

Quality of Interactions in Face-to-Face and Hybrid Career Development Courses: An Exploration of Students' Perceptions

Siu-Man Raymond Ting

Professor of Counseling and Director of Graduate Programs
Department of Curriculum, Instruction, and Counselor Education
North Carolina State University
Raleigh, NC 27695 USA
ting@ncsu.edu

Laura M. Gonzalez

Assistant Professor
Department of Counseling and Educational Development
University of North Carolina at Greensboro
Greensboro, NC 27412 USA
lmgonza2@uncg.edu

Abstract

Online counselor education is growing, but there has been little conclusive research about its effectiveness. This paper reports on an exploratory study in which the perceptions of students in a hybrid career development and counseling class were compared to those of students in a face-to-face offering of the same class. Student-to-student and student-to-instructor interactions were examined and several themes were identified: nature of interactions, sufficiency of interactions, different types of communication, impact of interactions on learning, and enhancement of relationships. Both delivery formats were found to have benefits and challenges. The paper concludes with a discussion of the practical implications and areas in need of future research.

Keywords: online counselor education, face-to-face course, hybrid course, student interactions, student perceptions

Introduction

One of the strengths of the counseling profession, and thus a key ingredient of its preparation programs, is the emphasis on effective interpersonal skills leading to a constructive working alliance between counselor and client. Perhaps for this reason, there has been reluctance in many counselor education programs to move to an online learning format ([Rockinson-Szapkiw & Walker, 2009](#)). Skills like active listening, nonverbal attending, and here-and-now immediacy may be more difficult to demonstrate and practice in the virtual environment ([Trepal, Haberstroh, Duffey, & Evans, 2007](#); [Young, 2005](#)). [Krieger and Stockton \(2004\)](#) also mention ethical concerns related to confidentiality as a reason that counselor educators may not be adopting learning technologies as rapidly as some other fields. To date, there has been more use of technology in counselor education for clinical supervision classes than for instruction in counseling theory or skills ([Clingerman & Bernard, 2004](#); [Manzanares et al., 2004](#); [Rockinson-Szapkiw & Walker, 2009](#); [Vogel & Klassen, 2001](#)). However, little is found in the literature about the impact of online learning in counselor education ([Rockinson-Szapkiw & Walker, 2009](#)).

This paper reports on a study aimed at exploring counseling education students' interactions and perceptions of instruction and learning in two settings: a hybrid class and a face-to-face (F2F) class. The main research questions that the study sought to answer were as follows:

- 1) What is the nature of interactions in a hybrid and a F2F counseling course?
- 2) Which class activities are perceived to strengthen relationships between students and instructors?
- 3) How do the interactions and activities affect student learning in the hybrid and F2F classes?

Literature Review

Some of the benefits of moving counselor education courses into the virtual realm (whether a hybrid of F2F and online or an entirely online format with no classroom component) include flexibility of scheduling, ability to reach students in other locations, fewer demands on physical classroom space on campus, and provision for students to guide their learning at their own pace (El Mansour & Mupinga, 2007). Some studies also have suggested that students are willing to disclose more when they are not in a physical classroom of peers, and that today's technological natives are comfortable in digital formats ([Trepal et al., 2007](#)). [Oravec \(1996\)](#) explains that the anonymity available through virtual meetings has the social function of a mask at a carnival, offering "certain kinds of relief from massive pressures that societies place on individuals" (p. 153). In counselor education, [Draves \(2002\)](#) indicates that the Internet enhances learning because learners can work at their own pace and focus on the content of specific interest to them. Possible drawbacks to online courses could be the differences between training modality and professional counseling modality (still likely to be F2F), and concerns about maintaining high quality interpersonal interactions. Some variables that could influence the successful implementation of counselor education courses online are the age or technological literacy of the students, the level of comfort with technology of the instructor, the types of instructional strategies utilized, the gender of the students (with females being predominant in counselor training programs and more likely to share), and the content of the course (e.g., counseling theories may be more easily adaptable than skills-based courses) ([Artino, 2010](#); [Steinbronn & Merideth, 2008](#)).

In many online education programs, the technologies employed typically include e-mail, virtual meetings, electronic mailing lists, chat rooms, digital video clips, narrated slides, computer-assisted live supervision, and online examinations ([Brown, 2002](#); [Vogel & Klassen, 2001](#); [Yang & Cornelious, 2004](#)). The recent improvement in synchronous teaching technologies means that more interactive discussions, assignments, and exercises can be included, such as web conferences or virtual meetings ([Rockinson-Szapkiw & Walker, 2009](#)). Whether counselor education faculty members are interested in updating their technology skills and have the time, resources, and support to rebuild their courses using Web 2.0 tools is a separate question. [Sugar, Martindale, and Crawley \(2007\)](#) offer an interesting case study in which they documented one senior faculty member's experiences in the transition to online teaching. After coping with the initial technological learning curve, the faculty member ultimately found the online environment to be characterized by greater engagement between instructor and students, as well as among students.

