Chapter 5

Discussion

The purpose of this study was to explore the experiences of online students and faculty and determine whether there are identifiable needs, trends, or issues to address to ensure that online students and faculty are satisfied and successful. A secondary purpose was to contribute to the field of research and scholarly practice related to student and faculty satisfaction and success in online courses. The research methodology and results provided a rich source of data for quantitative and qualitative analyses which were presented and summarized in the previous chapter. This chapter will discuss the significant findings in light of the original research questions. The fourth and last research question regarding recommendations will be addressed within the discussions of the first three research questions.

Research Question #1

How satisfied and successful are students and instructors with online courses?

Overall Student Satisfaction

The vast majority of students are either satisfied or very satisfied with online courses. This was clearly indicated by their responses to the overall satisfaction question (#19). It was also indicated by their responses to recommend the course to another student (#20), take another online course in the future (#21), and their expressed desire for more online courses to be offered in the future (#23). Students also indicated their satisfaction by their written responses to an open-ended question (#28), "What else would you like to say about online courses at DVC?": Of the 311 student comments, the

two most frequently offered statements related to being pleased with the online course

(23%), and requesting that the college offer more online courses in the future (15%). As

demonstrated in the distance education literature review, student satisfaction is an

important element of quality for online education. As demonstrated in the general

education literature review, student satisfaction is positively correlated to student

retention and success, and, principles of good practice for the traditional classroom

apply to the online classroom. The student survey responses indicated a robust measure

of satisfaction with online courses, and yet, many students were not satisfied or

successful.

Although nearly three-quarters of DVC students were satisfied or very satisfied

with their online courses, 26.2% were either neutral (14.9%), unsatisfied (11.3%), or

very unsatisfied (4.2%). This is about equivalent to the percentage of students in the

sample who were non-successful (25%). So, although there is a strong majority of

satisfied students, the number of non-satisfied students is still quite high. As a strategy

for increasing student success in online courses, the college will need to address the

issue of non-satisfied students—especially around the areas of learner interactions—as

was seen in the prior chapter and will be discussed under research question #2.

Overall Faculty Satisfaction

The vast majority of online instructors are either satisfied or very satisfied with

online courses. This was clearly indicated by their responses to the overall satisfaction

question (#16). It was also indicated by their responses to recommend teaching online

to other faculty at DVC (#17), and their expressed desire for more online courses to be

offered in the future (#15). Only one instructor was unsatisfied overall, and three were neutral. No one was very unsatisfied with teaching online at DVC.

There were seven faculty comments related to overall satisfaction with teaching online. Three of the comments sum it up:

- "This was my first experience teaching online -- I know I could improve as an online instructor, but the experience overall was great."

- "I'm dissatisfied with my students performance altho' I like the process of teaching online and being creative with my online course."

- "I love teaching online, although I would never do it exclusively. I still value the face-to-face contact in my on-campus classes."

As demonstrated in the distance education literature review, faculty satisfaction is an important element of quality for online education, and student satisfaction is positively associated with faculty satisfaction. So, one strategy for increasing student satisfaction is to increase faculty satisfaction. Faculty satisfaction could be increased through applying effective practices of learner interactions, as discussed under research question #3. Faculty satisfaction could also be increased through receiving more technical support as discussed under research question #3.

The need for providing *new* online instructors with adequate support is indicated by the bulleted faculty comment above, and by faculty survey question (#18), in which 37 of the 43 faculty respondents submitted advice for a faculty member who is considering teaching an online course for the first time. Given the significant demand for more online courses, it will become even more critical that the college provides

additional resources for identifying and preparing faculty to develop and teach online

courses in the future.

Overall Student Success

Students in online courses have a lower average success rate than students in

traditional courses. At DVC, the average success rate for traditional students is about

70%. The success rate of the student *population* of this study was 61% -- a considerable

gap. However, the success rate of the student *sample* of this study was 75%. Compared

to the online student population they represented, the student sample (survey

respondents) was biased towards higher grades.

Given that satisfaction is associated with success, we might infer that the sample

was biased towards greater satisfaction. Assuming, as a rough estimate, that the bias in

overall satisfaction is proportional to the bias in success, then, the overall satisfaction of

the online student population could be more like 3.20. This is within one standard

deviation of the overall satisfaction mean of the student sample (M = 3.93, SD =

1.077)—68% of the student sample had an overall satisfaction mean between 2.85 and

5.00. So whether or not the satisfaction mean of the student sample is positively biased,

there is a much room for improving student satisfaction with online courses.

