



## NRC Publications Archive Archives des publications du CNRC

### **BVCam in the Virtual Classroom**

Simms, Deanne; Milliken, Mary; O'Donnell, Susan; Fournier, H  l  ne; Emond, Bruno

For the publisher's version, please access the DOI link below. / Pour consulter la version de l'  diteur, utilisez le lien DOI ci-dessous.

<https://doi.org/10.4224/5765012>

### **NRC Publications Record / Notice d'Archives des publications de CNRC:**

<https://nrc-publications.canada.ca/eng/view/object/?id=a4dcadc4-94c9-4d49-94c3-b81296105d7e>

<https://publications-cnrc.canada.ca/fra/voir/objet/?id=a4dcadc4-94c9-4d49-94c3-b81296105d7e>

Access and use of this website and the material on it are subject to the Terms and Conditions set forth at

<https://nrc-publications.canada.ca/eng/copyright>

READ THESE TERMS AND CONDITIONS CAREFULLY BEFORE USING THIS WEBSITE.

L'acc  s    ce site Web et l'utilisation de son contenu sont assujettis aux conditions pr  sent  es dans le site

<https://publications-cnrc.canada.ca/fra/droits>

LISEZ CES CONDITIONS ATTENTIVEMENT AVANT D'UTILISER CE SITE WEB.

**Questions?** Contact the NRC Publications Archive team at

PublicationsArchive-ArchivesPublications@nrc-cnrc.gc.ca. If you wish to email the authors directly, please see the first page of the publication for their contact information.

**Vous avez des questions?** Nous pouvons vous aider. Pour communiquer directement avec un auteur, consultez la premi  re page de la revue dans laquelle son article a   t   publi   afin de trouver ses coordonn  es. Si vous n'arrivez pas    les rep  rer, communiquez avec nous    PublicationsArchive-ArchivesPublications@nrc-cnrc.gc.ca.





National Research  
Council Canada

Conseil national  
de recherches Canada

Institute for  
Information Technology

Institut de technologie  
de l'information

# **NRC - CNRC**

---

## ***BVCam in the Virtual Classroom \****

Simms, D., Milliken, M., O'Donnell, S., Fournier, H.,  
Emond, B.  
May 2008

\* published as NRC/ERB-1154. 17 pages. May 2008. NRC 50411.

Copyright 2008 by  
National Research Council of Canada

Permission is granted to quote short excerpts and to reproduce figures and tables  
from this report, provided that the source of such material is fully acknowledged.

## **BVCam in the Virtual Classroom**

**May 2008**

**National Research Council  
Institute for Information Technology**

Deanne Simms  
Mary Milliken  
Susan O'Donnell  
Hélène Fournier  
Bruno Emond

This is an internal NRC report of the Broadband Visual Communications Strategic Initiative (BVC-SI), a project of the National Research Council Institute for Information Technology (NRC-IIT). The views expressed are those of the authors, who welcome feedback.

Copyright © NRC 2008

Report No.

## ACKNOWLEDGEMENTS

The authors would like to thank our colleagues at the NRC-IIT and the Communication Research Centre in Ottawa who organize and run the Virtual Classroom project, as well as the students and teachers who participated in the sessions.

Suggested reference for this report: Simms, D. C., Milliken, M, O'Donnell, S., Fournier, H, Emond, B. (2008). BVCam in the Virtual Classroom. NRC/ERB xxx. Report: 10 pages. Appendix: 7 pages. May 2008. NRC xxx.

## NRC-IIT STAFF

Deanne Simms, PhD Candidate  
Mary Milliken, PhD Candidate  
Susan O'Donnell, PhD  
Hélène Fournier, PhD  
Bruno Emond, PhD

## CONTACT INFORMATION

Dr. Susan O'Donnell, NRC-IIT  
[Susan.ODonnell@nrc-cnrc.gc.ca](mailto:Susan.ODonnell@nrc-cnrc.gc.ca)

Address:  
National Research Council  
Institute for Information Technology  
46 Dineen Drive  
Fredericton, NB  
Canada E3B 9W4

## 1. Background

The objective of this report is to document our study of technologies used and developed by the NRC-IIT project, the Broadband Visual Communication Strategic Initiative (BVC-SI). In particular, this report provides analysis of the effectiveness of the Broadband Virtual Camera (BVCam) in the Virtual Classroom.