In terms of the advantages or disadvantages of offering a course in each of the formats (F2F and hybrid), [Artino \(2010\)](#) indicates that students appreciate the flexibility of online learning, especially when they are confident in their ability to use technological tools in online learning environments, but that students seem to prefer F2F formats when they evaluate the content as highly valuable, useful, and interesting. In addition, [Anderson and May \(2010\)](#) note that participants were able to demonstrate and retain informational literacy skills regardless of whether they were assigned to a F2F, online, or blended classroom environment.

In counselor education, the Council for Accreditation of Counseling and Related Educational Programs (CACREP) is highly regarded for guiding counselor education practices. Stated within the CACREP 2009 Standards is: "Evidence exists of the use and infusion of technology in program delivery and technology's impact on the counseling profession" ([CACREP, 2009](#), p. 10). However, the findings on this topic are inconclusive, owing to the limited number of research studies and small sample size ([Clingerman & Bernard, 2004](#); [Tait, 1999](#)). Given the dearth of relevant extant literature in the field of counselor education, an exploratory, qualitative approach was adopted for the present study. Since the quality of interaction is a known key factor, the authors sought to explore a career development class offered via both F2F and hybrid formats, including a main component delivered online. Students in the course were asked to reflect upon their experiences in terms of interaction with the instructor and with one another. The results may be useful to counselor educators who are considering adding more technology to their teaching, but who might be concerned about the possibility of negative impacts on interaction.

Methods

Participants

The participants were 32 graduate students in a F2F and a hybrid career development class in an urban public research university in the Southeastern United States. The second author taught the F2F class, and the first author taught the hybrid class. The enrollment for the classes was 13 and 20, respectively; all

of the students in the F2F class and all but one of the students in the hybrid class participated in the study. The hybrid class was primarily conducted online, with four required on-campus class meetings. The two classes were matched in structure and requirements, using the same syllabus, textbooks, and reading assignments, and including periodic meetings between the two instructors.

At the end of the semester, the graduate students were asked to voluntarily complete an open-ended questionnaire in class. Therefore, the response rate for participation was 100% and 95%. Among those surveyed, 30 were women and two were men. Of the students, 23 were Caucasian, seven were African American, one was Asian American, and one was Latino.

The Survey

The authors developed an open-ended questionnaire to explore interactions and student perceptions of instruction and learning. The questionnaire included five open-ended questions related to the nature of interactions between the instructor and the students in class, the nature of interactions among the students, effect of interactions on learning experiences, activities which strengthened participants' relationships, and adequacy of interactions. Specifically, the questions were: (1) Please describe the nature of the interactions between the instructor and the students in this course; (2) Please describe the nature of the interactions among the students in this course; (3) How did these interactions affect the learning process for you?; (4) What were the activities that strengthened the relationships among the participants in this course, if any?; and (5) Do you think the interactions in this class are sufficient? Why or why not?

Procedure

[Hill, Thompson, and Williams' \(1997\)](#) consensual qualitative research (CQR) method was employed for the current research. The CQR method is "particularly helpful during the initial stages of exploration of a research area because it provides a rich description of the phenomenon" ([Hill et al., 1997](#), p. 562). This research method is appropriate for the current study for its explorative nature in counselor education. First, according to Hill et al., the sample should be defined carefully. In our study, the authors examined counseling students and targeted a representative sample. Second, the authors used a research team approach to reach consensus about findings and an assistant as auditor to validate the findings. Third, the two researchers studied the data to develop domains (i.e., topic areas), then core ideas (essence of what the respondent said). Fourth, the researchers compared across cases and counted the number of cases that fit within each domain. Finally, the researchers presented the findings across domains. Hill et al. suggest either open-ended questionnaires or interviews for data collection (p. 523). They stress that the data should be collected in open-ended questions, which was adopted in our survey. The strengths of interviews include allowing the respondents more time to share more completely their ideas or thoughts ([Hill et al., 1997](#)). However, not every student would be interested in participating in interviews, which require more time arranged outside of class. Many students were part-time and had full-time work. Also, some of the students in the hybrid class lived a few hours from the campus. It was logistically challenging for them to spend extra time after the class was completed. Finally, the authors decided to adopt the questionnaires to make sure that they could capture a representative and comparatively large sample in the last class. Also, the authors retained a key objective of open-ended questions, "not constraining the responses of the participants" (p. 522). This allows the students to express freely what they perceive about the interactions in class and its effectiveness (Lincoln & Guba, 1985). The authors set aside about 30 minutes for the survey, which seemed to be adequate for the students to write their ideas and comments regarding six questions (including the last item which solicited any other thoughts/comments).

The students were asked to participate voluntarily in the study and responded to the open-ended questions during a F2F class at the end of the semester. The instructor for the classes, also the lead author, administered the questionnaire. No incentives were offered. It took about 30 minutes to complete the open-ended questionnaire. The authors did not use the triangulation method in the current study, as [Hill et al. \(1997\)](#) do not think it is necessary for every single study to use this method (p. 540). Limitations are identified and discussed in the Discussion section.

