

Kennesaw State University
DigitalCommons@Kennesaw State University

Faculty Publications

1-1-2015

Predictors of Enrolling in Online Courses: An Exploratory Study of Students in Undergraduate Marketing Courses

Renee J. Fontenot
Georgia College

Richard E. Mathisen
Kennesaw State University, rmathise@kennesaw.edu

Susan S. Carley
Kennesaw State University

Randy S. Stuart
Kennesaw State University, rstuart@kennesaw.edu

Follow this and additional works at: <https://digitalcommons.kennesaw.edu/facpubs>

 Part of the [Higher Education Commons](#), and the [Marketing Commons](#)

Recommended Citation

Renee J. Fontenot, Rick E. Mathisen, Susan S. Carley, and Randy S. Stuart. "Predictors of Enrolling in Online Courses: An Exploratory Study of Students in Undergrad Marketing Courses" *Journal of Educators Online* 12.1 (2015): 116-139.

This Article is brought to you for free and open access by DigitalCommons@Kennesaw State University. It has been accepted for inclusion in Faculty Publications by an authorized administrator of DigitalCommons@Kennesaw State University. For more information, please contact digitalcommons@kennesaw.edu.

**Predictors of Enrolling in Online Courses:
An Exploratory Study of Students in Undergraduate Marketing Courses**

Renée J. Fontenot, Georgia College, Milledgeville, Georgia, USA

Richard E. Mathisen, Kennesaw State University, Kennesaw, Georgia, USA

Susan S. Carley, Kennesaw State University, Kennesaw, Georgia, USA

Randy S. Stuart, Kennesaw State University, Kennesaw, Georgia, USA

Abstract

An exploratory study of undergraduate students enrolled in marketing courses at a Southeastern regional university was conducted to determine the motivations and characteristics of marketing students who plan to be online learners and examined for differences between those who have taken and those who have not taken online classes. An online survey of Likert scales, open-ended questions and demographic questions was sent via class learning management websites. A total of 165 students of the 438 invited to participate completed the survey. A structural model was developed using SMART-PLS to estimate the relationships of constructs that predict taking online courses. Results of the study showed differences in predictors of those that have taken online courses compared to those who plan on taking online courses. A significant predictor of those planning on taking online courses is quality of learning while a significant predictor of those who have taken online courses is scheduling and timing. The results can be used to examine ways to improve/enhance the student's educational experience, as well as an institution's effectiveness in attracting the growing body of online learners.

Keywords: Online learners; face-to-face learning; student interactions; learning environments; undergraduate marketing

INTRODUCTION

Student participation in distance learning continues to grow at an ever-increasing rate. A recent report on trends in online learning (Allen & Seaman, 2013) found that almost seven million U.S. college students, of the roughly twenty-one million (United States Department of Education 2012), or one-third, took at least one online class in the fall of 2011. The number of students taking online courses has increased each semester since 2011, in part to the growth of MOOCs, massive open online courses (Pappano, 2012). Though a few leaders in higher education still remain skeptical (Kingkade, 2012), the credibility of online courses, once thought to be inferior, has begun to change as public, private and for-profit schools along with even the most respected of universities are offering MOOCs (Garrett, 2013). MIT and Harvard taught 370,000 students through MOOC offerings in the fall of 2012.

These trends suggest growing competition among colleges in general and business colleges in particular for a share of the online student market as over 70% of public and private colleges offer full degree granting programs online (Lederman, 2013). Though some say the growth for online education is reaching maturity (Fain, 2012; Arnason, 2013) there are indications that online learning has the potential to reach 21.13 million students by 2015 (Adkins, 2013). Regardless the type of institution, online education will play a significant role in course delivery.

To succeed in this shifting competitive landscape of disruptive innovation (Lenox, 2013), institutions of learning need to have a clearer grasp of why students select online as opposed to face-to-face course options and how their programs should be designed to attract learners. Given the high representation of business students among American students in general (34%)

(Aslanian & Clinefelter, 2012), colleges of business especially stand to gain from a clearer picture of the preferences of online versus face-to-face business students. Most research has focused on students who have taken online courses; this research will also examine student rationale that precedes taking online classes.

Marketing students, as a whole, have a different learning style when compared to students in other majors, preferring a stimulus-rich learning environment approach (Steward & Felicetti, 1992). Allen, Swidler, and Keiser (2013) also found evidence that supports this style of learning among marketing majors. Given the lack of research on online marketing education and student cognitive style, the implications of these studies are unclear, suggesting a need for further investigation.

Marketers must have strong communications skills, including oral and listening, interpersonal skills, and be adaptive to a changing environment (Bureau of Labor Statistics 2012). The changing environment will mean ongoing training throughout their careers. Most, though not all, communication in online learning is written through email or threaded discussions posted to a common chat room (Smith & Rupp, 2004). This downside for marketing majors is the reduced ability to develop necessary skills needed in their future work environment. The upside for future employers is the familiarity and acceptance that new hires may have with online training as many look for less expensive employee training procedures (Bersin, 2014; Nielson, 2014). Though online courses may not be conducive for developing some skill sets, such as interpersonal and strong oral communication skills, for a large set of employees with a broader range of necessary skills, the acceptance and mastery of online training may be more important to employers.

