that students occasionally ask for assignment extensions in the discussion forum. Similarly, a Nursing instructor mentioned that some students share so much personal information on the forum that they wonder if the students know that the whole class can read their comments. Another SPA instructor reminds students that they can contact the instructor via e-mail prior to posting if they are unsure of a statement's appropriateness. In many instances, instructors seem to use this strategy to protect risk-taking students from their own carelessness with personal information. However, this strategy can also be used to encourage students to post their appropriate and valuable insight in the virtual classroom.

> *"I tell them that they can always be in touch with me before they post something if they want to talk about it."*

This strategy is also used to avoid embarrassing students through public criticism. One SPA instructor mentioned only writing positive comments in the discussion forum, and using e-mail

to criticize students is they are not posting constructively. This strategy ensures that the contents of corrective conversations remain between the instructor and the student.

The next section addresses instructor's practices for introductory or biographical statements, an instructor strategy that students identified as a privacy concern.

8.3.3 Instructor Practices for Introductory or Biographical Statements

At the beginning of each online course, instructors typically ask students to provide an introductory or biographical statement, and may also ask students to post a picture. This is a common strategy, and these statements are one of the most explicit and noticeable ways in which students provide personal information to their colleagues in the virtual classroom. Instructors were asked to discuss their personal approach to this privacy-related teaching strategy.

All instructors indicated that they ask students to post an introductory statement. While the type of information requested by instructors varies widely between instructors and schools, a few types of information were frequently mentioned. Notably, instructors often ask students to tell the class where they work (or about their work), their level of experience in the subject matter of the course, and what they hope to get out of the course. A few instructors specifically ask students to post photos of themselves, or photos that represent them in some way, but a roughly equivalent number explicitly stated that they do not require a photo.

> *"It's sort of optional, and I think students feel that way too"*

Instructors were typically nonchalant about the privacy implications of requesting this personal information, regardless of the types of information requested. Many instructors indicated that students "know" what is expected of them in this regard and are aware that they can reveal as much or as little personal information as they want. Some instructors were unconcerned about what types of information students provided, and did not mind if students neglected to provide an introductory statement. The personal information provided in the introductory statement was occasionally described as being "volunteered" or "optional". Only one instructor had encountered a student who was unwilling to share any personal information in the introductory statement, and only one Social Work instructor (with the student social worker from a very small community) mentioned receiving direct inquiries from students on this matter. In fact, instructors frequently noted a tendency among some students to voluntarily disclose more information than the instructor requested, including information about students' families and pets.

> *"Students are adults, and I figure that they will share what they want to share."*

> *"So if you're the one who rode your motorcycle across the country, maybe that will help me remember who you are."*

The introductory statement serves a range of pedagogical purposes. Some instructors perceive the introductory statement to be a routine exercise to allow students to introduce themselves to their classmates – the equivalent of saying "hello". These instructors were least concerned about what information students disclosed, or whether they posted at all. Other instructors saw the statement as a community-building exercise; an opportunity for students to "build more empathy in the classroom with their peers and their teacher", which can allow students to "bond, and invigorate the class". These statements also help instructors to remember students' identities.

In contrast with the strategies discussed above, a small number of instructors integrate the introductory statement more thoroughly into the course structure and content. Some instructors use the statement to judge students' level of knowledge in the subject matter and tailor some material to students' interests within the scope of the course. For example, instructors may direct information to specific students because they know it will interest the student, or may be more encouraging and understanding with a student who begins the course with minimal knowledge in the subject matter. Those instructors perceive that personalization can make courses "very engaging and very interesting" for students.

> *"[The introductory statements] help me help them".*

Introductory statements are also integrated more closely into course content in classes that focus on epistemology, ontology, and identity. For example, in a research methods course, students may be asked to think about and discuss how their identity and life experience relate to their perceptions of being and the acquisition of knowledge. In a Social Work class, students may be asked to critique their biography to identify the normative assumptions in their self-presentation, and to analyze their biographies using post-colonial or feminist social theories. A few participants taught these types of classes, and it is evident that biographical information is not just helpful for community building or personalization – it is integral to the course content.

> *"People write about themselves, and it's really important to understand that everyone is situated somewhere in terms of privilege, in terms of their ideology, in terms of their preferences. […] It's important to apply that kind of lens to yourself in Social Work, as part of anti-oppressive practice."*

8.3.4 Instructor Perceptions of Student Anonymity

Instructors were also asked to discuss a hypothetical strategy to promote student perceptions of privacy in the virtual classroom, in which online students would be granted increased anonymity. For the purposes of the interview, instructors were told that increased anonymity meant "identifying students by first name only".

Instructors' responses ranged between opposition (eleven instructors) and indifference (six), with only one instructor indicating that increased anonymity would be a "good idea". It is evident that some instructors had not previously considered this element of online learning. Those participants seemed amenable to the idea when they started answering, but had determined that anonymity would be infeasible or detrimental to online interaction by the conclusion of their statement. By far, the most common response was that it would negatively impact interaction, and instructors offered a variety of explanations for their negative response to this strategy.

Some instructors who responded negatively focused on the difficulty of implementing and maintaining anonymity. Instructors thought that increased anonymity would cause confusion, because they may not be able to differentiate between speakers in a lengthy conversation thread, and would subsequently have difficulty assigning participation marks. Instructors also pointed out that students engaging in group work tend to communicate via channels outside the virtual classroom, where

> *"You can't maintain that anonymity in the on-campus classroom, so why should you do that in the online program?*

small cohorts of students in particular would have difficulty maintaining anonymity. In addition to these implementation concerns, several Social Work instructors mentioned that they teach blended courses, in which distance learners congregate on-campus for a short amount of time each term. In those courses, it would be nearly impossible to maintain anonymity. In a similar vein, three SPA instructors expressed concerns related to the structure of their program. Instructors noted that on-campus MPA students are unable to maintain anonymity. To allow online MPA students to be anonymous would be "like creating a wall between the online program vs. the on-campus program", which are intended to be comparable, if not identical.

In addition to these practical concerns, instructors also identified ethical and professional concerns related to increased anonymity. Several instructors in schools across HSD were adamant that students should be "accountable" and "responsible" for their words, and that anonymity would reduce the reputational motivation to engage in responsible and civil discourse. One instructor vehemently opposed anonymity, calling anonymous conversation a "coward's way of communicating".

"You're going to be a professional out there. And you kind of have to put your name to things.

Instructors also levelled criticisms from the perspective that HSD intends to educate and train professionals. A CYC instructor argued being a professional involves attaching your name to ideas, and communicating those ideas in a way that respects and persuades others. Similarly, a Social Work instructor observed that if students are being trained to work in fields where privacy and confidentiality are important, students should learn to respect those principles, rather than being allowed to avoid privacy issues. Also on the topic of professionalism, a Social Work instructor mentioned that students begin to form their professional networks as students, which would be difficult if students were anonymous. Social Work instructors also discussed the importance of being authentic and knowing oneself, and emphasized the degree to which honest interpersonal relationships are crucial for learning in that school. For those instructors, anonymity would cause inauthenticity, and would prevent students from learning "with, from, and about each other". Much like instructor practices for student introductory statements, anonymity appears to be another topic where instructors in the "relational disciplines" have a unique point-of-view.