### **Virtual Classroom Sessions**

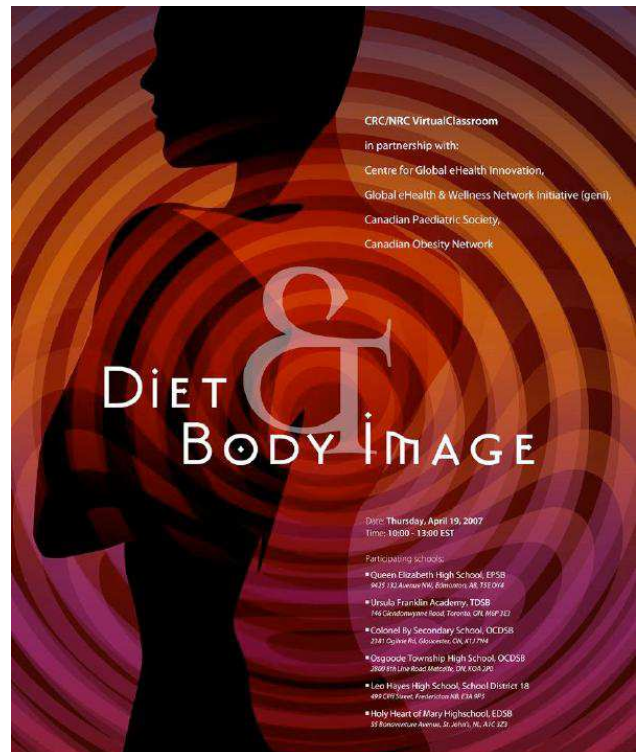
The Virtual Classroom is a project of the National Research Council and the Communication Research Center. The project involves high school students across Canada communicating about topical issues, primarily by live videoconference.

In April and November 2007, the Virtual Classroom included sessions on *Diet and Body Image*. Our research team collected data at both sessions. The results of the April 2007 session were published as NRC 49868-ERB 1150. This current report is based on data from the session in November 2007.

In the Virtual Classroom *Diet and Body Image* session held in November 2007, five schools and more than 500 students participated. West to east, the schools were located in: Edmonton, Alberta; Ottawa and Metcalfe, Ontario; Fredericton, New Brunswick; and St. John's Newfoundland. Survey data were collected at three of the five schools (Ottawa, Fredericton, and St. John's).

During the session, students were given access to three kinds of technologies to communicate about diet and body image: videoconferencing (live exchange of audio-visual), short videos (asynchronous audio-visual - making and posting short videos on

the web using the BVCam technology described later in this report); and text exchange via "Desire2Learn" a web-based asynchronous text exchange program for real-time chat among students in four of the five schools.



## 2. Research Focus

Our study is investigating the level of participation and engagement facilitated by two of the technologies used during the *Diet and Body Image* event: videoconferencing and online videos made using the BVCam. "Participation" includes interpersonal communication and observation, as well as the production and viewing of video recordings by students. "Engagement" includes conversation and action related to the topic of diet and body image.

Specifically, we explored the following research questions:

- To what extent are students in the different locations participating and engaging with each other using BVCam videos?
- What constitutes “successful” participation and engagement among a large group of people in multiple locations using broadband visual communication technologies?
- What are the enablers and constraints to successful participation and engagement?
- How can the design and use of the BVCam and the Virtual Classroom sessions be improved to facilitate participation and engagement?

A final goal of the current investigation was to explore the influence of peer-created video upon students’ attitudes or perceptions of diet and body image.

### ***BVCam: Description of Technology***

The BVCam is a technology developed at the National Research Council. The BVCam application includes remote H.323 session recording on a server so that BVCam clients do not need video production capability, nor are they required to upload files as the video is stored directly on the server. The BVCam application also offers transcoding and video streaming services. Users can also create text messages and video responses to existing BVCam videos – this feature provides users with diverse means to communicate with each other.

### **3. Methodology and Participant Profile**

Our research team received ethics approval from the NRC Research Ethics Board and the research ethics committees of four

school boards in Canada to collect data from students participating in the Virtual Classroom project. The Virtual Classroom *Diet and Body Image* event took place on November 21, 2007. The event involved approximately 520 students in five schools and lasted for three hours.

We collected data from three schools in Ottawa, Fredericton, and St. John’s. The approximately 250 students participating in the Virtual Classroom event in these three schools were invited to complete a questionnaire (Appendix III), and 152 students completed questionnaires. Questionnaires were checked for consistency and the consistent data were analyzed for this report.

The data analyzed for this report also include transcripts of focus group sessions conducted with a small group of students in each of the three schools, the 62 BVCam videos posted online, and observational data from onsite researchers.

### ***Profile of Students Surveyed***

Of the 152 students who completed the survey, 40% were male and 60% were female. For 82%, English was their first language; for four percent, French; and for 14%, a language other than French or English.

### ***General Use of ICT by the Students***

Students reported that they were comfortable using computers. Twenty-nine percent of students rated their technical ability with computers in general as excellent and 66% rated their ability as average. Fifty percent of students reported that they liked working with computers “very much” and 43% reported that working with computers is “Okay”. A further 59% of students reported that, in general, they like appearing on camera.

