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F2F/CMC Peer Writing Consultant/Tutee Perceived Satisfaction

Introduction

The writing process is open-ended in that there is no definitive answer (Barilea & Dursob, 2002). In a sense, the writing process could also be defined as an ill defined problem that requires dynamic degrees of collaborative interaction and cognitive evaluation to craft possible solutions. This complexity makes the task of learning to write competently dependant on interaction and feedback with people that can help a student understand the dynamics of the writing process. Peer tutoring has become a popular method for providing that help. Traditionally peer tutoring happened face to face in a classroom setting, or face to face after class. And school environments still rely primarily on F2F interactions (Van der Meijden & Veenman, 2005). A review of the literature on peer reviews, collaborative writing and problem solving as they relate to the available modes of communication (F2F, asynchronous CMC and synchronous CMC) reveals a transitional continuum from a dichotomous view pitting the value of F2F communication against the value of CMC communications, to a more integrated process view of communication modes. One of the primary criteria addressed by many studies has been the perceived satisfactions of participants in peer tutoring, collaborative writing and problem solving interactions that utilize various modes of communication.

This Study

The purpose of this study was to explore the factors that influence the perceived satisfaction levels of face to face peer reviews and computer mediated peer reviews in the San Jose State University Communication Department's writing consultations program. The specific aim of the study was to gather data that could inform the design and application of the writing consultation program to better meet the needs of the SJSU student body. The following was my research question:

How does the perceived helpfulness of communicative interactions between face to face tutoring sessions and CMC (email/Skype) tutoring sessions differ between peer tutors and students that receive peer tutoring assessments?

Hypothesis: Peer tutors will rate F2F interactions more helpful, whereas tutees will rate CMC more helpful.

Literature Review

Studies over the past decade have attempted to determine why students are, or are not, satisfied with their communicative interactions in peer reviews, problem solving and collaborative writing scenarios.

A recent study by Ching-Fen Chang (2012) evaluated mixed mode satisfactions of peer reviews in a writing course. The study showed that perceived satisfactions were strongly weighted toward synchronous mode (75%) for helping improve writing quality, but F2F still came in at 50%, and other categories like convenience rated a respectable 47% for asynchronous and F2F (Ching-Fen Chang, 2012). It appears that the modal satisfaction perception is a bit of a mixed bag and involves more complexities than past studies that focused on modes linearly correlated with different types of problems can account for. This is consistent with contradictory results relevant to satisfaction levels from other past studies where F2F interaction produced higher levels of satisfaction, while others showed that CMC produced higher levels of satisfaction (Van der Meijden & Veenman, 2005).

Barilea and Dursob (2002) focused on communicative terms such as *interactivity* and *expressiveness* to try to explain the differences in satisfaction levels between different modes when students engaged in open-ended type problem solving like collaborative writing. Interactivity means the rapid exchange of information with the ability to immediately respond to information conveyed by the conversation partner. Expressiveness refers to the ability to communicate a whole idea, often involving multiple levels of thoughts, feelings and social contexts, to a communication partner. Barilea and Dursob (2002) did suggest combining the modes of asynchronous and synchronous CMC to perhaps equal the satisfaction levels of F2F. However, combined modes were not specifically addressed within the framework of their study.

Cheng and Tsai (2012) attempted to negotiate the satisfaction level continuum by focusing on the social aspects of peer tutoring within the writing process; adopting the Van Gennip, Segers & Tillema (2009) concepts of *psychological safety*, *value diversity*, *interdependence* and *trust* within the cognitive learning frameworks of *fragmentation* and *cohesion*. Fragmented learning focuses narrowly on pieces of a process. The concept of *cohesion*, especially ideas about restructuring knowledge as learning, and thoughts of learning from different perspectives incorporates more of a global approach where the pieces within a process are perceived as dynamic and interdependent.

This is similar to the differentiation between the process of solving ill defined problems and structured problems presented by Jonassen and Kwon (2001). Structured problems are well bounded with clear directions and specific steps on how to go about solving the problem, like the type often encountered in school textbooks. Ill structured problems are often emergent, lacking existing models to pull from in developing plans and solutions.

Zumbach and Spraul (2007) showed that problem solving was seen as more effective when tutors were perceived to have some level of expertise similar to the findings of Cheng and Tsai (2012) in that social trust was related to belief in the assessment ability of a peer reviewer.

While many of these studies focused on particular aspects of satisfaction in relation to utilizing different modes of communication in a range of problem scenarios, only Ching-Fen Chang (2012) went as far as suggesting that mixed modes could be applied at different stages of the writing process to accommodate varying personal preferences and facilitate a broader range of satisfaction.

