

Trust: A Process and an Outcome in an Audio-Teleconferencing Learning Environment

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ABSTRACT

If trust is critical in relationships between teachers and distance education students, then how do teachers facilitate trust? This particularly challenging question arose from our experience teaching distance education nursing students who were continuing their education through the medium of audio-teleconferencing. Although audio-teleconferencing has the advantage of allowing students to stay in their own communities while accessing educational opportunities, we believed that it complicates the development of trusting relationships between teachers and students. In a qualitative study, students were asked to provide their perspectives on factors that facilitate trust within this distance education learning environment. Their responses indicate

RÉSUMÉ

Si la confiance est cruciale en enseignement à distance dans les relations enseignants-étudiants, comment ces mêmes enseignants peuvent-ils en favoriser son établissement? Cette question particulièrement intéressante est survenue quand nous avons enseigné à des infirmières-stagiaires poursuivant leur éducation par l'intermédiaire de l'audio-téléconférence. Bien que l'audio-téléconférence permette aux étudiants de rester dans leur communauté et d'accéder à des possibilités d'instruction, nous croyons qu'elle complexifie le développement de la confiance dans une relation enseignant-étudiant. Dans une étude qualitative, nous avons demandé aux étudiants de nous donner leur point de vue sur les facteurs favorisant l'établissement de la confiance à l'intérieur de cet environnement d'enseignement à distance. Leurs réponses indiquaient

that, within the context of the learning milieu, trusting is construed as a developmental process, and through this process, trust in the learning, in the curriculum, and in one's co-learners occurs.

que la confiance est perçue comme faisant partie d'un processus développemental dans le contexte d'un environnement d'apprentissage, et qu'elle serait favorisée, par l'intermédiaire de ce processus, dans l'apprentissage, dans le programme d'études et dans ses co-apprenants.

Trust within the context of an emancipated learning environment may be described as a subjective attitude in which the student relies with confidence on the curriculum and on co-learners.¹ Trust is a developmental process (Johns, 1996), marked by or subsuming "dependability, consistency and predictability" (Meize-Grochowski, 1984, p. 565). Trust is central to the teacher-student relationship (Brookfield, 1991); for example, through a trusting teacher-student relationship, the teacher will be accorded credibility and authenticity (trustworthiness). If trust is violated in attempting to reach a goal, the potential loss outweighs the gain—thus its fragile characterization. Trust can be seen as an outcome, one that may well be transitory, "its level not necessarily the same as a moment before or after that point" (Johns, 1996, p. 81). The assumption to be drawn from this is that negative outcomes, for either the student or the teacher, may result if the learning environment lacks trust.

The authors of this paper attempt to create egalitarian learning environments within the context of audio-teleconferencing with BN/RN students.² They believe that a learning milieu that lessens social distance enhances trust, and thus furthers the potential for students' learning. This belief is consistent with a paradigm shift that is occurring in nursing education. Classrooms previously governed by domination, or prescription, of thinking, knowing, valuing, and behaving (definitive components of oppression as described by Freire, 1968/81) are being replaced by emancipated learning environments. Such environments are supported by the principles of unity, or the interconnectedness of everything in the learning environment, and interdependence, in this case, the complex set of organizational, relational, and practical processes required for the continuing viability of the learning environment. These principles are included in Clark's (1991) description of holistic thinking.

Trust occurs in relationships and, indeed, trust is one of the key dimensions of the teacher-student relationship (Buchanan, 1993). Recent studies on teacher-student relationships support this view (e.g., see Garko et al., 1994; Walsh & Maffei, 1994). Additionally, Burge and Haughey (1993)

posit that trust is an essential ingredient in the one-to-one relationship for distance learners in order to condition “role reciprocity.” For example, they argue that trust is “essential if students are to feel free to challenge and refute the teacher’s contribution to the discussion” (p. 109). Garko, Kough, Pignata, Kimmel, and Eison (1994) found that reciprocity (viewed as equality) within the teacher-student relationship is based on trust and mutual understanding. Assuming that trust is critical within an emancipated audio-teleconferencing learning environment, then how do teachers facilitate trust?

