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Differences in Students' Perceptions of the Community of Inquiry in a Blended Synchronous Delivery Mode

Différences dans les perceptions des étudiants à l'égard de la communauté d'enquête dans un mode de prestation synchrone mixte

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Abstract

As more post-secondary institutions are turning to non-face-to-face course delivery modes to cater to the emerging needs of the student population, we have yet to find out whether students attending both at a distance and face-to-face have access to equal learning opportunities. A research was conducted in the nursing program taught in the blended synchronous delivery mode at the Cégep de la Gaspésie et des Îles over the winter 2017 semester. Using the Community of Inquiry framework and questionnaire elaborated by Garrison et al. (2000) and later revised by Shea and Bidjerano (2010), face-to-face (n=20) and at-a-distance (n=25) students' perceptions of the four Community of Inquiry presences (teaching, social, cognitive, and learner) were measured and compared. Results of the overall presences comparison reveal that face-to-face participants perceived a stronger teaching presence than students attending from a satellite site, while the distinctive elements of each presence reveal significant differences between students' perceptions of the teaching, cognitive, and learner presences. Additionally, students' comments provide rich qualitative data that explain the quantitative results obtained.

Résumé

Alors que de plus en plus d'établissements postsecondaires se tournent vers des modes de prestation de cours à distance pour répondre aux besoins émergents de la population étudiante, nous devons encore déterminer si les étudiants inscrits à des cours à distance et ceux à des cours en présence bénéficient d'apprentissages équivalents. Une recherche a été menée dans le programme de soins infirmiers enseigné en mode mixte au Cégep de la Gaspésie et des Îles au cours du semestre d'hiver 2017. En utilisant le cadre et le questionnaire de la communauté

d'enquête élaborés par Garrison et al. (2000) et plus tard révisé par Shea et Bidjerano (2010), les perceptions des étudiants en présence (n = 20) et celles des étudiants à distance (n = 25) sur les quatre présences de la communauté d'enquête (enseignement, social, cognitifs et apprenants) ont été mesurées et comparées. Les résultats de la comparaison globale des présences révèlent que les participants en présence ont perçu une présence enseignante plus forte que les étudiants à distance sur un site satellite, tandis que les éléments distinctifs de chaque présence révèlent des différences significatives entre les perceptions des étudiants sur les présences enseignante, cognitive et apprenante. De plus, les commentaires des étudiants fournissent des données qualitatives riches qui expliquent les résultats quantitatifs obtenus.

Introduction

In the province of Québec, Canada, a significant drop in student numbers in the college network was predicted over the 2011-2020 period (for a total of 26,500 students, a decrease of about 16% compared to the fall 2011 semester). Yet a 2011 study expects 1.4 million jobs to be vacant by 2021 due to economic growth (20%) and retirement (80%), while the unemployment rate will be at the lowest it's been since 1976, at 5.3% (Grenier & Centre d'étude sur l'emploi et la technologie, 2011). A 2014 report was produced as per the request of the Québec Minister of Higher Education to identify the measures that should be taken to enable the college system to continue to offer accessible and diversified training in all regions of Québec; online and blended courses were presented in the report as an important avenue (Demers, 2014).

In remote areas such as the Gaspésie peninsula in the province of Québec, institutions like the Cégep[1] de la Gaspésie et des Îles (CGÎM) have turned to online, blended, and blended synchronous delivery modes to allow people to access education depending on their location and personal needs (Bergeron, 2014). This large post-secondary institution consists of one main campus (Gaspé) with Francophone and Anglophone sectors, four satellite campuses, three research centres, one national school, and one continuing education centre (Cégep de la Gaspésie et des Îles, n.d.).

The CGÎM has developed great expertise in distance education since 2007. At that time, the Maria hospital near Carleton-sur-Mer was expecting a shortage of certified nurses, and the program was taught 300km away, at the Gaspé campus. As a result, videoconferencing equipment was installed in the Carleton-sur-Mer classrooms and even in rooms directly at the Maria hospital. Since then, several nursing cohorts that have been taught in the blended synchronous delivery mode (BSDM) have graduated (Bergeron, 2014).

What qualifies as online, blended, or a BSDM varies greatly in the literature. Given the lack of consensus on blended synchronous learning, we use Lakhal and Meyer's (2019) definition of blended synchronous learning, defined as "mixing both asynchronous and synchronous online learning, to which face-to-face learning opportunities are added. It is about learning and teaching where distant students participate in face-to-face class sessions by means of video conferencing and web conferencing." (p. 6).

The BSDM offers a variety of advantages such as flexibility and access (Abdelmalak, 2014), quality learning, learning outcomes enhancement, and institutional benefits (Lakhal,

[1] CEGEP is a French acronym for Collège d'Enseignement Général et Professionnel. It refers to the public post-secondary education collegiate institutions and is exclusive to the higher education system in the province of Québec (Author, 2017).

Bateman, & Bédard, 2017). The literature also reveals that this course format can pose challenges in terms of institutional support (Bower, Dalgarno, Kennedy, Lee, & Kenney, 2015), additional workload, course design and technologies (McGee & Reis, 2012), as well as teaching presence (Wicks, Craft, Mason, Gritter, & Bolding, 2015).

The socio-constructivist paradigm (Vygotsky, 1962), widely embraced in the education field, contends that interaction with teachers and peers is necessary for knowledge to deepen. Taking this further, the Community of Inquiry (CoI) framework (Garrison, Anderson, & Archer, 2000) claims that the quality of one's educational experience is found at the intersecting centre of the presences (social, cognitive and teaching, as well as the learner presence later added by Shea and Bidjerano, 2010) of the CoI framework, where a deep and meaningful educational experience can occur (Szeto, 2014). The CoI framework highlights the importance of the teaching presence to deliver direct instruction and facilitate discourse in order to encourage cognitive and social processes. The social presence is translated into group cohesion, collaboration, open communication, and affective expression, as well as sharing personal emotions; it requires intellectual focus and respect. Through the cognitive presence, learners connect and confirm meaning as they engage in sustained reflection and substantive discourse (Garrison & Arbaugh, 2007). Finally, personal-level traits such as learning style, personality, motivation, effort, self-efficacy, metacognition, and self-regulation, are all characteristics of the learner presence (Shea & Bidjerano, 2012).