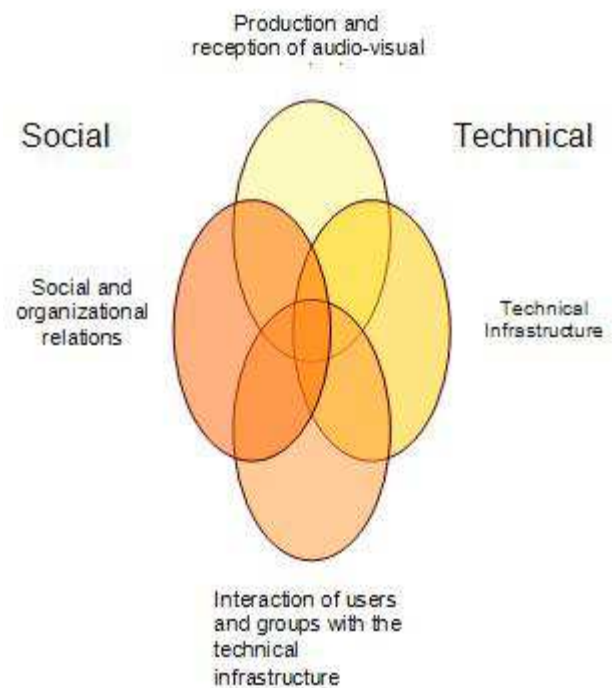
Students reported the information and communication technologies (ICT) they personally use and the frequency with which they use them (see Appendix II). Using MSN, Yahoo! or other types of chat were the most frequently reported technologies: 62% of students indicated using them everyday. Facebook, Second life or Myspace was the second most frequently used technology: 55% of students reported using these technologies every day. Using a cell phone for calls or texting was the third most common technology used: 49% of students reported doing this every day. The fifth most frequently used technology was using the home telephone with 44% of students reporting using this technology everyday.

Writing and mailing letters was the least frequently reported technology used: 66% of students stated they never did so (See Appendix II). Using a website/blog they built themselves and uploading a video to share with others were the second and third least frequently used technologies with 63% and 62% reporting never or rarely engaging in these activities, respectively. Finally, using a cell phone for taking pictures and making videos was the fourth least frequently used technology: 60% of students reported never or rarely doing this.

#### 4. Analytic Framework

Our research is focused on improving participation and engagement among people in multiple locations using broadband visual communication technologies. This includes multi-site videoconferencing (live and archived) and user-generated online video (including the videos generated by the BVC-Cam).

#### Analytic Framework



We developed an analytic framework to analyze the use of broadband visual communication technologies for social interaction. The framework identifies the variables that help and hinder the ways in which people use these technologies to engage with each other. This framework, based on a variety of theoretical approaches from multiple social sciences disciplines, is used to understand the social implications of broadband visual communications technologies and the social aspects of technology design and implementation.

There are four core variables for investigation: technical infrastructure, the interaction of users and groups with the infrastructure, production and reception of content and finally, social and organizational aspects of the interaction. Our report is focused on the last three variables.

## 5. Interaction with the Technologies

This component of the framework is comprised of both technical and social elements. Some variables within this category of interest to this study include the level of awareness, use and comfort with the technologies, the technical skills of students, the perceived ease of use of the technology and the perceived usefulness of the technology.

### ***BVCam Experience and Level of use***

Students did not have much experience with the BVCam prior to the November Virtual Classroom *Diet and Body Image* Session. Seventy-one percent of students reported not having used the BVCam recording equipment in the past. Twenty-four percent indicated having used the equipment one to two times in the past.

Only 48% of the students were able to take part in making a BVCam video during the Virtual Classroom session. The sessions were designed so that not all students would make videos; generally those that did were leaders or volunteers from the small group discussion sessions. Some students were assigned the task of using BVCam, while others had other tasks to do. The situation was different among the schools - not all the schools organized the event the same way, i.e. distribution of tasks.

### ***Unequal Levels of BVCam Use***

Analysis of the session BVCam video logs revealed a large disparity in the number of videos posted by different schools (see Appendix I).

The students in all schools belonged to one of four colour groups for the event. At the group level, the numbers of videos posted was fairly even across the color divisions with the Red and Green groups posting 18

videos, the Black group posting 15 and the Blue group posting 11.

However the school in Fredericton posted the majority of the videos (35) while the schools in Ottawa and St. John's only posted 15 and 11 videos respectively. (The schools in Metcalfe and Edmonton posted only one video in total).

This disparity was also evident in the text replies. The Ottawa school was the only one to post text responses to the videos (4 posts in total), and only students in the Red Group at the Ottawa school posted the text replies.

These results are similar to the Virtual Classroom *Diet and Body Image* session in April 2007 wherein there were dramatic differences in the numbers of videos posted by each school. In the April session, 66 videos were made. However, the schools with the lowest number of video postings - Metcalfe, Edmonton and Toronto - produced only eight videos in total. The three schools with the highest video postings - Ottawa, Fredericton and St. John's - produced 58 videos in total.

Having such huge disparities among the different schools obviously limits the effectiveness of using BVCam videos for communication among different locations participating in the Virtual Classroom.

Although our data alone do not allow us to state definitively why the discrepancy exists in video posting across schools, we surmise that the incentive for Fredericton students of academic credit (i.e., course marks) for participation and video posting contributed to the higher rate of video posting at their school.