The purpose of this paper is to discuss the outcome of a qualitative descriptive study. The goal of the study was to understand more about the development of trust and the dimensions of trusting relationships for students who were studying through the medium of audio-teleconferencing. The focus was exclusively on students’ perspectives. The expectation was that teacher behaviours and attributes that facilitate the creation and maintenance of trust in a teacher-student relationship would be identified. Research indicates that audio-teleconferencing teachers perceive their personal characteristics “as the salient elements in the instructional environment” (Kirby & Chugh, 1993, p. 3), and, admittedly, this was our bias when entering into the study.

THE CONTEXT

The authors have taught in a baccalaureate degree program for registered nurses in an eastern Canadian university for a number of years. Audio-teleconferencing technology is used to deliver the program across the province to groups of nurses where they live and work, thus allowing nurses to stay in their own community while attending classes. For nurses, this is vitally important as they typically have multiple roles and cannot travel easily to either of the major university sites. The audio-teleconferencing technology is also interactive, which permits a reasonable simulation of an on-site classroom. Students in small groups interact with other groups and with the teacher via a telephone bridge. By using push-button microphones, students can become part of the discussions and debates, and they are heard at all other sites through a speaker box. The disadvantage of the technology primarily lies in the isolation of the distance students (Burge & Haughey, 1993; Cragg, 1991; Lalande, 1995), although this may be more of an issue from the teacher’s perspective than from the students’ perspectives (Kirby & Chugh, 1993). It is acknowledged that “trust may take longer to develop in teleconference groups where non-verbal communication and visual cues are absent” (Lalande, 1995, p. 67).

DISCOVERING STUDENTS' PERCEPTIONS

Searches of both nursing and distance education literature did not identify an instrument that had been used for measuring trust in studies of teacher-student relationships. Reference was found to the importance of establishing trust in these relationships, but little research was found pertaining to *how* to measure this concept. The authors did, however, discover an interview guide that had been used to explore trust in nurse-client relationships (Choiniere, 1991) and used this as a base, with minor wording revisions, for the development of a questionnaire for this study. The questionnaire was pilot tested with a group of BN/RN students not involved in the study to discover whether it measured the area of interest, that is, trust. The feedback was satisfactory and the data for this qualitative study were subsequently gathered using this open-ended questionnaire. (See the Appendix for a presentation of the questionnaire.)

Participants were distance education students, located at several sites, who were taking the second term of the introductory nursing course in a BN/RN program by audio-teleconference. This course originated from two sites and was teleconferenced from each originating site (both campuses of the same university) to two or three additional distance sites. The course had been developed jointly by the two teachers who taught the sections.

The study was reviewed and approved by the Faculty of Nursing Ethical Review Committee. Its purpose was explained to students enrolled in the course, and the choice to participate remained with the individual student. There were no academic rewards or penalties for this decision. Written student consent was obtained for participation. Although it is usual practice to assume that returned questionnaires indicate consent to participate, in this situation, where the researchers were also the teachers of the course, it was felt that specific permission was appropriate to avoid any potential inference of coercion. To ensure student confidentiality, the teachers as researchers did not have access to the consent forms or to the returned questionnaires. Raw data were typed by an assistant who removed identifying information.

Of interest to this study were teacher behaviours and attributes perceived as relevant by the students and reported as those that led students to experience trust in these teacher-student relationships. Students were asked to recall their pre-course expectations regarding an anticipated relationship with their teacher. They were then asked to describe any changes to these expectations, the factors accounting for the changes, and their present expectations for a relationship.

The questionnaire was distributed prior to one particular class period, and students were asked to complete it in a given allotment of time at the end of that class. The total number of students available and eligible when the questionnaire was administered was 31; 24 students returned the questionnaire, indicating a 77 percent response rate. One large site did not receive the questionnaire in time for those students to complete it simultaneously with the other participants. As it was anticipated that class discussions the following week might influence the responses, these questionnaires were eliminated from the analysis. Thus, there were 12 of 15 off-campus questionnaires returned, for a response rate of 80 percent; 10 of a potential 16 on-campus questionnaires were completed, a rate of 63 percent. It was anticipated that students might respond more freely if they felt completely anonymous, but since two questionnaires were returned without an indication of campus status, the actual rates cannot be calculated. This may be seen as a limitation of the study.

The number of questionnaires returned may in itself be a reflection of a guarded degree of trust between student and teacher in this situation. The reality of the previous education of these students is that they graduated from diploma schools of nursing in order to become nurses. This experience within authoritative learning institutions influences the expectations these students have for learning situations. They are used to having teachers tell them what is important to learn, what performance will be required to pass tests and practical examinations, and what is expected for their dress and behaviour, both in class and outside. Being part of a university environment is often a drastic change for these learners, who are usually more mature by the time they return to school.