The literature points to the key role teachers play in fostering the sense of a social presence among participants. When done properly, it can lead to a level of comfort and trust that stimulates interaction; when it is missing, students can feel left out and be less likely to engage (Bower et al., 2015). The teaching presence is also important in supporting the cognitive presence; the clarity and consistency of the course structure play an important role in order to support interaction and discourse, which help achieve higher-order thinking skills (Swan, 2004). Additionally, an increased, positive teaching presence can encourage students' levels of self-efficacy, thus inciting them to be metacognitively, motivationally, and behaviourally active in their learning process (Shea & Bidjerano, 2010).

Although a BSDM can help lower feelings of isolation of online students, it still remains a challenge, especially in terms of engaging with other students and forming relationships (Lakhal et al., 2017). Cunningham (2014) cites the "us and them" phenomena, while Wang, Quek, and Hu (2017) point to the physical separation that accounts for feelings of isolation, exclusion, and difficulty to collaborate and communicate. Cunningham's (2014) study also reveals the need for recognition, appreciation, inclusiveness, participation, shared cognition, and feelings of social solidarity; she claims a BSDM can hinder the possibility to meet such needs. Moreover, Cunningham (2014) and Wang et al. (2017) point out that less visible body language and facial expressions through a screen can lead to misinterpretation of what participants mean, including social cues. Wang et al. (2017) and Conklina, Oyarzun, and Barreto (2017) note that the type of technology used can either foster or hinder emotional presence, which is said to increase the social presence among participants. In line with the theoretical stance of social constructivism, meaningful peer interaction and social presence lead to significant learning outcomes (Szeto & Cheng, 2014). Szeto (2014) found in his study higher inter-group interaction (F2F [face-to-face] with online, and vice versa), lower intra-group interaction (F2F with F2F, online with online), and that participants sought affective support within their own groups (online with online, F2F with F2F) when faced with frustrating or confusing situations.

Given the challenges that the BSDM can pose, is there a difference in the perception of presence as defined in the CoI framework elaborated in Garrison et al. (2000) and later revised by Shea in Bidjerano (2010) between F2F students and those at a distance? This research used three nursing courses taught in the BSDM at the CGÎM to find out whether F2F students and those at a distance were offered equal learning opportunities.

Methodology

Procedure

The research project was approved by the Research Ethics Board at the CGÎM. The study took place over the winter 2017 semester. The teachers of each course were approached and asked to participate in the study. Their participation was limited to allowing the researcher to contact their students by email to explain the research project and give 30 minutes of class time for students to sign the consent form and fill out the questionnaire. All three teachers agreed to participate. Standard consent forms were used to obtain written acceptance to participate in this study; all 45 students gave consent and completed the questionnaire. The paper questionnaires were distributed to each section during a class near the end of the 2017 winter semester; at the satellite site, an employee was in charge of printing as well as mailing copies back to the researcher. The fact that the questionnaire was filled out in class rather than during students' free time (via email or an online survey form) helped ensure they were taking the time to understand and properly answer the questions, as well as include pertinent comments.

The confidentiality of all responses was safeguarded. In each section, the teacher left the room during the 30-minute period, and a volunteer student was designated to hand out and collect both the consent forms and the surveys. They were put in a sealed envelope, which was later opened, and results were shared with the three teachers after the final grades for each course were submitted to the CGÎM. A $50 gift certificate prize was drawn among all participants to thank them for taking part in the study.

Study Sample

The convenience sample included three sections of students enrolled in the nursing program at the CGÎM. The 100% compliance with all potential participants helps mitigate some of the selection bias of this type of sample. The three courses were taught from the Gaspé campus in a blended synchronous format combining both F2F students in Gaspé and students at satellite campuses (Carleton-sur-Mer or Chandler). While one group was in a physical classroom with the F2F teacher, the other group was attending from the distant site via videoconference. Each classroom (at the F2F and the distant sites) was equipped with a plasma television at the back of the class, a Polycom camera, and a high-quality microphone located in the middle of the room; a lapel microphone was also available for teachers who chose to use one. All classes were taught in a lecture format with some in-class learning activities and homework, and very little asynchronous activities (limited to sending messages and sharing documents such as syllabi, PowerPoint presentations, and notes via the Omnivox platform[2]). Supplementary resources were either

[2] Omnivox is a course management program operated by Skytech and used in the province of Québec. CEGEP submit marks to the Québec government via this platform, which is also designed for teachers to share documents with students and send messages via a simple communication tool, or Messaging In Omnivox (MIO). Other options are available, at a cost, such as forums and surveys. However, the user experience is much more limited than with course management systems such as Moodle.

distributed via Omnivox or in a printed form, and written evaluations were given in a traditional paper format (a resource person at the distant site was in charge of invigilating). Intergroup interaction was limited to occasional student interventions during lectures and class activities. With a total of 21 students attending from Carleton-sur-Mer and four from Chandler, the sample was composed of 25 students (56%) at satellite sites, and 20 F2F (44%) from the Gaspé campus. The sample of 45 participants was divided as shown in Table 1.

Table 1

Study Sample

	F2F group	At-a-distance group		
	Students in Gaspé	Students in Carleton-sur-Mer	Students in Chandler (EPAQ)	Total
1st year students	6	14	0	20
2nd year students	8	0	4	12
3rd year students	6	7	0	13
Total	20	21	4	45

Measure

The questionnaire used in this study included Likert-type and open-ended questions. The first section addressed demographic elements – namely, course title and number, campus, gender, student enrollment status, year in the program, experience with distance education, perceived level of ease learning with technology, work situation, family situation, and age group. The other four sections were items related to the four CoI presences – teaching, cognitive, social, and learner. There was room for additional comments at the end of each section. The CoI questionnaire used in the study was developed by Shea and Bidjerano (2010) and comprised of 48 items (see Appendix A). Studies among English speakers reported adequate reliability coefficients: Arbaugh et al. (2008) obtained Cronbach Alpha coefficients of 0.94 for teaching presence, 0.91 for social presence, 0.95 for cognitive presence. As for learner presence, Barnard, Lan, To, Paton, and Lai (2009) reported a Cronbach Alpha coefficient of 0.90. The CoI questionnaire was translated to French since the participants are francophone (see Appendix B); the coefficients were similar after translation.

Results

Results of the overall CoI presences comparison revealed a significant statistical difference between Group 1 (at-a-distance) and Group 2's (face-to-face) perception of the teaching presence ($t=2.57$; $p < .05$) only. The F2F participants perceived a stronger teaching presence than the students attending from a satellite site. These results are presented in Table 2.