This study showed that there is a significant difference between the course

success rate of satisfied versus non-satisfied students. The success rate is 33% higher for

satisfied students. Furthermore, overall satisfaction is significantly (and strongly)

correlated to course success. These analyses clearly demonstrate the importance of

achieving student satisfaction, for achieving student success, and represent a major

finding of this study. **Student success is positively, strongly, and significantly associated with student satisfaction in online courses!**

This finding demonstrates the generalization of student satisfaction theory to a case—the case of student satisfaction with online courses at Diablo Community College. This finding supports the distance education literature that states that student satisfaction is a pillar of quality online education (Sloan-C, 2005), where in this case, quality is measured by successful completion of course learning objectives. This finding supports the general education literature that student satisfaction is associated with student success (Astin, 1993), coupled with the application of good practices of undergraduate education using technology (Chickering & Ehrmann, 1996). Given that these theories generalize to online education at DVC, it suggests that these theories may generalize to online education at other community colleges.

Overall Faculty Success

In the California Community College System, there is a basic formula to use for measuring student success. Such a formula does not exist for measuring faculty success. The DVC faculty evaluation process as it applies to online courses, is fairly similar to the process for traditional courses. It does not account for the interactions that are related to online education (e.g., learner to interface), nor does it require that the evaluator have experience with online education. Similar to traditional courses, students in online courses are not provided with an end-of-course survey unless the instructor is being evaluated. However, such evaluations are not required for online courses unless the instructor is part-time, or is full-time and teaching a full load of online courses. The

college should assume that teaching online is different enough from teaching in the traditional classroom that specialized support and evaluation should be provided. The equivalence theory of distance education (Simonson, 1999) applies to educational *outcomes*, not *processes*, and we need to change our institutional and instructional processes to ensure that the educational outcomes are the same. Thus, achieving equivalent outcomes (student success) would require, at minimum, different processes in pedagogy and faculty evaluation (faculty/institutional change).

As indicators of faculty success—student success, student retention, and student satisfaction—it was shown that there is a wide variation in the student averages for each instructor. There was also a wide range of student comments about online instructors, from disappointment to appreciation. By these indicators, some instructors are more successful than others. However, it may be that such student indicators are more strongly associated with the subject matter (e.g., mathematics), or other factors (i.e., technology, student learning style) than the instructor. To what degree these indicators measure faculty success (or not) with online courses is beyond the scope of this study, but is of interest for future research.

Although a large majority of students are satisfied or very satisfied with online courses at DVC, a significant percentage are non-satisfied. Furthermore, the student sample mean for overall satisfaction may be biased in the positive direction compared to the student population. This study established that student satisfaction is positively associated with student success in online education at DVC; therefore, the college will

need to address the discrepancy in student satisfaction as a strategy to address the

discrepancy in student success.

Recommendations for Overall Satisfaction and Success

Course surveys. Provide a standardized end-of-course satisfaction survey (online)

to every online student. Incorporate the survey results into the Research Office data

reports to be aggregated and made appropriately accessible to pertinent stakeholders

such as instructors, department chairs, division deans, and other administrators. Review

the results of the satisfaction surveys and make plans accordingly for improving online

student satisfaction. This should be done at least once per year, ideally each semester,

until the success rates of online courses are equivalent to the success rates of traditional

courses.

Success indicators. The variation in student averages for success, retention, and

satisfaction per instructor is large. These indicators should be reviewed by instructors,

department chairs, division deans and the distance learning coordinator on a semester

basis in order to identify potential areas to address for improving student and faculty

success.

Success stories. The college should encourage more frequent opportunities for

online instructors to share their online teaching experiences with each other—to

problem solve and discuss ways to increase student success, retention and satisfaction.

These activities could be open to technical staff and administrators to attend—and

perhaps students—in order to encourage a broader understanding of the online

educational process.

Faculty evaluations. The faculty evaluation process (contractual issue), as it

pertains to online courses, should be modified to ensure that (a) the online course

observation process differs from the traditional course observation process by including

specific items related to online course pedagogy and technology, and (b) the evaluator

of the online course is an experienced online educator who knows how to use web

course technologies. The process of evaluation needs to change, to account for changes

in pedagogical processes, and to foster equivalent educational outcomes (success) for

students.

