

Running Head: Student Perception of Online Instruction & Learning

Student Perception of Online Instruction and Learning:
Exploring the Dziuban Model

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Introduction

Background

In the fall of 2007, principal investigators Dr. Charles D. Dziuban, Dr. Joel L. Hartman, Dr. Patsy D. Moskal, and Dr. Jay Brophy-Ellison completed a study titled “Student Involvement in Online Learning” for the Alfred P. Sloan Foundation. In this study, Dziuban et al. (2007) identified eight dimensions of Student Satisfaction for students who take college coursework in an online format that employs asynchronous technologies and corresponding instructional design. The Dziuban et al. eight dimensions (hereafter referred to as the “Dziuban Model”) can be said to comprise a framework for describing student satisfaction with asynchronous learning network (ALN) courses. If this model were to be considered robust, then educational researchers would have a common framework to study student satisfaction, the design of ALN type instructional designs, and other (future) technologies. Further, researchers would have a terminology that is potentially more accessible than is the case to date.

Purpose of the Study

The purpose and potential value of what we learn from this study is to enhance our understanding of student perspectives regarding their online learning experiences. This understanding can benefit multiple constituencies: students who enroll in online courses (especially those who enroll almost exclusively in online courses or academic programs of study), faculty who teach and develop online courses, department chairs and college deans who support online teaching and learning initiatives, and university support services for online teaching and learning (e.g., Course Development & Web Services, Faculty Center for Teaching and Learning, etc.). This researcher notes that it will have to be through follow-on work (i.e., not

within the scope of this study project) to research a link of an enhanced understanding of student perspectives to directives for instructors or instructional designers with how to adjust elements of an online course based on studying student perspectives. The current scope of the study is to develop means by which an instructor of an online learning course can probe for authentic student perspectives. The term 'authentic' is used to differentiate the perspectives of students that are secured by traditional course evaluation methods from the perspectives of students secured by an approach more completely developed by students themselves.

Research Questions

In this exploration of the model, this researcher has the following questions:

1. Can the Dziuban Model be used to study student perception of online instruction and learning?
2. Can students generate questions they would want to see asked about their experiences with online instruction and learning at UCF, in this way provide a unique student perspective?
3. How and when would be favorable to use student generated questions in a study about student perceptions to online instruction and learning?
4. Can the results of the study be used to later explore students' perception of their online instruction and learning experiences?

These questions provide directional guidelines for the research project. What we hope to learn is whether the Dziuban Model can be used to develop a fresh approach to the Student Perception of Instruction (SPI) evaluation given to all UCF students when they finish a course. Specifically, this fresh approach would be applicable only to students who take or participate in online coursework at UCF, typically termed type 'M' or 'W' courses. At UCF, student course

evaluations are the same whether a student takes a traditional (i.e., face-to-face: f2f) course or an online course. That online courses are evaluated identically to f2f courses creates a disparity in the evaluative data that guide faculty to an understanding of the students' perception of the course: the current evaluation tool does not reflect the changed reality of teaching and learning online. It is worrisome that faculty performance in teaching online is measured by the same, older evaluation tool. This study will not focus on any comparative analysis that includes existing evaluation instruments. Those future topics and worries notwithstanding, this study will focus on deriving an instrument and an approach to be used by instructors who teach online to explore how their students perceive their course.

The remaining structure of this paper includes a review of the literature, a detailed discussion of the methods employed in this study, a presentation of results and findings, a discussion of those results and findings, and a conclusion. Further, this study includes three appendices: appendix A presents the protocol used for data gathering in the first phase of the study; appendix B presents the protocol used for data gathering in the second phase; and appendix C presents the final set of questions produced through the study.

Review of the Literature

Context by Terminology

What does it mean to be “satisfied”? The concept plays an important role in our lives, as it is woven into the core of our society. In the preamble to the Declaration of Independence of the United States, we have the famous line, “We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.” The concept of satisfaction might be derived from our pursuit of happiness. When we buy things, we are often assured that

“...satisfaction is guaranteed!” In the 1960’s, The Rolling Stones made a hit single with a highly controversial song by singing, “I can’t get no... satisfaction.” The concept would seem to carry heavy weight in our interactions everywhere. It seems multi-faceted, and there are many perceptions of what it is, and when we might have it.

It is an important point of distinction that we can say with some certainty that the concept of “satisfaction” is largely reflective. While it might be true that we ‘look for’ satisfaction, which implies forward planning and thinking, it can be argued that for many, ‘satisfaction’ represents a statement about current conditions we find ourselves, and this represents a culmination of past events or activities that yield (or not) sought-after results. Most dictionary entries on the noun or verb will include phraseology that sustains this assertion. In this way, ‘satisfaction’ is backward thinking or reflective.

By contrast, ‘motivation’ can be argued to be largely forward thinking, or involve some form of internal planning to reach a goal or objective. Our motivations to fulfill a plan, need, or want carry us forward through or around obstacles. Motivation theories abound the literature. In a chapter addressing a theory of human motivation, Maslow (Maslow, 1946) presents 13 propositions that he argues “...would have to be included in any theory of human motivation...” (p. 22). In three of those propositions, Maslow employs the concepts of goals (which represent forward thinking, planning) to distinguish behaviors; in another two of those propositions, Maslow tersely associates motivation with states of satisfaction; the remaining propositions focus on considerations of biology, environment, and terminology. In a paper on “Meaning, Self, and Motivation in Organizations,” Shamir (Shamir, 1991) identifies that needs based theories (i.e., a subgroup of motivation theory) as being associated with individual satisfaction. In the ARCS model (Attention, Relevancy, Confidence, and Satisfaction), John Keller incorporates

motivation theory into instructional design (Keller, 1987; Keller, 1999; Keller, 2001). By the prominence of satisfaction in motivation theory, further pursuit in distinguishing the characteristics of satisfaction is well-legitimated. The derivation of motivation or factors of motivation (that can include the elements of the ARCS model) that might be used to improve desired educational outcomes will more easily follow with a strong understanding of satisfaction. Still, there is an important difference between satisfaction and motivation: the former is largely backward thinking or reflective, and the latter is largely forward thinking or planning, and the two would seem to be intertwined.

Additional Studies Converge on Satisfaction

There are others who have contributed to the research dialog on satisfaction in education. Shea et al. (Shea, Fredericksen, Pickett, & Pelz, 2004) identify that good learning requires a centering on the learner, knowledge, assessment, and community and further point to Chickering and Gamson's *7 Principles of Good Practice and Principles on Learning Environments* (Chickering, Gamson, Poulsen, & Foundation, 1987; Chickering & Ehrmann, 1996). While the 7 Principles do not specifically refer to student satisfaction, achievement of satisfaction is alluded to by following the guidelines derived from the principles: contact between students and faculty; student reciprocity and cooperation; prompt feedback; time on task; active learning techniques; communication of high expectations; respect for diverse talents and ways of learning. While stated sometimes differently, these principles seem to arise in the literature on satisfaction in education. Conducting an analysis to determine the relationship between environmental variables and student satisfaction, Thurmond et al. (2002) leveraged 12 questions in an evaluative instrument based on the 7 Principles for web-based training (Thurmond, Wambach, Connors, & Frey, 2002). Their findings include having a variety of assessment strategies, team or

group work, timely feedback, and an instructor's active participation in web-based discussions as being the most influential variables to satisfaction. Grant and Thornton (Grant & Thornton, 2007) identify three themes of best practices for online instruction as being course design, instructional effectiveness, and interactivity or interconnectivity –which, if properly implemented, can influence student satisfaction. Summers et al. (Summers, Waigandt, & Whittaker, 2005) examined differences between online distance education and traditional classroom learning for an introductory undergraduate statistics course and found differences in the level of student satisfaction: instructor explanations, enthusiasm, openness and concern, interest in student learning, group discussions, quality of questions and problems, and evaluation and grading were all deemed less satisfactory in an online course against a traditional class on the same topic. In a study to detail student perceptions of useful and challenging characteristics of online learning, Song et al. (Song, Singleton, Hill, & Koh, 2004) note that flexibility, convenience, diversity of learning experiences, immediacy in instructor feedback, and sense of community contribute to student perceptions, but that satisfaction is more associated to course design, the comfort level with technology, learner motivation, and time management skills. Young and Norgard (2006) developed a student survey tool after completing a review of the literature and found that course design, student-student interactions, timeliness of student-instructor interactions, technical support, and depth of experience with the medium (i.e., online learning management systems) contribute to student perception of satisfaction (Young & Norgard, 2006).