Table 2

CoI Presences Comparison

	Teaching Presence		Social Presence		Cognitive Presence		Learner Presence	
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2
M	3.28	3.67	2.38	1.97	2.69	2.68	3.06	3.32
SD	.58	.38	.73	.89	.57	.72	.52	.53
t		2.57		1.68		.023		1.64
p		.014*		.100		.982		.107

Note. M = Average. SD = standard deviation. t = t test value. * p <0.05. ** p<0.01. Group 1 = at-a-distance (n=25). Group 2 = face-to-face (n=20).

Moreover, a closer look at the *distinctive elements* of each presence reveals significant difference between Group 1 and Group 2 on four items regarding students' perception of teaching presence (Table 3), two items regarding students' perceptions of the cognitive presence (Table 4), and three items regarding students' perceptions of the learner presence (Table 5). Qualitative data is further examined in the discussion section.

Teaching presence. When we examine the distinctive element of the teaching presence, four of the 13 items related to teaching presence support the significant difference between Group 1 and Group 2. Indeed, Group 2 perceived, in average, that the instructor better communicated course topics (t=2.90; $p < .01$) and due dates (t=2.81; $p < .01$) than Group 1. Group 2 also perceived that the instructor helped them learn (t=2.40; $p < .05$) and provided helpful feedback (t=4.13; $p < .01$) more than Group 1. Those results, presented in Table 3, support the findings presented earlier that Group 2 perceived a stronger teaching presence than Group 1.

Table 3

Teaching Presence Significant Comparison

	CoI 1: The instructor communicated course topics		CoI 4: The instructor communicated due dates		CoI 5: The instructor helped students learn		CoI 12: The instructor gave feedback that helped students	
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2
M	3.44	3.90	3.64	3.95	3.16	3.65	2.88	3.75
SD	.71	.31	.49	.22	.75	.59	.93	.44
t		2.90		2.81		2.40		4.13
p		.006**		.008**		.021*		.000**

Note. M = Average. SD = standard deviation. t = t test value. *: p <0.05; **: p <0.01. Group 1 = at-a-distance (n=25). Group 2 = face-to-face (n=20). CoI #: CoI question number.

Social presence. In terms of the social presence, no significant difference was found between Group 1 and Group 2. Students' comments point to certain factors that negatively impact their perception of the social presence as well as positively impact.

Cognitive presence. While no significant difference was found in terms of the distinctive elements of the cognitive presence, two of the 12 questions pertaining to students' perceptions did show significant difference; F2F students felt more motivated to explore content-related topics than non-F2F students (t=2.07; p < .05), and non-F2F students found that discussions helped them appreciate different perspectives (t=3.51; p < .01). These results are presented in Table 4.

Table 4

Cognitive Presence Significant Comparison

	CoI 25: Students felt motivated to explore content-related topics		CoI 28: Online discussions helped students appreciate different perspectives	
	Group 1	Group 2	Group 1	Group 2
M	2.52	3.05	2.39	1.10
SD	.71	.99	1.15	1.25
t		2.07		3.51
p		.044*		.001**

Note. M = Average. SD = standard deviation. t = t test value. *: p <0.05; **: p <0.01. Group 1 = at-a-distance (n=25). Group 2 = face-to-face (n=20). CoI #: CoI question number.

Learner presence. No statistical difference was found for the learner presence either, but a closer look at the distinctive elements of this presence shows that three of the 14 questions revealed significant differences. These results are presented in Table 5. Students from Group 2 feel, on average, they know how to evaluate the quality of their work (t=2.05; p < .05), they are aware of their strengths and weaknesses in a learning context (t=2.37; p < .05), and they take the time to review the material related to the work to be done (t=2.29; p < .05) more than Group 1.

Table 5

Learner Presence Significant Comparison

	CoI 39: I know how to evaluate the quality of my work		CoI 41: In a learning context. I am aware of my strengths and weaknesses		CoI 44: I take the time to review the material related to the work to be done	
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2
M	3.04	3.50	3.08	3.55	3.00	3.60
SD	.84	.60	.64	.68	.95	.75
t		2.05		2.37		2.29
p		.046*		.022*		.027*

Note. M = Average. SD = standard deviation. t = t test value. *: p <0.05; **: p <0.01. Group 1 = at-a-distance (n=25). Group 2 = face-to-face (n=20). CoI #: CoI question number.

Discussion

CoI Presences Comparison

Results of the overall CoI presences comparison presented in this research reveal significant difference between F2F and at-a-distance students' perception of the teaching presence only; the F2F participants perceived a stronger teaching presence than those at-a-distance. Furthermore, a closer look at the distinctive elements of each presence also reveals significant difference between Group 1 and Group 2 on four items regarding students' perception of teaching presence, two items regarding students' perceptions of the cognitive presence, and three items regarding students' perceptions of the learner presence. Given Garrison and Cleveland-Innes's (2005) illustration of teaching presence as being crucial in providing structure (i.e., design) and leadership (i.e., facilitation and direction) to guide deep and meaningful learning in a non-F2F environment, it appears that students at the satellite site perceived a weaker teaching presence. As students need guidance and facilitation (Powell & Kalina, 2009), this means that they had an inferior opportunity to achieve deep and meaningful learning. Students' comments confirm that the teacher's integration of participants at-a-distance is very helpful in making them feel less distance and in increasing their sense of belonging. Moreover, the discipline problems (e.g., chit-chatting, negative attitude, and noise) and communication issues they said to have experienced can be attributable to the lower teaching presence some perceived. It is important to note that this research surveyed three different groups with a distinct teacher for each section and that one of them reported conflict between the F2F and at-a-distance groups. Careful consideration of students' comments, backed with the literature, helps better understand the findings of the research presented in this article.

Teaching Presence

Swan (2004) found that, in a distance education context, instructions need to be explicit and transparent since social cues or norms of the traditional F2F format are often absent for participants at-a-distance. Therefore, a predicator of the success of online courses is the clarity and consistency of the course structure, and whether it supports engaged instruction and dynamic discussions. The fact that at-a-distance participants perceived a lower teaching presence could explain why some also felt that course topics and due dates were less clear, that the teacher was less helpful, and that the feedback they received was less helpful as well. For instance, at-a-distance students commented that not having a teacher in their physical classroom may have caused them to miss certain material and that the increased level of noise attributable to the blended synchronous learning environment (BSLE) would have caused them to miss certain points of information. Some of them even noted that they sometimes felt misunderstood. All those factors can help account for at-a-distance students' perceptions of a lower teaching presence.

