

Global expertise in the classroom:

Evaluating the learning potential of teaching with videoconferencing¹

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Introduction

Adopting videoconferencing (VC) as a method of teaching journalism and communication students requires a clear understanding of its affordances². Videoconferencing engenders *interactive* space for knowledge creation (see Comber & Lawson, 2012; Doggett, 2008; Freeman, 1998; Knipe & Lee, 2002). In this paper it is argued that, when used for educational purposes, VC should be treated as a collaborative knowledge-creation event, where certain *dynamics of interactive collaboration* among the participants (Expert, Instructor, and Learner) are observed. Due to the shared communicative space that the medium both allows and requires, the actors share as well a sense of responsibility for, and authorship of, the success of the event. As a result, the argument goes, each of the

¹ The research presented in this paper was supported by a grant provided by the University of North Dakota Office of Instructional Development, in Summer 2010.

² Siemens & Tittenberger (2009) define an affordance as “the action potential of a technology” (p. 21).

participants comes out of a VC event with enhanced experiential knowledge about the medium, the subject matter, and the process of interactivity.

Each year thousands of university graduates in journalism and communication join the global work force, where cross-cultural communication competence is valued as high as expertise in web writing³, reporting, public relations, marketing, or advertisement. While the latter type of professional training is the focus of a number of academic programs in journalism and communication, the former type of competence is often addressed by just creating one undergraduate course in cross-cultural communication in the curriculum.

This paper proposes that, regardless of the subject of a journalism or communication course, bringing international expertise to the classroom via videoconferencing is an invaluable approach to diversifying student experiences. Moreover, a virtual lecture by a renowned scholar or practitioner exposes the students to the interactive features of the medium, and prepares them for the real-life modes of communication in professional settings.

The discussion focuses further on the key tenets of the Transactional Distance theory in distance education and on the potential of this theory to illuminate key factors, which impact on the learning outcomes of a VC event. The Transactional Distance theory (Michael Moore, 1972; 1993) proposes that, in distance education, where teaching is mediated by technology, “transactional distance” is the psychological and communication space between instructor and

³ The “2010 Annual Survey of Journalism & Mass Communication Graduates” (Lee B. Becker, Tudor Vlad, Whitney Kazragis, Chelsea Toledo, Paris Desnoes; August 10, 2011) reported that “[t]wo-third of the bachelor’s degree recipients who found work in communication were involved with writing and editing for the web.... Eight in 10 of the graduates with a communication job are researching materials using the web, and more than half are using social network sites in their jobs... Almost regardless of employer type, writing and editing for the web is a prominent part of the work landscape... Researching materials using the web is nearly universal, regardless of employer type” (pp. 4-5). http://www.grady.uga.edu/annualsurveys/Graduate_Survey/Graduate_2010/Grad2010MergedColorv2.pdf)

learner. The key dimensions of this space are *dialog*, *structure* of the instructional program, and the learner's *autonomy*.

A VC event, though, challenges the simplicity of the Instructor – Learner model of interaction, which is the one employed by the Transactional Distance theory. Based on the author's experience with incorporating VC events in teaching undergraduate journalism and communication students⁴, the notions of differing roles and collaborative interaction are introduced. It is suggested that the horizon of the Transactional Distance theory could be expanded by bringing the notion of power in creating/maintaining relationships among the key agents of a VC event: instructor/convener, expert/guest-lecturer, learners/students in communication courses/technicians/supporting staff, and the VC technology⁵.

The independent variable in studying videoconferencing is the *learning outcomes*, and enhancing learning outcomes is the ultimate goal, which justifies the use of diverse pedagogical strategies in the pre-event and post-event stages. Thus, it is proposed here that the learning outcomes from a VC event would increase by 1/ intensifying the *dialog* among the agents in the pre- and post-event stages, or by shrinking the transactional distance and enhancing the level of mutual understanding; 2/ creating and maintaining *structured* relationships among the key agents involved in a VC event; and 3/ constructing the learners as *autonomous* agents before, during, and after a VC event.

⁴In the last six years, the author has instructed journalism and communication students at universities in New Zealand and the United States, in the fields of public relations, communication law, communication technologies and society, and managing communication technologies.