Chickering and Gameson's 7 Principles seem to comprise a robust compilation as evidenced by how other researcher's work fit well within their list. Shea et al. overtly refer to the Principles in their study. Thurmond et al. leveraged 12 questions from a data bank built from the

7 Principles in their study. Grant and Thornton’s three themes align well with the 7 Principles: course design and instructional effectiveness can fit with time on task, active learning techniques, and respect for diverse talents and ways of thinking; interactivity and interconnectivity fit with student/faculty contact, student reciprocity and cooperation, prompt feedback, and communication of high expectations. The Summers et al., Song et al., and Young and Norgard findings seem to focus in a similar fashion to Grant and Thornton with the 7 Principles on the communication and interactivity elements of the course design.

Considerations of the Dziuban model

The study by Dziuban et al. (2007) employed three independent literature reviews to guide the research team in their efforts to develop a survey instrument on student satisfaction: Muilenburg and Berge (Muilenburg & Berge, 2005), Sun, Tsai, Finger, Chen and Yeh (Sun, Tsai, Finger, Chen, & Yeh, 2008), and Lorenzo (Dziuban, Hartman, Moskal, Brophy-Ellison, & Shea, 2007, Appendix A). In table 1, a casual comparison of the findings in those studies is compared with the Chickering and Gamson 7 Principles. We see that there are some differences, which could be construed as that the Chickering and Gamson 7 Principles function well when expanded upon by current research.

Table 1
Comparison: Chickering & Gamson's 7 Principles and Recent Research

Chickering and Gamson (1987)	Muilenburg and Berge (2005)	Sun, Tsai, Finger, Chen & Yeh (2008)	Lorenzo (2007)
Contact between students and faculty	Administrator and Instructor Issues	Computer Anxiety	Instructor Attitude and Selection
Student reciprocity and cooperation	Social Interaction	Instructor Attitude	Instructional Activities Virtual Teams and Collaborative Learning
Prompt feedback	Academic Skills	Course Flexibility	Feedback Communication and Rewards
Time on task	Technical Skills	Course Quality	

Active learning techniques	Learner Motivation	Perceived Usefulness	Online Learning Design
Communication of high expectations	Time and Support for Studies	Perceived Ease of Use	Characteristics of Students Who Withdraw
Respect for diverse talents and ways of learning	Cost and Access to the Internet	Diversity of Assessment	Characteristics of Students Who Complete
	Technical Problems	Technical Problems	Importance of Student Services

The elements from the three literature reviews appear to differ from the previously discussed items that influence student satisfaction. Thinking differently, the Dziuban research team convened 100 students in focus groups to derive questions from these elements, which ultimately fit into eight dimensions. Those questions were then distributed to 1,325 students across two campuses. Then, Dziuban et al. ran a factor analysis on the results to determine if the eight dimensions were relatively robust and found that they are. The eight dimensions are the following:

Reduced Ambiguity; Enhanced Student Sense of Value in Courses; Reduced Ambivalence; Clarified Rules of Engagement; More Individually Responsive Learning Environments; Improved Interaction; Augmented Learning; and Increased Freedom (Latitude).

In another casual comparison, the eight dimensions of the Dziuban Model seem to be a superset of the Chickering and Gamson (1987), Chickering and Ehrmann (1996) model. In table 2, by using the descriptors associated with each of the eight dimensions of the Dziuban Model, we see that the 7 Principles fit within the eight dimensions. There remain, however, two areas identified in the Dziuban Model that are not as well expressed in the 7 Principles: Reduced Ambiguity and Increased Freedom. This is not to say that the 7 Principles are in any way

lacking, merely that the expression of the Principles do not identify these areas in the same way as the Dziuban Model.

Table 2
Comparison: Dziuban Model and Chickering & Gamson's 7 Principles

Dziuban et al. (2007)	Dziuban Model Descriptors	Chickering & Gamson (1987)
Reduced Ambiguity	<ul style="list-style-type: none"> • Reduced uncertainty about how to succeed in course • Reduced work and family disruption and constraints • Improved sense of control 	
Enhanced Student Sense of Value in Courses	<ul style="list-style-type: none"> • Faster assessment of assignments • Higher levels of recognition • Better able to audit course progress 	Prompt feedback
Reduced Ambivalence	<ul style="list-style-type: none"> • Reduced stress over course completion • Increased degree of course access • Increased connectedness 	<ul style="list-style-type: none"> • Student reciprocity and cooperation • Contact between students and faculty
Clarified Rules of Engagement	<ul style="list-style-type: none"> • Course expectations clear from the onset • Fairer performance assessment • Clearer definition of involvement • More opportunity to collaborate 	Communication of high expectations
More Individually Responsive Learning Environments	<ul style="list-style-type: none"> • Continually connected as an individual • Encouraged to be actively engaged • Facilitated access to outside sources • Able to audit course progress 	Active learning techniques
Improved Interaction	<ul style="list-style-type: none"> • Anywhere, anytime communication with peers • Anywhere, anytime queries to instructors • Sustained conversations • Rapid access to independent experts • Better able to find, evaluate, and use information (information fluency) 	Time on task
Augmented Learning	<ul style="list-style-type: none"> • More room for individual creativity • More individual empowerment to learn • Expanded course boundaries 	Respect for diverse talents and ways of learning
Increased Freedom (Latitude)	<ul style="list-style-type: none"> • Self-managing the learning environment • Expanding beyond the current course • Alternatives to large lecture classes • Reducing prohibitive logistics 	

Those two dimensions do reflect important aspects of student satisfaction as they focus on control over learning within context of busy lives, and an opportunity to expand learning for those students who desire to range beyond the course design. Given that the Chickering and

Gamson 7 Principles fit well within the Dziuban Model, we can preliminarily say the fit is an indication of the Model being robust.

In developing the model, the Dziuban research team followed a unique path to derive results: a) the results are largely independent of institutional influence, and b) students were the primary contributory to the resulting model. It would seem a natural approach that if one is to best study student perceptions, then it is an arguably strong position to have the target audience design the instrument. By contrast, Young and Norgard (2006) developed their instrument as a result of the literature review only. The inherent benefit in the Dziuban Model is the potential to reduce the risk of bias within the survey instrument. It is always the challenge of the researcher to find a means to capture data that is not influenced by the researcher or observer. Regarding the Dziuban Model instrument, it is unfortunately long (74 questions) and would be difficult to employ and interpret as a formative evaluation tool for an online instructor.

Existing Instruments

Soliciting students for their impressions, perspectives, concerns, complaints, or ideas is standard practice at probably all institutions of higher learning. Forms for the Student Perception of Instruction (SPI) are also available online through website maintained by National Survey of Student Engagement (NSSE) project:

http://www.nsse.iub.edu/html/survey_instruments_2008.cfm).

The form of these surveys includes approximately 16 questions, plus at least four open-end questions for survey-takers to provide narrative detail regarding their experiences, which are usually directed to comment on best and worst experiences about the course in question. While these mainstay survey tools remain useful, the literature often contains references to the fact that faculty perceive them as outdated. Whether or not this might be correct, the purpose of this study

is to develop an instrument that instructors might use to gain the perspective of students with their online course in addition to the standard, institutionally accepted form. Such a tool has intrinsic value to instructors who seek different feedback at potentially different times. This permits an instructor to make adjustments to the course prior to course end, when the standard evaluative tool is released for student use.