"I think it would be a bad idea, myself. But my discipline is Nursing, and it's a relational discipline."

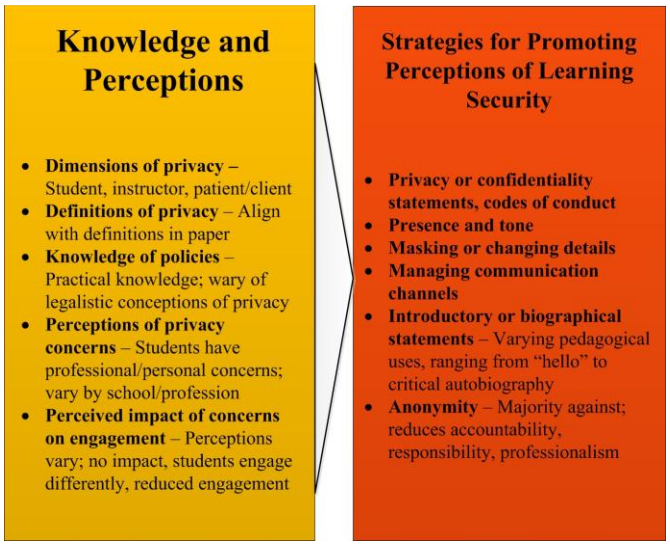
"For me, it's all about relationship, and anonymity would kind of run counter-intuitive to that". – Social Work

Despite the wide range (and occasional vehemence) of the objections expressed by instructors, not all instructors opposed increased anonymity, or thought that it would have a negative impact on interactions in the virtual classroom. Two instructors observed that students typically communicate on a first-name basis anyway, and those instructors noted that online education is already fairly anonymous. Other instructors were indifferent, and indicated that if the students wanted increased anonymity, it could be accommodated without too much difficulty and it would not impact discussion in the virtual classroom. The two instructors who explicitly indicated that they would support increased anonymity were among the least experienced participants, and these instructors also perceived few student privacy concerns in the virtual classroom.

8.3.5 Conceptual Framework - Strategies

Despite instructors' diverse perceptions and knowledge of privacy concerns, instructors within all HSD schools discussed a relatively cohesive set of strategies to promote perceptions of learning security in the virtual classroom. Instructors' strategies for promoting learning security are summarized in the conceptual framework below.

Figure 8.3 Conceptual Framework – Strategies



8.4 Influential Factors

In the interview findings summarized above, it is evident that variations in instructors' perceptions, knowledge, and strategies are not random. Patterns within the findings indicate that several influential factors seem to shape those perceptions and actions. Five influences are discussed in this section: the instructor's school within HSD, area of academic or professional specialization, employment status at UVic, level of technological comfort, and level of online teaching experience. The first four factors seem to have the strongest influence on instructors' perceptions, but an instructor's level of experience may also play a role in some situations. The identification of these patterns is important for drawing conclusions from the interview findings and developing and targeting recommendations to improve instructors' knowledge and actions. Each influential factor is discussed briefly below, using examples from the interview findings.

8.4.1 School within HSD

Instructors' schools within HSD seem to influence their perceptions, knowledge, and strategies. This influence is apparent in number of ways. First, the varying administrative practices and structures between schools can influence instructor strategies. For example, the influence of a school's course structure is evident in Section 8.2.3, where Nursing instructors discussed how their school's course structures raise student confidentiality concerns that require a strategic instructional response. In another example, it is evident that the use (or lack of use) of a

standardized privacy notice impacts the types of strategies that are the responsibility of the instructor. In Social Work, Nursing, and CYC, instructors discussed their schools' "Netiquette" pages and "Tips for Online Discussion", which inform students about appropriate behaviour and privacy issues. In those schools, it is not necessary for instructors to create their own privacy notices. In contrast, this task is left up to individual SPA instructors, as evidenced by the SPA instructor who created their own code of conduct in the absence of a standardized notice.

Instructors' HSD schools also influence perceptions of privacy in the sense that schools are arranged around professions, such as social work. Many instructors referred to themselves by their professional titles; non-tenured or non-tenure track instructors in particular identified as nurses and therapists who teach, rather than as academics who specialize in a professional topic. This influence is most clearly evident in the dimensions of privacy perceived by instructors. Instructors in Social Work, Nursing, and CYC tend to perceive a "client/patient" dimension of privacy, while SPA instructors are more likely to focus only on students and instructors.

This professional influence is also evident in instructors' knowledge of privacy policies and understanding of how policies relate to their role. Few instructors had read the policies, and when asked to discuss their knowledge, instructors pivoted to the practical knowledge they had gained through professional experiences. Nurses indicated being familiar with privacy issues because their training and practice taught them to protect patient privacy in a hospital setting. This practical knowledge can leave professors unprepared to handle inherently legalistic privacy issues (e.g., the Canadian Storage and Access provisions of *FIPPA*) that are not relevant to the instructor's professional training.

8.4.2 Area of Academic and/or Professional Specialization

Instructors' area of academic or professional specialization also influences instructors' perceptions of privacy and opinions of student anonymity. This factor is not necessarily evident in the interview findings discussed in Sections 8.2 and 8.3 because participants' academic specialization information was stripped from the summaries to protect participant privacy.

This factor is different than an instructor's profession or school within HSD, because it accounts for the variety of specializations that exist within individual schools and professions, and the influence those specializations may have on perceptions of privacy. This factor was illustrated in the School of Nursing, where a participant who teaches family nursing seemed to perceive privacy differently than a participant who teaches nursing leadership. The family nursing instructor focused on the privacy of patients and clients. Each student in a family nursing course is expected to work with a specific family, and the instructor expressed concern that details about the student's client family might be revealed in the virtual classroom. In contrast, the Nursing Leadership instructor focused less on patient privacy, because the intent of those courses is to develop leadership skills

> *"Students are instructed to find a family to work with. And that all involves getting consent from the family, [and] when they share something about their family to be very careful that this is not going to divulge any personal information, or identify the family."*

> *"One of the things you're trying to foster within the Nursing Leadership course is a community of practice. And how do we create that community? By maintaining confidentiality".*

among nurses, independent of the nurses' direct interactions with patients. The Nursing Leadership instructor focused more on student privacy and confidentiality, and emphasized the importance of forming a community of practice among future nursing leaders.

This influence was also apparent among Social Work instructors. One Social Work participant who focused on indigenous perspectives on social work discussed the influence of their indigenous heritage and academic focus on their approach to privacy. That instructor discussed their traditional name, and how anonymity in the classroom would conflict with how they have been taught to carry their name. This instructor's perception differed from another Social Work participant who teaches human development courses. That instructor did not focus on indigenous conceptions of identity, but rather on discouraging hurtful and uninformed conversations about controversial issues that can arise when discussing human development.