⁵ Felix (2003) views the technology in distance education as not dominating the learning experience "but remain[ing] in the background in the shape of one of many tools at the disposal of both teachers and students, used for the unique potential it offers in different settings and in catering for different learning needs" (p. 164). Scholars in communication studies (the medium theory adherers, for instance) are aware, though, of the capacity of a medium to structure perceptions and to produce relationships of power.

Finally, evaluating the learning potential of VC as a teaching technique in journalism and communication courses is discussed by presenting the technique of creative transformation of knowledge. Along with exploring the interactive nature of the technology, in a VC event students are engaged in active discussion with international and national experts on a number of substantive issues. In order to evaluate the level of their learning, the students are asked to write about the VC event in a particular professional format - news releases, or journalistic reports.

In view of both, the continuing academic debate on the validity of the Transactional Distance theory, as discussed later in the paper, and of the scarce empirical data on the learning potential of videoconferencing, this study provides a novel approach to the systematic integration of this mode of teaching in the communication classes. Moreover, the paper introduces a new area of research in media/communication education, and proposes some observations and practical principles of enhancing the learning potential of that teaching method. To understand the learning potential of a key agent in a VC event, we will present next the technology, with a special focus on *interactivity* as its defining affordance.

Interactivity as the defining affordance of videoconferencing

Since the mid-1990s, VC has been used in distant education in the UK and the USA. Videoconferencing is defined as an *interactive synchronous mode of communication*.⁶ Wang (2004) categorizes VC, from a technical perspective, into *desktop* and *studio-based* conferencing. He explains that “[s]tudio-based videoconferencing can be supported by the Internet or an intranet and often involves more complicated set ups and technology, such as a codec, a multipoint control unit, a studio, and a visualiser. In an educational setting, such

⁶ See *Encyclopædia Britannica Online*. Encyclopædia Britannica Inc., 2012.
<http://www.britannica.com/EBchecked/topic/627943/videoconferencing>

videoconferencing is often designed to conduct lectures across campuses or institutions. Obviously the initial investment and on-going maintenance costs are huge.” However, Wang cautions that the interactive potential of VC is conditioned on bandwidth and latency, which are “two major problems facing Internet-based videoconferencing”, because “data can be delayed due to Internet congestion and latency” (p.93).

Today, the Internet broadband connections, which enable high quality audio and video signals, allow for enhancing the *interactive* potential of that mode of teaching. As it is discussed further, students can benefit from actively participating in a VC event as they “set the agenda” for the guest-talk, ask questions during the lecture from the position of their personal experiences related to the discussed topics, and sometimes even share laughter with the virtual guest. Interactivity enhances the learning outcomes as well, as the learners are part of authentic cross-cultural communication experiences. By simply observing culture-specific manners of interacting, use of gestures, facial and body behavior, and listening to colloquial and idiomatic expressions, they acquire a level of cross-cultural communication competence, which, otherwise, is unachievable in their local classrooms.

University of North Dakota is part of the North Dakota Interactive Video Network (IVN). This is a state-wide network of video centers which connects all North Dakota higher education institutions through two-way compressed video and audio signals. In “A Practical Guide to Teleconferencing and Distance Education”, written by Joseph R. Tykwinski and Russell C. Poulin for the users of IVN, the authors state that “North Dakota is one of the first states to create a statewide system that allows multiple video conferences each connecting two or more sites.”⁷

⁷ The “Practical Guide” (Tykwinski & Poulin, 1991) describes the vision and resources behind the IVN project: “A statewide plan for implementing communications technologies was developed by the Educational Telecommunications Council, which was established by the state legislature and appointed by the Governor.

The “compressed video” transmission format that the system uses “requires less bandwidth to transmit, and consequently, it is less costly to transmit”, while “the image approaches broadcast quality”.

In a classroom, where a VC event is taking place, the high-quality video/audio connection enables an almost “face-to-face quality” interaction among the expert, the instructor, and the students. Anderson (2004), for instance, places videoconferencing closest to the face-to-face mode of teaching on a map of the media used in distance education, defined by two axes – the capacity of a medium to support independence in relation to time and place, and its capacity to support interaction.

In pedagogical literature, *interactivity* is construed as a powerful dynamic in the teaching-learning process. It was defined by Wagner (1994) as a dynamic emerging in “reciprocal events that require at least two objects and two actions. Interactions occur when these objects and events mutually influence one another” (p. 8). Anderson (2008) summarizes pedagogical views on interaction and interactivity in the learning process as: “*allowing for learner control, facilitating program adaptation based on learner input, allowing various forms of participation and communication, aiding meaningful learning, and providing for gaining another person’s perspective, which induces mindfulness in learners*” (emphasis added) (p. 55).