Qualitative Method Employed in Study

Because the Dziuban Model fits strongly with the existing body of knowledge in the study of student satisfaction, using it to further develop an understanding of current student perceptions of online instruction and learning is sensible and merited. One of the methods Dziuban et al. used to derive the Model is Naturalistic. In their book, *Qualitative Research for Education: An Introduction to Theory and Methods* (Bogdan & Biklen, 2007), Bogdan and Biklen describe the Naturalistic method as using the actual settings of the research as the direct source of data, while the researcher becomes the key instrument. The intent of this design is to be primarily concerned with context: the data is collected "...on the premises and supplemented by the understanding that is gained by being on location" (p. 4); researchers "...feel that action can best be understood when it is observed in the setting in which it occurs" (Bogdan & Biklen, 2007, p. 4). The data is descriptive since the derivation of a level of student satisfaction must apply itself to the analysis of words, more so than numbers. The method is also concerned with process more than outcomes in the negotiation of meaning. Dziuban et al. carefully designed their research process to best exemplify the position, attitudes, and concerns of the students. Their emphasis was to find a means to closely align the research process, such that the outcomes would be largely unbiased. Another indicator of the Naturalistic method is whether the research approach is inductive versus deductive. The concepts, findings, or results emerge from the

collected data become a result of the process, rather than forethought. Since Dziuban et al. conducted a review of the literature to guide their efforts, they were not otherwise in possession of the characteristics of student satisfaction at the beginning; rather, their process permitted the descriptors to emerge from the students engaged in the research by having the study participants discuss the elements derived from that initial review of the literature. The final indicator of a Naturalistic method is the focus on deriving meaning: "...qualitative researchers are concerned with what are called *participant perspectives*" (Bogdan & Biklen, 2007, p. 7). Intending to derive the descriptive characteristics of student perceptions of online instruction and learning fully embraces the tenets of Naturalistic research. Dziuban et al. clearly focused on the participant perspectives as evidenced by their process.

In the following section, this researcher provides the details of the methods employed for this study, which largely mirror the methods used by Dziuban et al. The section explores the following: Description of Research Setting/Context; Sampling Strategies and Sample Size; Data Collection Techniques; Data Analysis Procedures; Subjective Lens/Positionality; Potential Threats to Validity & Use of Verification Strategies; and Consideration of Possible Ethical Issues.

Methods

One of the ambitions of this study is to maintain alignment with student perspectives as closely as possible. Specifically, students should derive the question elements, with some direction provided from the research and researcher. It is not merely giving students a stakeholder position, but more importantly it is to ensure that the perspectives the instrument would elicit is not confounded with an institution's or researcher's. To such an ambition, the methods described herein represent a series of activities to keep the students involved and central with the

process. Therefore and foremost, this instrument should become a guiding tool for students to represent their experiences and satisfaction with online learning and instruction. A follow-on project will be to develop a mechanism to aggregate, trend, and advise instructors on new strategies or other changes that might be necessary following an interpretation of student responses. The work done for this study, however, pays no mind for such future possibilities, as doing so at this juncture could imperil the student-centered goal.

Description of Research Setting/Context

The study purpose is to have college students derive evaluative questions they would ask themselves and their peers regarding their experiences with asynchronous learning courses. Since the previous work to build the eight dimensions was done by working with students in social sciences, and because it would be an assumption to consider that these dimensions would function equally well with other disciplines, this study remains with the same target group of students: undergraduates enrolled in social science courses. After a brief survey of available opportunities at the time this project was initiated, one course made sense due to its instructor's previous collaboration with the work done by Dziuban et al. in 2007: undergraduate course in Psychology at a large south-eastern university being taught concurrently in mixed mode (i.e., type M). The number of students enrolled in the course is approximately 150 students.

Sampling Strategies and Sample Size

The sampling strategy to identify the student study volunteers combines criteria sampling with stratified random sampling. The study inclusion criteria requires that volunteers must be 18 years of age or older, must have previous experience with at least one semester in an online course at the institution, and must agree to audio recording during Phase 2. The rationale for the

criteria is that to study student perception of instruction for online learning courses, students should have some experience, so that they have some sense of what works, and what does not, or what they did and did not like, in online courses. Of course, the exclusion criteria for participation must be the failing to meet any of the inclusion criteria. The stratified random sampling technique is applied to select a sample from the body of volunteers. Since volunteers are solicited from a large lecture format course with nearly 150 students enrolled, a large number of students elect to participate – more than are necessary for this study. Each volunteer fills in a consent waiver form and returns it to the researcher. Each correctly completed form is then numbered by the researcher and a set of random numbers are generated from tools available at Random.com. Those selected numbers are matched to the numbers on the form and those students are contacted with instructions for participation. An optimal size for this study would include 15 volunteers, but half of the target-size more or less remains acceptable.

Data Collection Techniques

The study requires the voluntary participation of students, who will create the evaluation questions they would consider appropriate to ask of themselves and each other. Solicitation of student volunteers will be a coordinated effort between researcher, instructor(s) and the Teaching Assistants (i.e., TAs). Students require a choice between participation or electing not to with equal value for either choice. The solution is to generate an alternative activity that will require similar effort on the part of the students and to offer the choice. The students who would consider participating in the study receive the consent waiver form, which covers both phases of the study, and clearly states that the student meets the minimum qualifications for participation. The students who meet the qualifications and agree to the recording are instructed to return their signed waiver to the instructor or researcher and to watch for an email with Phase 1 instructions.

The students who elect to not participate or do not meet the qualifications receive in-class directions that their alternative activity and directions are forth-coming. (The timing of the alternative activity is set to coincide with the completion of Phase 2, the focus group session, so as to minimize likelihood that student volunteers will switch to the alternative activity midstream.)

Since data will be derived from both individuals and groups, two different data collection strategies are used for the two phases. Phase 1 uses individuals in isolation as a take-home assignment to follow instructions on a two part, custom made Word form. A Word form is a special version of a Microsoft Word document that users can only input information into prepared fields. The advantage of a Word form is that a) users need only to have access to MS Word to use; b) the designer can easily create a complete form that includes instructions, examples, and structured response items; and c) the researcher has a means to collect study volunteer data that can be separated from their identities – this permits tracking of participation while maintaining anonymity of responses. The Word form for Phase 1 is divided into two parts. Part 1 instructs study volunteers to carefully draft evaluation questions that fall within the eight areas identified with the Dziuban et al. study. Guidelines and examples are provided. Volunteers are instructed to submit at least two question items for each area. In Part 2, volunteers are instructed to consider themselves as researchers and to submit suggestions or ideas to six prompts regarding the structure and design of the study. Volunteers are carefully instructed to not include their identity anywhere within the form. The take-home assignment has a deadline and must be submitted online through the Blackboard system prior to the due date and time. Volunteers submit their saved form in the assignment tool set up for this purpose.

In Phase 2, volunteers convene for a focus group meeting, which is set during regularly scheduled class hours as agreed to with the course instructor. During this focus group meeting, the session is recorded for audio (but not video), to which all volunteers have agreed in their consent waiver. The protocol for the focus group includes prompts to discuss the merged results of the material submitted by them during the take-home assignment in Phase 1. Each submitted item is discussed for clarity and any further adjustment to question form, wording, or sequence. The focus group session also includes a group discussion of the Part 2 items that cover their perceptions on any needed changes to the study design. During this segment of the session, the protocol directs a review of each the Phase 1, Part 2 items to prompt a discussion on how and when to best implement the delivery of the instrument to an online class, how often to use it for a class, and who to involve.