### ***Ease of Use and Usefulness of BVCam***

The students believed the BVCam was easy to use: 83% of students agreed that learning to operate the BVCam would be easy for them; 78% agreed they would find it easy to communicate with people by using the BVCam to make videos; 76% reported it would be easy for them to become skilful at using the BVCam; 74% reported they would find the BVCam easy to use creatively; and 73% agreed that they would find the BVCam “flexible enough to do what I want it to do”.

The students also perceived the BVCam to be useful: 81% of students agreed that using the BVCam would improve their ability to communicate ideas to students at other schools; and 88% agreed that using the BVCam would improve the ability for students at other schools to communicate their ideas back.

Further, 48% of students thought posting BVCam videos was useful, 45% thought viewing BVCam videos was useful, 34% thought posting a text comment to an online BVCam video was a useful function of the software interface, and 36% thought reading a comment posted to an online BVCam video was useful for interacting with students at other schools during the session.

When asked about the usefulness of the BVCam *before* the Virtual Classroom session, 48% thought posting BVCam videos was useful, 46% thought viewing BVCam videos was useful, 41% thought posting a text comment to an online BVCam video was useful and 41% thought reading a comment posted to an online BVCam video was useful for interacting with students at other schools.

### ***Usefulness of the other Virtual Classroom Technologies***

Students reported that some technologies were more useful than others for interacting with students at other schools during the Virtual Classroom session. Responses indicated that 58% thought email was useful, 75% thought online chat (e.g., Desire 2 Learn) was useful, and 96% thought videoconferencing was useful.

Similarly, students rated certain technologies as more useful than others for interacting with students from other schools *before* the event. Responses indicated that 71% of students thought email was useful, 59% thought online chat was useful, 51% thought videoconferencing was useful.

## **7. Production and Reception of Audio-Visual Content**

This category includes both technical and social variables. The focus here is on the reception of the BVCam videos by the students.

### ***Viewing the BVCam Videos***

The survey found that only 45% of students viewed the BVCam videos posted by students from other colour groups or other schools during the Virtual Classroom session. Having less than half the participants viewing the videos made by students in other colour groups or other schools obviously limits the effectiveness of online videos for communication in the Virtual Classroom. The observations of researchers at the sites and the focus group sessions with students noted the following restraints to accessing the BVCam videos.

First, the URL (web address) for viewing the BVCam videos was not displayed prominently in the classrooms or in the

session handouts to students; most students were not aware how they could access the videos and viewing the videos was not specifically discussed or encouraged during the Virtual Classroom session, despite having a time for this on the agenda. Consequently, viewing the videos was not a priority for students.

Second, the students were very busy participating in other tasks during the Virtual Classroom and in the focus group sessions they indicated they did not have time to view the videos.

Third, the computer resources available were not sufficient for using videos as a means of communication. In the Fredericton school for example, the desktop computers available did not have speakers or headphones so could not be used for viewing the BVCam videos. There were 15 laptops for 120 students, not enough to go around, and in any case it would have been difficult to view / listen to the BVCam videos on the laptops because it would have made far too much noise in the room; headphones were not provided to the students. The low ratio of laptops to students is typical of high schools in Canada.

### ***Quality of BVCam video Viewing Experience***

Of those students who did view the BVCam videos, most reported a positive viewing experience. Ninety percent of these students (N = 70) reported that it was easy to find the videos they were looking for. Ninety-two percent (N=59) reported that the colors of the BVCam videos were either "Real and true" or "Close to real and true". Students reported that there were some technical issues that disrupted their engagement with the BVCam. When asked if the quality of any of the following list of

technical aspects of the BVCam videos distracted or interfered with their engagement or interest in the topic or content, 45% reported the quality was fine and did not interfere with their engagement with the subject, but 30% reported the quality of image and sound interfered with their engagement. A further 27% indicated that the steadiness of the video streaming signal interfered with their engagement in the video content.

Students reported problems with image clarity; 19% of students (N = 58) indicated it was always quite clear, 41% reported it was clear about half the time, and 40% reported that it occasionally broke up into pixels or, square boxes. Fifty-two percent of students said they could always see who was speaking and 48% reported "sometimes" being able to see who was speaking. Forty-two percent of students said that sound quality was always clear in the videos and 54% reported that it was sometimes not clear. The majority of students (78%) reported images would sometimes freeze/get out of sync with the sound which compromised overall image and sound quality.

## **8. Social and Organizational Relations**

This category is comprised of purely social variables. The main variables of interest from this category in the present investigation were related to the impact of the technologies as demonstrated in attitude or perspective change as a result of viewing peer-created, user-generated video.

As stated earlier, only 45% of the students watched the BVCam videos. However the overwhelming majority of those students who watched the BVCam videos reported

that the videos had an impact on them in some way.