Together with the Information Services Division, the North Dakota University System, and the USDA Rural Health Project, the ETC created a vision for the future. The Educational Telecommunications Council plan calls for a two-pronged attack to build an integrated statewide network. State and local agencies will work simultaneously to construct the network. ... The North Dakota University System and the Information Services Division are developing a statewide backbone inclusive of regional switching hubs for video activities. Together, they will manage the long distance lines required to connect these hubs. After the development of local clusters, regional hubs, and connectivity standards, the local clusters will be able to connect to the statewide network. All of North Dakota could then be connected through interactive video communications. The United States Department of Agriculture's Rural Health Project has provided approximately one half of the funding to establish the North Dakota Interactive Video Network. ... State appropriations to the North Dakota University System have funded the balance of the initial cost.”
<http://www.ag.ndsu.nodak.edu/qbcc/Library/No%20Name%20Folder%20Field%20Trips/ND%20Interactive%20Video%20Network.pdf>

As a synchronous mode of communication, teaching via VC produces specific learning outcomes. Hrastinski (2008) emphasizes the *psychological effects* of synchronous teaching, on the basis of a learner's experience with the medium and the produced learning outcomes. He cites Kock's (2005) *media naturalness concept*, where it is suggested that "synchronous communication increases psychological arousal": "Kock argues that each element that characterizes 'natural' media (for example, the ability to convey and observe facial expressions and body language) contributes to psychological arousal. If these elements are suppressed, however, a decrease in psychological arousal can be expected." In his interviews with learners in small classes Hrastinski has found that they perceive VC "more like talking", resembling face-to-face communication; that the "sender" and the "receiver" feel more committed and motivated to participate in exchange of "social support" and to "discuss less 'complex' issues".

From the above-presented views on interactivity and VC it can be concluded that the VC technology enables the creation and maintain of relationships among a number of actors. The scope and breadth of the learning outcomes produced in the process of enacting those relationships depend on understanding the discursive space, which has been designated as "transactional distance" in the distance education theoretical field.

Theoretical framework

In distant education research, the attempts to conceptualize learning outcomes have produced a number of publications (see Hiltz, 1994; Harasim, 1995; Khan, 1997; Simich- Dudgeon, 1998; Barron, 1998). As Jung (2001) observes, though, in those publications "[t]here is little linkage to established pedagogical theory in general or to distance education theory in particular" (p. 525). To fill the gap, Jung proposes that the *Transactional Distance Theory* can

provide a better understanding of the pedagogical *relations* that emerge in a distance education environment. Formulated by Michael Moore, as early as 1972, the theory explores the psychological and communication space between instructors and learners, where the possibility of *dialog*, or interaction, the flexible *structure* of the instructional program, and the learner's *autonomy* in making decisions on her own learning and construction of her own knowledge are identified as key constituent elements. Later, Moore proposed that the transactional distance, which defines the learning outcomes, is a function of the extent of *dialog* (Moore, 1993).

In the late 1990s, Moore's hypothesis was subjected to contestation in a series of empirical studies evolving a number of interactive technologies (see Jung, 2001). Thus, Chen and Willits (1999) showed that, in a synchronous videoconferencing environment, the multidimensional concept of transactional distance allows for a better evaluation of the used pedagogical strategies.

However, in a later review of empirical studies, which had attempted to support or to validate transactional distance theory, the authors (Gorsky and Caspi, 2005), claimed that "either data only partially supported the theory or ... the studies lacked reliability, construct validity, or both. It was concluded that the basic propositions of transactional distance theory were neither supported nor validated by empirical research findings. Furthermore, it was found that the theory may be reduced to a single proposition (as the amount of dialogue increases, transactional distance decreases) and that this proposition may be construed as a tautology" (p. 1).

The Transactional Distance theory was revisited one more time in 2012, by Goel, Zhang and Templeton (2012) with the goal to operationalize transactional distance in order to develop a research model that predicts individual intentions towards e-learning. The authors confer that

“[a] predominant problematic area has been the measurement of transactional distance and its components – dialog, structure, and autonomy” (p. 1122). They agree with other authors (Chang, Wang, & Chen, 2008; Kreijns, Kirschner, & Jochems, 2003; Saba, 2000) on constructing *dialog* as the central tenet of the Transactional Distance theory (p. 1123), but they focus on learners and their perceptions of understanding transactional distance: “We view each construct - dialog, structure, and autonomy – as a perception of the learner that is influenced by the technology, course, and individual traits” (p. 1124).