Data Analysis Procedures

The data analysis for the Phase 1 procedure followed these general steps:

5. Extract all original data and organize into a working spreadsheet.
6. Build two worksheets for the purpose of analyzing separately Part 1 and Part 2 of the individual assignment.
7. For each original submitted item in each of the two parts, reduce to key words.
8. Build third worksheet for a 3 step process to merge Part 1 results.
9. Assemble all reduced items according to the eight study areas.
10. Highlight items in each study area that a) seem to represent the area without b) being duplicated elsewhere.
11. Review initial results and make further adjustments.
12. Remove items embedded in other results or areas.

13. Rebuild the questions from the resulting elements by a) reviewing any guidelines provided by the volunteers in part 2 results and b) reviewing original phrasing (see first worksheet - Data).
14. Make final adjustments to resulting questions with limited rephrasing allowed: a) rewrite the questions in the form that student is currently taking an online course and their feedback is solicited; b) adjust verb tense, so all verbs are in the active and present tense; c) edit results again.

The data analysis for the Phase 2 procedure followed these general steps:

15. Transcribe the results of the audio recording.
16. Set up a worksheet to separate the different speakers by time – differentiate verbal contributions of study volunteers from the researcher.
17. In an adjoining column, reduce each contribution to key concepts or themes.
18. Review all reduced items for commonality and set up an additional worksheet to contain these results.
19. Group the reduced results into common elements.
20. Remove duplications.
21. Use the results to restructure, reword, or rebuild question items accordingly.
22. For the Part 2, researcher-role items, draft instructions for future study adjustments.

Subjective Lens/Positionality

The literature has much to contribute that can be clarifying and useful to describe our subjective lens or positionality, such as "...the quality of your interactions to support your research – or rapport – and the quality of your self-awareness of the potential effects of self on your research – or subjectivity" (Glesne, 2006, p. 109); "We must write about why we chose the

setting, who we are at the moment, and how our identity affects our reactions to the setting and its participants” (Kleinman, 1991, p. 194); and “I define culture as a group’s individual and collective ways of thinking, believing, and knowing, which includes their shared experiences, consciousness, skills, values, forms of expression, social institutions, and behaviors” (Tillman, 2002, p.4). Beverly (2008) fields this strong advice: “Positionality means that important aspects of our identity are markers of relational positions rather than essential qualities. The effects of these aspects and their implications change according to the context. As qualitative researchers, we should reflect on our positionality as we engage our participants and complete our research process” (Beverly, unpublished assignment paper, Fall 2008, p. 1).

The previous instructive descriptions and advisements direct researchers to know about and be aware of how they interact with sources of data through the research process. For the study, this researcher’s roles are directed (as described below) to keep the students central to the effort.

- As researcher, this researcher focuses on keeping things going along a planned path, but that plan should be flexible, so as to allow the data (i.e., student contributions) to flow unimpeded.
- Being the project manager/administrator can cause issues because this researcher may lose attention to the here and now instead of what is currently happening, or where the thoughts are going, and etc. This researcher releases the project manager/administrator role while in session and stay in the now. This is what Zen masters describe as “staying in the moment.”
- As an individual with more mature experience than the study volunteers, this researcher might miss some of the subtleties that may go on, so close attention is kept,

as well as not assuming an understanding that may be vague or incomplete. To keep to the goal of the project being student-centered, capturing the participants' perspectives correctly becomes vitally important. To such aim, this researcher consciously seeks clarifications, such that cross-referenced or divergent descriptions are created by asking student participants to restate in different ways wherever necessary.

- Student with experience – this researcher considers this role as key and a point of emphasis during the focus group and data analysis phases. This role is maintaining a balance between being a student and being an instructor or co-collaborating instructor. To fulfill this role, this researcher resists the notion of being fearful of coming across as trying to prove something to either the instructor or to the student participants.
- Instructional Designer – for this researcher, this role stems from many the years of experience, such that it might be difficult to moderate. Perhaps moderating this role might not be completely necessary if for no other reason than that it helps retain an attitude of being analytical, quizzical, and continuously trying to understand the audience. The only caution is to self-monitor against over-analysis of student perspectives.

Potential Threats to Validity & Use of Verification Strategies

This study employs triangulation to mitigate threats to the validity of the findings and conclusions. Specifically, embedded within the design, this study employs member checking, researcher reflexivity, and collaboration. Further, this design includes peer review and debriefing, but as a verification strategy, it remains a secondary strategy.

For member checking, students revisit their material as a forum (i.e., the focus group session) with the purpose to provide discussion, clarification, or adjustment to their intended

meaning. For researcher reflexivity, this researcher conducted an independent assessment of the attitudes and experiences that influence the roles this researcher brings to the study. Those identified roles, the potential negative influences, and a strategy to mitigate the negatives were identified and then reduced to an essential strategy. This essential strategy appears elsewhere in this report. For collaboration, students are additionally asked to consider the researcher's role and to provide perspective and ideas for improvement. This strategy is described as the Part 2 portion of the Phase 1 take-home assignment and Part 2 of the Phase 2 focus group session. For peer review and debriefing, this researcher works closely with the originators of the original study, Dziuban and Moskal. Through regular and frequent meetings, they are briefed, and their remarks and recommendations are incorporated into the final study design and process.

Consideration of Possible Ethical Issues

A primary concern of the study is to respect the confidentiality of the volunteers and to ensure they receive no greater risk than would normally occur in a course assignment at a university. Towards meeting such needs, this study went through multiple internal and institutional reviews, and it includes a specially designed volunteer consent waiver form that covers the two different phases of the project, as well as requests that volunteers verify they meet the minimum inclusion criteria (i.e., described in the sampling strategy section) and agree to recording their voices during the focus group in Phase 2. Confidentiality is retained by separating the initial contributions from the volunteers in Phase 1 from their identities. This is possible by having the students enter their material into a Word form and submitting this document as an attachment into the assignment tool of the Blackboard Learning Management System (LMS). Anyone participating on the research team can save the attachments with the specific instruction of not opening the document (to prevent association of contributions with identity) and by

renaming the document to something relevant to the project and adding a number (e.g., “Satisfaction_01”). Once all of the documents have been extracted from their carrier email or assignment tool, each document can be individually opened and the contents copied into a worksheet tool. After all of the data is in the worksheet tool, the entry order is randomized to further destroy the possibility of tracking identities to contributions. (Note: destroying the order of entry is accomplished by first generating a series of random numbers in a column cell for each contributor. This table data is then resorted by using either ascending or descending order on the random number column.) Back in the Blackboard system, the names of all the contributors is recorded to be released to the instructor to ensure that participation for grading purposes is retained. Then the assignment submissions within the LMS are deleted. At this point, all connection between contributor and contribution is destroyed.

For Phase 2, the focus group includes audio recording. The recorded material is transcribed and during the transcription process, all references to individual identity are changed to random names that have nothing to do with the volunteers. Once the transcription is complete, the original audio recording is destroyed. At this point, the data and identities are fully disconnected, and there is no way to reconnect the two.

Results & Findings

The overall results are quite positive. The number of questions generated is 24, and all the study volunteers found agreement with the intent and the wording of these items. Their only generally stated concern with the items lies in the use of ratings without including open-ended “Why did you select that choice?” questions to give survey-takers an opportunity to add detail or clarification to their evaluations. The results in the following sections include the adjustments

advised from the study volunteers. The study also included an opportunity for volunteers to provide feedback on the research procedures. This effort also worked well.

Two sections follow that present the final questions the students produced and the organized ideas regarding the study's design.

Results: Questions for Students' Perceptions of Online Instruction and Learning

In this section, the questions the students produced are presented with their associated area in the Dziuban model.