In SPA, this influence is less evident. An instructor who specializes in strategic planning does not seem to perceive privacy differently than instructors who specialize in program evaluation, local government, or economics. Only one instructor was interviewed from each of HIS and CYC, so this type of intra-school dynamic cannot be inferred in those schools.

8.4.3 Nature of Employment in the University

The nature of instructors' employment at UVic also seems to influence instructor knowledge and strategies in some situations. The "nature" of employment refers to the instructor's status as a full faculty member, tenure-track professor, senior instructor, or sessional instructor. This influence was only noticeable for sessional instructors. As noted in Section 8.3.2, two sessional instructors indicated that they cannot impact course content, because they are asked to teach courses at the last minute. Even if those instructors wanted to add a privacy notice, they perceive that the window for influencing class materials has closed. As a result, these instructors are less informed about privacy, and less able to discuss pedagogical strategies. This perception seems to result from the nature of the instructor's employment, not their level of experience. Non-sessional instructors with similarly little experience did not mention this sense of inefficacy. In fact, non-sessional instructors did not mention a sense of inefficacy at all.

8.4.4 Technological Comfort

For some participants, it is evident that their lack of technological comfort influences their perceptions of privacy issues and online training, and their strategies for fostering learning security. This influence is strongest for those who are uncomfortable using online learning technology. This group of instructors is small – only three instructors expressed deep discomfort. Their discomfort primarily stems from a fundamental lack of understanding about how internet and online technologies work. As a result, these instructors feel insufficiently prepared to produce quality online courses, field technical questions, identify privacy risks in the virtual classroom and the broader internet, and develop strategies to promote perceptions of learning security. These were the same instructors who expressed concern that they would accidentally reveal student grades due to their lack of Moodle experience, and these instructors also expressed dissatisfaction with the available training opportunities. Instructors in this group defensively rely on technical support staff for basic problem-solving support when problems arise.

For the instructors who expressed a moderate or high level of technological confidence, this influential factor had little influence on their perceptions and strategies. These instructors have a long history with computers and their level of comfort eases their adaptation to technological changes, as with the transition from Blackboard to Moodle. For these instructors, the influence of this factor on their perceptions is most evident in the conspicuous absence of influence. The technological comfort felt by these instructors enables them to perceive student concerns and craft pedagogical strategies without worrying about making technological mistakes.

> *"I had to learn DOS, and I learned how to program. […] Being confronted with a piece of software doesn't scare me"*

There does not seem to be a consistent connection between instructors' level of online teaching experience (Section 8.4.5 below) and their comfort with online learning technologies, except among the four instructors who had taught greater than twenty online courses, who were clearly comfortable with online learning technology. Also, the interview findings suggest that there is no connection between an instructor's HSD school or professional specialization and their level of technological comfort. Each school contains instructors who are more or less comfortable with technology, for reasons specific to that individual.

8.4.5 Level of Experience

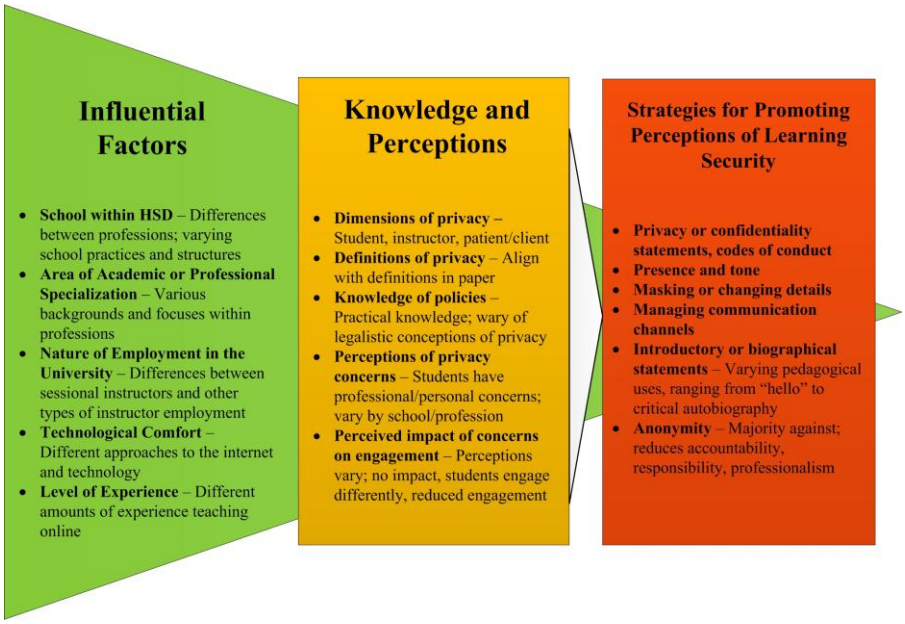
The influence of an instructors' level of experience on their perceptions and knowledge is among the weaker patterns in the findings. However, among the six instructors who had taught few courses, some instructors expressed perceptions and knowledge that could be attributed to lack of experience. For example, an inexperienced HIS instructor could not name the Moodle as UVic's online learning platform, and could not confidently discuss online privacy risks.

This factor seems to play a relatively minor role in shaping instructor knowledge, perceptions, and strategies. Some inexperienced participants possess extensive knowledge, and some experienced instructors indicated relatively little knowledge. That counter-intuitive dynamic indicates that other influential factors may explain more of the variance in instructor knowledge. For example, the inexperienced HIS instructor is also a sessional who expressed a low level of technological comfort. One of the inexperienced instructors who expressed a high level of knowledge also expressed a high level of technological comfort. In those situations, factors such as the instructor's level of technological comfort or the nature of their employment in the University may have a more significant impact on their perceptions of privacy issues.

8.4.6 Conceptual Framework

This section discussed factors that appear to influence instructor knowledge, perceptions of privacy, and strategies for promoting learning security. While pervious sections focused more on *what* instructors' know and perceive and *how* they implement strategies to promote perceptions of learning security, this section tentatively identified patterns that indicate *why* instructors think about privacy as they do. The influential factors seem to impact instructor knowledge and perceptions more than strategies, as instructor knowledge and perceptions vary widely between HSD schools and professional specializations, while instructor strategies are more homogenous. The influence of these factors is illustrated in the conceptual framework on the next page by the extension of the green "Influential Factors" triangle through the other framework elements.

Figure 8.4 Conceptual Framework – Influential Factors



8.5 Conclusion to Findings

Instructors perceive that it is important to protect students' privacy and confidentiality, and demonstrate a relatively thorough understanding of students' professional and personal privacy concerns, despite the fact that many instructors have never encountered a privacy breach and have never been approached by a concerned student. Instructor perceptions of these concerns (and knowledge of privacy policies and legislation) seem to be influenced by their school within HSD and professional specialization, in terms of the dimensions of privacy perceived by instructors, the instructors' knowledge of privacy legislation and policies, the specific concerns attributed to students, and the perceived impact of those concerns on student engagement.