In this study, the perspectives of students enrolled in marketing courses are examined to determine the motivations and characteristics of students who plan to become distance learners compared with those who prefer a traditional classroom experience. This study compares the characteristics and motivational factors influencing educational decisions of students who plan to take online versus face-to-face classes. Specifically, the research considers online versus face-to-face students across several elements including: perceptions of the educational value and difficulty of coursework; preferences for a challenging learning environment; scheduling preferences; and demographic characteristics. Using a survey of undergraduate students enrolled in marketing classes at a regional university in the Southeastern U.S., demographic, attitudinal and learning differences are examined to determine the roles they play in student selection of online versus traditional classroom modes of educational delivery.

Likert scales and open-ended questions were used to determine student perspectives on various dimensions of online versus face-to-face courses. A cross section of students was surveyed including students in traditional face-to-face courses and students in online courses. Students were queried regarding their perceptions of convenience in scheduling, flexibility, quality of learning, interaction with other students and faculty, work commitments and family structure as related to taking online versus face-to-face courses. Partial Least Squares was used to specify a model of students who had taken and plan to take online courses. Recommendations are framed against the current changes and the new normal in higher education.

LITERATURE REVIEW

Student enrollment in online classes increased from 9.6% of total enrollment in the fall of 2002 to 32% in the same semester of 2011 (Lederman, 2013). With roughly one in every three college students now participating at some level in distance learning, today's online students are

more reflective of students in general than was the case a decade ago (Mann & Henneberry, 2012; DeMaria, 2012). The literature indicates a number of influences that may contribute to a decision to enroll in online classes, with most studies in agreement on some influences and others showing inconsistent findings. Some of the common elements that contribute to students enrolling in online courses include: convenience and flexibility, educational value/course difficulty, student demographics, cognitive styles and the credibility and acceptance of online education. The proposed model includes the constructs that determine the propensity of students that have taken online courses and plan on taking online courses and include the model hypotheses with each section of the literature that addresses the common elements found in the literature. Each section of the Literature Review lists the corresponding hypotheses based on the extant literature.

Convenience and Flexibility

Research findings on convenience and scheduling are perhaps the most uniform in terms of motivations for electing to take an online course. These courses provide opportunities for flexibility where work can be completed at one's own schedule (Fullerton, 2013; "The Pros and Cons," 2012; Vamosi, Pierce & Slotkin, 2004; Dale & Spencer, 2001) and at any location (Fujii, Yukita, Koike & Kunii, 2004). The ability to select from a wider variety of colleges (Fullerton 2013) and not having to commute to campus (Marks, Sibley & Arbaugh, 2005) are also cited influences that attract students to online courses.

Online programs allow unprecedented access to degrees and programs at schools that have very limited openings in their traditional programs (Allen & Seaman, 2013; Garrett, 2013). MOOCs, offered mostly not-for credit, by MIT, Harvard and similar institutions reach students who would never before have been able to take courses from those institutions. As economic

pressures push the limited resources at schools, many are considering ways to provide less expensive options to more students for access to for-credit classes (Jaschik, 2013).

There are also cost considerations that play a role in assessing the flexibility of a particular program of study. For students, there are possible savings from graduating earlier (Marks, Sibley & Arbaugh, 2005) and not losing income due to missed work when face-to-face classes are not offered at convenient times (Larson, 1999). As an increasing number of students work full time, 48%, or part time, 24%, (Aslanian & Clinefelter, 2012) the ability to take classes around work schedules is an important consideration. Hypotheses 1 through 5 are related to the paths for the Time and Scheduling, Work, and Taken Online Course constructs in the proposed model.

H₁: Previously taking online courses impacts students' plans to take future online courses.

H₂: Time and scheduling flexibility impacts students' plans to take future online courses.

H₃: Time and scheduling flexibility is related to previously taking an online course.

H₄: Students' work responsibility is related to previously taking an online course.

H₅: Students' work responsibility is related to time and scheduling flexibility.

Educational Value/Course Difficulty

While the acceptance of distance learning has gained respectability over the past decade, two-third of all faculty reportedly still believe that online courses are inferior to the education students receive in a traditional classroom (Allen & Seaman, 2013; Kingkade, 2012). As the authors can anecdotally attest based on discussions with colleagues, considerable skepticism remains about the value of online education. Undoubtedly, some of this skepticism is shared with students when they seek guidance from their professors.

In addition to these external influences on how students view the quality and legitimacy of online learning, students' own personal classroom experiences affect their educational decisions. Previous research on online versus face-to-face learners indicates that many online learners believed that online courses were more difficult; also, no differences were found in the level of learning between the two groups (Iverson, Colky & Cyboran, 2005). Where course enrollment levels are comparable between online versus face-to-face course deliveries, studies have indicated no difference in the level of student-faculty interaction (Vachris, Bredon & Marvel, 1999), which is often cited as a shortcoming by online skeptics. Related to the level of student-faculty interaction is the time required of faculty to teach online, which is commonly believed to exceed the time required to teach in a face-to-face course (Allen & Seaman, 2013). As these studies suggest, the experience of online students is comparable to that of their traditional classroom counterparts in regards to classroom interactions and course difficulties. Hypotheses 6 and 7 are related to the paths for Classes Helpful construct in the model.