In conducting their data analysis, the authors attempted to follow the steps presented by [Hill et al. \(1997\)](#), including: (1) developing domains; (2) constructing ideas; (3) auditing of domains and core ideas; and (4) reconciling the audit and the data. First, the authors developed a list of domains, which group or cluster information or data about similar topics. The two researchers reviewed the cases/questionnaires independently to develop domains that seemed relevant based on the literature review and the open-

ended questions. All the responses were placed in at least one domain, including "other." An "other" domain is used as a "catchall for data that do not fit in other domains" (Hill et al., 1997, p. 545). Then, the two researchers discussed the proposed domains to reach agreement on the domains developed. The domains included nature of interaction, types of communication, and effects of interactions on learning. Second, the researchers constructed core ideas by summarizing the content of each domain for a given case to "capture the essence of what the respondent has said about the domain in fewer words and with more clarity" (Hill et al., 1997, p. 546). In the process, the researchers avoided changing the meaning; instead they adhered very closely to the explicit meaning by concentrating on the focus of the domain. Third, a student assistant, who served as a check for the researchers, audited the domains and core ideas by reviewing all questionnaires. The assistant read through all questionnaires in each domain and determined if: "(a) the raw material was in the correct domain; (b) all the important material in the domain had been abstracted; and (c) the wording of the core ideas was concise and reflective" of the cases/questionnaires (as suggested by Hill et al., 1997, p. 548). Feedback from the assistant was communicated to the researchers for decisions to make any related changes. No major changes were made after this auditing. Finally, all the questionnaires were reviewed one more time to spot any inconsistency of the domains or core ideas across the questionnaires. In interpretation of the data, the authors adopted Elliott's (1983, 1989) categories: (1) general – applying to all the cases; (2) typical – applying to half or more of the cases; and (3) variant – less than half of the cases. Hill et al. support this method.

Results

Nature of Interaction

Overall, a typical response of the students in the hybrid class was that they had a positive experience (see Table 1). A few of them said things like, "friendly," "supportive," "helpful for enrollment from instructor," "interactive class," and "instructor was available when needed." Some had positive comments about the instructor's facilitation and responses to student questions, they said, "prompt e-mail reply from the instructor," "receptive to my questions," and "the instructor was facilitative and supportive." The students also liked the opportunities for discussions as they expressed comments such as "discussion board," and "online interactions were engaging and informative." Two students addressed some areas for improvements including, "not personal enough to process interactive information," and, "should have learned mostly online."

Table 1. Results of qualitative analysis: Quality of interaction in hybrid career counseling class (N = 13)

Domain	Core Ideas	Category	No. of Cases
1. Nature of interaction	a) Something good	Typical	10
	b) The benefits of discussing online	Typical	12
	c) Facilitation of class and feedback to students	Variant	4
	d) Areas for improvement	Variant	2
2. Types of communication	a) Discussions, e.g., e-mails, discussion boards, and face-to-face discussions	Typical	16
	b) Virtual meeting	Variant	4
	c) Benefits of discussions	Variant	7
	d) Areas for improvements	Variant	3
3. Effects of interactions on the learning process	a) Positive and enhancing	Variant	7
	b) Enriched career counseling knowledge	Variant	4
	c) Dissatisfaction related to use of technologies	Variant	3
4. Enhanced student relationships	a) Groups in the face-to-face class	Variant	6
	b) Virtual meeting	Variant	4
	c) Discussion boards	Variant	3
	d) Class activities	Variant	2
5. Sufficiency of interactions	a) Adequate and enriching interactions among students and instructor	Typical	13
	b) Inadequate interactions	Variant	6

In the F2F class (see Table 2), a typical response about interactions was also good (10 cases), which included comments about the instructor being *"positive," "great," "good," "friendly," "helpful," "open," "approachable," "kind,"* and *"flexible."* A variant response was about the good facilitation and response to student questions (four cases) such as *"facilitated well," "inquired about what was read in class," "handled problems well,"* and *"available after class for questions."* Another variant response was about discussions (three cases), which included *"discussions in class," "facilitate group discussions," "worked collaboratively in class,"* and *"role-plays."*

Table 2. Results of qualitative analysis: Quality of interaction in F2F career counseling class (N = 19)

Domain	Core Ideas	Category	No. of Cases
1. Nature of interaction	a) Something good	Typical	10
	b) Facilitation of class and feedback to students	Variant	4
	c) Discussions	Variant	3
2. Types of communication	a) Students' good quality	Typical	9
	b) Group communications	Variant	4
3. Effects of interactions on the learning process	a) Positive and enhancing	Typical	8
	b) A positive environment	Variant	5
	c) Good group work	Variant	4
4. Enhanced student relationships	a) Class activities	Variant	5
	b) Group project	Variant	5
	c) Group discussion	Variant	5
5. Sufficiency of interactions	a) Adequate and enriching interactions among students and instructor	Typical	9
	b) Inadequate interactions	Variant	3