Area 1: Reducing Ambiguity

1. Please rate each item for how easily understood and reasonable you find them:
syllabus, lecture materials, readings, and assignments. (Choices for each: 0 – 9; scale: None to Lot.)
2. Please rate how intuitive and easy it is to navigate and find what you need in the online course. (Choices: 0 – 9; scale: None to Lot)
3. Why do you rate the items as you do? Please comment, clarify, or explain your experience related to these items. (Open-ended.)

Area 2: Enhancing sense of course value

4. Please rate how you find the timeliness of assessments and grading of assignments are provided to you. (Choices: 0 – 9; scale: None to Lot.)
5. Please rate how easy it is to audit online your progress in the course. (Choices: 0 – 9; scale: None to Lot.)
6. Please rate how you feel both teachers and students use all available resources.
(Choices: 0 – 9; scale: None to Lot.)

7. Please rate the feedback, advice, and guidance you receive from your lecturers and facilitators (TAs). (Choices for each: 0 – 9; scale: None to Lot.)
8. Why do you rate the items as you do? Please comment, clarify, or explain your experience related to these items. (Open-ended.)

Area 3: Reducing ambivalence (or improving how the course matters to you)

9. Please rate how much this course provides breadth and detail relevant to your major field of study. (Choices: 0 – 9; scale: None to Lot.)
10. Why do you rate the item as you do? Please comment, clarify, or explain your experience related to this item. (Open-ended.)
11. Please rate for each person-role how easy you feel it is to network with them online during the course: students, TAs, and instructors. (Choices for each: 0 – 9; scale: Not possible to very easy.)
12. Do you network a lot with fellow students, TAs, and instructors? Please comment, clarify, or explain your experience related to this item. (Open-ended.)

Area 4: Clarifying engagement or expectations

13. Please rate whether you find the assessment strategies fair and accurate instruments for determining your progress and mastery of the course material. (Choices: 0 – 9; scale: None to Lot.)
14. Please rate whether you find all listed resources and materials readily available. (Choices: 0 – 9; scale: None to Lot.)
15. How do you rate the opportunities for collaboration in this online course? (Choices: 0 – 9; scale: None to Lot.)

16. Please rate how you would like the teacher to have both in person office hours and online office hours, so you can talk about concerns / problems / grades. (Choices for each (i.e., office and online): 0 – 9; scale: None to Lot.)
17. Why do you rate the items as you do? Please comment, clarify, or explain your experience related to these items. (Open-ended.)

Area 5: Integrating individually responsive learning environments

18. Please rate how motivated you are to participate in the online activities. (Choices: 0 – 9; scale: None to Lot.)
19. Please rate each item for how well it keeps you involved in your online class: weekly quizzes, weekly readings, and weekly discussions. (Choices for each: 0 – 9; scale: None to Lot.)
20. Please rate how much you feel engaged and connected while taking this online course. (Choices: 0 – 9; scale: None to Lot.)
21. Please rate how you feel there are sufficient and positive opportunities for interaction within the course environment and outside of it. (Choices: 0 – 9; scale: None to Lot.)
22. Why do you rate the items as you do? Please comment, clarify, or explain your experience related to these items. (Open-ended.)

Area 6: Improving interactions

23. Please rate how well you think the course succeeds with encouraging communication, discussion, and debate with instructors, facilitators (TAs), fellow students, and other individuals. (Choices for each: 0 – 9; scale: None to Lot.)

24. Why do you rate the item as you do? Please comment, clarify, or explain your experience related to this item. (Open-ended.)
25. For this course, what interactions do you appreciate and find important, and why? (Choices: Open-ended question.)
26. Please rate how important it is that students use respectful language when communicating. (Choices: 0 – 9; scale: None to High.)

Area 7: Augmenting learning

27. Please rate the degree to which you are motivated to go beyond the required reading and assignments to broaden your own perspectives and understandings of the topics in this course. (Choices: 0 – 9; scale: None to Lot.)
28. For graded assignments, please rate whether you prefer being able to choose from different assignment options or whether you prefer all students doing the same assignments. (Choices: 0 – 9; scale: No Options to Some Options.)
29. Why do you rate the items as you do? Please comment, clarify, or explain your experience related to these items. (Open-ended.)

Area 8: Increasing freedom (latitude)

30. Please rate whether you feel the course provides enough opportunities for you to develop your own solutions or alternatives to problems and assignment tasks. (Choices: 0 – 9; scale: None to Lot.)
31. Please indicate whether you would prefer individually assigned due dates for assignments or an "all due at the end of the semester" approach. (Choices: Individually Assigned / All Due at End of Semester.)

32. Please comment, clarify, or explain your preference to individually assigned or all due at the end of the semester. (Open-ended.)

Findings: Summarized Feedback on the Study Research Design

Procedure Question 1: What would you change?

“Develop both qualitative and quantitative analysis procedures.”

“Get larger group - 15 is not enough for variety.”

“Confused by the [instructions] to go about researching the topic and what perspective I should give. Part 1 instructions were not as clear as Part 2.”

“Add a survey with scale of 0-5.”

“Have instructor available in person.”

Procedure Question 2: How would you use the eight areas you worked with in Part 1?

How would you change any of these?

“No additional categories. Key issue is selecting appropriate questions for each category.”

“Have questions and answers made such as to benefit both instructor and student. Make instructions more clear.”

“Also ask study participants if they agreed or disagreed with each area stated.”

“Check the system daily for what needs to be done.”

Procedure Question 3: How would you collect the data from student volunteers?

“Same as this study, but also add spot interviews, randomly selected, to collect real-time answers and narratives.”

“Create online quiz and have students submit questions and answers.”

Procedure Question 4: How would you analyze and process the data?

“SPSS / Excel.”

“Read everyone's opinions.”

“With questionnaire, create a chart showing participant answers. With survey, create graph to show answer frequencies.”

“Read, judge relevancy, and reduce to pertinent and relevant.”

Procedure Question 5: When the questions are complete so a questionnaire can be given to students, when is an appropriate time to make it available for students to respond?

“Present questionnaire online in final two weeks of course. Permit students to have multiple visits to change / modify responses.”

“Beginning of the week, in the morning.”

“Midway through the term when students are comfortable.”

“Three-quarters through the term to change things for next semester, while having enough time to report discrepancies.”

Procedure Question 6: Who else would you involve in the study?

“Include instructors and facilitators [TA's] to compare perceptions.”

“Anyone who has taken online or mixed mode course.”

“Students that hate / love online courses.”

Discussion

Even as the results of the study are positive, a recounting of the elements of the procedure that did not work must be made. Arguably, the sample size can and should be larger. The initial

target was to include 15 volunteers through the two phases, and this study had only eight. The reason for the diminished pool can be attributed to the time the study was brought to the students: late in the term, just prior to a major holiday (i.e., Thanksgiving), and concluding as students readied themselves for their final exams. Not only did the timing affect the recruited number of volunteers, but it also posed a problem with the students' availability to participate in the focus group that needed to be scheduled during the next available class from the completed first phase. Due to delays beyond control of the researcher and instructor, this initial run of the study had a narrow window of opportunity that compromised being able to run a focus group. The remedy to maintain participation through Phase 2 was to set up a dialog online by using the Discussion Board tool in the Blackboard LMS. The student volunteers received a new form with instructions to respond within the form and to post their responses into the Discussion Board. The volunteers did contribute their responses to the form, but because the effort to post to the Discussion Board ran into the Thanksgiving holiday, they did not engage in a dialog between each other.

Running this study earlier in the term and with attention to holidays and exams will be critical for further study implementations. Other issues with the procedure are the typical results one should expect from a first run of a study procedure. In several areas, the instructions need some adjustment as the volunteers' responses indicate they did not properly understand the activity instruction. In addition, the focus group session protocol will likely need an additional activity to ensure that any future resulting material is pared down to a maximum target number of question items. There is a tendency with these types of procedures that participants add material without taking material away. One of the study goals is to produce a manageable number of items that can be easily used by instructors at different times during their course. The

target number of items is around 30 questions, so it might become necessary in the future to have an activity whereby the group of volunteers must reduce the number of items to that maximum.