As technology is identified in our study as a key agent of the interaction, it is important to note how Goel, Zhang and Templeton (2012) link a learner’s perceptions to the motivation for e-learning: “The flexibility of the structure, as conceptualized as the fit between the content and the medium, could be influenced by *how easy the medium is to use*. The higher the ease-of-use, the less cognitive effort it would take for an individual to work with the content in the medium, decreasing his/her perception of the rigidity of structure” (emphasis added) (p. 1125).

Videoconferencing is a synchronous mode of communication, which is perceived as a virtual face-to-face encounter. This would suggest that learning outcomes are produced by interweaving cognitive efforts with emotional arousal (anxiety, excitement, curiosity) that is observed in everyday human encounters.

In the cluster of relationships created around a VC event, actors experience and perceive the transactional distance in different ways, for “individuality and disposition of distance learners differs from one cultural to another cultural setting” (Kawachi, 2003). As Giossos *et al.* (2008) suggest, “transactional distance is experienced and perceived differently between Greeks and Indians, or between undergraduate and postgraduate students” (p. 4). Moreover, as the authors

suggest, transactional distance “must be examined at the level of: (i) the interpersonal relationship between teacher and learner, (ii) the relationship among the members of the learner group, and (iii) the mediating relationship between learners and the educational material” (p. 5).

These most recent publications mark an important turn in the academic debate on the Transactional Distance theory, where “relationship” in distant education becomes the unit of analysis. Thus, Giossos *et al.* (2008) advise that “the fact that the relationship between learner and teacher occurs within a context of authority should be kept in mind” (p. 6).

Foucault (1980) established that power is relational, or is perceived and detected in networks of relationships. Hence, relationships cannot be analytically discussed outside the framework of power. Moore (1993) identified learner’s autonomy as a key variable in the transactional distance study. In an empirical study of desktop VC, Saba & Shearer (1994) formulated the following theorem: “An increase in the level of learner control increased the rate of dialogue, which in turn decreased the level of transactional distance; an increase in the level of instructor control increased the rate of structure, which in turn increased the level of transactional distance” (p. 54).

As a mode of power, autonomy enables learners to be *co-creators* of a VC event, and, hence, this emerges as a technique of enhancing the learning outcomes of the event. In the next sections, the outlined theoretical framework is applied to VC events integrated by the author in communication courses. The focus is on enhancing the learning outcomes by prompting collaboration among the key actors in a VC event.

Lessons from collaborating on four videoconferencing events

A VC event can be a boring lecture from the screen, or it can be designed as an interactive event, where students and the hosting instructor assume the active roles of, accordingly, learners and a moderator. In such a setting, the guest-expert involves the students in a dialogue and actively seeks feedback, questions, or explores the students' previous scope of knowledge on the discussed topic. Consequently, the potential of VC to enhance student learning can be realized.

In the last six years, the author has actively integrated VC as a technology of choice in the traditional lecture-based classroom teaching of communication courses. Introducing journalism and communication students to contemporary social trends, such as globalization and cultural diversity on the workplace, requires that real-life professional practices are discussed in, and brought, to the classroom. Videoconference is a synchronous communication mode used in public relations and advertisement practices, and in media reporting. There are three main expected learning outcomes that justify the efforts invested in organizing a VC event and designing learning-assessment tools. First, expanding the cognitive horizons of local students by exposing the learners to unfamiliar discourses and perspective in communication topics; international expertise is solicited from leading experts and is made available via the medium to local students who otherwise would never have the chance to learn from renowned scholars or professionals. Second, students learn "first hand" about the medium affordances through experiencing its interactive nature. And, third, in cross-cultural virtual encounters, students accumulate competence in communicating with "strangers" in a controlled educational setting.

Overall, a well-organized and conducted VC could turn into an unforgettable learning event for the participating students.

This author has accumulated certain understanding of the dynamics and the effectiveness of VC as an Internet-supported value-added mode of teaching. The systematic observation of the dynamics of VC events, the surveying of students, and the discussing of the experience with the international guest-experts has resulted in designing some learning-assessment tools (i.e. pre- and post-event student surveys, and providing the students with instructions on creatively reflecting on the impact of a VC event through writing news releases and news reports).