H₆: Student belief that classes are helpful is related to plans to take future online courses.

H₇: Student belief that classes are helpful is related to previously taking an online course.

Student Demographics

Because of their flexibility and convenience, online classes have tended to appeal to non-traditional students. Past research finds that the online learner has typically been an employed female, 25-44 years of age (Garrett, 2013) whose primary reasons for taking online courses are the need to balance work, family and school responsibilities (Aslanian & Clinefelter, 2012). In addition, most students lived nearer than 100 miles from the institution from which they were taking online courses, many being out-of-state and non-residents (Mann & Henneberry, 2012). Hypotheses 8, 9 and 10 are related to the paths for the Demographics construct in the model.

H₈: Student demographics are related to their plans to take future online courses.

H₉: Student demographics are related to previously taking an online course.

H₁₀: Student demographics are related to time and scheduling flexibility.

Cognitive Styles

A significant body of research has examined learner cognitive styles in the context of student performance in and preference for online classes. Here, the evidence is inconclusive and in want of further inquiry. Several studies concluded that success in online instruction is highly dependent on whether students' cognitive styles are met (Vermunt, 1998; Blickle, 1996). Some students need greater instructor interaction, specifically support and guidance, than is typical of online instruction. While interaction with fellow students is important to some learners, others thrive on independent study without face-to-face interaction. Online courses may thus be better suited to the type of learner who can work alone and with less instructor direction (Chen & Macredie, 2004). Howland & Moore (2002) found that students with attributes such as higher self-confidence are more likely to succeed in distance learning. Based on these observed differences, some have suggested that pedagogical practices require adaptation when courses are moved from a face-to-face to an online format (Barnes, Preziosi & Gooden, 2004) to accommodate students who might otherwise struggle in online courses.

In examining cognitive style and online learning, many researchers have failed to find a relationship between this style and learner performance and preferences. Oh and Lim (2005) found no correlation between cognitive style and student attraction to or success in online learning. Instead, the primary determinants were computer competency and previous online learning experience. Student subjects reported that the flexibility of online classes and learning at one's own pace were the most important influences on their decision to take online courses.

Although their subjects had specific expectations and needs (e.g., frequent communication with the instructor, instructor understanding and flexibility), Mupinga, Nora, & Yaw (2006) failed to find a particular learning style among online students. Others studies have arrived at similar conclusions (Truell, 2001; Wang, Hinn, & Kanfer, 2001). Hypotheses 11 through 14 are related to the paths for the Personal Feelings and Learner Interaction constructs.

H₁₁: Perceptions of learner interactions are related to belief that classes are helpful.

H₁₂: Perceptions of learner interactions are related to plans to take future online courses.

H₁₃: Perceptions of learner interactions are related to previously taking an online course.

H₁₄: Students' personal feelings are related to perceptions of learner interactions.

Credibility and Acceptance of Online Education

Employers' acceptance of online education is perhaps of most singular importance, since no student wants to invest time, energy and money into programs of study with no career payoff. Concerns of prospective employers involve the comparative academic rigor of online courses, opportunities for cheating, lack of interaction with instructors and fellow students (Kohlmeyer, Seese & Sincich, 2011), and commitment of online students to their studies (Columbaro & Monaghan, 2009). Linardopoulos (2012) reports that employers view job candidates with degrees from online programs less favorably than those with traditional degrees. There are recent indications that these negative perceptions may be changing, as more graduates with online degrees enter the workplace and demonstrate their knowledge and skills to employers (Metrejean & Noland, 2011; Tabatabaei & Gardiner, 2012). Hypotheses 15, 16 and 17 are related to the paths for the Quality of Learning construct.

H₁₅: The perceived quality of learning is related to students' plans to take future online courses.

H₁₆: The perceived quality of learning is related to previously taking an online course.

H₁₇: Scheduling flexibility is related to the quality of learning.

METHODOLOGY

A survey instrument was developed and submitted to the university Institutional Review Board (IRB) for approval. Upon IRB approval, the survey was administered online using Qualtrics. A pretest was administered to affirm the survey's validity. The link to the final survey was sent to students in undergraduate face-to-face and online marketing classes at a Southeastern regional university via the learning management system (*Desire2Learn*) website that is required for all courses. Inviting the student's to participate and administering the survey online was deemed acceptable as all students at the university surveyed are expected to use online resources regularly including, but not limited to the course evaluation surveys given at the end of the semester. These evaluations are only administered online as the university recognizes online surveying as a reliable and credible way to gather information from the student body.

There were 438 students enrolled in these classes. A final sample of 165 respondents (38% response rate) roughly approximated the general demographics of the student body of the university. The respondents were 62% female, 38% male; on average 25 years of age; and single with no children (78%). Students had taken on average 13 online classes and had a self-reported GPA of 3.25. Twenty-two percent of the respondents indicated that they had not taken online courses. Most were employed, 82% (41% full-time, 41% part-time) but only 10% travelled regularly for work.