Methods

Participants for this study consisted of peer writing consultants, tutees and potential tutees within the SJSU written communications program. The fledgling peer writing consultant program consisted of less than 20 writing consultants serving hundreds of students enrolled in mandatory undergraduate level writing courses where peer tutoring was optional to successful course completion. The program had only been in operation for one and a half semesters at the time of this study. I surveyed 81 tutees and potential tutees via electronically submitted questionnaires utilizing a combination of fill in the blank and Likert scale questions. The questions were designed to assess student perceptions of emotional responses to writing and asking for help, psychological attitudes toward writing and asking for help, perceptions of time constraints in relation to asking for help, perceptions of the degree of helpfulness based on certain criteria, and perceptions of which mode of communication is more beneficial at different stages of the writing process. An example of an emotional response to asking for help with writing: I am discouraged from asking for help from a peer tutor because I am embarrassed that I do not write well. An example of a psychological attitude toward the writing: Writing well is not important to my career goals. An example of a question about time constraints: I am discouraged from asking for help from a peer tutor because my schedule is already so full that I do not have time to meet with a peer tutor. An example of a question about perceptions of helpfulness of tutoring: I get better grades on papers. And an example of a question about perceived helpfulness of different writing tasks via different modes of communication: I strongly prefer face to face consultations because I believe the goal of tutoring is to create understanding rather than simply make objective and mechanical corrections. These students were all enrolled in mandatory undergraduate writing courses. The writing assignments required in the mandatory writing courses ranged from well structured fact based writing to loosely structured creative writing. The assessment of the surveys was primarily quantitative with cross referencing between response totals and academic emphasis of the students.

I then interviewed 5 writing consultants (identified by consultant numbers 1-5) using open ended questions. 1 interview was conducted F2F, 2 via email, and 2 via Skype conference calling. Consultants were asked about their experience level with peer consulting, their perceptions of why students do not ask for help with writing assignments, what writing process task characteristics they tend to focus on most, their perceptions of the helpfulness of F2F and CMC tutoring at different stages of the writing process, and the importance of social interaction in the peer tutoring relationship. The interviews were assessed qualitatively by assigning interviewee responses to predetermined categories of communication behaviors, perceived attitudes, and characteristics of writing process tasks. An example of an interview question is which do you prefer, F2F or CMC-why?

Finally, I conducted a focus group in person with three potential writing consultant tutees (10 were invited but only 3 were able to attend). The focus group participants (identified as participant 1, 2, and 3) were from three different majors: participant 1 was a business major, participant 2 was communications major and participant 3 was an engineering major. None of the participants had previously received peer tutoring in the writing process. The focus group

was divided into two segments. The first segment utilized a combination of technological support tools to simulate portions of the writing tutor/tutee consultation process via different modes of communication. The support tools utilized were an electronic Word document of a sample student essay (a basic fact based paper) with inserted tutor comments using the Word review feature that participants were told they had received via email, and a video recording of a tutor (me) referring to the same sample student essay to simulate a Skype consultation. The participants were asked to express key words, first impressions, thoughts and feelings after each step of stage one, and finally to express what differences they perceived if the communication had all been done face to face. Stage two involved changing the assigned writing prompt to an ill defined writing scenario that would require a much higher degree of creativity and critical thought over different stages of the writing process. The writing prompt for this portion of the focus group activity was: Write a 2500 word essay on something you feel passionate about and that you believe other people would benefit from reading in some way. Incorporate five senses writing (taste, touch, smell, hearing, visual) and use highly descriptive language (the black and white speckled ball soared through the atmosphere instead of the soccer ball flew high...). The participants were then asked again to express their initial reactions, key words, thoughts or feelings in response to the writing prompt. Next, I verbally clarified some key considerations for this type of writing assignment: "For this type of assignment you have to choose a topic that you can write 8-10 pages of text on, be able to articulate why this topic is important for others to read, choose a structure for the paper that promotes a logical, easy to follow progression, and be able to creatively play with word choice." Finally, the participants were asked to express if they felt writing consultations for this type of assignment would be more helpful in a face to face setting or a computer mediated (email alone, Skype) setting along with key terms that supported or detracted from successful communication in each mode.

Categories (Codes) and Definition of Terms

The definition of satisfaction offered by Keeler (1983) involving participants' perceptions of being able to achieve success and feelings about the outcomes achieved was used as a gauge of the perceptions of tutees. Helpfulness was substituted for the term satisfaction in the data gathering process as a term with a broader understanding of meaning in the general student population. A total of 21 categories and subcategories were used to code the data.