One possible explanation for the lower score of the teaching presence among at-a-distance participants could be a lack of institutional support; perhaps the teachers had not had professional development or the time to re-design their course (although the CGÎM does provide its teachers who are teaching online an additional 20% release time). Administrative decisions can also interfere with classroom dynamics when, for example as reported in the comments, students are not informed they are enrolled in a course taught in the BSDM. This is also true when low bandwidth prevents students and teachers from connecting with each other over their personal electronic device, or the resource person at the satellite site keeps changing. It is also possible that technical issues interfered with the teaching presence, thus preventing at-a-distance students to

fully feel such presence; in a BSDM, F2F and at-a-distance students can have a different perception of the same issue, thus relating to it in a different way.

Social Presence

While there were no significant statistical differences between Group 1 and Group 2, students' comments point to interesting advantages and limitations in their perception of the social presence. Several research results support the findings of this research on the social presence; for instance, Conklina et al. (2017) claim that some F2F students can feel neglected when the teacher spends more time dealing with at-a-distance participants and technical issues. Other comments confirm that unclear social cues through the technological lens made it harder to interpret body language and facial expressions, which lead them to feel weaker emotional, and thus social, presence (Cunningham, 2014). Additionally, an online community set-up by the teacher can help cultivate a sense of social presence (Garrison & Arbaugh, 2007) rather than, as noted in the comments, having a division between Group 1 and Group 2. It seems that questions and answers, collaboration, interaction, sharing ideas, reacting positively to classmates' comments, and helping each other helped foster participants' perceptions of the social presence. They also cited the importance of mutual respect, understanding each other's reality, and listening to one another as factors that helped increase their sense of belonging. It is possible that when answering the questionnaire, students were thinking of "a group" as their own group (either F2F or at-a-distance) rather than the entire class. While some literature (Bower et al., 2015; Cunnigham, 2014; Wang, Quek, & Hu, 2017) claims that F2F and at-a-distance students have a different perception of the social presence, the distinctive BSDM at the CGÎM could help account for the lack of significant statistical difference in the present study. While participants from Group 1 and Group 2 noted the importance of interaction as a key component of the social presence (Swan, 2004), they also found two elements that divided them from the other group: the need for comfort and trust to be willing to engage (Brown, 2001), as well as a need for recognition and appreciation (Cunnigham, 2014). However, each group still felt a sense of social cohesion because they were able to find those features within their very own group (Group 1 with Group 1, Group 2 with Group 2 rather than Group 1 with Group 2 and vice versa). In line with Szeto's (2014) findings that participants sought affective support within their own groups and displayed higher intra-group interactions, F2F participants in this study reported a stronger sense of belonging with their F2F classmates than with those at-a-distance. At-a-distance students also echoed this when they said they felt more help, sharing, and encouragement from each other than from the F2F group. The fact that participants at the satellite site shared a common classroom could account for the lack of significant statistical difference found between both groups in terms of their perceptions of the social presence; both F2F and at-a-distance groups found emotional presence and social cohesion within their own group rather than in the inter-group setting; this is confirmed in Szeto (2014).

Regarding pedagogy, the BSDM may have been a challenge for some of the teachers. While two of the three teachers had taught in the BSDM for several years, one of them was only beginning to get familiar with the format. Moreover, the BSDM requires everyone to be more patient, to raise their hand, to be more tolerant, which emerging adults may not necessarily be familiar with at this stage in their student life.

Cognitive Presence

Two of the 12 questions pertaining to students' perceptions of the cognitive presence showed significant difference; F2F students felt more motivated to explore content-related topics

than at-a-distance students, and at-a-distance students found that discussions helped them appreciate different perspectives. As their comments reveal, F2F participants showed interest and motivation, and enjoyed connecting content with other course material as well as learning new definitions. Perhaps at-a-distance students' comment that having a class at the end of the day made them more tired and less receptive could account for their lower levels of motivation to explore content-related topics. As the cognitive load theory (CLT) reveals, this could be thanks to the added cognitive load that the distance education format carries; indeed, the BSDM can increase the extraneous load, which in terms can jeopardize the intrinsic and germane loads (Sweller, Ayres, Kalyuga, 2011). Additionally, given that the teaching presence scored the lowest and that, as Swan (2004) reveals, a predicator of the success of at-a-distance courses is the clarity and consistency of the course structure, perhaps this explains why in some cases the class at the end of the day also felt like an added cognitive load. However, having surveyed three different courses with a distinct teacher for each could possibly account for some students' comments that they actually enjoyed the course structure because they could connect prior knowledge to this new one, and then use it in their internship thus making it easier to integrate the material. Different teachers mean different learning experiences and as Szeto (2014) noted, the teaching presence plays a central role in online and blended learning contexts since it requires multi-role leadership that drives the other CoI presences. As Garrison and Arbaugh (2007) claim, purposeful online communities can help cultivate a sense of social presence through safe communication among participants, which is necessary to foster a cognitive presence, and the structure and leadership of the teaching presence can also develop a cognitive presence; this confirms why at-a-distance students found that discussions helped them appreciate different perspectives. Finally, the findings corroborate the central roles of the teaching and social presences in fostering the cognitive presence.

Learner Presence

In terms of learner presence, three of the 14 questions revealed significant differences: F2F students feel they know how to evaluate the quality of their work, they are aware of their strengths and weaknesses in a learning context, and they take the time to review the material related to the work to be done – more so than participants from satellite sites. Shea and Bidjerano (2010) point to a strong relationship between teaching presence and self-efficacy, implying that an increased, positive teaching presence can encourage participants at a distance to be metacognitively, motivationally, and behaviourally active in their own learning process. The fact that at-a-distance students perceive a lower teaching presence, confirms these findings and the correlation between the teaching and learner presences. Moreover, the technical issues students said to have experienced in the BSLE could also account for at-a-distance students' lower score on the learner presence. In fact, Choy and Quek (2016) claim that encouraging students to ask questions, seek clarification, challenge assumptions, and develop metacognitive skills can help develop learner presence. Yet many of the at-a-distance students reported noise as one of the major technical issues; while they believe F2F students may not be aware of this, they say they can be quite loud and that simply moving one piece of paper, whispering, or dropping a pencil can come off extremely loud through the speakers. Moreover, they feel that their level of anxiety increases when they cannot be heard when asking a question and find that it is difficult to stay focused in general. Therefore, technological issues that interfere with at-a-distance participants' ability to ask questions, seek clarification, challenge assumptions, and develop metacognitive skills could explain why they scored lower on certain aspects of the learner presence. Additionally, Tichavsky Hunt, Driscoll, and Jicha (2015) contend that students at a distance need to be taught the skills to become self-regulated learners in an environment aiming to foster effective learning; while both

groups complain that the nursing program has a heavy workload, which requires autonomy and time management skills, some at-a-distance participants have reported having a tendency to wait until the last minute to do their work. Perhaps they began the program without any prior knowledge on how to self-regulate and engage in metacognition; also, maybe they were not guided by their teacher to develop such skills.