Ninety-one percent reported that they learned something about diet and body image from watching the videos. Seventy-five percent of students reported that watching the BVCam videos influenced their perspectives or opinions about diet and body image. Further, 93% reported that the videos helped them understand the perspectives or opinions of the students from other schools about diet and body image.

### ***Virtual Classroom Experience***

Many students did not have past experience with Virtual Classroom videoconferencing sessions. Fifty-three percent of students reported they had no experience with Virtual Classroom sessions prior to the November session. Twenty-seven percent reported they had previously participated in one to two sessions and 15% indicated they had participated in three to four sessions. Only 5% reported having participated in five or more sessions in the past.

Students thought the Virtual Classroom videoconferencing sessions were good tools for relationship building and maintenance. Ninety-two percent of students reported that they saw the Virtual Classroom sessions as providing opportunities for students across the country to build a community or build relationships with each other that are based on common interests. They also saw these sessions as a good way to collaborate with students from other schools. Fifty-five percent reported that the sessions are a good way to get to know someone from another school, and 88% thought that using short videos is a good way to communicate with other people. However, of the 47% of

students who had participated in a Virtual Classroom session in the past, only 8% of these students had ever communicated with a student from another school they met during the Virtual Classroom after the session was finished.

Overall, 68% of students indicated that the Virtual Classroom session encouraged them to think differently about diet and body image in their own lives. As for change and discussion outside of the Virtual Classroom environment, 67% of students indicated that they would talk with family and non-school friends about what they learned during the session.

## **9. Conclusions**

The overall finding derived from analysis of the questionnaire and qualitative data is that the majority of students enjoyed the Virtual Classroom session and found it a valuable learning experience.

It is encouraging to note that most students reported that the Virtual Classroom session had an impact on their attitudes and perceptions of diet and body image. Of the students who viewed the BVCam videos, most had learned something as a result. Further, it is promising that two thirds of the students indicated that they would talk with others about what they learned during the session; this speaks to the potential for the wider dissemination of knowledge that has been shared during the Virtual Classroom sessions beyond the individual video-linked sessions.

Our analysis of the data from the Virtual Classroom session held in November 2007 allowed us to derive the following answers to our research questions:

- To what extent are students in the different locations participating and engaging with each other using BVCam videos?

Less than half the students in the Virtual Classroom session either made or viewed a BVCam video. There were large disparities in the participation of students from the different schools in the various geographic regions. Namely, the majority of video postings were made by the school in Fredericton, and all of the text postings were made by the Red team at the school in Ottawa. We presume the disparity in video production across schools was related to the incentive for participation at the Fredericton school (i.e., course credit) and the lack of emphasis on video posting at the other schools.

Further, some students who were able to partake in producing a BVCam video did not actually speak during the videos. This discrepancy of the level of participation amongst students no doubt affected the level of engagement they felt during the session.

- What constitutes “successful” participation and engagement among a large group of people in multiple locations using broadband visual communication?

Successful participation in this context includes interpersonal communication between students in various geographic locations. It also means interactive communication including contributions to discussion, sharing ideas with others as well as being receptive to the viewpoints of others and engaging in dialogue. Further, it includes producing, viewing and responding to videos made by other color groups and schools.

The fact that students reported they felt able to share their own thoughts and ideas as well as understand the perspectives of students at other schools through the BVCam videos, speaks to the utility of this technology in active participation. However, the production and viewing of video recordings by students was not uniform across schools or color groups and the majority of students did not partake in this aspect of the Virtual Classroom sessions.

Successful engagement also refers to conversation and action with respect to the subject material presented during the session. The engagement of the students with the material was clearly demonstrated by reports from the majority of students who watched the videos that they learned about diet and body image through the BVCam videos. The fact that students reported that what they learned in the session encouraged them to think differently about diet and body image in their own lives, and that they would likely discuss what they had learned with others (e.g., friends and family members), demonstrates the impact of the session on the students at a personal level as well as an action-oriented response to the material.

- What are the enablers and constraints to successful participation and engagement?

In addition to the majority of student’s confidence in their computer skills and their comfort level with appearing on video, the enablers to successful participation were the students’ views of the utility of the technology for a creative outlet, communication and relationship building.

The fact that most of the students agreed that the BVCam was useful and easy to use

creatively possibly added to their opinion that the BVCam would be a good creative tool which would let them communicate in an individualized, innovative manner. Further, the fact that students also reported that the BVCam was useful and easy to use to communicate with others presumably reinforced their view that the technology was a good way to interact with and build relationships based on shared interests with students whom had similar interests but lived in different geographic regions across Canada.

The constraints to successful participation were primarily the limited amount of time allotted to use the BVCam and view the videos and physical limitations of the environment in which the computers for making and viewing the videos were situated. Unfortunately, the itinerary for the Virtual Classroom session did not allow for much time to post or view BVCam videos.