Different Types of Communication

In the hybrid class, the sources of interaction among students that were found included e-mails, discussion boards, synchronous online interaction (e.g., web conferencing and live chat), and F2F meetings. Students expressed positive feelings regarding the opportunities they were afforded for learning and dialogue through the discussion boards (seven cases); they wrote comments like *"interesting reading on discussion board," "good discussions,"* and *"learned a lot from the discussions."* Other responses alluded to e-mails (two cases), live chats (one case), and using webcams (one case). Interestingly, there were also six students who liked the F2F discussions. Some students reported overall positive experiences on interaction with fellow students, describing them as *"smooth," "encouraging," "cordial," "helpful," "good."* Some students mentioned the benefits of virtual meetings, such as *"saving time," "easy access,"* and *"little restrictions."* Three students mentioned areas for improvements including *"not enough interactions," "need more time to sink down the materials,"* and *"fine, it was a short course so not a lot of time to get to know each other."*

In the F2F class, the following core ideas were identified: a typical response of students was good quality communication (nine cases), including friendliness, openness, respectful, inclusive, and accepting; and group projects/team work (four cases). The students appeared to appreciate the opportunity for discussions and groups such as *"group projects," "group discussion,"* and *"plenty of interactions in class."* They valued *"respecting one another," "open attitudes,"* and *"focusing in class activities."* These personal qualities seemed to be basic elements for group activities and classroom instruction.

How Interactions Affected Learning Process

In the hybrid class, eight sources of interactions affecting the learning process were found: virtual meeting, insufficient time for the course, good learning environment, narrated slides of the "lecturettes," understanding of career concepts/theories, student initiative, overall effectiveness, need for more interactions, and technical challenges. A typical student response was that interactions were positive and enhanced the learning process. Some students wrote, *"was able to learn from class and all tools, including online," "created a positive and motivational environment," "they expanded my knowledge of online courses, also forced me to take responsibility for my work and to work independently,"* and *"effective."* Another core idea identified was enhancing career counseling knowledge. Students indicated things like, *"group project was a great experience," "helped me understand career counseling,"* and

"understand other points of view of different theories," "helpful and did not feel as if the class experience was in any way compromised due to the online nature." Last, some students mentioned their dissatisfactions about using technologies, such as *"online was difficult,"* and *"technical problem in virtual class."*

In the F2F class, core ideas were developed around the learning process: positive and enhancing learning experiences (eight cases), a positive environment (five cases), and group work (four cases). Students said the following about the positive and enhancing learning experiences: *"students support one another and asked questions," "helpful to build cohesiveness in the group,"* and *"feel comfortable to express my opinions."* Regarding the positive environment, they shared about, *"a positive environment," "open communication and easy access to instructor,"* and *"treasure the person-to-person interaction."* They thought group work was a *"good experience,"* and *"interesting."*

Activities Increase Relationships among Students

In the hybrid class, the students listed some activities that enhanced student relationships including a group project (10 cases); online experiences including discussion boards (three cases); virtual meetings (four cases); F2F groups/activities (six cases), such as activities related to Holland's and Super's theories; and online chat rooms (one case). Students said things such as, *"I think the online discussion board was great,"* and *"we as students bonded over the challenges of using this format/new way of doing things."*

In the F2F classes, student responses included class activities (five cases), such as career lifeline, interviews, role-play, and card sorts; group projects (five cases); and group discussions (five cases).

Sufficient Interactions

A typical student response about sufficient interactions of the hybrid class included online instructions allowing students to take this class and flexibility with time/schedule. Students wrote down comments like, *"good interactions given everyone has busy schedules and online nature," "We were challenged by the online format, but we worked it out together," "I learned a lot through interactions with the class, and can already think of ways to apply what I have learned in my job setting,"* and, *"enough real life and online discussions."* A variant response about insufficient interactions included technical problems, unmatched personal styles of learning, and personal preferences for F2F classes. They also suggested the following for improvements: creating more case studies, solving the technical problems, and adding F2F meetings. Also, one student stated, *"this [class] was unique and something to experiment with again,"* and, *"we could make it a smoother experience with more practice [with the technical issue]."*

In the F2F class, a typical student response was that sufficient interaction existed in the class (nine cases), a variant response (three cases) was not enough interactions in class. The students who did not think that the interactions were sufficient listed the following reasons: shallow discussion, not enough student-driven activities, and too many lectures and chapter reviews. They suggested increasing interactions, discussions, learning opportunities from one another, and student-oriented activities such as practice on skills.

Discussion

This study investigated comparison of the interactions and effectiveness of a hybrid career development and counseling class and the same class in F2F format. The results show different patterns of interaction styles and their related challenges. However, the majority of the students in both classes felt that class interactions, though different, were sufficient. In further analysis of the results, these interactions can be understood in terms of environmental and personal factors.

Environmental Factors

Although building community was a goal for both delivery methods, there were differences in the ways communities were formed within the class environment between the hybrid and the F2F class. Both classes utilized a variety of tools, and these tools varied between sections.