For this paper, four VC events are analyzed in the light of the Transactional Distance theory. Each event lasted one hour, which allowed for an expert presentation between 30 and 40 minutes, and a “question-answer” period of ten to fifteen minutes.

The chart below presents the four cases that have provided data for this discussion:

Attributes of a VC event/ Semester	Course	# students	Experts: location and field of expertise	Duration of email exchange with an expert and number of emails	
Spring 2010	COMM 407 Communication technologies and the future	16	Director of IT, Hong Kong Polytechnic University, China	3 months	11
			Research Professor in global Internet governance (Projet Vox Internet II Fondation Maison des Sciences de l'Homme), Paris, France	3 months	21
Fall 2010	COMM 412 Communication Law	13	North Dakota Supreme Court Justice	2 months	17
Spring 2011	COMM 303 Principles of Public Relations	47	Renowned scholar in Public Relations Massey University, New Zealand	4.5 months	21

As shown in the table, the experts, who graciously accepted the invitation for a teaching VC, represented diverse professional fields in four continents. With three of them, the instructor had had collegial and professional relations for a number of years, which, in fact, emerged as an important factor in organizing a successful VC event. Nevertheless, in each of the cases, between eleven and twenty one email messages were exchanged in the pre-event stage, which lasted between two, and four and a half months. Skype sessions were conducted as well in two of the cases. In addition, in the cases of New Zealand and Paris events, between nine and twelve emails were exchanged with the technical staff. Aside from the in-class discussions on the forthcoming events, emails were sent to the students, via Blackboard, on the eve of each occasion. Technology tests were conducted in the international expert events involving the technical staff at the two locations.

All of these experiences suggest that integrating VC in an in-class mode of teaching is contingent upon securing some personal resources on the instructor's side, in terms of time, professional relationships, and persistence.

In three of the cases, the VC events involved less than twenty students, and the level of interactivity during the events was visibly higher. Thus, in the Hong Kong event, the expert replied to questions by addressing the students by name, which encouraged the class to generate even more questions. The expert exhibited as well an easy-going attitude by cracking jokes about his "kiwi accent and about Hong Kong as an overpopulated city, which was favorably assessed by the students in their reflections on the event.

On the other hand, in the New Zealand event, which took place on the very next day after a major earthquake in Christchurch, the students, in a class of 44, were more reserved in

inquiring about the tragic event, or about the culture-specific PR practices that the expert discussed, and adopted a more passive role of listeners. This suggests that the interactive potential of VC for teaching is a variable dependent, among other factors, on the class size, on the personal traits of the expert as those are perceived by the learners, and, most importantly, on the investment of time and efforts in collaborating in the pre-event stage.

As the Transactional Distance theory suggests, the three key variables in distance education are dialog, structure and autonomy. Collaborating with the guest-speaker by providing guidance was an important strategy used by the instructor to intensify the dialog during the VC event. This included formulating *expectations* about the topic and the manner of involving the students in the discussion, and providing information on the level of student familiarity with the topic and the subject. The Instructor collaborated with the students as well by motivating them to actively participate in the VC event. The strategies that we used included embedding information on the guest-lecture topic in the regular lectures, initiating in-class discussions on that information, and introducing the Expert's bio to the students.

The dynamics of collaboration among the Instructor, the Expert and the Learners, in the pre-event and post-event stages, are presented next as they evolved in two of the studied videoconference events.

Learning about law from a state Supreme Court Justice

Fall 2010, COMM 412 Communication Law

a/ Pre-event collaboration with the guest-speaker, a North Dakota Supreme Court Justice

- Initial guidance on the topic and the student level of understanding of the topic was provided in the invitation email: “the students will benefit from learning about the key characteristics of the North Dakota Supreme Court and its activities. You may decide to focus on a few cases, or particular issues, but please consider that this class provides the first contact of my students to the specific topics of freedom of expression, balancing tests, etc.”;
- A day prior to the VC, another reminder of what was expected from the guest-speaker with an update on students’ level of understanding of the topics: “So far, the students have learned about the American legal system, the legacy of freedom, modern prior restraints, libel and slander, privacy issues, copyrights and trademarks, and fair trial-free press conflicts.”
- The guest-speaker replied with details on the presentation topic and explicit intention to engage the students: “I plan to talk about the North Dakota Supreme Court, including how we become justices, the nature of our caseload, how we arrive at our decisions, our duties, and the state court system overall. I will compare it to the federal system and point out the similarities and the differences. I will be open to questions from the students about our Court and how it operates. I will talk briefly about the relationship between courts and the media. I will talk about the *Fargo Forum v. Paulson* opinion briefly. If we have time I will talk about the impact of recent US Supreme Court cases concerning political speech rights of judicial candidates and the impact on the fairness and impartiality of the courts. I hope this gives you the topic of my presentation.”