UNCOVERING THEMES

A qualitative study was planned “based on the premise that gaining knowledge about humans is impossible without describing human experience as it is lived and as it is described by the actors themselves” (Polit & Hungler, 1995, p. 517). A process known as analytic description (Wilson, 1989, p. 458) was used to identify categories of responses in these data. That is, data were initially examined for themes articulated by students in response to the open-ended questions and then coded for future identification. Similar meanings and words were gathered into clusters of themes and labelled. Patterns of themes were also sought, which were then analyzed for indicators that had led the students to trust.

Both researchers examined the data independently and then collaboratively. Where differences between researchers in assignments to clusters occurred, these were discussed until consensus was reached for all data. The researchers subsequently adopted the “iterative approach,” described by Polit and Hungler (1995) as a process in which “the researcher derives themes from the narrative materials, goes back to the materials with the themes in mind to see if the materials really do fit, and then refines the themes as necessary” (p. 527). Polit and Hungler go on to state that the “various themes need to be interrelated in a manner that provides an overall structure . . . to the entire body of data” (p. 529).

The Data as an Integrated Whole

As anticipated, general themes indicated that students’ expectations of the learning environment were influenced by their past experiences with learning. The traditional authority role of the teacher as giver of information, evaluator, and speaker was described by the students in this study. The students expected the teacher to be unapproachable and intimidating, to have little understanding, and to “make me feel like a student.” This expectation of who held the power in the classroom was clear and placed the student in the role of receiver and listener. The description of silent and received knowers in the work of Belenky, Clinchy, Goldberger, and Tarule (1986) seems to highlight the way in which these students described their initial way of learning as listening, receiving, and retaining the “right answers.” This is also consistent with their previous experience with nursing education in highly structured diploma programs.

Overall, three clusters of themes were observed in the data.

1. Achieving trustworthiness (a teacher-focused category). This cluster of student comments described actual and perceived relational processes with the teacher. It included descriptions of personal and professional attributes of the teacher that influenced students to trust, including verbal and nonverbal behaviours and how students felt their voices were activated and valued.
2. Experiencing trust (a student-focused category). This cluster of data described the students’ growing solidarity with the learning experience itself. It included an acknowledgement of their increasing self-esteem as new insights took hold and old learnings were re-examined or reshaped.

3. Situating trust (a curriculum-focused category). The descriptive category of situating trust, as revealed through the student data, is curriculum centred and represents the art of teaching by distance technologies through crafting the curriculum, setting the tone, and preparing the atmosphere. Situating trust includes three components: designing a holistic learning environment; orchestrating the learning experience, which involves preparing and conducting the curriculum and engaging the students in it; and co-relating (teacher and students) verbally and through writing.

The cluster called situating trust is of significant interest. Responses indicated that this cluster had an integrative meaning to students, which helped to clarify the other observed clusters. Students approached their responses in a way that merged “teacher” and “student” into the context of the total learning experience. This finding is of prime interest to us as distance educators; it is the focus of the remainder of this paper and is described with examples from student comments.

SITUATING TRUST: STUDENT PERSPECTIVES

Examples from student responses to the question “Prior to entering N3014, what were your expectations of a relationship with your teacher?” reflected an oppressed view of learning. For instance, “I felt that I would be instructed regarding course content and that the usual student-professor relationship would occur (that is, the teacher is right and the only one to talk)” and “I expected the teacher to teach and I to sit, listen and learn” were common responses. However, something occurred within the parameters of the learning experience that changed the personal meaning of teaching and learning for this group of students. What was it?

Student comments about designing the learning environment for trust included statements associated with the actual structure of the learning environment, as well as with the atmosphere, or the perceived environment. Students described the structural environment as concrete conditions, including: class size and seating arrangements; the format of the course and the course outline; expectations of students, including assigned pre-class readings; and the clearly stated purposes of assignments.

Students described the perceived ambiance or atmosphere in terms of how they felt about working with each other and with the teacher in the class and the degree of comfort they experienced therein. Students commented on differences between the expected atmosphere of the class

(e.g., “dictatorial” or “severely structured”) and the learning atmosphere they perceived (e.g., “open,” “relaxed,” or “having time to speak freely”).