The original response sample included 167 surveys. Two were eliminated with many missing responses. The resulting useful sample included 165 surveys. These were adequate to conduct the Partial Least Squares (PLS) study as the sample size was greater than five times the number of indicator variables (Hair, Black, Babin, & Anderson, 2010). The measures for the

study are shown in Table 1 To meet IRB requirements two screening questions (Q1 and Q2) were not included in the results. All the Q3 and Q4 measures were five point Likert scales anchored at (5) strongly agree and (1) strongly disagree.

Partial Least Squares Analysis

The hypothesized model is shown in Figure 1. It was hypothesized that predictors of students that had taken online (OL) courses and that planned on taking OL courses were Learner Interaction, Classes Helpful (in future endeavors and enhancing skills), Time & Scheduling, Quality of Learning, Work Responsibilities and Demographics.

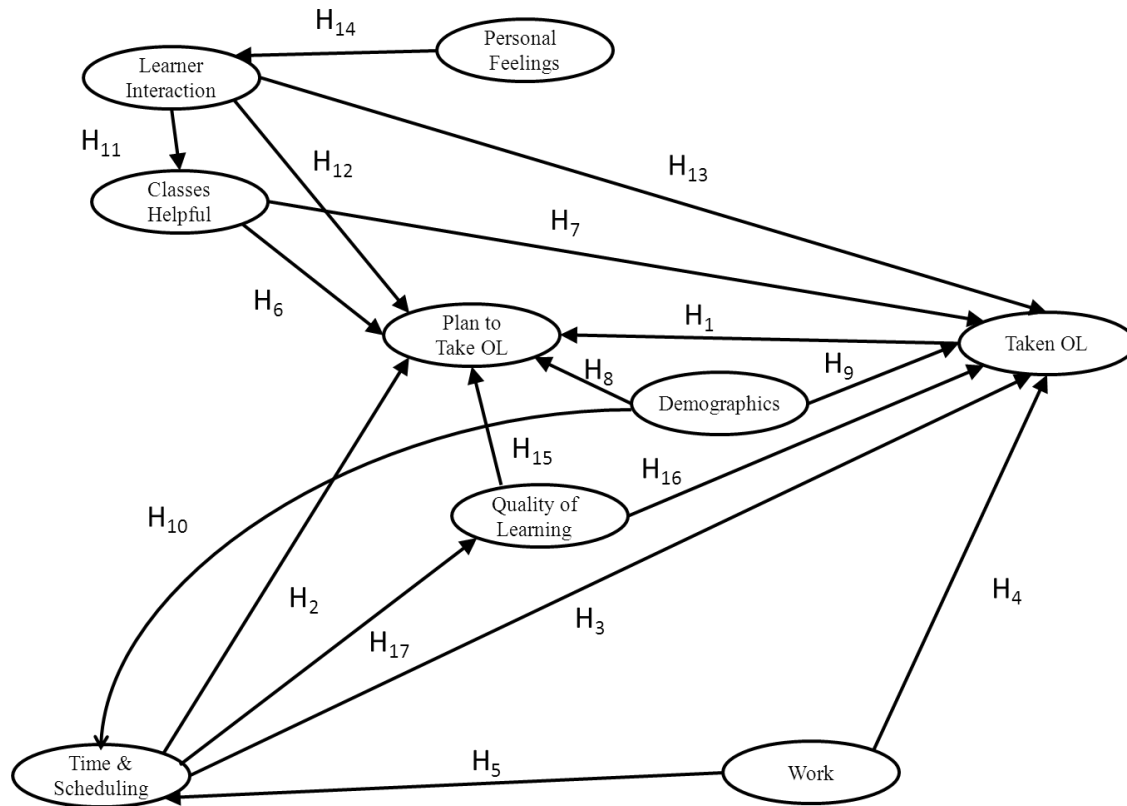


Figure 1: Hypothesized Model with Path Hypotheses from lists of Hypotheses from the Literature Review and Research Hypotheses section.

An initial model was analyzed to determine the loadings of all variables in the survey as indicators for the constructs. Indicators not included in the final model were eliminated due to

outer loadings less than 0.400 (Hair, Hult, Sarstedt, & Ringle, 2013). Some indicators with loadings of between 0.400 and 0.700 were retained in the model as removal did not substantially increase the average variance explained (AVE) for the constructs and others were eliminated as they reduced the construct AVEs. Table 1 lists all the variables and the indicator measures retained in the final model.