- Last email with encouragement and guidance to the speaker: “You may decide to go with up to 50 min talk, and then allow the students to ask their questions, or you could allow to be interrupted whenever the students have something to ask - it is really up to you. The latter format is a bit messy to the speaker, but brings a higher level of interactivity and keeps student's interest up.”
- The guest-speaker’s feedback on the VC event: “I enjoyed the time I had with your class very much. Thank you for inviting me. I do hope we can meet again.”

b/ Pre-VC event work with the students:

- Introducing the students to the North Dakota judicial system: in Lecture 1 “The American legal system”, the North Dakota judicial system was presented with pictures and information to provide a background for the VC event; students were provided with online links to the North Dakota Judicial System, and the North Dakota Constitution, and their attention was directed towards Art. 1, Declaration of rights.
- The class was asked to prepare for a discussion the following week on “What is the authority of each of the courts in the North Dakota judicial system?”
- Prior to the VC event, the students were informed about the arrangements with the guest-speaker, and they were introduced to her bio in order to appreciate the significance of the expert lecture and the event itself.

c/ Post-VC event evaluation:

- *Tangible outcomes*: access to high-level expertise was secured for the class; a DVD produced with the VC event recorded for use in next-year classes;
- *Intangible outcomes*: students learned about a rather specific topic concerning the state judicial system; to detect the level of learning, the VC event was followed by a

class discussion guided by the questions: Was the topic of interest to the students? Was the talk accessible to the students – terminology, structures, level of understanding?; What are the things the students learned about the North Dakota judicial system from the guest-speaker?; Was it a pleasant experience to be part of an academic videoconference?

Learning about New Zealand public relations practices from a renowned scholar

2/ Spring 2011, COMM 303 Principles of Public Relations

a/ Pre-VC event collaboration with the guest-speaker - Associate Professor in Communication, Massey University, New Zealand, an established scholar in Public Relations with international recognition:

- Initial guidance on the topic and the student level of understanding of the topic provided in the invitation email: “my students will greatly benefit from your expertise, and from learning about the NZ experience in that area.”
- Clarification of the expectations was provided in the next email: “What I have in mind is a rather general presentation of the place that PR have in NZ public life, considering the uniqueness of the economy, culture, and geographical location. So, in that broad topic, you can decide to focus on a theoretical or a practical issue that is close to your hearth - something linked to your research, or a topic that is hotly discussed by the kiwis today. You could tell stories and give examples, of course. It is really about bringing some international perspective to my mostly local students, who have, for the most cases, not been outside the Midwest states.”

- The guest-speaker inquired on the class and the expectations: “this is mainly to ask for some indication about your class. How many? At what stage they are? What they are mainly studying etc. That will help me pitch my little lecture accordingly. How long do you want it and what sort of approach – overheads? A ‘chat’ or what?”
- Further details were provided on the expectations: “This is an introductory course ‘Principles of Public Relations’, and by Feb. 22 we should have covered some basic topics: history of PR, publics and stakeholders, the four-step process, ethics and social responsibility, and PR as a profession. We discuss as well case studies, and the students are working in groups on devising alternative solutions to PR problems based on case studies. So, assume some familiarity with the vocabulary of the field, but not much knowledge on the specifics. You might bring the NZ experience in PR with some prominent government or business campaign, and tell us what the challenges are there in relation to the specific economic and demographic conditions there, the cultural diversity challenges as well.” To this email, the guest-speaker replied: “That all sounds do-able and I’ll do my best.”
- Further details were provided to the guest-speaker of technical capabilities and additional elements of the VC event: “you can use PowerPoint slides, and the students will be able to see you speaking, and the slides, on the screen.”
- The day prior to the VC event, last minute coordination with the guest-speaker took place: ‘There are around 50 students in the course, but due to the heavy snow last night some of them won't be able to come. Do you like me to present you in a particular way? I will mention that you are a Fellow of the NZ Public Relations Institute and a prominent scholar in the field, with a number of years of teaching courses in public relations. If you

have any questions, please call, or send me an email, and I'll get in contact with your tomorrow morning my time.”