New faculty. To help new online faculty be successful, (a) develop procedures to

ensure that new online instructors are prepared to teach their first online course, (b)

develop a mentoring program to support new online instructors, (c) dedicate a position

for the ongoing recruitment, preparation and support of part-time and full-time

instructors who are getting started with online education.

Research Question #2

What are the student characteristics, activities or perceptions that are associated

with overall course satisfaction and success? Are there any significant differences

between the characteristics, activities or perceptions of successful versus non-successful

students?

Factors of Student Satisfaction

This study showed that there is a significant difference in the overall satisfaction

level of successful versus non-successful students. Although this finding is fairly obvious,

it set the stage for dividing the student sample into successful and non-successful

groups, to explore the correlations and differences in satisfaction per selected input and process variables. This analysis demonstrated what factors are the most and least satisfactory to successful and non-successful students. This analysis is used to prioritize the areas of greatest significance for improving student satisfaction.

From the distance education literature, six learner interactions were identified as theoretically important and were included in the student survey: the learner's interactions with the instructor, content, other learners, interface, self, and student support. The students' relative satisfaction levels with each of these learner interaction scales varied according to the groupings of (a) all students, (b) successful students, and (c) non-successful students. **With the exception of student support, there was a significant positive difference in satisfaction for each of the learner interaction scales by successful versus non-successful students. Furthermore**, **there was a significant positive correlation between each of the learner interaction scales and overall satisfaction at the 0.01 level**. Table 1 shows the top three satisfiers and the bottom three satisfiers for each group. However, for all students, the difference in satisfaction between content and instructor (top-three to bottom-three) was much less than the difference between content and other learners (both in bottom-three). So, this division between top-three and bottom-three is somewhat arbitrary, but, somewhat instructive for considering the differences between the three groups of students.

Table 1

Comparison of Scale Satisfiers by Student Groups

Student Group	Top-three Satisfiers	Bottom-three Satisfiers
All	1. Interface 2. Self 3. Instructor	4. Content 5. Other learners 6. Student support
Successful	1. Self 2. Instructor 3. Interface	4. Content 5. Other learners 6. Student support
Non-successful	1. Interface 2. Content 3. Instructor	4. Student support 5. Self 6. Other learners

The distinguishing features of this comparison are that (a) non-successful students rank self-interactions in the bottom-three while successful students rank self interactions as number one, (b) non-successful students rank interactions with other learners as number six, (c) interface and instructor are in the top-three of each student group, (d) other learners and student support are in the bottom-three of each student group.

The most dramatic difference between successful and non-successful students is their differing satisfaction levels for *self* interactions. Successful students rate self interactions as the top-most satisfactory interaction scale while non-successful students rate self-interactions as nearly the least satisfactory of all interaction scales (second from bottom). The four survey items that comprised this scale concerned self-discipline, self-motivation, self-organization abilities, and achievement of learning objectives. Of the four items, non-successful students were the least satisfied with their self-discipline while successful students were the most satisfied with their ability to organize the

course materials (followed by self-discipline). In my experience, the idea that online

students need a lot of self-discipline to be successful seems to be "common knowledge"

among educators. However, it is not common knowledge that **successful students are**

much more satisfied with their ability to organize course materials than non-

successful. This could be a significant area for future research—to learn more about the

organizational perspective and practices of successful online students. At face value, self

organization is an important element of self interactions in online courses, and

instructors or counselors might encourage struggling students to become more

organized in their online courses in order to be successful.

Each of the student groups ranked interactions with other learners and student

support in the bottom-three. However, of the two, interactions with other learners was

the only scale that demonstrated a significant difference in satisfaction. From the survey

items comprising this scale, **non-successful students were the least satisfied with**

student collaboration on group projects and their sense of belonging in the class. Even

satisfied students were not very satisfied with interactions with other learners. This

interaction is conducted very differently online (e.g., email, discussion board, chat), than

in the traditional classroom. Online faculties need to understand the importance of this

interaction for learning online in order to effectively structure group projects or other

learner interactions.

The interface interaction was ranked in the top-three satisfiers for each group.