Table 1
Indicators from Survey Used in Final Model

Survey Question	Used in Model	Question Content
Q3-1	x	Fellow students are important contributors to my overall learning.
Q3-2	x	As a college student, I enjoy the challenge of learning.
Q3-3		Most of my college classmates seem to enjoy the challenge of learning.
Q3-4	x	My college classes have helped me to develop better problem-solving skills.
Q3-5	x	My college classes have helped me to develop better critical thinking skills.
Q3-6	x	I consider myself to be a highly motivated student.
Q3-7	x	I have high self-confidence when it comes to my learning abilities.
Q3-8		I wish I had better time management skills.
Q3-9	x	What I learn in class will be helpful in my career.
Q3-10	x	What I learn in class will be helpful in future educational endeavors.
Q4-1	x	Online classes allow people to spend more time with their family..
Q4-2	x	Online classes allow people to travel more for their job.
Q4-3	x	Online classes provide flexibility in scheduling when scheduled courses conflict with other courses.
Q4-4	x	Online classes provide flexibility in scheduling when courses that students need are not offered on campus
Q4-5	x	Online classes allow people to finish their degree when they take another job away from the area where they started their degree.
Q4-6	x	Online classes are something that I have taken
Q4-7		Online classes are something that I would never take.
Q4-8		Online classes are easier than face-to-face classes.
Q4-9		Online classes require more work than face-to-face classes.
Q4-10		Online classes are easier to keep up with than face-to-face classes
Q4-11	x	Online classes lack personal interaction with professors
Q4-12	x	Online classes lack personal interaction with fellow students
Q4-13	x	Students learn more in face-to-face classes than in online classes.
Q5		Number of Online Courses Taken
Q6	x	Do you plan on taking future online courses to complete your degree?
Q8		Your gender?
Q9		What is your overall undergraduate GPA?
Q10	x	How old are you?
Q11	x	Which of the following best describes your household?
Q13	x	What is your current work status?
Q14	x	How often does your work require you to travel out of town?

Note: Indicators not used (not checked) due to low outer loadings less than 0.400 or if between 0.400 and 0.700 decreased the Average Variance Extracted for the construct.

Survey Questions Q1 and Q2 were screening questions required for IRB approval to verify agreement to participate in survey.

The final AVE and composite reliability statistics are shown in Table 2. All of the constructs had AVEs of over 0.5000 indicating that each construct explained over 50 percent of the variation in the indicator variables (Hair, Sarstedt, Ringle, & Mena, 2012). The composite reliability scores were all above 0.7000 indicating that the constructs had convergent validity. The final model therefore had high levels of internal consistency reliability and high levels of convergent validity (Hair, et al, 2013).

Table 2
Model Construct Quality Measures

Construct	AVE	Composite Reliability
Classes Helpful	0.7239	0.9129
Demographics	0.7403	0.8468
Learner Interaction	0.6275	0.7662
Personal Feelings	0.7311	0.8442
Quality of Learning	0.8044	0.9249
Time & Scheduling	0.6068	0.8845
Work	0.5503	0.7000

Note: All AVE (Average Variance Extracted) greater than 0.500 and Composite Reliability equal to or greater than 0.700. The model has both high levels of internal consistency reliability and convergent validity.

The outer loadings and indicator reliability are shown in Table 3. All of the outer loadings are above the threshold of 0.708 except Q3_9, Q10, Q3_1, Q 4_1 and Q14 which were above 0.400. These were retained in the model for further enhancement of the importance of these indicators in the constructs, and eliminating these indicators did not enhance AVE for the constructs. The *t* and *p* values were determined using bootstrapping with 5,000 samples.

Table 3
Outer Loadings and Reliability for Indicators

Construct	Indicator	Outer Loading	Reliability	t value	<i>p</i>
Classes Helpful	Q3_10	0.8434	0.7113	19.1002	0.0000
Classes Helpful	Q3_4	0.8761	0.7675	30.8530	0.0000
Classes Helpful	Q3_5	0.8569	0.7343	27.5523	0.0000
Classes Helpful	Q3_9	0.8261	0.6824	16.3965	0.0000
Demographics	Q10	0.6973	0.4863	2.4093	0.0171
Demographics	Q11	0.9972	0.9944	3.8318	0.0002
Learner Interaction	Q3_1	0.6508	0.4235	7.0940	0.0000

Learner Interaction	Q3_2	0.9118	0.8315	26.1873	0.0000
Personal Feelings	Q3_6	0.9046	0.8183	30.3468	0.0000
Personal Feelings	Q3_7	0.8024	0.6438	10.6129	0.0000
Plan to Take OL	Q6	Single Item Construct			
Quality of Learning	Q4_11	0.9210	0.8482	55.7269	0.0000
Quality of Learning	Q4_12	0.9131	0.8338	48.5036	0.0000
Quality of Learning	Q4_13	0.8551	0.7311	28.6403	0.0000
Taken OL Courses	Q4_6	Single Item Construct			
Time & Scheduling	Q4_1	0.6720	0.4516	10.4028	0.0000
Time & Scheduling	Q4_2	0.8135	0.6618	21.6026	0.0000
Time & Scheduling	Q4_3	0.8382	0.7026	18.7464	0.0000
Time & Scheduling	Q4_4	0.8321	0.6924	19.2495	0.0000
Time & Scheduling	Q4_5	0.7250	0.5257	10.0947	0.0000
Work	Q13	0.8846	0.7824	3.4238	0.0008
Work	Q14	0.5641	0.3182	1.8451	0.0668

Note: See Table 1 for question content.