Despite instructors' diverse perceptions of privacy concerns, instructors use a relatively cohesive set of strategies to promote perceptions of learning security in the virtual classroom. Essentially, instructor strategies can be grouped into two categories. Some strategies (such as managing communication channels and reminding students not to post sensitive information in the discussion forum) aim to reduce the amount of sensitive information in the classroom. In contrast, the other category of strategies attempts to restrict the dissemination of sensitive information that has been posted in the virtual classroom (such as the Chatham House Rule[6]). Instructors' strategies are also shaped by the influential factors, though to a lesser extent than instructors' knowledge and perceptions. Notably, sessional instructors (nature of employment at UVic) and instructors who are uncomfortable with technology (level of technological comfort) seem to be less likely to implement strategies to promote perceptions of learning security.

[6] The Chatham House Rule states that meeting participants are "free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed" (Chatham House, 2002).

Chapter 9 – Discussion

This chapter examines the interview findings in the context of the literature review (Chapter 6), and in relation to Stange's findings in "Privacy Concern and Student Engagement in the Virtual Classroom". Areas of tension and concordance between those three information sources will ultimately suggest tentative answers to the research questions reproduced below:

1. How do University of Victoria instructors perceive privacy and confidentiality issues as they pertain to instruction in an online environment?

2. What do University of Victoria instructors know and do in their instructional design and delivery to accommodate student perceptions of learning security in the online environment to maximize learning and teaching outcomes?

The first section of this discussion addresses the first question by focusing on instructor perceptions of privacy in the virtual classroom, and comparing those perceptions with the literature and student perceptions reported by Stange. The next section examines instructors' actions and strategies for promoting learning security, again, in the context of the literature and Stange's recommended strategies. The final section discusses the incoherence and inconsistency of some individual instructors' perceptions, which may not be apparent in the interview findings.

9.1 Instructor Perceptions of Privacy and Confidentiality Issues in the Virtual Classroom

Instructors define "privacy" and confidentiality" similarly to Stange, whose definition is summarized in Section 3.3. Instructors perceive that **privacy** refers to the protection of personal information like grades, student numbers, and contact information, while **confidentiality** means protecting course discussion information and ensuring that personal thoughts and opinions expressed in the virtual classroom are kept within that context. The terms "privacy" and "confidentiality" are often used interchangeably in the literature, and instructors use the terms with a similar degree of imprecision.

In regard to instructor perceptions of student privacy issues, this section will first discuss instructor perceptions in relation to Stange's primary research finding, which is that SPA students perceive privacy concerns about "workplace examples and information" to be paramount in the virtual classroom, and that "the literature was silent" in regard to that issue. The literature, aside from Stange's report, continues to be silent on this matter. However, the findings of this report enable an elaboration upon Stange's finding.

Instructors perceive that online students may have professional privacy concerns (e.g., workplace examples and information) as well as personal privacy concerns (e.g., grades, student numbers). Instructors' perceptions echo Stange's finding, which identified students' professional privacy concerns, and expand upon that finding by identifying different types of professional concerns that students may have depending on their HSD school. Instructors in Social Work, Nursing, and

CYC perceive that discussions with workplace examples cause unique student concerns in each school, and that students may be concerned about patient or client privacy *in addition* to their own privacy. In Social Work, instructors also perceive that personal and professional privacy concerns can sometimes be fused when professional discussions about addiction or abuse lead to the disclosure of sensitive personal information. These findings correspond to Stange's finding that workplace privacy concerns are paramount among SPA students, and add detail about how that professional concern manifests in different schools and professional contexts.

The impact of professional factors on instructor perceptions of privacy is also evident in regard to instructors' knowledge of privacy policies. Many instructors seem to rely on knowledge gained through professional experience in government, nursing, or social work to guide their perceptions of privacy issues and policies. This can lead to incomplete understandings of privacy issues, such as for the technical elements of *FIPPA*'s Canadian Storage and Access provisions. This finding is further evidence that professional and workplace influences are pervasive in the virtual classroom as Stange suggested, and have a significant impact on perceptions of privacy. Furthermore, this finding reinforces the literature review finding that few online users voluntarily investigate privacy policies and information, as noted by Jensen & Potts (2004, p. 477).

The literature also discusses various conceptualizations of the instructor's role in regard to privacy in the virtual classroom. Though the literature is sparse, Section 6.4.1 infers the instructor's role from a number of articles. The literature suggests that the instructor is central to the protection of privacy in the classroom, for good (Tu, 2002b) or ill (Anderson & Simpson, 2007), in the sense that Anderson & Simpson cast instructors as privacy threats. Only a couple of participants mentioned their role in this regard, and they were notable for their position in UVic as sessional instructors. While faculty and senior instructors seem to assume their centrality to the creation and modulation of the learning environment, sessional participants (who teach few classes and are often "parachuted" into courses at the last minute) perceive far less agency and self-efficacy. Sessional instructors tend to accept the decisions made by course authors, and do not perceive an opportunity to implement measures to promote student perceptions of learning security. Sessional instructors' perceptions indicate that it may be inappropriate to consider instructors as a monolithic group in terms of how they perceive their role in the classroom, and how they perceive the implications of that role for promoting perceptions of learning security.

The literature review also identified a number of factors that could potentially impact instructor perceptions of privacy and confidentiality in the virtual classroom. Those factors, such as instructor perceptions of technology and innovation, training and administrative support, and workload will now be discussed briefly in conjunction with the interview findings.

The literature review for this report indicated that instructors' perceptions of technology and innovation could impact their perceptions of privacy issues in the virtual classroom. The literature made it clear that online teaching requires instructors to adapt their practices (Cuellar, 2002; Lahaie, 2007; West, Waddoups & Graham, 2007), which creates the potential for instructor discomfort and confusion. Stange found that student perceptions of insufficient technical comfort and competence among instructors resulted in increased privacy concerns, which led her to recommend that UVic provide more training to online instructors. The interview findings reveal that only a small number of instructors feel severe technological discomfort to the

extent that it impacts their ability to promote perceptions of learning security. That said, Stange demonstrated that a single mistake by an instructor can leave an indelible impression if a student's assignment feedback is posted for the class to read (2011, p. 48). Those few uncomfortable instructors are confused about how online learning technology works, lack knowledge about the types of actions that pose privacy or confidentiality concerns, and are uncertain about how instructors can counteract those risks. However, those instructors are a distinct minority due to the training accessed by many instructors, the guidance and support found within informal peer networks, and extensive self-education among instructors.

Training and preparation is labeled as "administrative support" in the literature review, but direct administrative support is only a part of instructors' preparation. Instructors who have participated in formal training exercises find them to be "good", but insufficiently tailored to their individual needs. In the literature, West, Waddoups & Graham (2007) found that instructors are more likely to learn online teaching techniques from colleagues than from formal training, and the interview findings for this project reinforce that finding. HSD instructors value and rely on their relationships with colleagues as they grapple with technological, pedagogical, and privacy issues. Instructors also supplement their formal training and peer network support with self-education, which was mentioned as an important element of teaching preparation in the literature (Cuellar, 2002). These preparation techniques are essential for ensuring that instructors perceive that they are capable of understanding and addressing learning security issues in the virtual classroom.