Thus, **the interface is relatively satisfactory for all online students**. From the survey

items comprising this scale, students were the most satisfied with access to the course

website and the least satisfied with the chat room. These same two items were the top

and bottom interface satisfiers for faculty. Concerning the chat room, it appears that

many faculties do not enable that functionality in WebCT. And, based on the student

survey feedback, many students would like access to the chat room. Many of the online

students have grown up with technology (digital natives), and they are used to instant

messaging through computers or cell phones. The absence of this resource in the online

classroom could be annoying or frustrating to them. On the other hand, many

instructors did not grow up with ubiquitous communication technologies (digital

immigrants), and may not want to chat with their students or provide that resource for

student interactions. To consider another rationale, it could be that students and/or

faculty are simply not satisfied with the interface of the chat room within the CMS. This

would require further research that is beyond the scope of this study. Regardless of the

reason that the chat room was rated low by students and faculty, it is an issue that

needs to be addressed.

The instructor interaction was also ranked in the top-three satisfiers of each

group. **Furthermore, of all of the learner interaction scales, the instructor to learner**

interaction was the most strongly correlated to overall satisfaction. Thus, the learner's

interaction with the instructor is a strong factor of overall satisfaction. It is very

important that the instructor understands how to interact with students in an online

course—for the sake of student satisfaction, and ultimately, for the sake of student

success. Given that this scale consistently ranked high, most learners and instructors

must be interacting relatively well. However, there were many student comments

expressing frustration that their online instructor did not respond to them in a timely manner—or sometimes not at all. This is an example of an online classroom observation item that should be included as part of the evaluation process of online faculty.

Four other variables were found to demonstrate a significant difference in satisfaction for students. Three related to the student's expectations versus experience, and one related to technology. These are significant findings of the study and may contribute to the field of distance education. **Students who experienced the course to be more difficult, more work, or more time than they expected, were significantly less satisfied with the course than other students.** This problem could be due to unrealistic expectations of the students *or* instructors. Perhaps some online instructors do not realize how much work, etc., they are requiring of their students. Or, perhaps some online students do not realize that attending an online course involves time spent learning (equivalent to class time) and time spent working (equivalent to homework). To understand the source of this discrepancy would require additional research that is beyond the scope of this study. Finally, **Windows users were significantly more satisfied with online courses than Macintosh users.** This must be related to the incompatibility issues between the Macintosh and CourseCompass lab modules (e.g., MyMathLab, MyEconLab, etc.), and the difficulties with accessing password protected videos with a Macintosh computer.

In general, students expressed dissatisfaction with anything that disrupted the flexibility of the online course such as attending required events at specific times. The study clearly showed that most students are attending online courses because of the

scheduling flexibility—allowing students to incorporate classes into their work, family or personal schedules. Any required activities that reduce scheduling flexibility would somewhat defeat the purpose of taking an online course, and would naturally reduce student satisfaction.

Factors of Student Success

Many of the same items that were factors of student satisfaction are also factors of student success. For example, the course success rate of satisfied versus non-satisfied students was significantly higher for each of the learner interaction scales (except for student support). Also, each of the learner interaction scales was positively correlated to course success at the 0.01 level, (excepting student support). Thus, it appears that the keys to course success are the keys to student satisfaction in each of the learner interaction scales (excepting student support).

The relative significance of the learner interactions for success (at this time at DVC) may be approximated by the magnitudes of success differences for each of the interaction scales: self (.31), instructor (.15), content (.12), other learners (.11), and interface (.09). This approximation is reinforced by the strengths of the correlations between the interaction scales and success—they are in the same relative order. This is a major finding of this study. **Student satisfaction with the learner interactions are a significant factor of success, from greatest to least: self, instructor, content, other learners, and interface.** This could be a significant finding for researchers or scholarly practitioners. It would be interesting to explore the theoretical potential of this finding by conducting related studies at other colleges.

All of this suggests that to narrow the success gap between online students, we need to increase satisfaction with the learner interactions. Accordingly, the strongest variable for success is self, suggesting that online students need a significant amount of self-discipline, self-motivation, and self-organizational abilities to be successful in online courses. Next is interaction with the instructor, which has the highest correlation to overall satisfaction. Online instructors need to be able to use technology and structure their courses to provide effective interactions with students. This requires new processes and pedagogies for the new instructor of online courses. Next is interaction with content, which includes textbook content modules, online applications, instructor-created content, video content, etc. Satisfactory interactions with content are associated with student success. Next is interaction with other learners, which relates to group projects and student interactions with each other. From the comments and rankings, it is clear that this area needs attention at DVC. Last is the interface, which includes student interactions with the online course system. Given that students were most satisfied with access to the online course, it is reasonable that this would have the lowest success gap between satisfied and non-satisfied students.