The final model with indicators, indicator loadings and path coefficients is shown in Figure 2.

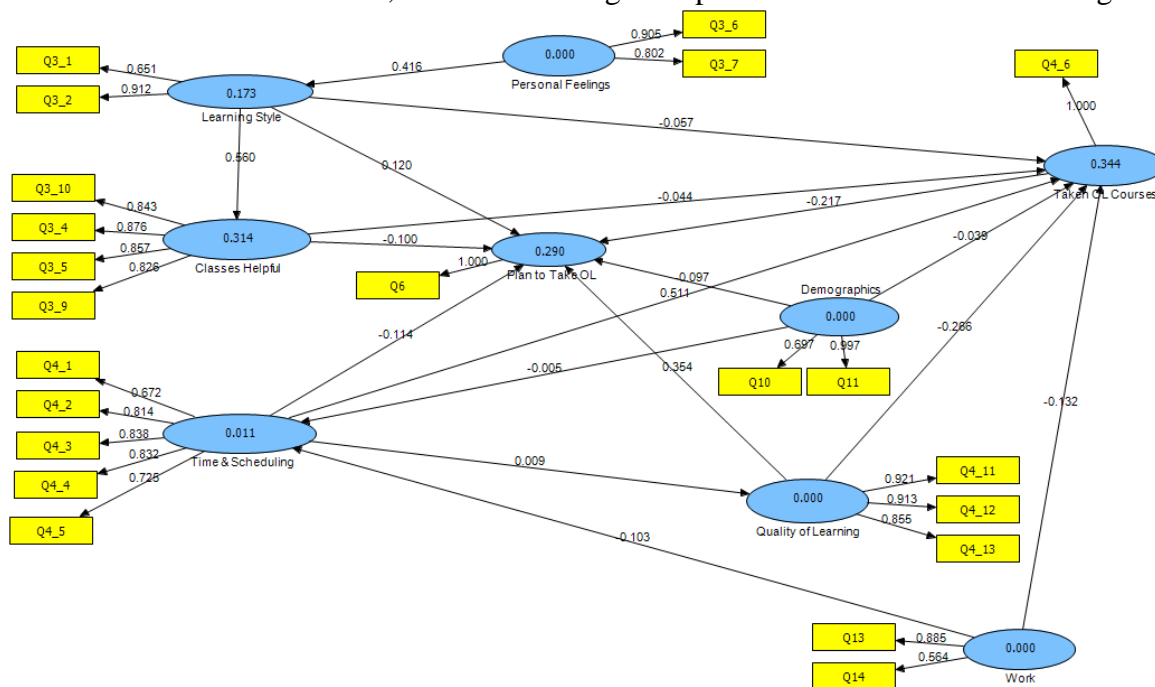


Figure 2: Model with Indicators, Outer Loadings and Path Coefficients

The Fornell-Larker Criteria (Fornell & Larcker, 1981) confirms that the model also has discriminate validity. The criteria are shown in Table 4. The square roots of all construct AVEs were higher than the correlations with other constructs.

Table 4
Fornell-Larker Criteria for Model

	Classes Helpful	Demographics	Learner Interaction	Personal Feelings	Plan to Take OL Courses	Quality of Learning	Taken OL Courses	Time & Scheduling	Work
Classes Helpful	0.8507								
Demographics	0.1581	0.8604							
Learner Interaction	0.5601	0.1781	0.7921						
Personal Feelings	0.5032	0.0481	0.4156	0.8550					
Plan to Take OL Courses	-0.1153	-0.1661	0.0189	-0.0722	Single Item Construct				
Quality of Learning	-0.0644	-0.1923	-0.0122	-0.0394	0.4326	0.8969			
Taken OL Courses	0.0709	0.0248	0.0195	0.1252	-0.3731	-0.2596	Single Item Construct		
Time & Scheduling	0.2519	0.0129	0.1663	0.2865	-0.2256	0.0094	0.5005	0.7790	
Work	-0.0550	-0.1763	-0.1517	-0.0758	0.0483	0.0691	-0.1850	-0.1025	0.7418

Note: The square root of the Average Variance Extracted for each construct is higher than the correlation of each construct with other constructs. The model has discriminant validity.

The path coefficients and the hypothesis tests of the relationships derived from the literature are shown in Table 5.

Table 5
Path Coefficients and Model Hypotheses

Path	Path Coefficient	t Value	p	Hypothesis	
Taken OL Courses -> Plan to Take OL	-0.217	3.0317	0.003	H ₁	Accept
Time & Scheduling -> Plan to Take OL	-0.114	1.3845	0.168	H ₂	Reject
Time & Scheduling -> Taken OL Courses	0.511	6.7352	0.000	H ₃	Accept
Work -> Taken OL Courses	-0.132	1.8298	0.069	H ₄	Reject
Work -> Time & Scheduling	0.103	1.1855	0.238	H ₅	Reject
Classes Helpful -> Plan to Take OL	-0.100	1.0494	0.296	H ₆	Reject
Classes Helpful -> Taken OL Courses	-0.400	0.4427	0.659	H ₇	Reject
Demographics -> Plan to Take OL	-0.039	1.2111	0.228	H ₈	Reject
Demographics -> Taken OL Courses	0.097	0.3110	0.756	H ₉	Reject
Demographics -> Time & Scheduling	-0.005	0.0518	0.959	H ₁₀	Reject
Learner Interaction -> Classes Helpful	0.560	7.1519	0.000	H ₁₁	Accept
Learner Interaction -> Plan to Take OL	0.120	1.6110	0.109	H ₁₂	Reject
Learner Interaction -> Taken OL Courses	-0.057	0.5964	0.552	H ₁₃	Reject
Personal Feelings -> Learner Interaction	0.416	4.7866	0.000	H ₁₄	Accept
Quality of Learning -> Plan to Take OL	0.354	5.4702	0.000	H ₁₅	Accept