The specific categories assigned were Outcomes (out); *Convenience*(CVtime); *Flexibility*(FLXtm); *Relevance* (RLvnc); *Interactivity* (INT): Including the subcategories *Time lag* (TL), and *Coordination Comments* (CC); *Expressiveness* (EXP); *Psychological Safety* (PS): Including subcategories of *Emotional Comments* (EC) and *Trust* (TRST); *Focus of Discourse* (FOD): Including the subcategories *Relevant Remarks* (RR), *Irrelevant Remarks* (IRM), and *Social Comments* (SC); *Characteristics of Tasks* (COT): Including the subcategory *Fragmented* (FRG) with the sub-sub category *Basic Technical* (BTech), and *Cohesive* (CHSV) including the subcategory *Creative* (CRT).

Interactivity was defined by Barilea and Dursob (2002) as the rapid exchange of information with the ability to immediately respond to information conveyed by the conversation partner and a *lapse in time* between messages allows for interruptions to occur, disrupting the flow of communication. In relation to virtual peer review, Chang (2012) borrowed the criteria for virtual peer review from Breuch (2004) as having three characteristics that are different than F2F peer

reviews, *time* (either real-time or delayed time), *space* (beyond geographic boundaries), and *interaction* (mainly text-based) which also informed the framework for this study.

Expressiveness was defined by Barilea and Dursob (2002) as the ability to fully convey a whole idea. *Irrelevant remarks* were counted as statements that were off-topic. Social comments were a specific form of irrelevant comments with beneficial effects relating to rapport building through social presence. *Coordinating remarks* included all statements that addressed issues such as division of labor and *plans* for upcoming sessions. According to Cheng and Tsai (2012) *Psychological safety* refers to a situation in which an individual feels safe to take interpersonal risks in a team and is often expressed through emotional comments, and *trust* refers to the perception of the qualifications for peer assessments (Zumbach and Spraul, 2007). The characteristics of the writing process tasks were segregated into two broad categories of fragmented and cohesive conceptions of learning which Cheng and Tsai (2012) adopted from Marton, Dall'Alba & Beaty (1993). Fragmented learning in this study refers to those writing process tasks (spelling, grammar, technical structure, technical revisions) that represented simple knowledge reproduction or accumulation as learning (Cheng and Tsai, 2012). *Cohesive* learning in this study refers to those writing process tasks (brain storming for what to write about, developing a thesis) that represent restructuring knowledge to learn or the ability to see the problem from a different perspective (Cheng and Tsai, 2012). The characteristics of the writing process tasks were also informed by Jonassen and Kwon (2001) as similar to the differentiation between structured problem solving and ill-structured problem solving.

Findings and Discussion

Hypothesis

My hypothesis claimed that I would find the tutors in favor of face to face communication and the tutees in favor of CMC communications. However, my hypothesis proved oversimplified and not determinative. The data did not support any linear connection between specific modes of communication and clearly defined preferences between tutors and tutees. However, the data from my study did provide some perceptual patterns that informed my general research question.

Research Question

The research question for this study was exploratory in nature. I wanted to ascertain what factors influenced the perceptions of helpfulness (satisfaction) in the peer tutoring relationship as it related to the writing process using different modes of communication. The foundation for the inquiry was initially formed through personal observation. As a writing consultant I had personally observed what appeared to me to be a strong favoritism toward face to face in the communication department's pedagogical stance toward learning writing. As a student, I had participated in numerous writing classes where I repeatedly heard students express frustration with the lack of time available to focus on developing their writing skills. This implied that a conflict existed between the training for consultants emphasizing face to face interaction and students' need for efficient and flexible assistance.

Unpredictability

To explore my research question, I compared the perceptions of the tutors to the opinions of the tutees and potential tutees (those that had never received peer tutoring) within the context of different writing tasks in various communication modes. My findings indicated more correlations made by a lack of predictable patterns than in the existence of definable patterns. For example, around 43% of survey participants indicated that they could not meet with a tutor because they did not have time, which would imply that possibly they would be interested in CMC tutoring exclusively, as has been found in previous studies (Van der Meijden & Veenman, 2005). But this was not the case, as the spread between choices of communication modes did not appear to be significantly linked to time.