Conclusion

This research compared F2F and at-a-distance students' difference of perceptions of the CoI in a BSDM to find out whether, in three of the CGÎM's nursing program courses taught in the BSDM, there is a difference in the perception of presence as defined in the CoI framework elaborated in Garrison et al. (2000) and later revised by Shea and Bidjerano (2010) between F2F students and those at a distance. By measuring students' perceptions of the CoI, we measured their learning opportunities. Results of the overall CoI presences comparison presented in this research reveal significant difference between F2F and at-a-distance students' perception of the teaching presence only; the F2F participants perceived a stronger teaching presence than those at-a-distance. Thus, the findings raise a serious issue since the teaching presence plays a more central role than the other presences to reach the learning outcomes (Wicks et al., 2015); in a word, F2F and at-a-distance participants did not have the same learning opportunities. The significant differences found on specific items of the teaching, cognitive, and learner presences could be directly connected to the overall lower score of the teaching presence; indeed, a predicator of the success of online courses is the clarity and consistency of the course structure, and whether it supports engaged instruction and dynamic discussion (Swan, 2004). Moreover, while the use of media can serve as a motivator for students (Abrahamson, 1998), a cognitive overload from multimedia in the delivery strategies used can impact student satisfaction as well (Bradford, 2011).

The teaching profession has witnessed several transformations over the last decades and the shifting from the "sage on stage" to the "guide on the side" approach, as well as going from a sole F2F delivery mode to a BSDM are two examples that illustrate such changes. As a competency-based approach to education not only acknowledges the importance of teaching and learning, but also points to cooperation and metacognition as equally significant factors (Demers, 2014), the use of the BSDM requires institutions and instructors to think differently. Indeed, a non-F2F format impacts teachers' pedagogical approach as they need to re-design their courses, also known as the *course-and-a-half* phenomenon (McGee & Reis, 2012); this also means a need for more institutional support.

Limitations

One limitation of this study is that the results are only applicable over a semester. Additionally, advocating for consistency to benefit online students may take away some of the advantage of dynamic interaction (active participation, student engagement, meaning negotiation, and the like), which is so essential for students to be drawn to "travel" to the physical classroom. In terms of the convenience sampled used in this study, selection bias is a factor that could affect generalizability issues. The sample size being also relatively small, some of the apparent differences that were found to be statistically insignificant may have become statistically significant with a larger sample size. Moreover, students' perceptions may not necessarily

represent the reality; we saw that a large percentage of them are first-year students, and students' perceptions of the teaching presence require some give-and-take. Nevertheless, the teacher factor may very well have played a key role in the results (e.g., experience with the BSDM). We also saw that some students had had more prior experience with the blended synchronous course format, which can affect their level of ease in a BSLE. Additionally, students' educational, as well as motivational, backgrounds may vary. Moreover, there could be a gender bias that affects the results. Finally, the fact that the courses were taught by different teachers could impact the findings; for instance, teachers with more teaching experience could perform differently than teachers for whom this was their first or second time. Likewise, teachers' experience with, as well as their pedagogical knowledge of, the BSDM may also vary. Finally, the BSDM studied in this research made very little use of asynchronous activities – activities which could have helped foster students' perceptions of the four CoI presences.

Implications and Suggestions for Future Research

In light of the findings presented in this research, teachers, with the help of pedagogical advisors, should work on different aspects that will help both F2F and at-a-distance groups reach equal learning opportunities; they should research as well as develop protocols and tools to do so. Further research on onsite students' frustrations (when the teacher interacts with online students, for instance) could be explored in future work too. Students' comments also provide helpful tips on the most effective characteristics in a BSLE. Because of its numerous advantages, the BSDM will certainly continue to become one of the most popular course delivery modes. Student advantages of taking the course in a BSDM are not explored in this paper (mostly because students do not have a choice of course format) but could be assessed in further research. Yet the challenges posed by this course format also need to be addressed. As we are witnessing a growth in distance education and course formats such as the BSDM, it is important to ensure that a BSLE fosters a strong CoI among participants attending both F2F and from satellite sites. For teachers, the CoI framework elaborated in Garrison et al. (2000) and later revised by Shea and Bidjerano (2010) can serve as a strong pedagogical compass when designing courses in general. Additionally, the qualitative data drawn from students' comments highlights effective pedagogical strategies while also shedding light on the ones students find to be the least effective. It would also be relevant to formally survey teachers on their perceptions of the four CoI presences in a BSDM since this research only examined students' perspectives.

The questionnaire used, based on the CoI framework elaborated in Garrison et al. (2000) and later revised by Shea and Bidjerano (2010), revealed itself to be pertinent and useful. It could be used in professional development; for example, in instances of teacher training. More work should be done to reach a consensus on the terminology surrounding course delivery modes, and the impact of a BSDM on the CoI presences. Additionally, the emotional presence Cleveland-Innes and Campbell (2012) discuss was echoed by students' comments and should be investigated in further research. Finally, the relationship between the CLT elaborated by Sweller et al. (2011) and the BSDM was confirmed in some students' comments; this should also be investigated in further research.

References

Abdelmalak, M. (2014). Towards flexible learning for adult students: HyFlex design. In M. Searson & M. Ochoa (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2014* (pp. 706-712). Retrieved from https://www.learntechlib.org/p/130839

Abrahamson, C. E. (1998). Issues in interactive communication in distance education. *College Student Journal*, *32*(1), 33.