Quality of Learning -> Taken OL Courses	-0.286	4.1365	0.000	H ₁₆	Accept
Time & Scheduling -> Quality of Learning	0.009	0.0845	0.933	H ₁₇	Reject

Six of the seventeen hypotheses on the construct paths were accepted as statistically significant with probability levels of less than 0.0500. Of these four have positive path coefficients and two have negative path coefficients.

Blindfolding was used to assess the predictive relevance of the endogenous constructs.

The R^2 and Q^2 values are shown in Table 6.

Table 6
R² and Q² Values for Endogenous Constructs

Endogenous Construct	R ²	Q ²
Learner Interaction	0.1727	0.1026
Classes Helpful	0.3137	0.2226
Plan to Take OL Courses	0.2896	0.2212
Time and Scheduling	0.0105	0.0071
Taken OL Courses	0.3439	0.3637
Quality of Learning	0.0001	-0.0007

For Partial Least Squares Structural Equation Modeling (PLS-SEM) models, a Q^2 value larger than zero in the cross-validated redundancy report indicates that all of the six constructs have predictive relevance (Hair et al., 2013). The Q^2 statistics indicate that all endogenous constructs are non-zero.

FINDINGS AND CONCLUSIONS

The proposed model reflects the significant constructs and indicators that both predict why respondents have taken online courses and why respondents plan on taking online courses. The most significant predictor of Taken OL Courses is Scheduling and Timing, while the most significant predictor of Plan on Taking OL Courses is Quality of Learning. While a significant predictor of Plan on Taking OL Courses, the relationship between Taken and Plan on Taking is negative. This indicates a tendency for those who have experienced online courses to prefer not

to take them in the future or indicates students who have taken online courses have different perceptions than those who plan to take online courses. Thirty-nine percent of the respondents indicated that they would not plan on taking an online course in the future. Of those who did not plan on taking online classes in the future, 51% indicated that they were graduating or the university did not offer online classes that they need to graduate. Of the others that cited reasons for not planning on taking online classes, 34%, indicated a preference for interaction with faculty or being more comfortable in a face-to-face environment.

Time and Scheduling is a significant predictor of those that have taken online courses; however, it is not a significant predictor of plans to take online courses in the future. Quality of Learning is negatively related to those that have taken online courses. The negative relationship is a function of the negative phrasing of the construct indicators and not an adverse reaction to the actual quality of the learning. This indicates that students who have taken courses online do not perceive a lower quality of learning as a function of their interactions with others as occurs in face-to-face course delivery. However, those that plan on taking online courses view Quality of Learning as significant factor. The indicators for the Quality of Learning were negatively stated (See Table 1). Students planning on taking online courses perceive the quality of learning will be less than in face-to-face courses in terms of personal interaction between other students and the faculty, and that students learn more in face-to-face classes.

Although students feel that Classes Helpful, helpful for future classes and for their careers, this is not a significant indicator that they have taken online courses or is it a predictor that they plan on taking online courses. Personal Feelings is a significant predictor of Learner Interaction, and Learner Interaction is a significant predictor of Classes Helpful. Neither Learner Interaction nor Classes Helpful are significant predictors of Taken or Plan on Taking OL

courses. These findings are based on the values for the path coefficients and acceptance or rejection of hypotheses 1-17 as illustrated in Table 5.

Although generally students think that classes will be helpful in their future career and other courses, they do not select online courses for this reason. They do not see significant differences in the ability of online courses to impact their career or success in future course. There was not a strong relationship between demographic characteristics and other variables to indicate segments that would have a strong preference for online courses.

As the extant research indicates, online courses are successfully recruiting students. As institutions of higher education, specifically universities, become more competitive in generating revenues, they will position enrollment in their online courses as providing convenience for learners in their life and work. Course offerings should give students the confidence that what they learn will be helpful for other courses and in their career.

In marketing online courses, universities must find differentiating factors to attract those who plan to be online learners in an increasingly competitive environment for educational revenues. The research clearly confirms that convenience and scheduling remain important decision points for selection of online versus face-to-face courses within a department. Recognizing the competition among institutions of higher learning departments, colleges and universities must find a way to position their online courses and programs to establish a competitive advantage. Although not part of the study, the authors note that students familiar with interactions in face-to-face classes may not understand the nature of the interactions in online courses.