Also, the Virtual Classroom environments were often chaotic. Some sites operated out of small classrooms where noise levels were loud and potentially quite distracting. Ideally, locations that are uniformly quiet and more settled (e.g., having students remain seated in their chairs instead of walking around) would make for more appropriate settings. Also, if there had been an opportunity for all students at all of the sites to participate in the production and viewing of the videos, this would allow for increased participation at the individual level. Additionally, equivalent incentives provided for students at all the locations would encourage more balanced participation including prior to, during and after the sessions.

The enablers to successful engagement were that most students thought the BVCam videos would be an asset for them

in conveying their ideas, interacting with and understanding the perspectives of students at other schools across Canada.

Other technical aspects impeded the full participation and engagement of the students such as the sound and image clarity, steadiness of the video streaming signal and the tendency for the image to break into pixels and get out of sync with the sound. These technical difficulties distracted the students and seemed to disrupt their engagement with the communication process; when the image quality lessened the students seemed to lose focus and would shift their attention away from the videoconference session.

- How can the design and use of the BVCam and the Virtual Classroom sessions be improved to facilitate participation and engagement?

Shared Experience: During the Virtual Classroom session there was a division between making the BVCam videos and sharing or viewing the videos. While the individual color groups made videos that were occasionally viewed by the same color groups at other locations, very few watched videos made and posted by the other color groups from any location. This was not a requirement of the session, and there was little time allotted or available to view other color group's videos. Future sessions would benefit from adjusting their time schedules to allow for a more shared experience around the videos, particularly viewing the videos. The BVCam video viewing experience was quite different from the shared atmosphere in which the videoconference was conducted. The videoconference session was broadcast to students at the different schools simultaneously and they all participated in viewing and creating the video content.

Length of experience: Even though the students were involved in preparatory activities leading up to the Virtual Classroom the event itself was presented as a three-hour session on one day. There was no structured time to view and reflect on the videos produced by students using the BVCam. One obvious way to improve the session would be to structure the Virtual Classroom as a series of events, including a synchronous videoconference session with asynchronous video elements before and after the videoconference session, to give students time to view and interact with the videos posted online.

Resources: Another aspect which could be altered to facilitate participation and engagement is in the area of resources available in the Virtual Classroom sessions. The number of computers available to students could be increased. In some of the schools the ratio of computers to students was too small to allow for adequate viewing. For example, at the school in Fredericton there were only 15 computers for 120 students and there were even fewer in St. John's. The fact that some students were unable to access a computer made it less likely that they would view the videos the other groups and schools produced.

## Appendix 1: BVCam videos and text replies posted for November 2007 Virtual Classroom session

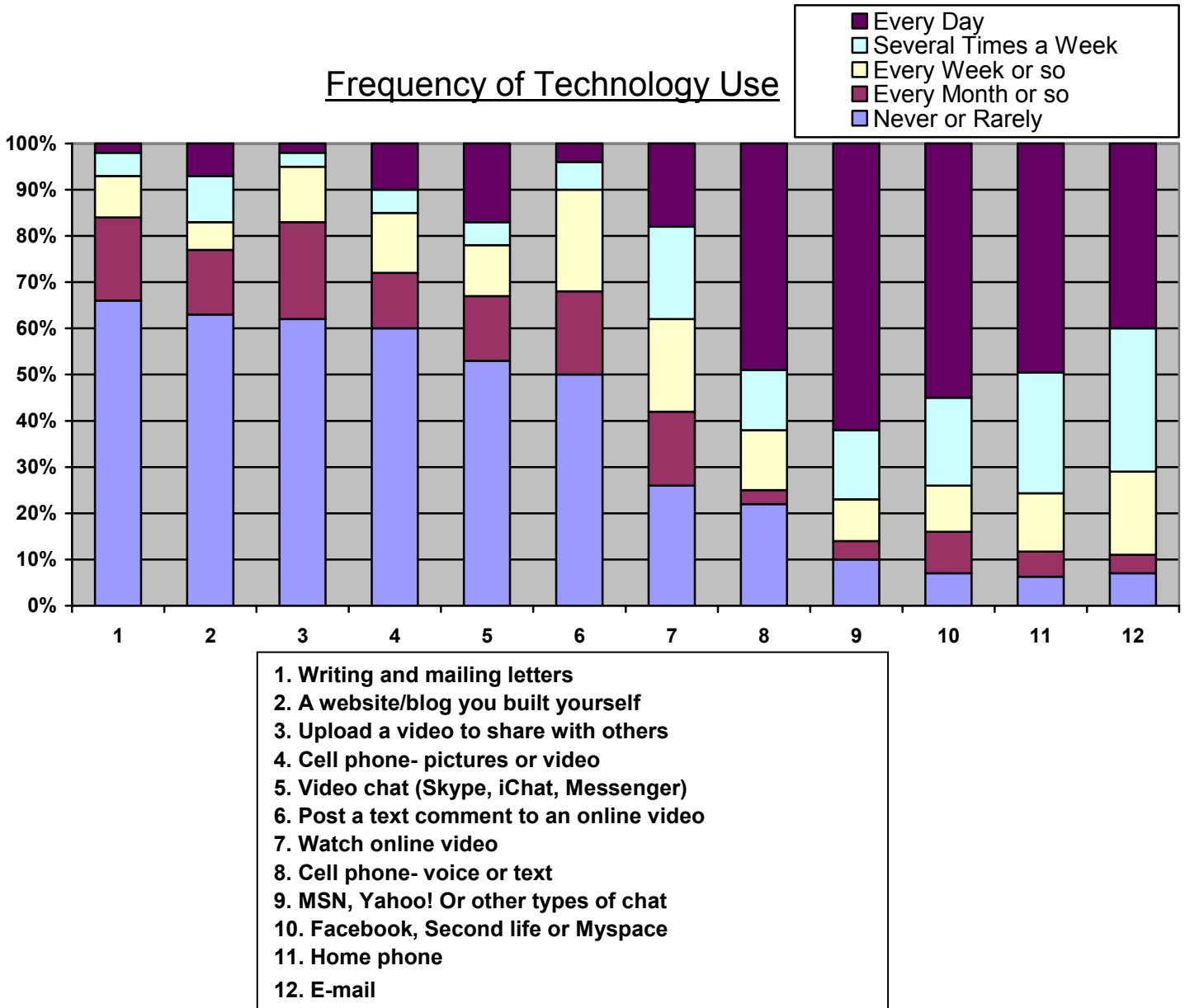
Count of Videos (excluding text replies)
62