The students in the online class appeared to appreciate multiple elements and tools for their interactions and learning experience. These tools included e-mails, discussion boards, virtual meetings, narrated slides of the "lecturettes," learning modules, and F2F meetings. Meanwhile, three students expected more interactions. This may imply that online classes should create multiple tools for interactions and learning. [Bower \(2001\)](#) stresses the importance of creating learning communities in online environments. There are three levels of learning community: (1) making online acquaintances or friends; (2) building

community conferment, through tools like discussion boards (like the one used in the current study); and (3) camaraderie, which was achieved after mid-term and/or intense association with others involving personal communication. [Ascough \(2002\)](#) posits that communication in the community can be achieved through exploration, reflections, and discussion, which should lead to students' deeper learning. Specifically, e-mails, listservs, threaded discussion (on discussion boards), and chat rooms provide an efficient communication tool to build an effective community ([Yang & Cornelious, 2004](#)). Synchronous virtual meetings offer opportunities for students to "meet" in real time as a class, to discuss related concepts, to apply just-learned knowledge in simulated cases or in small groups, and to ask questions. Virtual meeting may be a special platform for instructor and student interactions, which was found to improve engagement between instructor and students, as well as among students (Crawley, Fewell, & Sugar, 2009).

In the F2F class, the students also expressed that they appreciated the variety of interactive activities and tools, which served to create a positive, supportive, and respectful environment. These tools included class presentations, interviews, role-plays, journals, card-sorts, and career lifelines.

Related to the environmental factors, it appears that recreating the classroom experience was a key to successful online education in the current study. A few important online tools the current study used to achieve this were: e-mails, discussion boards, virtual meetings including chat rooms, online student presentations and virtual class discussion, and online advising. A few online counselor education programs accredited by the CACREP also adopt many of the above online tools in their master's degree programs.

It appears that the students used the e-mails to contact the instructor the most. Usually, they would receive responses from the instructor the same day. The students found that this was the quickest way to get help in the hybrid class. Questions varied from asking for excused absences from classes to how to conduct the role-play exercises. Likewise, in another study, e-mails were found to encourage a higher level of intimacy than F2F interactions in a clinical supervision class based on e-mails ([Clingerman & Bernard, 2004](#)). However, readers are cautioned that in that study, no control group was included and individual F2F supervision was not analyzed.

Discussion boards, also commonly called threaded discussions, were used for comments and feedback on themes developed on each topic in the curriculum. Instead of letting the students just post their comments on the discussion board, guidelines were included to encourage the students to comment on other students' postings as well. As a result, the authors found that there was a great deal of exchange of student opinion and follow-up feedback/comments on different topics. This format for discussion board enhanced the students' interaction and learning experiences. [Edelstein and Edwards \(2002\)](#) also found that threaded discussion can create a home-like atmosphere where students can visit and embrace the joy of learning. [Brown \(2002\)](#) offers some tips for instructors to improve impact on their online discussions, including: (1) maintaining an informal tone in the online community built by online discussion; (2) relating online discussion to issues raised in class; (3) structuring discussion topics and staying focused around a problem being resolved; (4) defining roles for various discussants, such as "original proposer," "idea extender," "constructive critic," "responder to critic," or "consolidator"; (5) providing incentive for active participants in discussion by providing extra points or enhancing grade; (6) requesting backup for the points students have raised; and (7) keeping the discussion board as an open and free speech platform.

Virtual meetings are another tool used to help re-create the F2F classroom experience. These meetings also enhance engagement between instructor and students as well as among students (Crawley et al., 2009). Through the use of the [Elluminate Live!](#) synchronous web-conferencing platform for the virtual meeting in the hybrid career development class, the students met as a whole class and also broke up into chat rooms for small group discussion. Also, students' slide presentations were pre-loaded and presented to the whole class. Other studies also found the Elluminate sessions to be positive and supportive ([Disbrow, 2008](#); [Page et al., 2003](#)).

For advising and answering student questions, the hybrid instructor met with students in designated virtual meetings every week through Elluminate (2 hours per week). In the results, some of the students used these meetings to discuss different topics with the instructor including the papers, role-play exercises, and videotaping. The students mentioned that they enjoyed the virtual meeting and benefited from this online individual advising. One of them chose another way to communicate with the instructor by sending instant messages during an advising period.

Group activities were favored by the students in both hybrid and F2F formats. This implies that student-oriented learning and teamwork are essential interactions whether in person or online. [Edelstein and Edwards \(2002\)](#) also suggest using small group activities in online classes.

Close to one third of the students in the hybrid class did not think that the interactions were sufficient. Some of them appeared to be hopeful for online education, two of them proposed offering the course again with improvements. According to their responses, improvements could be made in the following ways: increasing the number of virtual meetings, offering more information about the course to recruit students who are ready and desire to take online courses, extending the lessons, and increasing online advising time. In the F2F class, a similar proportion of the students felt that the interaction was sufficient. The students suggested adding student-driven activities and group activities, and more time for discussion.