Arbaugh, J. B., Cleveland-Innes, M., Diaz, S. R., Garrison, D. R., Ice, P., Richardson, J. C., & Swan, K. P. (2008). Developing a community of inquiry instrument: Testing a measure of the community of inquiry framework using a multi-institutional sample. *The Internet and Higher Education*, *11*(3-4), 133-136. doi:10.1016/j.iheduc.2008.06.003

Barnard, L., Lan, W. Y., To, Y. M., Paton, V. O., & Lai, S.-L. (2009). Measuring self-regulation in online and blended learning environments. *The Internet and Higher Education*, *12*(1), 1-6. doi:10.1016/j.iheduc.2008.10.005

Bergeron, M.-H. (2014). Innovating to promote access to higher education in rural areas. *Pédagogie Collégiale, (27)*4, Summer 2014. Retrieved from http://aqpc.qc.ca/sites/default/files/revue/Bergeron-Vol_27-4.pdf

Bower, M., Dalgarno, B., Kennedy, G. E., Lee, M. J. W., & Kenney, J. (2015). Design and implementation factors in blended synchronous learning environments: Outcomes from a cross-case analysis. *Computers & Education*, *86*, 1-17. doi:10.1016/j.compedu.2015.03.006

Bradford, G. R. (2011). A relationship study of student satisfaction with learning online and cognitive load: Initial results. *The Internet and Higher Education*, *14*(4), 217-226. doi:10.1016/j.iheduc.2011.05.001

Brown, R. E. (2001). The process of community-building in distance learning classes. *Journal of Asynchronous Learning Networks*, *5*(2), 18–35. Retrieved from http://onlinelearningconsortium.org/sites/default/files/v5n2_brown_1.pdf

Cégep de la Gaspésie et des Îles. (n.d.). Le Cégep. Retrieved from http://www.cegepgim.ca/cegep

Choy, J. L. F., & Quek, C. L. (2016). Modelling relationships between students' academic achievement and community of inquiry in an online learning environment for a blended course. *Australasian Journal of Educational Technology*, *32*(4). doi: 10.14742/ajet.2500

Cleveland-Innes, M., & Campbell, P. (2012). Emotional presence, learning, and the online learning environment. *The International Review of Research in Open and Distributed Learning*, *13*(4), 269-292. doi:10.19173/irrodl.v13i4.1234

Conklina, S., Oyarzun, B., & Barreto, D. (2017). Blended synchronous learning environment: Student perspectives. *Research on Education and Media*, *9*(1). doi:10.1515/rem-2017-0004

Cunningham, U. (2014). Teaching the disembodied: Othering and activity systems in a blended synchronous learning situation. *The International Review of Research in Open and Distributed Learning*, *15*(6).

Demers, G. (2014). *Chantier sur l'offre de formation collégiale: Rapport final du Chantier sur l'offre de formation collégiale*. Retrieved from https://fneeq.qc.ca/wp-content/uploads/DEMERS-Report-juin-2014.pdf

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, *2*(2), 87–105. Retrieved from http://cde.athabascau.ca/coi_site/documents/Garrison_Anderson_Archer_Critical_Inquiry_model.pdf

Garrison, D. R., & Arbaugh, J. B. (2007). Researching the community of inquiry framework: Review, issues, and future directions. *The Internet and Higher Education*, *10*(3), 157–172. doi:10.1016/j.iheduc.2007.04.001

Garrison, D. R., & Cleveland-Innes, M. (2005). Facilitating Cognitive Presence in Online Learning: Interaction Is Not Enough. American Journal of Distance Education, 19(3), 133–148. doi:10.1207/s15389286ajde1903_2

Grenier, A., & Centre d'étude sur l'emploi et la technologie (Québec). (2011). Le marché du travail au Québec: perspectives à long terme, 2010-2019. Retrieved from http://www.emploiquebec.gouv.qc.ca/publications/pdf/00_imt_marche-travail_long-terme_2012-2021.pdf

Lakhal, S. & Meyer, F. (2019). Blended Learning.Tatnall A. (eds) Encyclopedia of Education and Information Technologies. (1-9). Springer, Cham. Retrieved from https://link.springer.com/referenceworkentry/10.1007%2F978-3-319-60013-0_41-1

Lakhal, S., Bateman, D., & Bédard, J. (2017). Blended synchronous delivery modes in graduate programs: A literature review and how it is implemented in the master teacher program. *Collected Essays on Learning and Teaching*, *10*, 47. doi:10.22329/celt.v10i0.4747

McGee, P., & Reis, A. (2012). Blended course design: A synthesis of best practices. *Journal of Asynchronous Learning Networks*, *16*(4), 7-22. Retrieved from https://files.eric.ed.gov/fulltext/EJ982678.pdf

Powell, K. C., & Kalina, C. J. (2009). Cognitive and social constructivism: Developing tools for an effective classroom. *Education*, *130*(2), 241-251. Retrieved from https://docdrop.org/static/drop-pdf/ConstructivismDay1-ln36v.pdf

Shea, P., & Bidjerano, T. (2012). Learning presence as a moderator in the community of inquiry model. *Computers & Education*, *59*(2), 316-326. doi:10.1016/j.compedu.2012.01.011

Shea, P., & Bidjerano, T. (2010). Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended learning environments. *Computers & Education*, *55*(4), 1721-1731. doi:10.1016/j.compedu.2010.07.017

Swan, K. (2004). *Relationships between interactions and learning in online environment.* Retrieved from: https://www.immagic.com/eLibrary/ARCHIVES/GENERAL/SLOANCUS/S041202C.pdf.

Sweller, J., Ayres, P., & Kalyuga, S. (2011). *Cognitive load theory*. doi:10.1007/978-1-4419-8126-4

Szeto, E. (2014). A comparison of online/face-to-face students' and instructor's experiences: Examining blended synchronous learning effects. *Procedia - Social and Behavioral Sciences*, *116*, 4250–4254. doi:10.1016/j.sbspro.2014.01.926

Szeto, E., & Cheng, A. Y. (2014). Towards a framework of interactions in a blended synchronous learning environment: What effects are there on students' social presence experience? *Interactive Learning Environments,* 2, 1-17. doi:10.1080/10494820.2014.881391

Tichavsky, L. P., Hunt, A. N., Driscoll, A., & Jicha, K. (2015). "It's just nice having a real teacher": Student perceptions of online versus face-to-face instruction. *International Journal for the Scholarship of Teaching and Learning*, *9*(2), 2. doi:10.20429/ijsotl.2015.090202

Vygotsky, L. S. (1962). Thought and language. Cambridge, MA: MIT Press (original work published in 1934).