An interesting result of the study is the appearance of question 26, “Please rate how important it is that students use respectful language when communicating.” It’s unclear if this question is a reaction to negative experiences, a warning to fellow classmates to change their language, or a call to consider whether respectful language might be preventing honest viewpoints. Unfortunately, because the focus group session became impossible, the opportunity to discuss the intent of the question was lost. This researcher believes it will be interesting to see the question asked and answered.

Other interesting results come from the Part 2 responses. Specifically, question three brings to surface some interesting ideas. Adding randomly selected spot interviews to collect real-time answers and narratives could be a quite useful technique for adding student perspective details. This technique can also be used to improve social presence that has been a cited problem with online instruction that influences student dissatisfaction (Gunawardena & Zittle, 1997; Rourke, Anderson, Garrison, & Archer, 1999; Tu & McIsaac, 2002; Gunter, 2008) or a decrease in educational quality (Nygren, 2008; original Swedish). Another response from this question is to create an online quiz and have the students submit their responses during the online course. This would be quite easy to implement, and an instructor would have the freedom to use the instrument at opportune times during the course. Towards this end, responses to question five on when to deliver the instrument for student response indicates a variety of different times are acceptable to students.

Responses from question six are also intriguing. Including TAs and even the instructor’s own perspective could provide interesting counter-point to the students’ and offer deeper insight

into what might be happening in the course. Securing responses from both students who love or hate the online format is unquestionably important.

Another theme that emerges from the review of the literature and from the actual study is the impact by the passage of time and the changes that evolve. It should not be a surprise that the Dziuban Model can function as a superset of the Chickering and Gamson 7 Principles. The changes elicited by social, political, economical, cultural, and technological forces on education make it necessary to constantly refresh, or re-inform. There can be no single model that represents the *best* approach, other than being *best* for now. As the Dziuban Model is the more recent work on student perspectives of satisfaction, it includes more of the changes that come about with time than does the Chickering and Gamson 7 Principles. The concern should then be to take the approach to include within the elicitation of student perspectives both an inquiry into questions or areas that have not been asked, and therefore can not be pre-planned, as well as to provide an opportunity for future collaboration between student and researcher (i.e., via the instructor). Towards such a need, this research suggests the following adjustments to the study. First, we add two questions to the current collection. “Is there a concern or perspective that we have not included within this set of questions that you believe we should ask? If so, please tell us.” (Open-ended.) “Would you like to be part of an on-going effort to improve the questions and means of asking these questions to students in the future? If so, please provide us with some contact information in the area below.” (Open-ended.) Second, we must be ready to adjust the study procedure as changes will warrant different techniques to collect data or to conform to institutional policies or legal requirements, as well as new technologies by which data might be collected in the future.

Conclusion

Securing student perspectives of online instruction and learning is necessary as the activity is usually an institutional requirement for accreditation. Producing an efficient and accurate method to gather those perspectives thereby becomes important not only for the instructor, who stands to benefit from being informed, but for the department, college, and university as well. Satisfaction, whether achieved or not, is the center-piece of student experience, and understanding its characteristics is crucial in being able to take measure of it. Satisfaction, as a backward thinking, reflective moment, can provide insight into the elements of a course design, which includes instructional strategies and assessments, to improve meeting identified course objectives and leveraging student motivations, as a forward thinking, planning strategy.

The Dziuban Model's eight dimensions are useful and, thus far in this study, demonstrate robustness through repeated student interpretations to make possible the development of an instrument to measure the complex concept of student satisfaction for online instruction and learning. Further study is necessary to determine the utility of the set of questions derived. First, an evaluative instrument needs to be deployed to online courses and analyzed against overall student performance and the traditional evaluation ratings. Second, the elements within the tool need to be connected to instructional design strategies to best make use of the information of student perspectives. And finally, the process of developing a satisfaction evaluation instrument needs to be repeated for other disciplines to better test the robustness of the Dziuban Model dimensions. At this point, however, it should be noted with strong conviction that the Dziuban Model consists not only of dimensions that describe characteristics of student satisfaction, but it also includes a procedure to extract student perspectives. The general method of employing

students to draft the questions through a guided process that includes group dialog is a critical component of an effective procedure. Considered this way, the Dziuban Model is both structure and process, and to this point it has demonstrated it is robust.

Of the four questions this study is designed to address, each is answered, and each answer is positive.

1. Can the Dziuban Model be used to study student perception of online instruction and learning? Yes. The model would seem to provide a foundation that students seem able to work with and useful in generating student-centered questions on the nature of their experiences with online instruction and learning. The model is both a collection of characteristics on the subject of student satisfaction and a process by which perspectives can be extracted and analyzed for further development.
2. Can students generate questions they would want to see asked about their experiences with online instruction and learning at UCF, in this way provide a unique student perspective? Yes. As indicated in the answer to the previous question, students seem to find using the model a straight-forward experience as they readily produced questions. Notably, there were several areas by which the model can be improved, and the analysis process by which final questions are extracted might be further refined or simplified.
3. How and when would be favorable to use student generated questions in a study about student perceptions to online instruction and learning? Students seem to be favorable to the notion of a variety of moments in a course when it makes sense to

deploy the instrument, as well as indicate the instrument might be deployed in a single course multiple times.

4. Can the results of the study be used to later explore students' perception of their online instruction and learning experiences? Yes. As earlier indicated, the instrument needs to be deployed under controlled conditions to study how an instructor might make use of the information, as well as the development of an instrument for different disciplines needs to be conducted.

The Dziuban Model provides a strong foundation for the discussion of student satisfaction of online instruction and learning. By presenting a set of dimensions, each with a set of descriptors, the model provides a useful terminology with which students and researchers can readily communicate about and employ. The study process also provides a structured approach by which further research can be made, which is necessary as these instruments will need to be recreated periodically.

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Appendix A: Individual Assignment Protocol

Instructions: Individual assignment

Thank you for participating in this study. Your efforts and contributions will help online faculty and support personnel to understand what students look for in online instruction or opportunities for learning through online courses at UCF.

This assignment has two parts. Please read the entire assignment carefully before beginning. Do not write your name or indicate your identity anywhere within this form. This is to keep your identity anonymous with the researcher for this phase of the study. However, please use your login identity when you upload the completed form, so that Dr. Brophy will know who turned in the assignment.

Part 1: Creating Questions

For part 1, you will create questions within particular topic areas (there are eight) that you would like to see asked regarding your experience and/or feelings about an online course you might be taking. Similar to the way students provide their instructors feedback at the end of a course, we want you to create questions that could be used for any online course to capture your experience, but only for W or M type courses at UCF.

The questions you create are intended to be used to ask your peers about their experiences with online instruction and learning courses. Your contributions will be merged with the contributions provided by other study volunteers. We ask that you spend sufficient time to carefully consider your questions and their wording. Try to be clear and to the point. If a question seems long or complex, make it into two questions instead. Try to imagine how someone else might read and interpret your questions.

Below are eight specific areas that have been shown to be important to students who take online courses. Each area includes some general descriptions about the area, which should provide you with an orientation sufficient for you to create your own questions and to complete the exercise. For each of the eight areas, please write a minimum of two (2) questions that you would want to see asked regarding your experience with an online course you would be taking. You are free to write more than two questions.

You may choose whatever form of question that you wish: examples can include True/False, Multiple Choice, Scaled or Likert (e.g., 0-10, Strongly Disagree-Strongly Agree, Really Dislike-Really Like, etc), or open-ended. Please include the details of how the students should answer, or they choices they would have, if the question form is not open-ended.

Use your mouse and click in the grayed areas to enter your responses.

Area 1: Reducing ambiguity

Students want to see...