There were two other factors that demonstrated a significant difference in student success: **(a) students working 30 or more hours per week had a lower success rate than students working less than 30 hours, and (b) students in the age group of 30 to 34 had a higher success rate than other age students.** These were significant findings of the study that may contribute to the field of online education. This information could be combined with the findings about the need for self-discipline, etc., to provide

prospective students and counselors with research-based advisements for succeeding in online courses.

Given that the retention rate in online courses is lower than traditional courses (5-10% gap at DVC), best practices for increasing or predicting online retention are found throughout the distance education literature. Eight such items were examined in this study: Orientation, prior online experience, computer skills, student support, locus of control, unit load, student age, and hours worked. As it turns out, **only one of these items tested for a significant difference in student retention—locus of control.** This was surprising. I fully expected that students who had attended an orientation or who had taken a prior online course would have a higher retention rate than students who had done neither. Such was not the case at DVC. There was no significant difference in the retention rates of students who attended an orientation or attended a prior online course. These findings may suggest that many DVC students may already be familiar with online technology and the concept of learning online. **These findings suggest that retention is most related to what happens *inside* the online class.** However, as a caveat, there was a significant difference in interest in attending a seminar for online success (#22) between students who had no prior online course experience and those who did attend a prior online course.

This study has reinforced the importance of applying theory to practice in distance education. The learner interaction scales provided meaningful measures of student satisfaction and success—analyses of the survey responses linked with respondent grades revealed significant differences between successful and non-

successful students. If the survey had not been based on theory, it is doubtful that such results would have precipitated. This study also showed that many reputed best practices and predictors did not make a significant difference for student retention at DVC.

Recommendations for Student Satisfaction and Success

Presentation of results. Prepare a condensed version of the main points of this dissertation to help online stakeholders understand the (a) context of distance education, (b) significance of effective interactions with online students, (c) impact of effective learner interactions upon student satisfaction, and (d) impact of online student satisfaction upon student success.

Focused faculty development. Provide online instructors with more support for understanding and facilitating effective learner interactions in their online classes. For each of the learner interactions, demonstrate examples of effective and ineffective practices. Share the student survey comments related to effective and ineffective practices. Recommend that online instructors evaluate their own effectiveness based in part on student satisfaction with learner interactions.

Learner interactions. Modify the student survey that was used for this study to represent the learner interaction scales as discovered through factor analysis. Include these questions in an end-of-course student survey for online classes. Modify the faculty evaluation process as it applies to online courses to include observations of evidence of effective learner interactions.

Student support. Provide information to prospective online students and

counselors about the need for self-discipline, self-motivation, self-organization, using

Windows based computers, and working fewer than 30 hours per week to promote

student success in online courses. Provide online students with online tutoring and

counseling. Provide more student services for online students—make online career and

employment services more satisfactory to students. Resolve the Macintosh

incompatibility issues with CourseCompass and online videos.

Student orientation. Produce a general student orientation for online course

success that could be accessed freely by any prospective online student at DVC. The

orientation should be accessible anytime, so students could complete it before, during,

or after their first online course. Encourage counselors and staff to incorporate the

orientation into general college success workshops/classes.

Eliminate required meetings. Encourage online instructors and departments to

eliminate or greatly reduce all required campus meetings for orientations, group

projects, presentations, examinations, etc. The online courses should be as flexible as

possible as students expect that online course activities will all be conducted online.

Research Question #3

What are the faculty characteristics, activities or perceptions that are associated

with overall course satisfaction?

Factors of Faculty Satisfaction

The faculty population was much smaller than the student population and so it

was not possible to do a factor analysis of the faculty interactions with the online

course. However, online instructors were surveyed about satisfaction with four of the

six learner interaction scales: content, interface, student-to-student, student-to-support

services.

This study showed that there are significant correlations between instructor

activities/perceptions and overall faculty satisfaction. Eight of the faculty survey items

were positively correlated with faculty satisfaction and one item was negatively

correlated. Three of the top four strongest correlations were related to **assessment**.

Three items related to **course content**. One item related to **computer skills**. One item

related to **perception of student sense of belonging**. The negative correlation was

between **computer type** used to access the online course, Mac or PC.