Situating trust in the learning environment comes about from the way in which the teacher orchestrates the learning experience and conducts the entire process. Examples of students’ preconceptions of how classes would be run reflected assumptions about a behaviouristic approach to teaching/learning. Students generally believed that they would “sit, listen and learn” and that “facts would be presented which [they] would be expected to accept and memorize.” The students commented that the classes did not unfold as they had expected. Differences from the expectations included, for example, “I expect more of myself instead of from the teacher,” “everyone has equal ‘air’ time,” and there is a “willingness to allow discussion even regarding areas where teacher has no expertise.”

The students noted that participation in the class was encouraged, and that group involvement and an exchange of ideas were presumed. There were many comments that spoke to valuable lessons learned both from examining and validating the students’ own experiences and from the integration of their experiences into the learning. This factor is also reported by Garko et al. (1994), under the subtheme of connection to the student, and emerges from attempts to uncover what students want from a teacher-student relationship.

Co-relating with the teacher and other students describes the students’ experiences with the amount and kind of contact encouraged and achieved. It also includes the amount and kind of feedback from the teacher, both oral and written. Students’ comments indicated that feedback from the teacher increased their sense of connectedness to the learning experience. Becoming familiar with the teacher through oral and written feedback allowed a rapport to develop; this is particularly critical for off-campus students. In this sense, those conditions that tended to lessen social distance between the teacher and student were of great importance to these participants.

The process of co-relating includes students’ expectations and experiences in association with the roles of teacher and student within the class and the accessibility of the teacher. Students had expected limited contact with the teacher, that is, to have questions answered and possibly to place a phone call for additional information. On-campus students expected even less in terms of openness and the mutual exchange of ideas than did off-campus students. Perhaps off-campus students, in their isolation from the originating classroom, had already started not only to become their own learning community but also to rely less on the teacher.

IMPLICATIONS

Trust “appreciates the independent existence of the other, that the other is other” (Mayeroff, 1971, p. 20). This study indicates that distance students will likely trust a teacher who projects faith in their ability to grow in their own time and in their own way and who provides experiences that will enable them to be in control of their own learning. In this study, student voices from an introductory BN/RN nursing course described the development of different expectations of the learning process and of themselves as learners. Students became involved in learning situations so that what they experienced in those situations had the capacity to change them and their personal meanings. From a transformative learning perspective, the process of emancipating the “learners from the paradigm which has dominated teaching over the last century” in order that they become “engaged in discovering the meaning of the learning for their own lives” (Burge & Haughey, 1993, p. 89) has begun. Students identified the curriculum as influencing them as learners, and stated that they expected to continue to develop their role as learners. They have a new understanding of how, and from whom, they can learn; in other words, “education as the practice of freedom—as opposed to education as the practice of domination” (Freire, 1968/81, p. 69). And, although teachers were initially expected to be authority figures, controlling class processes and giving out information, students in this study were pleased to find that these expectations were not borne out.

The data from this study have assisted us as teachers in an audio-teleconferencing learning environment to continue to understand more about the development and dimensions of trusting relationships with students. We have learned that our behaviours as teachers cannot be falsely separated from those interpersonal behaviours linking us to our students in ways that demonstrate connectedness, equality, and mutual respect. This fact is borne out in a similar qualitative study by Garko et al. (1994). Results of this present study also lend support to a description of curriculum that asserts that learning occurs within actions and transactions amongst co-learners, which includes students and teachers. This description emphasizes the importance of relationship building between students and teachers in order to facilitate learning, in spite of geographic distances. Through the process of trusting, distance education students learn to trust in themselves as learners and in the integrity of the curriculum as a humanized practice. “Trusting the other is to let go; it includes an element of risk and a leap into the unknown, both of which take courage” (Mayeroff, 1971, p. 21).