- Reduced uncertainty about how to succeed in course
- Reduced work and family disruption and constraints
- Improved sense of control

Suggestion: You might want to phrase your questions on topics about what would make an online course difficult or easy to succeed as you begin and proceed through to the end.

Your questions:

Area 2: Enhancing sense of course value

Students want to see...

- Faster assessment of assignments
- Higher levels of recognition
- Better able to audit course progress

Suggestion: You might want to phrase your questions on topics about what would make an online course personally more valuable to you, and help you take ownership of how well you do.

Your questions:

Area 3: Reducing ambivalence (or improving how the course matters to you)

Students want to see...

- Reduced stress over course completion
- Increased degree of course access
- Increased connectedness

Suggestion: You might want to phrase your questions on topics about what would make taking and completing an online course meaningful to you, rather than only fulfilling a requirement.

Your questions:

Area 4: Clarifying engagement or expectations

Students want to see...

- Course expectations clear from the onset
- Fairer performance assessment

- Clearer definition of involvement
- More opportunity to collaborate

Suggestion: You might want to phrase your questions on topics about what would help you to plan what you will need to do to succeed when you take an online course.

Your questions:

Area 5: Integrating individually responsive learning environments

Students want to see they are...

- Continually connected as an individual
- Encouraged to be actively engaged
- Facilitated access to outside sources
- Able to audit course progress

Suggestion: You might want to phrase your questions on topics about what would motivate you to stay involved and active when you take an online course.

Your questions:

Area 6: Improving interactions

Students want to see...

- Anywhere, anytime communication with peers
- Anywhere, anytime queries to instructors
- Sustained conversations
- Rapid access to independent experts
- Better able to find, evaluate, and use information (information fluency)

Suggestion: You might want to phrase your questions on topics about what would engage you through interactions with the instructor(s), fellow students, people outside the course, materials (such as books, articles, etc), tools (such as computer programs, lab equipment, web sites, etc), or environments (such as physical environments, virtual environments such as discussion boards, chat rooms, facebook, or other areas where you find interacting easy to do) when you take an online course.

Your questions:

Area 7: Augmenting learning

Students want to see...

- More room for individual creativity
- More individual empowerment to learn

- Expanded course boundaries

Suggestion: You might want to phrase your questions on topics about what would motivate you to go beyond set expectations when you take an online course.

Your questions:

Area 8: Increasing freedom (latitude)

Students want to see...

- Self-managing the learning environment
- Expanding beyond the current course
- Alternatives to large lecture classes
- Reducing prohibitive logistics

Suggestion: You might want to phrase your questions on topics about what could be done in an online course to make your learning experience better balance with your other responsibilities.

Your questions:

Part 2: Taking a Researcher's Role

For part 2, the assignment is to have you temporarily step into the role of a researcher for this study. While we realize you will likely not have very much experience conducting research, your perspective is still quite valuable. We want you to think about the best ways to work with you and your peers on a study of student perception of online instruction and learning. If you were trying to gather students' perspectives, how would you do it differently? What would you change? What should researchers know that would better prepare them to study students' perception of online instruction and learning? This section is open to you to express how you might change studying this topic.

Consider the questions below and provide your responses. We will use your ideas and discuss them in the focus group. If there is a question you do not wish to answer, please enter "N/A" in the box.

As a researcher designing this study...

1: What would you change?

Your response:

2: How would you use the eight areas you worked with in Part 1? How would you change any of these?

Your response:

3: How would you collect the data from student volunteers?

Your response:

4: How would you analyze and process the data?

Your response:

5: When the questions are complete so a questionnaire can be given to students, when is an appropriate time to make it available for students taking an online course?

Your response:

6: Who else would you involve in the study?

Your response:

Final Instructions: Submitting Your Contributions

Now that you have completed this assignment, please **SAVE** it to your computer and then **UPLOAD** it into the Webcourses assignment tool, *Study Project - Student Perception of Online Instruction*, by 3:00pm, November 21, 2008.

Your contributions will be merged with the other study participants, and the results will be discussed in a focus group, which will meet during your regular class session on Monday, November 24, 2008. The location of the focus group will be given in Dr. Brophy's class or posted in Webcourses.

Thank you again for volunteering to support this study. Your contributions are very valuable.

Appendix B: Focus Group Protocol

Protocol: Focus Group

Thank you for participating in this study. Your efforts and contributions will help online faculty and support personnel to understand what students look for in online instruction or opportunities for learning through online courses at UCF.

This focus group has two parts. In the first part, we will be discussing the questions you generated in part 1 of the take-home assignment. In the second part, we will be discussing the ideas you created on the study as co-researchers in the take-home assignment part 2. As you have been informed and agreed to by witness of your signature on the informed consent form, the focus group session will be recorded for audio. Once the audio is transcribed, the original audio recording will be destroyed.

Your participation in this focus group implies your agreement to civil behavior at all times. Anyone who elects to not follow this protocol will be asked to immediately leave the focus group, and there is a real risk that you will not receive credit for participating in the entire study, which is an alternative assignment. Your agreement to these terms is evident in your signed informed consent form and by remaining in the room with the focus group.

Part 1: Reviewing and Discussing Your Questions

Below are the results of the questions you generated. We have gone through your work looking for common themes to merge questions where it makes sense. In this session we are going to discuss each of the submissions for each area. The session is open-ended, and in that regard we seek your free and candid opinions or reactions to these questions. We wish to have the questions represent what you feel is important to be asked regarding your experience with an online course.

Are there any general questions before we start?

Area 1: Reducing ambiguity

Students want to see...

- Reduced uncertainty about how to succeed in course
- Reduced work and family disruption and constraints
- Improved sense of control

The results:

How do you find these results?

Participant reactions:

<Open-ended follow-on questions>?

Notes on follow-on questions, plus participant responses:

Area 2: Enhancing sense of course value

Students want to see...

- Faster assessment of assignments
- Higher levels of recognition
- Better able to audit course progress

The results:

How do you find these results?

Participant reactions:

<Open-ended follow-on questions>?

Notes on follow-on questions, plus participant responses:

Area 3: Reducing ambivalence (or improving how the course matters to you)

Students want to see...

- Reduced stress over course completion
- Increased degree of course access
- Increased

The results:

How do you find these results?

Participant reactions:

<Open-ended follow-on questions>?

Notes on follow-on questions, plus participant responses:

Area 4: Clarifying engagement or expectations

Students want to see...

- Course expectations clear from the onset
- Fairer performance assessment

- Clearer definition of involvement
- More opportunity to collaborate

The results:

How do you find these results?

Participant reactions:

<Open-ended follow-on questions>?

Notes on follow-on questions, plus participant responses:

Area 5: Integrating individually responsive learning environments

Students want to see they are...

- Continually connected as an individual
- Encouraged to be actively engaged
- Facilitated access to outside sources
- Able to audit course progress

The results:

How do you find these results?

Participant reactions:

<Open-ended follow-on questions>?

Notes on follow-on questions, plus participant responses:

Area 6: Improving interactions

Students want to see...

- Anywhere, anytime communication with peers
- Anywhere, anytime queries to instructors
- Sustained conversations
- Rapid access to independent experts
- Better able to find, evaluate, and use information (information fluency)

The results:

How do you find these results?

Participant reactions:

<Open-ended follow-on questions>?

Notes on follow-on questions, plus participant responses:

Area 7: Augmenting learning

Students want to see...

- More room for individual creativity
- More individual empowerment to learn
- Expanded course boundaries

Your questions:

Area 8: Increasing freedom (latitude)

Students want to see...

- Self-managing the learning environment
- Expanding beyond the current course
- Alternatives to large lecture classes
- Reducing prohibitive

The results:

How do you find these results?

Participant reactions:

<Open-ended follow-on questions>?