- The day of the VC event, the media announced a devastating earthquake in Christchurch, NZ; to understand the guest-speaker's situation, an email was sent: “I'm so sad about the casualties in Christchurch - such a tragedy... I really appreciate that you are still willing to be our guest-speaker today, and I guess there will be some questions about crisis management at the national level.” The guest-speaker replied: “Yes, it's really shocking news for us. I'll just address things briefly at the beginning, and happy to answer questions as much as I can at the end.”
- Final email to the guest-speaker with gratitude: “I would like to thank you for the interesting overview of the PR industry and profession in New Zealand. I think the event itself, and your presentation, had some unforgettable impact on those young students, who had not experienced the technology before and were not familiar with the life of that wonderful country of yours.”

b/ Pre-VC event work with the students:

- In two lectures (Foundations of public relations and Public Relations as a profession”) the students were introduced to the dynamics of the U.S. job market in that field, the required skills and qualities for a PR practitioner, and the occupational outlook; the guest-lecture was designed to bring an international perspective on those issues with a focus on the PR industry in New Zealand, the challenges and opportunities linked to the cultural diversity of the country, and some cases of marketing communication.

- Introducing the guest-speaker in a reminder posted on Blackboard on the VC lecture the day prior to the event: “This professor is a renowned scholar in communication studies and she teaches public relations to communication students at Massey University... Please think of questions that you would like to address to our virtual guest-speaker.”

c/ Post-VC event evaluation:

- *Tangible outcomes*: access to a renowned international scholar was secured for the class; the guest-speaker PP presentation posted on Blackboard for student use;
- *Intangible outcomes*: to detect the student attitudes towards the event and the speaker, and the scope of issues they did learn about, the class was asked to write news releases on the VC event; this “evaluation of learning outcomes” method was integrated in the class learning objectives, because learning how to write a news release is part of the study program for the course; through written instructions, though, the students were guided towards focusing on aspects of the event that were important for assessing the VC learning outcomes.

In the next section, we apply the Transactional Distance theory tenets to the dynamics of interactivity detected in the above-presented four VC events. It is argued that, in order to enhance the learning outcomes of a VC event, the instructor should aim at building collaborative relations with the experts and the students.

Collaboration and role distribution among the key actors

In the organization and conducting of a VC event, there is a clear division of responsibilities and distribution of power at each of the stages. To enhance the learning potential of a VC event, the convener/instructor should understand those power dynamics and tap into the

collaborative potential of the emergent relationships. The roles performed by the Instructor, the Expert, and the Learners are different, yet, overlapping.

As the authors of the “Practical Guide” explain (Tykwinski & Poulin, 1991, p. 19), “[t]he most important person in a successful video activity is the Event Coordinator, or the Instructor. That person is the human connection making the technology transparent to the participants”. They advise the Instructor to “[m]ake others aware of added responsibilities. Inform students and other participants about the additional tasks required to conduct an effective event. Inform them of the tips that will make them knowledgeable users of the system.”

Thus, the role of the Instructor (as a convener and as a moderator) is to inform the other participants about the learning objectives of the VC event. Among those are, 1/ students to gain first-hand experience in using a synchronous video-interaction, 2/ students to benefit from the expertise of international professionals and scholars, and 3/ students to build bridges between the theoretical material provided in lectures, class discussions and readings, and the real-world practices.⁸

In the author’s experience, a week prior to each above-presented VC event, videoconferencing was discussed in class, as a communication technology, which adds value to managing communication processes in businesses. Students were directed to pay attention to particular topics that the Expert would cover, in the context of the course material. In addition, the technical support persons at the VC events were asked to provide the students with a

⁸ To illustrate that point, we provide example by referring to the Hong Kong VC event in the course “Communication technologies and the future”. The video-lecture topic was inscribed in the context of the course material; the VC event took place in the eight week of the 16-week long Spring semester. By that time, the argument that ICTs bring significant change at the level of the individual, society, and organizations had been systematically presented to the students. The implication of technological convergence on the scenarios of our common future, on the way children use the Internet, and on how organizations approach technological upgrading had been discussed collectively, in class, and individually by the students, in two assignments.

description of the technological layers of the medium – the IVN infrastructure and service, the IP standard of transmitting video, audio, and data, and the computer and video equipment used in the VC event.