Wang, Q., Quek, C. L., & Hu, X. (2017). Designing and improving a blended synchronous learning environment: An educational design research. *The International Review of Research in Open and Distributed Learning*, *18*(3). doi:10.19173/irrodl.v18i3.3034

Wicks, D. A., Craft, B. B., Mason, G. N., Gritter, K., & Bolding, K. (2015). An investigation into the community of inquiry of blended classrooms by a Faculty Learning Community. *The Internet and Higher Education*, *25*, 53-62. doi:10.1016/j.iheduc.2014.12.001

APPENDIX A

Community of Inquiry Questionnaire

Garrison, Anderson, and Archer (2000), later revised by Shea and Bidjerano (2010)

1. The instructor clearly communicated important course topics.
2. The instructor clearly communicated important course goals.
3. The instructor provided clear instructions on how to participate in course learning activities.
4. The instructor clearly communicated important due dates/time frames for learning activities.
5. The instructor was helpful in identifying areas of agreement and disagreement on course topics that helped me to learn.
6. The instructor was helpful in guiding the class towards understanding course topics in a way that helped me clarify my thinking.
7. The instructor helped to keep course participants engaged and participating in productive dialogue.
8. The instructor helped keep the course participants on task in a way that helped me to learn.
9. The instructor encouraged course participants to explore new concepts in this course.
10. Instructor's actions reinforced the development of a sense of community among course participants.
11. The instructor helped to focus discussion on relevant issues in a way that helped me to learn.
12. The instructor provided feedback that helped me understand my strengths and weaknesses relative to the course's goals and objectives.
13. The instructor provided feedback in a timely fashion.
14. Getting to know other course participants gave me a sense of belonging in the course.
15. I was able to form distinct impressions of some course participants.
16. Online or web-based communication is an excellent medium for social interaction.
17. I felt comfortable conversing through the online medium.
18. I felt comfortable participating in the course discussions.
19. I felt comfortable interacting with other course participants.
20. I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.
21. I felt that my point of view was acknowledged by other course participants.
22. Online discussions help me to develop a sense of collaboration.
23. Problems posed increased my interest in course issues.
24. Course activities piqued my curiosity.
25. I felt motivated to explore content related questions.
26. I utilized a variety of information sources to explore problems posed in this course.
27. Brainstorming and finding relevant information helped me resolve content related questions.
28. Online discussions were valuable in helping me appreciate different perspectives.
29. Combining new information helped me answer questions raised in course activities.
30. Learning activities helped me construct explanations/solutions.
31. Reflection on course content and discussions helped me understand fundamental concepts in this class.
32. I can describe ways to test and apply the knowledge created in this course.
33. I have developed solutions to course problems that can be applied in practice.
34. I can apply the knowledge created in this course to my work or other non-class related activities.
35. I am aware of the best ways I can achieve the goals I set for myself.
36. I know how to plan my time to manage and do the work I have to do.
37. I do not hesitate to ask for help as needed to complete a homework assignment or task.
38. I know how to identify problems that can interfere with the completion of the work to be done.
39. I know how to self-evaluate the quality of my work.
40. I am making efforts to self-evaluate my participation and motivation to complete the work to be done.
41. In a learning context, I am aware of my strengths and weaknesses.
42. I think about the strategies I use to complete the work to be done.
43. I try to make connections between the new subject and my previous knowledge.
44. I take the time to review the material related to the work to be done.
45. I realize that the fruit of my efforts in this course will serve me in the future.
46. I am actively seeking from my classmates additional information related to the course activities.
47. I am attentive to the cognitive changes that result from my participation in the course activities.
48. My academic performance and grades are the result of my efforts.

APPENDIX B

QUESTIONNAIRE SUR LA COMMUNAUTÉ D'APPRENTISSAGE

RAPPEL : Ce questionnaire vise à mesurer la perception de communauté d'apprentissage dans un contexte de téléenseignement. Les réponses au questionnaire, rempli de façon anonyme, permettront de comparer notamment la perception de la présence enseignante, de la présence cognitive, de la présence étudiante, et de la présence sociale, entre les participants en présentiel et à distance. La participation à ce projet de recherche se fait sur une base volontaire; ceux et celles désirant y participer doivent avoir pris connaissance et signé la *Lettre d'information au participant*.

PROFIL DU RÉPONDANT

Nom et numéro du cours	
Campus	
Genre auquel je m'identifie	☐ Masculin ☐ Féminin ☐ Préfère ne pas répondre
Statut étudiant	☐ Temps plein ☐ Temps partiel
Année dans le programme	☐ 1ere ☐ 2e ☐ 3e
Expérience avec l'enseignement à distance	☐ Première fois ☐ 2e fois ☐ 3e fois et +
Aisance à apprendre à l'aide des technologies	☐ Tout à fait à l'aise ☐ Très à l'aise ☐ À l'aise ☐ Peu à l'aise ☐ Pas du tout
Emploi	☐ Aucun ☐ Travail à temps partiel ☐ Travail à temps plein
Responsabilités familiales (enfants, aidant naturel, ou autre)	☐ Très prenantes ☐ Prenantes ☐ Peu prenantes/ne s'applique pas
Catégorie d'âge	☐ 17 ans et moins ☐ 18-21 ☐ 22-25 ☐ 26-30 ☐ 30-40 ☐ 50+

QUESTIONNAIRE

Ce questionnaire, traduction libre de Shea et Bidjerano (2010) (adaptation de Garrison, Anderson et Archer (2000), comporte 48 questions. Pour toutes les questions, répondez en utilisant l'échelle d'appréciation en 4 points ci-dessous :