Personal Factors

On the personal side, both the instructor and the student are important in effective class interaction. A recent study by Nichols (2011) documents that online students wanted a direct relationship with their instructor and were less satisfied when a teaching assistant was the primary contact for instruction or feedback. It appears that the students surveyed for this study expected the instructor to play a facilitator role, such as facilitating the virtual meeting and organizing the opportunities for comments and feedback on the discussion board. Both classes thought that instructor facilitation enhanced their learning because they found the instructors to be available, helpful, and supportive. This may be even more important for online classes because these students are distance learners. The instructor of the hybrid class offered several different communication channels to the students, including e-mails, online advising, and phones. Once, a student did not log on to the virtual meeting when it was class time. The instructor opened his e-mail box to check if the student had e-mailed him. He found that the student had just sent an e-mail for help. Finally, the student was helped and joined the virtual meeting.

Personal factors associated with the student are important as well. First, the findings show that not every student in the hybrid class was ready to take a class through the Internet. Two students had some technical problems. Most problems were encountered recording a digital file for the role-play and uploading the file to the course website. After the instructor offered help, the two students completed their role-play assignments. One student made a few attempts before she successfully submitted the assignment. Other technical problems included accessing the virtual meeting, and downloading and viewing the narrated lecturettes for a Mac user (most students were PC users). The students who felt that they overcame the technical problems had shown an open attitude, worked with their classmates, and sought help from hotlines and the instructor. Second, students' learning styles should be taken into account in the design and delivery of online classes. [Jung, Choi, Lim, and Leem \(2002\)](#) note that reflective learners in an online learning community may perform better than those who are in F2F classrooms, as they have the opportunity to prepare themselves before offering their thoughts on discussion boards. From the findings, it appears that these students took initiative, were open (at least to using new technology), flexible, and motivated to study independently as well as being able to work with others in groups. This is consistent with findings from similar studies ([Clingerman & Bernard, 2004](#); [Schwitzer, Ancis, & Brown, 2001](#)) that have recognized the unique characteristics and needs of distance learners. These attributes are quite dissimilar from those of students who study on campus. Watts (1996) observes that online students who have relatively more stable goals and a relatively strong sense of independence are more satisfied with online classes and benefit more than those students with less stable goals and less sense of independence. [Disbrow \(2008\)](#) found that online students were more self-disciplined than students in F2F classes.

In the F2F class, the students appeared to value respecting one another, friendliness, open attitudes, and focusing in class activities. These personal qualities seem to be basic elements for group activities and classroom instruction. Unlike the online environment, in a F2F situation, everything happens in a here-and-now reality. One student lamented, "*At times, I felt distracted by the students who were having side conversation during class.*" It appears as if the demands for being engaged in classroom activities were higher than that of the online environment. In other words, it is more difficult for students and the instructor to hide or disengage in a F2F environment. Similarly, some students suggested more dialogues and interactions among the students and reduced lectures by the instructor. The authors believe that the students from both the hybrid and the F2F class need to be respected and value open-mindedness and interaction with one another. The F2F class has followed a traditional teaching format, including lectures

and group activities in every class. In comparison, understanding the challenge for distance education, the online class attempted to create the connectedness by intentionally developing many interactive opportunities for the students.

Challenges and Implications for Future Studies

The students also expected good technical support in online classes. They expected that the course website would be tested before the classes started. They also anticipated that sufficient information and instructions about software/equipment would be provided. For example, this hybrid class asked the students to subscribe to a webcam for recording a role-play and a headset to participate in virtual meetings without creating noise or echo. Before classes started, they were also asked to learn how to submit digital sound/video files to the course website on Blackboard. Naturally, the students needed technical support when they had problems. In this class, a student hotline was provided for technical support. The authors found that the students used this technical support frequently, particularly in the beginning of the semester. Their questions included how to upload video files to Blackboard, how to access narrated slide shows of the lecturettes, and how to access the virtual meetings. For example, a student reported having problems viewing the lecturette in narrated slide format on her Mac computer, which appeared to be a compatibility issue with the student's computer and software. As the semester continued, the students became more familiar with the technology; they used the student hotline less. Another option for orienting students to the technology needed for hybrid classes is to provide a screencast that demonstrates the features of a website or tool. Two students felt that they faced technical challenges described above. Technical challenges are also commonly found in other counselor education areas using high technology, such as clinical supervision. For example, in their study, [Manzarares et al. \(2004\)](#) found that students perceived the technology as not at all helpful and had problems with the compatibility of the site supervisor's computers and software with their own.

In higher education, there is a very diverse student population today (Duderstadt, Atkins, & Van Houweling, 2002). Special attention is expected for diversity needs in using technology such as affordability, cultural perceptions and differences, and family support. A variety of needs can be accommodated, including those of students, teachers, and administrators (Barone & Hagner, 2001).