Predictability

There was one notable connection between the type of writing process task and preferences indicated for modes of communication. CMC alone ranked lowest across all categories of tasks in the survey of tutees. Except with tasks such as correcting basic grammar and spelling, where 60.5% indicated preferences for either F2F or CMC. Interestingly, this did line up with the qualitative data from the interviews with the consultants. Consultant 3 stated, “basic technical and grammar are fine to deal with through CMC.” And Consultant 4, “Email can handle some tasks- prompting them to think about certain things- we can give feedback and pose questions and suggest adding descriptive language.”

Academic Majors: Quantitative Findings

I did not find any significant quantitative patterns between the preferences of modes of communication between majors from the survey results. The survey participants ranged in their specific academic emphasis from over 12 distinct majors: communications (27%), business (31%), undeclared (9%) finance (3%), accounting (2%), marketing (5%), information systems (4%), nursing (3%), biology(2%), kinesiology(2%), human resources(1%), engineering(7%). It was surprising that there were not more definitive links between specific majors and modal preference indicators. This could be because participants simply chose a balanced or middle of the road answer.

Academic Majors: Qualitative Findings

The data from the interviews did show a qualitative connection between academic majors of tutees and the experiential observations of the tutors in relation to the writing tasks. Consultant 4 commented in an interview, “Nursing/engineering majors are fact focused and prefer to just deal with technical and grammar issues, not creative process. Communication majors are often more comfortable with the creative process but need help cleaning up technical issues and staying on track within the creative writing stages.” And a similar comment from Consultant 2, “engineers are detail process oriented, comm. majors are more comfortable with esoteric ideas.” A comment from an engineering focus group member also supported this connection between academic major and perceptions of what is important in the writing process, “what does being able to say a black and white spotted ball [as more descriptive than soccer ball] have to do with engineering?”

These types of comments have to do with the concept of relevance, and the learning concepts of fragmentation and cohesion (Cheng and Tsai, 2012). For example, certain majors tend toward approaching writing as simple knowledge reproduction (grammar, technical structure) while others see the cohesion within the writing process. The creative part of the writing process is like an ill defined problem as described by Jonassen and Kwon (2001) and it appears that there is a correlation between certain academic majors and the ability to approach a problem from different perspectives.

Outcomes: Commonly Known as Practical Results

Some perceptions may also relate to a focus on outcomes or as Prins, Sluijsmans, Kirschner, and Strijbos (2005) note, they define improvement of *content related* performance as the first order learning goal. Support for this was provided by the 73.8% of tutee respondents that indicated getting better grades on papers as criteria they would use to judge the helpfulness of tutoring. If coupled with the over 70% responses indicating the ability to use techniques that they learned in tutoring without asking for more help and the almost 60% that indicated the ability to write quality papers in less time as very important, a propensity toward fragmented learning (focus on pieces of a complex process that can be memorized and easily reproduced) to achieve short term satisfaction emerges.

Emotional Factors

Emotional factors appeared to play a part in the peer tutoring satisfaction levels. 55.2% of survey participants ranked feeling embarrassed as a strong deterrent from asking for help from a peer tutor and 68.4% indicated a feeling of reduced anxiety with the writing process as a strong indicator of success in the peer tutoring process and are in line with Van Gennip, Segers & Tillema (2009) concept of *psychological safety*. It is possible that the anonymity of CMC tutoring could encourage students to seek help with writing but a definitive link from the data could not clearly show that connection.

Social Factors

Socially, the preferences between communication modes relate to expectations of interactivity and expressiveness (Barilea and Dursob, 2002). Again, the data from the survey was not definitive but the data from the interviews sheds more light on the subject.

Flow, Complex Ideas, Emotion and Trust

Flow is the common term often used to replace the formal term *interactivity* in common speech. Findings indicated that there are both advantages and disadvantages to the interruption of the flow of communication. Consultants noted that communicating through email can allow time for review of documents and time to form cohesive thoughts and responses to tutees. However, it was also noted that sometimes email communications can be overlooked, misunderstood, and create significant delays in response times. It was also noted that the complexity of the communication played a part in the preference for modal communications. For the ability to express complex ideas, Consultant 2 noted, "Complex ideas need more interaction/non verbal

cues to fully express than CMC allows for.” Consultant 4 said, “It’s hard to explain something when you can’t use gestures, eye contact, facial expressions.” However, it was also noted that the ability to express full ideas or even emotion in text based communications depends on the communicative skill sets of both the communicator and the receiver. Some people communicate effectively through written word alone, others not. Some students can fully understand complex ideas and the inferred nuances of emotion by reading communications, others cannot. A sense of trust between the tutor and the tutee was indicated as significant as well. As Consultant 3 offered, “Social interaction is needed to build rapport and trust, social interaction builds confidence and then they can write better.”