In addition to the impact of technological comfort and training on instructor perceptions of privacy, the literature review also indicated that the overwhelming volume of electronic communication (Lahaie, 2007; Cravener, 1999) might impact instructor perceptions. Some instructors believe that online students require "a lot of care and feeding" and that it can be difficult to place boundaries around student-instructor communication. However, instructors do not seem to perceive that the volume of electronic communication negatively impacts their strategy of "presence". The periods of reduced interaction enforced by instructors are typically during evening and weekend periods, and instructors do not seem to restrict their interactions or immediacy behaviours in any other way. As such, it does not appear that the amount of electronic communication influences instructor perceptions of privacy in the virtual classroom, or corresponding actions and strategies. In general, the impact of workload on instructor perceptions of privacy and confidentiality is insignificant, particularly when compared to the impact of an instructor's profession or professional specialization.

Lastly, some instructors perceive that demography influences privacy concern, as examined in Section 6.4.4 of the literature review. The literature suggests that older students are more likely to be very concerned or very unconcerned, and younger students are more likely to be pragmatic with their personal information (Sheehan, 2002). One instructor perceives that "younger" people are more comfortable sharing personal information, and gives youths' use of Facebook as an example. Another instructor perceives that on-campus MPA students do not care about privacy, while online MPA students are more concerned. That observation implies that older, mid-career students are more concerned about privacy than younger, nascent professionals. Instructors' statements in this area were typically anecdotal, and are of limited explanatory value. However, these perceptions demonstrate that some instructors perceive a relationship between demographic variables and privacy concern, and those perceptions may inform instructor actions.

The next section addresses the second research question, by examining instructors' privacy-promoting strategies in the context of the literature and Stange's report.

9.2 Instructor Strategies to Promote Perceptions of Learning Security

Few scholarly sources discuss strategies that instructors can use to promote perceptions of learning security in the virtual classroom. However, there is extensive literature on the communicative and facilitative role of the instructor and the importance of that role for fostering a community of inquiry. The interview findings suggest that HSD instructors employ numerous strategies to promote student perceptions of learning security. This section examines instructors' strategies in the context of the literature and the strategies recommended in Stange's report.

One strategy mentioned frequently by instructors is cultivating a sense of "presence" in the classroom, and attempting to create a tone or atmosphere that is conducive to interaction. This strategy is related to the concepts of social presence, intimacy, and immediacy that were discussed in the literature. Some of the immediacy behaviours mentioned in the literature, such as writing in a conversational tone, including a biographical sketch, and supplementing group feedback with personalized notes (Baker, 2004, p.11; Conaway, Easton, & Schmidt, 2005, p. 25), seem to be common actions among HSD instructors. Some instructors also define "presence" in terms that reflect the literature's conceptualization of the instructor as a facilitator. For example, instructors publicly reinforce students who take "appropriate risks", purposefully decide *not* to contribute in some situations, and pursue students who have withdrawn from the conversation. These behaviours are among the process facilitation competencies identified by Goodyear, et al. (2001, p. 70). A few instructors also describe their facilitative approach as "leading by example", and attempt to model appropriate forms of disclosure. Students in Stange's project mentioned that "leading by example" positively impacts their perceptions of learning security (2011, p.46).

Many instructors supplement the soft strategies of "presence", "facilitation", and "leading by example" with explicit privacy and confidentiality notices and codes of conduct. In the Schools of Nursing, Social Work, and CYC, standardized codes of conduct are posted via Moodle, though instructors are sometimes uncertain about the contents. Instructors may also post personalized codes of conduct in lieu of (or in addition to) standardized codes, or may issue reminders about these issues throughout the course. These types of notices were identified by the students in Stange's report as an instructional best practice (2011, p. 45).

Instructors who do not use a privacy or confidentiality notice support a link to the policies on Moodle or the establishment of more rigorous standardized notices. The literature and Stange's report indicate that formal privacy policies are rarely read by students or consumers (Stange, 2011, p. 58; Jensen & Potts, 2004, p. 477), and many instructors also admit that they have not read the policies. Furthermore, the literature indicates that privacy policies are written in a legalistic and technical language that is inaccessible to the average user (Proctor, Ali, & Vu, 2008, p.326). The literature findings indicate that linking the policies to the Moodle page would probably not result in an increase in knowledge among instructors or students. Stange's recommendation of "Course Privacy Notices" written by instructors may be more effective, but would require significant instructor buy-in, and may still result in unacceptable variations in practice between schools and instructors.

That instructor buy-in may be difficult to achieve, because some instructors are skeptical about the increased use of standardized or legalistic privacy policies in the virtual classroom. Instructor skepticism is connected to the observation in the literature that an absolutely private learning environment would be characterized by "a lack of social interaction between learners and between teachers and students" (Tu, 2002b, p. 300). Instructors who feel this concern do not necessarily phrase their wariness in the language of interaction or engagement, but their comments suggest that increased rigidity or legalism in the virtual classroom would negatively impact those important variables. This report's recommendations include a type of privacy notice that incorporates the literature review findings on how online users interact with privacy policies, Stange's findings on student preferences, and instructors' preferred strategies and wariness in this area.

In addition to their use of privacy notices, instructors also promote perceptions of learning security by managing the communication channels used in the virtual classroom. Instructors regularly divert sensitive discussions from the discussion forum to e-mail. The literature indicates that this is an appropriate strategy because students perceive e-mail to be the most private communication channel (Tu, 2002a, p. 42-23, Tu & McIsaac, 2002, p. 145-146). Tu recommends that instructors should understand "the level of privacy provided by each of the CMC systems and the learner's perceptions of the privacy provided by each" (2002a), and it seems that instructors consider those factors. However, in a number of cases, rather than understanding student perceptions of the different communication channels, instructors must educate students about using the appropriate communication channel for sensitive conversations. Interestingly, students in Stange's report mentioned that some *instructors* needed to be educated about the "inappropriate use of public tools for private tasks" (p. 51), so it seems that a few careless individuals in each group require more education on using appropriate communication channels.

Instructors also discussed Stange's proposal to increase student anonymity. Most instructors reject Stange's recommendation for a variety of reasons, including the loss of accountability, responsibility, and professionalism in the classroom, the division it would create between on-campus and online programs, and the impracticality of maintaining anonymity in small or blended programs. The instructors' critiques echo the literature's discussion of the online instructor's responsibility to foster a community of inquiry. Participants in a community feel a sense of belonging and trust as a group, and recognize the benefit that can result from "shared experiences" (McMillan, 1996, p. 133). Instructors suggest that increased anonymity might achieve a sense of learning security, but would waste teaching opportunities about accountability and developing trust in groups, and ultimately cheapen the shared experience of online learning. The strategy of increased anonymity seems to be grounded in a proposition that trust cannot be created within the confines of a four-month course. Whether that assumption is cynical or realistic is a matter of opinion, but a number of instructors appear to believe that it is possible build a sufficient amount of trust to ensure perceptions of learning security in their classes.