group	Number of videos
Red	18
Green	18
Black	15
Blue	11

school	Number of videos
Fredericton	35
Ottawa	15
Osgoode	1
St. John's	11

school	Number of text replies
Ottawa	4

**Appendix II: Use of information and communication technologies by students participating in the November Virtual Classroom session**





## Appendix III: Virtual Classroom Questionnaire

### BVCAM QUESTIONNAIRE

Background questions - Please check the box next to appropriate answers.

#### 1. Are you

- Male  
 Female

#### 2. Are you a

- Student *If so, are you a group leader?*  Yes  No  
 Teacher / Staff member / Other

#### 3. What is your first language?

- English  
 French  
 Other \_\_\_\_\_ (specify)

#### 4. Have you participated in any of the sessions (called Virtual Classroom) like this in the past? If yes, how many?

- No, none  
 1-2 sessions  
 3-4 sessions  
 5 or more sessions

#### 5. Do you see the Virtual Classroom sessions as providing opportunities for students across the country to build a community or build relationships with each other that are based on common interests?

- Yes  
 Yes somewhat  
 Not sure  
 Not really  
 No

#### 6. How much do you like working with computers?

- Very much  
 It's okay  
 I'd rather be doing other things  
 Not interested at all

#### 7. How would you rate your technical ability with computers in general?

- Excellent/a pro  
 Average  
 Not good

#### 8. In general, do you like appearing on camera?

- Yes  
 Yes somewhat  
 Not sure  
 Not really  
 No

#### 9. Which of the following do you use to keep in touch with acquaintances, friends or family?

On a scale of "never" to "every day", check all that apply.

	Never or rarely	Every month or so	Every week or so	Several times/week	Every day
Home telephone					
Cell phone - voice or text					
Cell phone - pictures or video					
E-mail					
MSN, Yahoo! or other types of chat					
A website / blog you built yourself					
Video chat (Skype, iChat, Windows Live Messenger)					
Watch online video					
Upload a video to share with others					
Post a text comment to an online video					
Facebook, Second life or Myspace					
Writing and mailing letters					

**How easy do you think it would be to use the BVCam regularly if it was always available?**

For each statement below, place an **X** in the box that best describes your level of agreement or disagreement. If you want to explain anything in a note, please use the blank space at the right hand side.

10. Learning to operate the BVCam would be easy for me.					
Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
11. I would find the BVCam flexible enough to get it to do what I want it to do.					
Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
12. I would find the BVCam easy to use creatively.					
Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
13. It would be easy for me to become skilful at using the BVCam.					
Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
14. I would find it easy to communicate with people by using the BVCam to make videos.					
Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	

**How useful would the BVCam be if it was always available to use?**

For each statement below, place an **X** in the box that describes your level of agreement or disagreement. If you want to explain anything in a note, please use the blank space at the right hand side.

15. Using the BVCam would improve the ability to communicate my/our ideas to students at other schools.					
Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
16. Using the BVCam would improve the ability for students at other schools to communicate their ideas to me/us.					
Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	

**Making BVCam Videos - Please check the box next to the appropriate answers.**

17. Have you used the BVCam video recording equipment before today's session, and if so, how often?	
<input type="checkbox"/> No, not at all <input type="checkbox"/> 1-2 times <input type="checkbox"/> 3-4 times <input type="checkbox"/> 5 times or more	
18. Were you able to take part in making a BVCam video today?	
<input type="checkbox"/> Yes      If yes, was it easy or difficult to use the BVCam video recording system? _____ (specify) <input type="checkbox"/> No        If no, skip to question #20.	
19. If you have used BVCam in the past, how did using it today compare with your past experience?	
_____ _____ _____	
20. Do you think that using short videos is a good way to communicate with other people?	
<input type="checkbox"/> Yes <input type="checkbox"/> Yes somewhat <input type="checkbox"/> Not sure <input type="checkbox"/> Not really <input type="checkbox"/> No	Why/why not? _____ _____ _____

**Watching BVCam Videos (technical) - Please check the box next to appropriate answers.**

**21. Was it easy to find the videos you were looking for?**

- Yes
- Yes somewhat
- Not sure
- Not really
- No

I did not watch any of the videos. Please explain why not, then skip to question # 36.