REFERENCES

- Belenky, M., Clinchy, B., Goldberger, N., & Tarule, J. (1986). *Women's ways of knowing: The development of self, voice, and mind*. New York: Basic Books.
- Bevis, E., & Watson, J. (1989). *Toward a caring curriculum: A new pedagogy for nursing*. New York: National League for Nursing.
- Brookfield, S. (1991). *The skillful teacher: On technique, trust, and responsiveness in the classroom*. San Francisco: Jossey-Bass.
- Buchanan, J. (1993). The teacher-student relationship: The heart of nursing education. In N. Diekelmann & M. Rather (Eds.), *Transforming RN education: Dialogue and debate* (pp. 304–323). New York: National League for Nursing.
- Burge, L., & Haughey, M. (1993). Transformative learning in reflective practice. In T. Evans & D. Nation (Eds.), *Reforming open and distance education: Critical reflections from practice* (pp. 88–112). London: Kogan Page.
- Choiniere, J. (1991). *Clients' perceptions of nurse behaviours that facilitate trust in the nurse-client relationship*. Unpublished master's thesis, Saint Joseph College, West Hartford, CT.
- Clark, E.T. (1991). Holism: Implications of the new paradigm. Response to Purpel, Miller and Gelb. *Holistic Education Review*, 4(2), 43–48.
- Cragg, C.E. (1991). Nurses' experiences of a distance course by correspondence and audio-teleconference. *Journal of Distance Education*, 6(2), 39–55.
- Freire, P. (1981). *Pedagogy of the oppressed*. (M. Ramos, Trans.). New York: Continuum (original work published 1968).
- Garko, M.G., Kough, C., Pignata, G., Kimmel, E.B., & Eison, J. (1994). Myths about student-faculty relationships: What do students really want? *Journal of Excellence in College Teaching*, 5(2), 51–65.
- Johns, J.L. (1996). A concept analysis of trust. *Journal of Advanced Nursing*, 24, 76–83.
- Kirby, D.M., & Chugh, U. (1993). Two views from the bridge: A comparison of the perceptions of students and instructors of elements in the audio-teleconferencing environment. *Journal of Distance Education*, 8(2), 1–17.

- Lalande, V. (1995). Student support via audio-teleconferencing: Psycho-educational workshops for post-bachelor nursing students. *The American Journal of Distance Education*, 9(3), 62–73.
- Mayeroff, M. (1971). *On caring*. New York: Harper & Row.
- Meize-Grochowski, R. (1984). An analysis of the concept of trust. *Journal of Advanced Nursing*, 9, 563–572.
- Polit, D.F., & Hungler, B.P. (1995). *Nursing research: Principles and methods*. Philadelphia: J.B. Lippincott.
- Walsh, D.J., & Maffei, M.J. (1994). Never in a class by themselves: An examination of behaviors affecting the student-professor relationship. *Journal of Excellence in College Teaching*, 5(2), 23–49.
- Wilson, H. (1989). *Research in nursing* (2nd ed.). Redwood City, CA: Addison-Wesley.

APPENDIX

*Teaching-Learning Questionnaire*³

Please answer the following questions as completely as possible. Do not identify yourself in any way. The teacher referred to is your N3014/3025 nursing teacher.

1. Prior to entering N3014, what were your expectations of a relationship with your teacher?
2. Did your expectations change? If yes,
 - a) What changes occurred? b) What accounts for these changes?
 - c) What do you expect from your relationship now?
 If no, what do you see as the reasons for no change in your expectations?
3. What is it about your teacher that helps you to trust her? (For example, what is it that your teacher does, says, acts, feels, looks like?)
4. Have you ever experienced mistrust of this teacher? Describe this.
5. Additional comments:
6. (Optional) I am a student:

on campus _____ off campus _____

BIOGRAPHIES

Judith Buchanan is an Associate Professor in the Department of Nursing, University of New Brunswick, Saint John campus.

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Both authors have taught courses within the BN/RN Program for several years, using distance technologies. Students in this program are adult learners—registered nurses who have decided to continue their education by pursuing a baccalaureate degree.

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FOOTNOTES

¹ *Curriculum* as expressed here “is the interactions and transactions that occur between and among students and teachers with the intent that learning occur” (Bevis & Watson, 1989, p. 5), in other words the totality of learning experiences. In this description, students and teachers are *co-learners*.

² Returning RN students (BN/RNs) are nurses who have graduated from two or three year diploma programs and are now enrolled in a Bachelor of Nursing program which is delivered through the medium of distance technology.

³ Adapted from “Clients’ Perceptions of Nurse Behaviours that Facilitate Trust in the Nurse-Client Relationship” by J. Choiniere, 1991, Unpublished master’s thesis, Saint Joseph College Division of Nursing, West Hartford, Connecticut, p. 136. Adapted by permission.