Another of Stange's recommendations was to "ensure that instructors provide students with detailed course expectations". This recommendation was inspired by student uncertainty about what types of information are required in biographical statements, how to present workplace

examples, and the required level of formality in course postings. Instructors were not queried directly on this topic, but the interview findings generally demonstrate the wisdom of this recommendation. The findings show that instructors have a wide variety of opinions about the ideal tone for the virtual classroom (such as "informal" or "scholarly"), and use course assignments like the introductory statement for numerous pedagogical purposes, depending on the type of course and the teaching style of the instructor. Despite these wide ranging expectations, instructors frequently assume that "students know" what is expected, or that some component of the course is "optional". It seems that instructors may over-estimate the homogeneity of instructor practices (in regard to tone, introductory statements, and the treatment of workplace examples), over-estimate student knowledge of their unspoken pedagogical style, and over-estimate the willingness of concerned students to withhold when other students are disclosing and participation marks are in the balance. These assumptions represent a failure to act as a facilitator in the virtual classroom, as discussed in the literature. Goodyear et al. (2001, p. 70) indicate that the classroom facilitator is responsible for "familiarising learners with the environment and expected working practices". Therefore, the findings of this report re-affirm Stange's recommendation that instructors should be more explicit about their course expectations with respect to student disclosure, privacy, and confidentiality.

The final strategy to be discussed in this section may negatively impact student perceptions of learning security in the virtual classroom. Some instructors use Moodle's surveillance powers, and unapologetically insist on the value of surveillance teaching tools, even as they acknowledge student discomfort. These instructors defend the use of the teaching tools in similar terms to Goodyear et al. (2001, p. 70), who indicate that "drawing out students who take a back seat" is a key role of the teacher-as-facilitator. Teachers may not need surveillance to know which students are actively participating, but the instructors use Moodle to identify the low-participation students who are not accessing the discussions or course materials. However, there is literature that specifically identifies this strategy as ethically problematic, because some students may not be aware (or may forget) that their activity is logged, in contrast with student awareness of more visible forms of data collection such as assignment submissions (Anderson & Simpson, 2007, p. 134). Anderson and Simpson question the ability of students to give informed consent for that type of data collection, and worry that instructors may pass judgements about students on the basis of activity data (Anderson & Simpson, 2007, p.134). Both instructors in the interview findings indicated that students are surprised to find that instructors can access that information, which confirms the concerns expressed by Anderson & Simpson.

In response to those concerns, instructors may wish to explicitly tell students at the start of the class that Moodle's surveillance tools will be used to ensure students access course material. If the main goal of the surveillance is to encourage activity, then communicating how and why the tools will be used may be a superior teaching technique. Students may be more likely to access materials if they are aware of the surveillance, and being straightforward about the use of surveillance tools avoids any ethically dubious "gotcha" moments which can be embarrassing and disconcerting for students. As noted in the literature, "where a system engages in coercive surveillance, mistrust and angst are likely to result", which can result in "reduced release of information" and "release of disinformation" (Samarajiva, 2001, p. 284). Instructors should endeavour to avoid student angst and mistrust, as those perceptions and emotions are not conducive to fostering learning security and could negatively impact engagement and learning.

The next section discusses the incoherence and inconsistency within individual instructors' interviews, which may not be apparent in the interview findings and discussion sections.

9.3 Incoherence and Inconsistency

Due to the aggregative nature of the interview findings, the incoherence and inconsistency within individual interviews is not always evident. The incoherence of some instructors' perceptions and actions is a finding of this project, so this issue will be discussed briefly here.

A number of instructors indicated that they had not thought about privacy at all in the context of the virtual classroom. These instructors were not necessarily inexperienced; they simply had not given the issue much thought. As a result, these instructors occasionally expressed obviously incoherent perceptions. In the most extreme example, an instructor characterized the security of the virtual classroom as being "not much different from the [traditional] classroom", less secure than the traditional classroom, *and* more secure than the traditional classroom in the same interview. Another instructor asked students to include the name of their workplace in an introductory statement, but later told students that masking their workplace in a professional example would protect their privacy. Also, it has already been noted that instructors seemingly changed their mind about the impact of student anonymity as they were answering the question.

These incoherent perceptions stem from a lack of forethought about privacy, lack of knowledge about student concerns, and lack of knowledge about technology and the factors that cause a classroom to be "secure" or "insecure". Instructors' inconsistency on the impact of student anonymity comes from a tendency among some instructors to consider operational considerations before pedagogical considerations. For example, in regard to anonymity, instructors first mentioned the potential difficulty of marking and telling anonymous students apart. Instructors who thought increased anonymity would be acceptable usually stayed in that realm, whereas the inconsistent instructors started with operational concerns before realizing the more complex pedagogical implications of the strategy. These incoherent and inconsistent statements indicate that more awareness-raising efforts may be necessary.

9.4 Conclusion to Discussion

This section has synthesized the interview findings, the literature, and Stange's findings in an attempt to answer the two research questions for this project:

1. How do University of Victoria instructors perceive privacy and confidentiality issues as they pertain to instruction in an online environment?

2. What do University of Victoria instructors know and do in their instructional design and delivery to accommodate student perceptions of learning security in the online environment to maximize learning and teaching outcomes?

For the first question, it was found that instructors' perceptions of privacy and confidentiality are influenced by their profession and professional specialization. Most instructors perceive that

their position in the classroom enables them to influence student perceptions of learning security. However, some sessional instructors perceive a lower degree of agency, and this dynamic among sessional instructors was not mentioned in the literature. Instructors are generally aware of UVic's privacy policies and are willing to follow and implement those policies in the virtual classroom. However, instructors (like students) tend not to read the policies, and rely on practical sources of privacy information. Furthermore, some instructors are wary of over-legalizing the interactions of online education, due to the potentially negative impact on course interaction.

Few instructors indicated that personal discomfort with technology impacted their perceptions of privacy and confidentiality, due to a combination of training, peer support, and self-education that enables instructors to confidently wield the University's online learning technologies. This finding corresponds to the literature, which indicates that instructors may supplement formal training with informal peer networks as they adapt to technological innovations. Instructor perceptions of the volume of electronic communication also seemed to have little impact on instructor interaction, despite being a focus on the online learning literature. Lastly, some instructors perceive that demographic variables impact privacy and confidentiality, though their perceptions do not necessarily correspond to the demographic findings of the literature.