More studies should be carried out in online counselor education. Based on the themes and concepts found in the current study, future studies should focus on validating the current findings regarding: (1) the online environment and the demand for creating good connectedness ([Tait, 1999](#)) through uses of different online tools; (2) the types of personal characteristics for online education including initiative, open attitude, and independent-learning orientation; and (3) specific online instruction tools and their effects on learning, for example, virtual meetings and discussion boards. The current study focused on interactions, but future studies may study learning outcomes such as counseling knowledge and strategies. Also, the readiness of students and instructors for online technology and how to resolve the technical challenges should be examined.

Limitations

A few limitations were noted in the current study. First, only one class of each type was studied. Repeated studies with quantitative approaches and more classes can further examine online benefits and drawbacks. Second, the sample size was small. In future studies, larger sample sizes should be explored, perhaps by recruiting multiple sections of the same course. Third, the hybrid class and the F2F class were taught by different instructors, although measures were applied to minimize the variance due to different instructors in both classes. These measures included using the same syllabus, textbooks, and reading assignments, and periodical meetings between the two instructors.

Conclusion

This explorative study provides a few findings. First, the counseling students perceived online learning and interactions as beneficial. Second, the useful online learning tools included e-mails, discussion boards, virtual meetings, and narrated slides. Third, the effects of interactions online on learning process appeared to be positive and enhancing, and enriched the students' career counseling knowledge. However, the results also show some student concerns on the use of technologies. It takes time for some students and instructors to adjust to the technological learning environment. Fourth, student relationships were enhanced through online learning in the hybrid class. Fifth, most students think that interactions among students and instructor were adequate and enriching in both the hybrid and F2F learning

environment. The current study has provided some ideas of online learning elements, concepts, and practices for further studies in counseling or related fields.

References

- Anderson, K., & May, F. A. (2010). Does the method of instruction matter? An experimental examination of information literacy instruction in the online, blended, and face-to-face classrooms. *The Journal of Academic Librarianship*, 36(6), 495-500. doi:10.1016/j.acalib.2010.08.005
- Artino, A. R., Jr. (2010). Online or face-to-face learning? Exploring the personal factors that predict students' choice of instructional format. *The Internet and Higher Education*, 13(4), 272-276. doi:10.1016/j.iheduc.2010.07.005
- Ascough, R. S. (2002). Designing for online distance education: Putting pedagogy before technology. *Teaching Theology and Religion*, 5(1), 17-29. doi:10.1111/1467-9647.00114
- Barone, C. A., & Hagner, P. R. (Eds.). (2001). *Technology-enhanced teaching and learning: Leading and supporting the transformation on your campus*. San Francisco, CA: Jossey-Bass.
- Bower, B. L. (2001). Distance education: Facing the faculty challenge. *Online Journal of Distance Learning Administration*, 4(2). Retrieved from <http://www.westga.edu/~distance/ojdla/summer42/bower42.html>
- Brown, D. G. (2002). The role you play in online discussion. *Syllabus*, 16(5), 9. Retrieved from <http://www.campustechnology.com/Articles/2002/11/The-Role-you-Play-in-Online-Discussions.aspx>
- Clingerman, T. L., & Bernard, J. M. (2004). An investigation of the use of e-mail as a supplemental modality for clinical supervision. *Counselor Education and Supervision*, 44(2), 82-95. doi:10.1002/j.1556-6978.2004.tb01862.x
- Council for Accreditation of Counseling and Related Educational Programs. (2009). Council for Accreditation of Counseling and Related Educational Programs (CACREP) (2008). *CACREP 2009 Standards*. Retrieved from <http://www.cacrep.org/doc/2009%20Standards%20with%20cover.pdf>
- Crawley, F. E., Fewell, M. D., & Sugar, W. A. (2009). Researcher and researched: The phenomenology of change from face-to-face to online instruction. *Quarterly Review of Distance Education*, 10(2), 165-176.
- Disbrow, L. M. (2008). The overall effect of online audio conferencing in communication courses: What do students really think? *MERLOT Journal of Online Learning and Teaching*, 4(2), 226-233. Retrieved from <http://jolt.merlot.org/vol4no2/disbrow0608.htm>
- Draves, W. A. (2002). *Teaching online* (2nd ed.). Riverfalls, WI: LERN Books.
- Duderstadt, J. J., Atkins, D. E., & Van Houweling, D. (2002). *Higher education in the digital age: Technology issues and strategies for American colleges and universities*. Westport, CT: Greenwood.
- Edelstein, S., & Edwards, J. (2002). If you build it, they will come: Building learning communities through threaded discussions. *Online Journal of Distance Learning Administration*, 5(1), Retrieved from <http://www.westga.edu/~distance/ojdla/spring51/edelstein51.html>
- El Mansour, B., & Mupinga, D. M. (2007). Students' positive and negative experiences in hybrid and online classes. *College Student Journal*, 41(1), 242-248.
- Elliott, R. (1983). Fitting process research to the practicing psychotherapist. *Psychotherapy: Theory, Research & Practice*, 20(1), 47-55. doi:10.1037/h0088478
- Elliott, R. (1989). Comprehensive process analysis: Understanding the change process in significant therapy events. In M. J. Packer & R. B. Addison (Eds.), *Entering the circle: Hermeneutic investigation in psychology* (pp. 165-184). Albany, NY: State University of New York Press.
- Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *The Counseling Psychologist*, 25(4), 517-572. doi:10.1177/0011000097254001