**22. Whose videos did you watch? Please check all that apply.**

- Your colour team from other schools
- Your colour team from your own school
- Other colour teams from other schools
- Other colour teams from your own school
- All of the videos, from your own school and the other schools

**23. Colours looked:**

- real and true
- close to real and true
- not very real and true
- really off, not at all real and true

Did this affect your viewing experience?

- Positively
- Negatively
- Not at all

**24. Image clarity was (check all that apply):**

- always quite clear
- clear about half of the time
- unclear all of the time
- occasionally broke up into pixels (square boxes)
- frequently broke up into pixels (square boxes)
- interrupted-that happened occasionally (specify type): \_\_\_\_\_
- interrupted-that happened frequently (specify type): \_\_\_\_\_

Did this affect your viewing experience?

- Positively
- Negatively
- Not at all

**25. You could see who was speaking:**

- always
- sometimes
- never

Did this affect your viewing experience?

- Positively
- Negatively
- Not at all

**26. Sound quality was:**

- always clear in the videos
- sometimes not clear
- often interrupted or distorted

Did this affect your viewing experience?

- Positively
- Negatively
- Not at all

**27. Overall image and sound quality of the videos:**

- image and sound were always synchronized
- image would freeze/get out of sync' with sound sometimes
- sound and image frequently not synchronized

Did this affect your viewing experience?

- Positively
- Negatively
- Not at all

**28. Did you post any text comments to the BVCam videos?**

- Yes
- No

**29. Did you read any of the text comments other people posted to the BVCam videos?**

- Yes
- No

**30. Is the text comment option useful?**

- Yes
- No

**Watching BVCam Videos (content) - Please check the box next to appropriate answers.**

**31. Did you learn anything about diet and body image from watching these BVCam videos?**

- Yes
- Yes somewhat
- Not sure
- Not really
- No

**32. Did watching these short video influence your perspectives or opinions about diet and body image?**

- Yes
- Yes somewhat
- Not sure
- Not really
- No

**33. Did watching the BVCam videos help you understand the perspectives or opinions of the students from other schools about diet and body image?**

- Yes
- Yes somewhat
- Not sure
- Not really
- No

**34. Did the quality of any of the following technical aspects of the BVCam videos distract you or interfere with your engagement/interest in the topic or content? Check all that apply.**

- The quality was fine and did not interfere with my engagement with the subject
- Colours
- Image clarity
- Identity or location of speaker
- Sound
- Steadiness of the video streaming signal

**35. What do you think would improve the ability of the BVCam to help people communicate with each other?**


**Overall session organization**

**36. If you have been part of a Virtual Classroom session in the past, how did the session today compare with your past experience?**

- Better
- The same/comparable
- Worse
- Not sure
- This is my first Virtual Classroom session

Comments?

**37. Was the session today a good way to collaborate with students from other schools?**

- Yes
- No

Comments?

**38. Is there anything you can suggest that would improve Virtual Classroom sessions?**

**39. Are sessions like today a good way to get to know someone from another school?**

- Yes
- Yes somewhat
- Not sure
- Not really
- No

**40. Have you ever communicated after a Virtual Classroom session with a student from another school you met in the session?**

- Yes
- No
- Not sure
- This is my first Virtual Classroom session

**41. Rate how useful each of these technologies was today for interacting with students at other schools.**

	very useful	useful	not useful	did not use
E-mail				
Online chat-either text (Blackboard) or video				
Videoconference				
Posting BVCam videos				
Viewing BVCam videos				
Posting a text comment to an online BVCam video				
Reading a comment posted to an online BVCam video				

**42. Rate how useful each of these technologies was in the past week (not including today) for interacting with students at other schools. Check all that apply.**

	very useful	useful	not useful	did not use
E-mail				
Online chat-either text (Blackboard) or video				
Videoconference				
Posting BVCam videos				
Viewing BVCam videos				
Posting a text comment to an online BVCam video				
Reading a comment posted to an online BVCam video				

**43. Will you talk with family/non-school friends about what you learned in this Virtual Classroom session?**

- Yes
- Yes somewhat
- Not sure
- Not really
- No

Comments?

**44. Has the Virtual Classroom session encouraged you to think any differently about Diet and Body Image in your own life?**

- Yes
- Yes somewhat
- Not sure
- Not really
- No

Comments?