In regard to the second question, it was found that many instructors post a course privacy or confidentiality notice, and instructors prefer that their school or program draft the notice. Instructors also accommodate student perceptions of learning security through "presence", "tone", and "leading by example", which correspond closely to the literature review concepts of social presence, immediacy, and facilitation. Also, many instructors actively manage the communication channels in the virtual classroom. Instructors were skeptical about Stange's recommendation that students have more anonymity in the virtual classroom, due to the potential negative impact on responsibility, authenticity, and professionalism in the virtual classroom. Lastly, as instructors' discussed their strategies, it became apparent that some instructors wrongly assume that students inherently understand the expected tone and level of disclosure in the virtual classroom, despite the fact that instructors expressed varying practices.

Chapter 10 – Recommendations

This chapter recommends five actions to DES and HSD to better support instructors as they promote learning security in the virtual classroom. Due to the shared responsibility for online learning at UVic, other support organizations such as UVic Learning Systems and LTC may also contribute to the implementation of these recommendations.

The focus on HSD instructors in the research design limits the degree to which these recommendations can be definitively generalized to other online instructors or UVic distance programs. However, in acknowledgement of DES' role within DCS, an effort is made in this chapter to explore the applicability of these recommendations beyond HSD. Any references in regard to the transfer of the recommendations to DCS are intended only to suggest possible opportunities for action, leaving the ultimate judgement about the suitability of the recommendation to DES' discretion. More research into the preferences and perceptions of DCS students and instructors may be needed to support those actions.

Recommendation 1 – Facilitate standardized privacy notices in schools or programs

When instructors discussed the potential use of standardized course privacy notices, they often assumed that UVic or their school would provide the notice. If UVic seeks to maintain a consistent learning environment for students between instructors, schools, and faculties, asking instructors to implement their own statements may not effective. A University-wide approach would also be ineffective, because a single notice may not capture the range of student privacy concerns, and instructors may not read or pay attention to a generic privacy notice.

It is recommended that standardized privacy notices be developed for each HSD school (or program), so the notices can be tailored to the unique concerns in each unit without placing an undue burden on individual instructors. Ideally, the Deans and Directors of each school would involve instructors in the development of a notice, which would increase instructor knowledge of privacy issues and encourage a sense of ownership over the notice. Participant instructors could act as privacy notice ambassadors by promoting the contents of the notice to other instructors. Stange outlined five elements that should be included in each course privacy notice:

1. The privacy risks associated with students' online course interactions
2. The privacy capacity of the online learning platform itself
3. Information on what happens with students' course information after course completion
4. A reminder to students that they have a responsibility to inform themselves about the risks they face while learning online
5. Links to additional resources – for example, those currently available via the DES website

These elements could be provided to HSD schools, and the administrators and participant instructors would craft a course privacy notice that reflects their school or program's unique privacy environment. That environment may be reflected in the addition of new elements to Stange's framework, such as existing Netiquette statements. Schools or programs may also personalize the notices by using specific examples and illustrations to communicate the risks and

information in the notice. Given DES' expertise in this area and involvement with this report and Stange's research, HSD schools should consult with DES throughout this process.

DES may also wish to explore the implementation of standardized privacy notices within DCS' distance programs. A division-wide privacy notice may not sufficiently capture the range of privacy concerns within DCS' varied online professional programs, and DCS' instructor base of working professionals may also be reluctant to develop their own privacy notices. DES could potentially use a similar process to the one recommended for HSD, by providing the fundamental elements of the notice to program managers or coordinators, and allowing the adjustment of the statement as necessary.

Recommendation 2 – Encourage instructors to communicate course expectations in regard to privacy and confidentiality

This recommendation echoes one of Stange's recommendations, as the findings from this report correspond to her finding that instructors do not sufficiently communicate their course expectations, particularly in regard to privacy, confidentiality, and disclosure in the virtual classroom. Instructors in all schools have varying expectations for classroom discussion and disclosure, yet seem to think students automatically understand their expectations, or that students are "adults" and will disclose what they want regardless of expectations. These perceptions do not correspond to Stange's findings or student actions reported by instructors.

DES includes this encouragement in the courses developed for DCS programs, and the DES website encourages distance instructors to communicate their course expectations (DES, 2012b). Given DES' efforts in this area, this recommendation is directed primarily to HSD. HSD schools should follow DES' example in online teaching materials and attempt to improve the communication of instructor expectations, consulting with DES where necessary.

Both DES and HSD should also consider advising instructors to communicate their expectations and practices with regard to Moodle's surveillance functions. If an instructor uses surveillance tools to ensure students access the course material, instructors should inform students in their course expectations to avoid "gotcha" moments that could impact student perceptions of learning security. DES could consider the advisability of material to this effect being added to DES' teaching resources website, or incorporated into existing material to help educate instructors on this issue.

Recommendation 3 – Raise awareness among instructors about privacy issues and strategies in the virtual classroom

Some instructors have never thought about privacy issues in the context of the virtual classroom, despite the expectation that instructors should know the issues and follow UVic's privacy policies. If instructors are not aware of privacy risks and concerns, they cannot undertake actions that foster student perceptions of learning security. The preceding recommendations should raise awareness among instructors, but additional efforts may be necessary.

To raise awareness, HSD and DCS could emphasize privacy issues in teaching orientations and distribute a privacy bulletin once per semester through school or program e-mail distribution lists. The bulletin could briefly discuss best practices for promoting perceptions of privacy and confidentiality in the virtual classroom, provide plain language interpretations of privacy policies, and notify instructors about new policies or policy changes. The bulletin could also include information about the proper methods for handling and destroying student information in hard copy or digital formats. The components of the bulletin would not need to be changed for each distribution, but only updated as necessary to reflect changes in policy or new pedagogical practices. The bulletin would ideally be distributed at the beginning of the semester to raise awareness prior to each course. However, HSD and DCS may wish to experiment with the timing of the bulletin to avoid the busy beginning of each semester.

DES could also amend the "Online Course Best Practices" and "Creating and Maintaining an Instructor Presence" documents on the DES website (DES, 2012b; DES, 2012c), to raise awareness among DCS instructors and other UVic instructors who may access the documents. The former document could be changed to include the use of privacy statements as a best practice for all instructors (until standardized notices are created), and could include a sample statement. The document already reminds instructors to "inject your own voice when teaching a course you didn't develop", but a bullet could also be added to encourage instructors to supplement the standardized privacy notice with personalized statements and examples. For the latter document, a bullet could be added to express the importance of instructor presence for promoting perceptions of privacy and confidentiality.

Recommendation 4 – Support and leverage the activities of instructors' informal learning networks

Instructors value the training and orientation sessions offered by Learning Systems, LTC, DES, and HSD, but often find that the programming is not targeted to their needs. Many instructors supplement their formal training through informal networks of colleagues and self-education. These networks represent an opportunity for teaching and learning support organizations to improve training by building on instructors' existing behaviours and practices.