Perceptions of Expertise

And finally, whether tutees believe that the peer tutor has any more skill in the writing process than themselves influences satisfaction perceptions. Zumbach and Spraul (2007) showed that problem solving was seen as more effective when tutors were perceived to have some level of expertise. Here again I found the needed data in the interviews.

Consultant 2, “We have to convince them that we do possibly know something about the writing process that they don’t...peer consultants don’t have teaching or tutoring credentials...” And consultant 4, “...figure [we] are in the same boat- unless [we] are a teacher, it’s like going to the middle man, and [they] may not get much help.” Perhaps F2F is perceived as necessary in establishing the ability of the tutor in some cases and not in others. In either case, the data did not provide definite links for empirical support.

Summary of Findings

Taken together, I discovered that as Ching-Fen Chang (2012) pointed out, mixed modal preferences encompass many levels of dynamic complexity. While practical factors such as time and convenience initially appear to play a part in influencing what mode tutors and tutees may prefer, other factors: the perceived relevance and requirements of the characteristics of different writing tasks, the socio emotional perceptions of tutees, the abilities of both tutors and tutees to communicate meaningfully via different modes, and the established expertise of tutors all influence perceived satisfactions.

Recommendations for Program Design Improvement

The recommendations for improvements to the SJSU communications center’s writing consultant program design are twofold:

1. Training for tutors
2. Promotional communications

First, as Ching-Fen Chang (2012) suggested, specific training for writing consultants on best practices for incorporating mixed modal tutoring in different stages of the writing process should be implemented.

This instruction should include the following:

1. Simulate F2F tutoring sessions from initial contact through successive stages of the writing process.
2. Incorporate practice sessions in Skype video calling.
3. Provide instruction in recording consultation sessions for tutee reference.
4. Train tutors in the use of the built in review features of Word.

Second, promotional communications for the writing consultant program should emphasize the following:

1. The availability of mixed modal tutoring.
2. The broad qualifications of the tutors (how and why tutors can help).
3. Specifically address the perspectives of a variety of majors (i.e. engineering, business, communications).

Limitations and Future Research

This study was limited by a small sample size, limited duration, and self reported information. Longitudinal studies that utilize content analysis of actual tutor/tutee communications should be implemented in the future. Other future research could focus more on specific aspects that influence satisfactions like language differences and how gender affects perceptions of tutoring in different modes of communication.

References

- Barilea, A., Dursob, F. (March 2002). Computer-mediated communication in collaborative writing. *Computers in Human Behavior*. 18(2). 173–190.
[http://dx.doi.org.libaccess.sjlibrary.org/10.1016/S0747-5632\(01\)00040-1](http://dx.doi.org.libaccess.sjlibrary.org/10.1016/S0747-5632(01)00040-1)
- Breuch, Kastman. (2004). Virtual peer review: Teaching and learning about writing in online environments. Albany, NY: *State University of New York Press*.
- Cheng, K. , & Tsai, C. (2012). Students' interpersonal perspectives on, conceptions of and approaches to learning in online peer assessment. *Australasian Journal of Educational Technology*, 28(4), 599-618.
- Ching-Fen Chang. (March 2012). Peer review via three modes in an EFL writing course. *Computers and Composition*, 29 (1)63–78.
<http://dx.doi.org/10.1016/j.compcom.2012.01.001>
- Jonassen, D. H., & Kwon, H. (2001). Communication patterns in computer mediated versus face-to-face group problem solving. *Educational Technology Research & Development*, 49(1), 35-51.
- Frans J. Prins, Dominique M. A. Sluijsmans, Paul A. Kirschner and Jan-Willem Strijbos. (Aug. 2005). Assessment & Evaluation in Higher Education. *Open University of the Netherlands*.
30(4). 417–444.
- Keller, J. (1983). Motivational design of instruction. In C. Reigeluth (Ed.), *Instructional design theories and models: an overview of their current status* (pp. 386–434). Hillsdale, NJ: Erlbaum.
- Van der Meijden, H. Veenman, S. (2005). Face-to-face versus computer-mediated communication in a primary school setting. *Computers in Human Behavior*. 21 (5). 831 - 859. <http://dx.doi.org.libaccess.sjlibrary.org/10.1016/j.chb.2003.10.005>
- Zumbach, j., & Spraul, P. (2007). The role of expert and novice tutors in computer mediated and face-to-face problem-based learning. *Research & Practice in Technology Enhanced Learning*, 2(2), 161-187.