Totalement en désaccord 0 1 2 3 4 **Totalement en accord**

	PRÉSENCE ENSEIGNANTE	**0**	**1**	**2**	**3**	**4**
1.	L'enseignant a clairement communiqué la matière importante du cours.	○	○	○	○	○
2.	L'enseignant a clairement communiqué les buts importants du cours.	○	○	○	○	○
3.	L'enseignant a clairement communiqué les instructions sur la façon de participer aux activités d'apprentissage du cours.	○	○	○	○	○
4.	L'enseignant a clairement communiqué les dates d'échéance importantes et la durée des activités d'apprentissage.	○	○	○	○	○
5.	L'enseignant s'est avéré utile dans l'identification des domaines d'accord et de désaccord dans la matière du cours, ce qui m'a aidé à apprendre.	○	○	○	○	○
6.	L'enseignant s'est avéré utile pour orienter la classe dans la compréhension de la matière du cours d'une manière qui m'a aidé à préciser ma pensée.	○	○	○	○	○
7.	L'enseignant s'est avéré utile pour maintenir l'engagement des étudiants et leur participation à un dialogue productif dans ce cours.	○	○	○	○	○
8.	L'enseignant s'est avéré utile pour maintenir les participants sur les tâches d'une manière qui m'a aidé à apprendre dans ce cours.	○	○	○	○	○
9.	L'enseignant a encouragé les étudiants à explorer de nouveaux concepts dans ce cours.	○	○	○	○	○
10.	Les actions de l'enseignant ont renforcé la construction d'un sentiment de communauté chez les participants dans ce cours.	○	○	○	○	○
11.	L'enseignant a contribué à orienter la discussion sur les questions pertinentes d'une façon qui m'a aidé à apprendre dans ce cours.	○	○	○	○	○
12.	L'enseignant a fourni des rétroactions qui m'ont aidé à comprendre mes forces et mes faiblesses dans ce cours.	○	○	○	○	○
13.	L'enseignant a fourni des rétroactions en temps opportun dans ce cours.	○	○	○	○	○

Selon vous, de quelle façon l'enseignant influence le sentiment d'appartenance au groupe (en présence et à distance) ?

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	PRÉSENCE SOCIALE	**0**	**1**	**2**	**3**	**4**
14.	Apprendre à connaître les autres participants au cours m'a donné un sentiment d'appartenance dans le cours.	○	○	○	○	○
15.	J'ai été en mesure d'éprouver de nettes impressions sur quelques participants au cours.	○	○	○	○	○
16.	La communication en ligne ou basée sur le web constitue un excellent moyen d'interaction sociale.	○	○	○	○	○
17.	Je me suis senti à l'aise de converser dans l'environnement en ligne dans ce cours.	○	○	○	○	○
18.	Je me suis senti à l'aise de participer aux discussions du cours.	○	○	○	○	○
19.	Je me suis senti à l'aise d'interagir avec mon enseignant et d'autres participants du cours.	○	○	○	○	○

20.	Je me suis senti à l'aise de signifier mon désaccord avec d'autres participants du cours, tout en conservant un sentiment de confiance.	○	○	○	○	○
21.	J'ai senti que mon point de vue était reconnu par les autres participants du cours.	○	○	○	○	○
22.	Les discussions en ligne m'aident à développer un sens de collaboration.	○	○	○	○	○

Selon vous, de quelle façon les autres participants du cours (en présence et à distance) ont une influence sur votre sentiment d'appartenance au groupe ?

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	PRÉSENCE COGNITIVE	**0**	**1**	**2**	**3**	**4**
23.	Les problèmes posés ont augmenté mon intérêt pour les questions relatives au cours.	○	○	○	○	○
24.	Les activités du cours ont piqué ma curiosité.	○	○	○	○	○
25.	Je me suis senti motivé à explorer des questions connexes au contenu dans ce cours.	○	○	○	○	○
26.	J'ai utilisé diverses sources d'informations pour étudier les problèmes posés dans ce cours.	○	○	○	○	○
27.	Les remue-méninges (*brainstorming*) et la découverte d'informations pertinentes m'ont aidé à résoudre les questions relatives au contenu dans ce cours.	○	○	○	○	○
28.	Les discussions en ligne ont été précieuses pour m'aider à apprécier des perspectives différentes dans ce cours.	○	○	○	○	○
29.	L'association de nouveaux éléments d'information m'a permis de répondre aux questions soulevées au cours des activités dans ce cours.	○	○	○	○	○
30.	Les activités d'apprentissage m'ont permis de construire des explications/solutions dans ce cours.	○	○	○	○	○
31.	La réflexion sur le contenu et les discussions m'ont aidé à comprendre les concepts fondamentaux dans ce cours.	○	○	○	○	○
32.	Je peux décrire des moyens de tester et d'appliquer les connaissances acquises dans ce cours.	○	○	○	○	○
33.	J'ai développé des solutions aux exercices dans ce cours qui peuvent s'appliquer dans la pratique et la vie quotidienne.	○	○	○	○	○
34.	Je peux appliquer les connaissances acquises dans ce cours à mon travail ou à d'autres activités hors de la classe.	○	○	○	○	○

Commentaires par rapport à mes processus cognitifs (événement déclencheur, exploration, intégration, résolution/application).

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	PRÉSENCE ÉTUDIANTE	**0**	**1**	**2**	**3**	**4**
35.	Je suis conscient(e) des meilleurs moyens que je dois prendre pour atteindre les objectifs que je me fixe.	○	○	○	○	○
36.	Je sais planifier mon temps pour gérer et accomplir le travail que j'ai à faire.	○	○	○	○	○
37.	Je n'hésite pas à demander de l'aide au besoin pour compléter un devoir, une tâche ou un travail.	○	○	○	○	○
38.	Je sais identifier les problèmes qui peuvent interférer avec la complétion du travail à accomplir.	○	○	○	○	○
39.	Je sais autoévaluer la qualité de mon travail.	○	○	○	○	○
40.	Je fais des efforts pour autoévaluer ma participation et ma motivation pour compléter le travail à faire.	○	○	○	○	○
41.	Dans un contexte d'apprentissage, je suis conscient de mes forces et faiblesses.	○	○	○	○	○
42.	Je réfléchis aux stratégies que j'utilise pour compléter le travail à faire.	○	○	○	○	○
43.	J'essaie de faire des liens entre la nouvelle matière, et mes connaissances antérieures.	○	○	○	○	○
44.	Je prends le temps de réviser la matière en lien avec le travail à faire.	○	○	○	○	○
45.	Je réalise que le fruit de mes efforts dans ce cours me servira dans le futur.	○	○	○	○	○
46.	Je cherche activement auprès de mes collègues de classe de l'information additionnelle ou complémentaire en lien avec les activités du cours.	○	○	○	○	○
47.	Je suis attentif aux changements cognitifs qui découlent de ma participation aux activités du cours.	○	○	○	○	○
48.	Ma performance académique et mes notes sont le fruit de mes efforts.	○	○	○	○	○

Commentaires par rapport à mes apprentissages.

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Commentaires additionnels.

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Merci!

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