- Jung, I., Choi, S., Lim, C., & Leem, J. (2002). Effects of different types of interaction on learning achievement, satisfaction and participation in web-based instruction. *Innovations in Education and Teaching International*, 39(2), 153-162. [doi:10.1080/14703290252934603](https://doi.org/10.1080/14703290252934603)
- Krieger, K. M., & Stockton, R. (2004). Technology and group leadership training: Teaching group counseling in an online environment. *The Journal for Specialists in Group Work*, 29(4), 343-359. [doi:10.1080/01933920490516044](https://doi.org/10.1080/01933920490516044)
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Manzanares, M. G., O'Halloran, T. M., McCartney, T. J., Filer, R. D., Varhely, S. C., & Calhoun, K. (2004). CD-ROM technology for education and support of site supervisors. *Counselor Education and Supervision*, 43(3), 220-231. [doi:10.1002/j.1556-6978.2004.tb01844.x](https://doi.org/10.1002/j.1556-6978.2004.tb01844.x)
- Nichols, J. (2011). Comparing educational leadership course and professor evaluations in on-line and traditional instructional formats: What are the students saying? *College Student Journal*, 45(4), 862-868.
- Oravec, J. A. (1996). *Virtual individuals, virtual groups: Human dimensions of groupware and computer networking*. Cambridge, UK: Cambridge University Press. [doi:10.1017/CBO9780511574986](https://doi.org/10.1017/CBO9780511574986)
- Page, B. J., Jencius, M. J., Reh fuss, M. C., Foss, L. L., Dean, E. P., Petruzz, M. L., ... Sager, D. E. (2003). PalTalk online groups: Process and reflections on students' experience. *The Journal for Specialists in Group Work*, 28(1), 35-41. [doi:10.1080/714860148](https://doi.org/10.1080/714860148)
- Rockinson-Szapkiw, A. J., & Walker, V. L. (2009). Web 2.0 technologies: Facilitating interaction in an online human services counseling skills course. *Journal of Technology in Human Services*, 27(3), 175-193. [doi:10.1080/15228830903093031](https://doi.org/10.1080/15228830903093031)
- Schwitzer, A. M., Ancis, J. R., & Brown, N. (2001). *Promoting student learning and student development at a distance: Student affairs concepts and practices for televised instruction and other forms of distance education*. Lanham, MD: American College Personnel Association.
- Steinbronn, P. E., & Merideth, E. M. (2008). Perceived utility of methods and instructional strategies used in online and face-to-face teaching environments. *Innovative Higher Education*, 32(5), 265-278. [doi:10.1007/s10755-007-9058-4](https://doi.org/10.1007/s10755-007-9058-4)
- Sugar, W., Martindale, T., & Crawley, F. E. (2007). One professor's face-to-face teaching strategies while becoming an online instructor. *Quarterly Review of Distance Education*, 8(4), 365-385.
- Tait, A. (1999). Face-to-face and at a distance: The mediation of guidance and counseling through the new technologies. *British Journal of Guidance & Counselling*, 27(1), 113-122. [doi:10.1080/03069889908259719](https://doi.org/10.1080/03069889908259719)
- Trepal, H., Haberstroh, S., Duffey, T., & Evans, M. (2007). Considerations and strategies for teaching online counseling skills: Establishing relationships in cyberspace. *Counselor Education and Supervision*, 46(4), 266-279. [doi:10.1002/j.1556-6978.2007.tb00031.x](https://doi.org/10.1002/j.1556-6978.2007.tb00031.x)
- Vogel, D., & Klassen, J. (2001). Technology-supported learning: Status, issues and trends. *Journal of Computer Assisted Learning*, 17(1), 104-114. [doi:10.1111/j.1365-2729.2001.00163.x](https://doi.org/10.1111/j.1365-2729.2001.00163.x)
- Watts, A. G. (1996). Computers in guidance. In A. G. Watts, B. Law, J. Killeen, J. M. Kidd, & R. Hawthorn (Eds.), *Rethinking careers education and guidance: Theory, policy and practice* (pp. 173-183). London, UK: Routledge.
- Yang, Y., & Cornelious, L. F. (2004, October). *Ensuring quality in online education instruction: What instructors should know?* Paper presented at the 2004 Association for Education Communications and Technology International Convention, Chicago, IL. Available from [ERIC](https://eric.ed.gov/?id=ED484990) database. (ED484990)
- Young, K. S. (2005). An empirical examination of client attitudes towards online counseling. *CyberPsychology & Behavior*, 8(2), 172-177. [doi:10.1089/cpb.2005.8.172](https://doi.org/10.1089/cpb.2005.8.172)



This work is published under a Creative Commons Attribution-Non-Commercial-Share-Alike License

For details please go to: <http://creativecommons.org/licenses/by-nc-sa/3.0/us/>