The following items were not significantly correlated to overall satisfaction, but

they do represent relative satisfaction levels within each of the four interaction areas.

Faculties were most satisfied with (a) access to the course website, (b) self-developed

course materials, (c) student sense of belonging, and (d) online textbook orders.

Faculties were least satisfied with (a) chat room, (b) multimedia, audio, video resources,

(c) student collaboration on group projects, and (d) tie between e-advisor and

career/employment services for students.

Online instructors provided many written comments throughout the survey in

response to satisfaction items or open-ended questions. These responses included

desire for (a) more technical support for development of course multimedia, (b) better

gradebook for WebCT, (c) better discussion board options, (d) better video resolution,

(e) more online tutoring for students, (f) more online counseling for students, (g) better

integration with WebAdvisor, (h) prospective students to review online course before they register, (i) more online support services, (j) more online courses, (k) possible requirement to use just one CMS, and (l) more training and support for online faculty, especially instructors who are new to online instruction.

There is a wide disparity between the student satisfaction, student success and student retention means per instructor. More research needs to be done to understand the possible causes of the disparities—student-based, subject-based, instructor-based, support-based, technology-based, etc. However, more should be done to support instructors in learning how to satisfactorily, and effectively teach online. The college should assume that teaching online is different enough from teaching in the traditional classroom that additional support and monitoring are necessary to ensure that students and faculty are satisfied and successful. The equivalence theory of distance education applies to educational outcomes, not processes, and we need to change our institutional and instructional processes to ensure that the educational outcomes are equivalent.

Recommendations for Faculty Satisfaction

Technical support. Provide more technical support to faculty for the development and delivery of multimedia, audio and video resources in online courses. Provide ongoing technology workshops in the use of all of the interface tools of WebCT and the rationale for incorporating them (e.g., chat).

Self support. Provide more opportunities for staff development and participation in professional conferences, etc. Identify successful online instructors and encourage/support them to provide flex workshops or mentoring for colleagues.

CMS standardization. Ensure that all online courses use WebCT for the core of their online course. Ensure that any external online resources such as CourseCompass are compatible with the Macintosh computer if possible, otherwise, the course schedule must clearly communicate that such a course requires a Windows based computer and is incompatible with a Macintosh computer.

Instructor incentives. Given the amount of time that is required to prepare a new course to go online, and the expressed desire for many more online courses to be available in the future, the college should find new ways to encourage instructors to develop new online courses, and/or offer additional sections. Any such strategies that may involve compensation or release time would need to be contractually determined and should include a written agreement about online course ownership and licensing.

Additional online courses. The college should explore other resources, partnerships or models for offering a greater variety of online courses, as soon as possible.

Communication. Increase the amount and types of communications between online instructors, department/division faculty, administration and support staff to ensure that online faculties are satisfied with teaching online, and that new online instructors are well prepared and supported to be effective in the online classroom.

Future Research

This study demonstrated definitive results of the connection between online student satisfaction and course success at DVC. It also provided definitive results about the significance of learner interactions to satisfaction and success, and a multitude of other findings that supported and refuted the literature. The findings show that theories of learner interactions and student satisfaction are applicable to DVC, and suggest that they may generalize to similar institutions.

It would be interesting and potentially powerful to research whether these results are found at other community colleges, perhaps beginning with the other colleges in the district. Would we find similar differences in satisfaction/success? Would the relative importance of learner interactions for successful and non-successful students be similar? Would student support services be more significantly linked to satisfaction or success? Would orientations make a difference? It would also be interesting to know if a similar study would yield similar results at four-year college or high school.

Within this study, several areas emerged that would be of interest to research in the future: Why is there such a great disparity between the satisfaction, success and retention levels per individual instructor? Why were orientations effective for increasing student retention at some colleges while making no significant difference at DVC? Why do so many students have wrong expectations about the workload/difficulty/time requirements of online classes? What are the organizational perspectives and practices of successful online students? Why are students and faculty dissatisfied with the chat

room? Is student satisfaction significantly correlated to faculty satisfaction? How satisfied are faculty with interacting with students (this question was overlooked in this survey)? This study was limited to full-term, 3-4 unit courses. Do these results apply to courses under three units or to short-term courses?

As this dissertation concludes, there are many research questions on the horizon, and I look forward to pursing them in the future. But, for this moment, this researcher will take satisfaction in the research answers before me: how student satisfaction is related to student success in online courses.