Notes on follow-on questions, plus participant responses:

Part 2: Discussing Your Suggestions on the Research Design

For part 2, we asked you to temporarily step into the role of a researcher for this study and consider some questions. Below we have compiled your responses. In this part, we want to open up the discussion to the group and openly consider your ideas for incorporation into the final model.

As a researcher designing this study...

1: What would you change?

Your responses are:

How do you find these ideas? <Open-ended follow-on questions>

Group responses/Notes:

2: How would you use the eight areas you worked with in Part 1? How would you change any of these?

Your responses are:

How do you find these ideas? <Open-ended follow-on questions>

Group responses/Notes:

3: How would you collect the data from student volunteers?

Your responses are:

How do you find these ideas? <Open-ended follow-on questions>

Group responses/Notes:

4: How would you analyze and process the data?

Your responses are:

How do you find these ideas? <Open-ended follow-on questions>

Group responses/Notes:

5: When the questions are complete so a questionnaire can be given to students, when is an appropriate time to make it available for students to respond?

Your responses are:

How do you find these ideas? <Open-ended follow-on questions>

Group responses/Notes:

6: Who else would you involve in the study?

Your responses are:

How do you find these ideas? <Open-ended follow-on questions>

Group responses/Notes:

Appendix C: Student Perception of Online Instruction & Learning Questions

Area 1: Reducing Ambiguity

1. Please rate each item for how easily understood and reasonable you find them:
 - a. Syllabus (Rating: 0 – 9; scale: None to Lot.)
 - b. Lecture materials (Rating: 0 – 9; scale: None to Lot.)
 - c. Readings (Rating: 0 – 9; scale: None to Lot.)
 - d. Assignments. (Rating: 0 – 9; scale: None to Lot.)
2. Please rate how intuitive and easy it is to navigate and find what you need in the online course. (Rating: 0 – 9; scale: None to Lot)
3. Why do you rate the items as you do? Please comment, clarify, or explain your experience related to these items. (Open-ended.)

Area 2: Enhancing sense of course value

4. Please rate how you find the timeliness of assessments and grading of assignments are provided to you. (Rating: 0 – 9; scale: None to Lot.)
5. Please rate how easy it is to audit online your progress in the course. (Rating: 0 – 9; scale: None to Lot.)
6. Please rate how you feel both teachers and students use all available resources. (Rating: 0 – 9; scale: None to Lot.)
7. Please rate the feedback, advice, and guidance you receive from
 - a. Your lecturers (Rating: 0 – 9; scale: None to Lot.)
 - b. Your facilitators (TAs) (Rating: 0 – 9; scale: None to Lot.)

8. Why do you rate the items as you do? Please comment, clarify, or explain your experience related to these items. (Open-ended.)

Area 3: Reducing ambivalence (or improving how the course matters to you)

9. Please rate how much this course provides breadth and detail relevant to your major field of study. (Rating: 0 – 9; scale: None to Lot.)
10. Why do you rate the item as you do? Please comment, clarify, or explain your experience related to this item. (Open-ended.)
11. Please rate for each person-role how easy you feel it is to network with them online during the course:
- a. Students (Rating: 0 – 9; scale: Not possible to very easy.)
 - b. TAs (Rating: 0 – 9; scale: Not possible to very easy.)
 - c. Instructors (Rating: 0 – 9; scale: Not possible to very easy.)
12. Do you network a lot with fellow students, TAs, and instructors? Please comment, clarify, or explain your experience related to this item. (Open-ended.)

Area 4: Clarifying engagement or expectations

13. Please rate whether you find the assessment strategies fair and accurate instruments for determining your progress and mastery of the course material. (Rating: 0 – 9; scale: None to Lot.)
14. Please rate whether you find all listed resources and materials readily available. (Rating: 0 – 9; scale: None to Lot.)
15. How do you rate the opportunities for collaboration in this online course? (Rating: 0 – 9; scale: None to Lot.)

16. So you can talk about concerns / problems / grades, please rate how you would like the teacher to have:

- a. In person office hours (Rating: 0 – 9; scale: None to Lot.)
- b. Online office hours (Rating: 0 – 9; scale: None to Lot.)

17. Why do you rate the items as you do? Please comment, clarify, or explain your experience related to these items. (Open-ended.)

Area 5: Integrating individually responsive learning environments

18. Please rate how motivated you are to participate in the online activities. (Rating: 0 – 9; scale: None to Lot.)

19. Please rate each item for how well it keeps you involved in your online class:

- a. Weekly quizzes (Rating: 0 – 9; scale: None to Lot.)
- b. Weekly readings (Rating: 0 – 9; scale: None to Lot.)
- c. Weekly discussions (Rating: 0 – 9; scale: None to Lot.)

20. Please rate how much you feel engaged and connected while taking this online course. (Rating: 0 – 9; scale: None to Lot.)

21. Please rate how you feel there are sufficient and positive opportunities for interaction within the course environment and outside of it. (Rating: 0 – 9; scale: None to Lot.)

22. Why do you rate the items as you do? Please comment, clarify, or explain your experience related to these items. (Open-ended.)

Area 6: Improving interactions

23. Please rate how well you think the course succeeds with

- a. Encouraging communication

- i. With instructors (Rating: 0 – 9; scale: None to Lot.)
- ii. With facilitators (TAs) (Rating: 0 – 9; scale: None to Lot.)
- iii. With fellow students (Rating: 0 – 9; scale: None to Lot.)
- iv. With other individuals (Rating: 0 – 9; scale: None to Lot.)

b. Encouraging discussion

- i. With instructors (Rating: 0 – 9; scale: None to Lot.)
- ii. With facilitators (TAs) (Rating: 0 – 9; scale: None to Lot.)
- iii. With fellow students (Rating: 0 – 9; scale: None to Lot.)
- iv. With other individuals (Rating: 0 – 9; scale: None to Lot.)

c. Encouraging debate

- i. With instructors (Rating: 0 – 9; scale: None to Lot.)
- ii. With facilitators (TAs) (Rating: 0 – 9; scale: None to Lot.)
- iii. With fellow students (Rating: 0 – 9; scale: None to Lot.)
- iv. With other individuals (Rating: 0 – 9; scale: None to Lot.)

24. Why do you rate the item as you do? Please comment, clarify, or explain your experience related to this item. (Open-ended.)

25. For this course, what interactions do you appreciate and find important, and why? (Choices: Open-ended question.)

26. Please rate how important it is that students use respectful language when communicating. (Rating: 0 – 9; scale: None to High.)

Area 7: Augmenting learning

27. Please rate the degree to which you are motivated to go beyond the required reading and assignments to broaden your own perspectives and understandings of the topics in this course. (Rating: 0 – 9; scale: None to Lot.)
28. For graded assignments, please rate whether you prefer being able to choose from
- Different assignment options (Rating: 0 – 9; scale: No Options to Some Options.)
 - All students doing the same assignments (Rating: 0 – 9; scale: No Options to Some Options.)
29. Why do you rate the items as you do? Please comment, clarify, or explain your experience related to these items. (Open-ended.)

Area 8: Increasing freedom (latitude)

30. Please rate whether you feel the course provides enough opportunities for you to develop your own solutions or alternatives to problems and assignment tasks. (Rating: 0 – 9; scale: None to Lot.)
31. Please indicate whether you would prefer
- Individually assigned due dates for assignments (Rating: 0 – 9; scale: None to Lot.)
 - "All due at the end of the semester" approach (Rating: 0 – 9; scale: None to Lot.)
32. Please comment, clarify, or explain your preference to individually assigned or all due at the end of the semester. (Open-ended.)
33. Is there a concern or perspective that we have not included within this set of questions that you believe we should ask? If so, please tell us. (Open-ended.)

34. Would you like to be part of an on-going effort to improve the questions and means of asking these questions to students in the future? If so, please provide us with some contact information in the area below. (Open-ended.)