On her/his part, the Expert must master the skills of delivering a lecture via VC to students in a distant classroom. Inducing interaction and keeping student attention in those circumstances is a challenge that falls almost exclusively on the expert's shoulders. He or she must plan ahead the structure of the talk, the ice-breaking introduction, the strategic moments of pausing to ask for questions, or to involve the students in exchange on experiences, etc.

In the four discussed cases, the expert talks were visually supported by Power Point presentations, which appeared on a separate screen. In the post-event stage, those PP presentations were posted on Blackboard for students to use. The international presentations contained place-specific pictures and statistical data, which was used as an “ice breaking” technique to help the students visualize the location of the guest-expert and, thus, to establish their virtual presence at the event.

The role of the Learner is a function of the learning objectives for the VC event, and, as such, is constructed by the Instructor. As motivation is a key psychological factor, involving the students in the pre-event stage of collaboration with the Expert, by seeking their input on the guest-lecture topic, by asking them to generate questions of interest, and by discussing the learning potential of the event – all those stimulate more active participation by the students in the virtual encounter.

The “Practical Guide” authors (Tykwinski & Poulin, 1991) discuss this issue in practical terms as well: “A high level of interaction is important in teaching and learning in order to increase the attention and motivation of the learner” (p. 33).

Conclusion

As the case analyses presented in this paper suggest, the three categories of participants – Learners, Experts and the Instructor - benefited from the collaboration on a VC event. Although the Instructor and the Hong Kong Expert, for instance, had had previous experience with VC, they both reported that the VC event had broadened their understanding of what constitutes success, in terms of learning, and how to manage VC in order to achieve the set learning objectives. The Expert reported after the event that he benefited from experiencing the “one-to-many” dynamic of VC, where the communicative power was concentrated at the one side of the interactive connection. Being experienced in virtual administrative meetings, where the communicative power is typically shared by the participants in order to make decisions by consensus, the Expert in a class lecture setting is in a position of dominating the discursive interactive space. Without the benefit of fully perceiving the audience reactions to her/his presentation, the Expert relies on other techniques of “relinquishing power” to the Learners by conveying expectations for collaboration via interjecting questions.

In that respect, naming only the students “Learners” is a metaphorical way to implicitly remind us that the VC events are organized mainly for student learning benefit.

As for the Instructor, she has been able to observe and compare the interactive dynamics of several VC events, and to act as a communicative power “broker” during each event. In that capacity, she has used the techniques of “mediating silences” by inviting the students to ask

questions, and of “leading the discussion” and sharing with the Expert in the communicative power by asking questions herself.

It is important to remember that the Instructor is an expert who holds a uniquely powerful position in the collaboration when it comes to facilitating student understanding of a subject matter, or to helping the Expert to tune into the student expectations. By the instrumental role an Instructor plays in a VC event, she is in charge of the interactive process, its dynamics, and its outcomes. As the instructor for the course, in which a VC event is inscribed, she is acutely aware of the added value of the VC event to the teaching process, and of the expected learning outcomes in the context of the course learning goals. Hence, although in a subtle manner, the Instructor exercises authority and stewardship in the collaboration.

The Instructor could either allow the Expert to solely lead the discussion, which could deteriorate to a monotonous lecture that is perceived by the students as a boring one, or suggest some “round-about” for clarification, new directions for the discussion, by intervening with questions or comments.

The collegial relationship between the Expert and the Instructor is another factor that could determine the success of a VC event: is the collaborative effort based on a mutually respectful relationship or on an instrumental one-time virtual contact? In the latter case, there is, perhaps, an asymmetric relation of admiration and recognition, on the Instructor’s side, but the expectation is not based on trust and on first-hand experience of the capabilities to deliver a presentation via VC.

Interactivity is a key affordance of videoconferencing, and, as it was discussed in this paper, by collaborating on energizing the interactive potential of a VC event, the main actors

could positively impact on shrinking the transactional distance with the learners. By creating virtual venues for exciting encounters with international and national experts, the instructors of communication course contribute decisively to preparing the students for meeting the challenges of the contemporary hyper-technological and culturally diverse global workplace.

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