Rather than attempting to tailor training to each instructor's personal preferences, all of UVic's support organizations should attempt to empower instructors and instructor networks to self-organize around training topics. This would reduce the informality of the networks, but it allows instructors to tell support organizations the type of training that is wanted at a given point in time. For example, an instructor may feel that their basic training was too complicated to absorb without having previous hands-on experience. After teaching a class, the instructor could create a list of problems they would like to be able to solve independently and identify other instructors with similar questions. Those instructors could arrange a training session with a support organization on the topics identified by the instructors. This supplemental training would ideally reduce the feeling among instructors that formal training is inappropriate for their level of experience, encourage networking among instructors, and relieve support organizations of the responsibility for guessing instructors' preferred topics and modes of training.

This hypothetical proposal may not attract instructors or be feasible for support organizations to manage within current resource constraints. However, the principle remains that support organizations should attempt to use instructor networks to learn the training needs of instructors.

Recommendation 5 – Conduct further research

Further research should be conducted into privacy in UVic's virtual classrooms. The perceptions of SPA students and HSD instructors have been studied, but the exploratory nature of the research and the narrowness of the study populations (compared to the overall student and instructor populations at UVic) leave numerous unanswered questions and areas for research.

Research could be conducted into the perceptions of UVic administrators. Aside from students and instructors, the university administration (at the level of the Dean and School Directors) is the other significant group that impacts the privacy environment. Administrators create, operationalize, and communicate UVic's privacy policies, and also protect, access, and destroy sensitive records on a daily basis. Instructors mentioned the unfairness of the administration's expectations of instructors in relation to knowing University policies. If UVic's privacy policies and actions are to be more closely aligned to the actual behaviours of students and instructors, more information is needed on the perceptions and motivations of administrators.

Further research could also be conducted into student perceptions of privacy across HSD and DCS. This report discussed instructors' perceptions of student concerns in Nursing, Social Work, and CYC, but unlike SPA students in Stange's report, students in those schools did not have an opportunity to express their concerns in their own words. Similarly, student concerns in DCS have not been the subject of focused and publicly available research. Subsequent student-focused research projects would result in a nuanced understanding of privacy concerns within each UVic school, faculty, and division, and would support more detailed learning security strategies.

Lastly, DES may wish to conduct additional research into the perceptions and strategies of DCS instructors prior to the implementation of some of the recommendations in this report, as discussed in the introduction of this section.

Chapter 11 – Conclusion

Instructors are in a position of trust and influence in the virtual classroom. Instructor actions impact student perceptions and concerns and set the tone by which students will learn with and from each other. As such, it is important that instructors consider and act against any threat to student engagement, interaction, and learning. The evidence presented in this report indicates that all instructors take online privacy and confidentiality risks seriously, and try to create a learning environment that is as safe and collegial as possible within the parameters of existing online learning technologies and standards at UVic.

The primary finding of this report is that instructors are most likely to learn, think about, and remember privacy issues when that knowledge is connected to their professional specialization. HSD has many instructors who practice in a profession in addition to their academic role, have practiced in the past, or study the practical actions of government, nursing, and social work on a daily basis. As such, it is unsurprising that instructors' professional specializations shape their knowledge of privacy issues. Similarly, instructors' perceptions of student privacy concerns are shaped by their profession's privacy environment, as evidenced by Nursing and Social Work instructors' discussion of their students' concerns about client privacy, a concern that had not been raised in Stange's SPA research.

These findings are relevant for DES and the online education programs offered in DCS, if not directly generalizable. DCS programs also have a professional focus, and the courses are often taught and taken by working professionals. It is therefore reasonable to infer that DCS instructors' professional backgrounds may also influence their knowledge and perceptions of privacy in the virtual classroom. UVic's faculties, divisions, and online teaching support entities should take these findings into account when designing and providing training for instructors, and when disseminating information about privacy issues or policies. Further research could be conducted to support the application of the findings where necessary.

Instructor strategies for promoting perceptions of learning security are less diverse, and less influenced by the instructor's professional specialization. Instructor strategies primarily include using privacy policies and confidentiality notices, cultivating a sense of "presence" and "tone" that is conducive to learning, and managing communication channels between instructors and students to ensure that sensitive information is not posted in the virtual classroom. This pedagogical homogeneity may be more indicative of the limitations of teaching in the virtual classroom than of homogeneity among instructors. That said, each instructor has a unique voice and style, and has the ability to wield familiar teaching tools in innovative ways.

This report is a modest first effort. The findings tentatively identify instructor perceptions of privacy and strategies for promoting learning security, as well as areas of incoherence and lack of knowledge that require increased awareness and changes to training and teaching practices. These findings are based on a small portion of the instructor population, and much research remains to be done within HSD and DCS on instructor, student, and administrator perceptions. Additional research would contribute to a more comprehensive view of privacy at UVic, taking into account the complex perceptions and actions of students, instructors, and administrators, both as individual actors and as collaborative groups working to maximize learning outcomes.

Appendix A – Interview Guide

Biographical and Background Information

- Name, school within HSD, job title and employment status
- Approximately how many fully online courses have you taught as a university instructor?
- Approximately how many web-assisted courses have you taught as a university instructor?
- What types of software programs and online learning platforms that you have used for the delivery of online courses?
- Could you describe what training you received on how to use the online learning technologies used by the University of Victoria?
- Could you describe your interactions with the technical support staff?
- Could you briefly characterize the classes you teach, and the types of discussions that occur?

Opening Question: What do the terms "privacy" and "confidentiality" mean to you in the context of the online classroom?

Themes:

Instructor Perceptions of Student Perceptions & Concerns	
Primary Question	**Based on your interactions with students, what are your perceptions of student concerns about privacy and confidentiality?**
Important Prompts	- Increasing the level of student anonymity has been recommended as a means of increasing privacy and confidentiality in the virtual classroom. What impact do you think this would have on the discussion in the virtual classroom? - Do you think student privacy concerns could impact their engagement in online courses? - Has a student ever asked you about what happens to course data and information at the conclusion of a course?

Teaching Strategies	
Primary Question	**In your opinion, what strategies can instructors implement to ensure that students feel safe and secure in the virtual classroom?**
Important Prompts	- Do you post a Code of Conduct or Privacy Notice? - Do you ask students to post an introductory or biographical statement? What types of information would you typically ask students to include in that statement?

Legislation and University Policies	
Primary Question	**How does British Columbia's privacy legislation and the University of Victoria's policies on privacy and information security relate to your role as an instructor in the online classroom?**
Important Prompts	- If you had a privacy-related question, what would your first resource be? - It has been recommended (Charlotte) that instructors post plain-language privacy notices at the beginning of a course. Do you think that instructors should play a role in interpreting/summarizing legislation/policy for students? - Do you have any thoughts on the situation regarding the Turnitin tool?

Instructor Privacy and Security of Intellectual Property	
Primary Question	**Please tell me about your own personal privacy and/or confidentiality concerns.**
Important Prompts	- Have you ever felt that your personal privacy was compromised during an online course? - Has your intellectual property (i.e. course designs, original research, syllabi) been used inappropriately as a result of its dissemination through the virtual classroom? - Are you comfortable with the amount of your personal contact information is available on University websites?

Conclusion: Do you have any final thoughts on privacy and confidentiality in the virtual classroom?

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