REFERENCES

- Adkins, S. S. (2013, January). The worldwide market for self-paced elearning products and services: 2011-2016 forecast and analysis. *Ambient Insight Report*. Retrieved May 27, 2013, <http://www.ambientinsight.com/Resources/Documents/AmbientInsight-2011-2016-Worldwide-Self-paced-eLearning-Market-Premium-Overview.pdf>
- Allen, I. E. & Seaman, J. (2013, January). Changing course: Ten years of tracking online education in the United States. *Babson Survey Research Group*, Retrieved May 20, 2013, from www.onlinelearningsurvey.com/reports/changingcourse.pdf
- Allen, S., Swidler, M. & Keiser, J. (2013). Aligning pedagogy of American business language with marketing students' preferred learning styles. *Procedia - Social and Behavioral Sciences*, 70 (25), 1254-1264.
- Arnason, M. (2013, April 23). ClevrU Corp. acquires newmindsets Inc. to transform online education market. *The Wall Street Journal*. Retrieved May 27, 2013, from <http://online.wsj.com/article/PR-CO-20130423-911839.html>
- Aslanian, C. B., & Clinefelter, D. L. (2012). *Online college students 2012: Comprehensive data on demands and preferences*. Louisville, KY: The Learning House, Inc.
- Barnes, B., Preziosi, R. & Gooden, D. (2004). An examination of the learning styles of online MBA students and their preferred course delivery methods. *New Horizons in Adult Education*, 18 (2), 19-30.
- Bersin, J. (2014, February 2). Spending on corporate training soars: employee capabilities now a priority. *Forbes*, Retrieved March 24, 2014 from <http://www.forbes.com/sites/joshbersin/2014/02/04/the-recovery-arrives-corporate-training-spend-skyrockets/>

- Blickle, G. (1996). Personality traits, learning strategies, and performance. *European Journal of Personality*, 10, 337-352.
- Bureau of Labor Statistics (2012). Occupation finder. *Occupational Outlook Handbook* , Retrieved March 29, 2014 from <http://www.bls.gov/ooh/management/advertising-promotions-and-marketing-managers.htm#tab-7>
- Chen, S. & Macredie, R. (2004). Cognitive modeling of student learning in web-based instructional programs. *International Journal of Human-Computer Interaction* 17(3), 375-402.
- Columbaro, N. L. & Monaghan, C. H. (2009). Employer perceptions of online degrees: A literature review. *Online Journal of Distance Learning Administration*, 12 (1), from Retrieved May1, 2013, from <http://www.westga.edu/~distance/ojdla/spring121/columbaro121.html>
- Dale, L. & Spencer, J. (2002). Student attitudes towards online courses. *Allied Academies International Conference; Proceedings of the Academy of Educational Leadership*, 6 (2), 30-34.
- DeMaria, M. (2012, March 7). More students taking online courses. *USAToday*, Retrieved May 24, 2013, from <http://www.usatodayeducate.com/staging/index.php/ccp/more-students-taking-online-courses>
- Fain, P. (2012, September 19). Mature market for online education. *Inside Higher Ed*. Retrieved May 27, 2013, from <http://www.insidehighered.com/news/2012/09/19/adult-students-interest-online-education-flat-study-finds#ixzz2UVMmcQfp>
- Fornell, C. & Larcker, D. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 28, 282-388.

- Fujii, N., Yikita, S., Koike, N. & Kunii, T. L. (2004). An e-learning system based on the top-down method and the cellular models. *International Journal of Distance Education Technologies*, 2 (4), 77-93.
- Fullerton, S. (2013, March). American marketing students' attitudes towards online classes. *Proceedings of the Association of Marketing Theory and Practice 2013 Conference*, Retrieved May 24, 2013 from <http://www.amtp.org/ocs/index.php/amtp/AMTP2013/paper/view/358/233>
- Garrett, R. (2013, February). Online higher education in the United States – explaining market success and diagnosing. *Education and Innovation Theme Report of Alliance 21*. Retrieved May 27, 2013, from http://grattan.edu.au/static/files/assets/10b3faa6/903_garrett_alliance_21.pdf
- Hair, J. F, Jr., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate data analysis* (7th ed.). New Jersey, USA: Prentice Hall.
- Hair, J. F., Jr., Hult, T., Sarstedt, M., & Ringle, C. M. (2013). *A primer on partial least squares structural equation modeling (PLS-SEM)*, Sage.
- Hair, J. F., Jr., Sarstedt, M., Ringle, C. M., & Mena, J. (2012). An assessment of the use of partial least squares path modeling in marketing research. *Journal of Academy of Marketing Science*, 40(3), 414-433.
- Howland, J. L., & Moore, J. L. (2002). Student perceptions as distance learners in Internet-based courses. *Distance Education* 23 (2), 83–195.
- Iverson, K.M., Colky, D.L. & Cyboran, V. (2005). E-Learning takes the lead: An empirical investigation of learner differences in online and classroom delivery. *Performance Improvement Quarterly*, 18 (4), 5-18.

- Jaschik, S. (2013, January 23). MOOCs for credit. *Inside Higher Ed*. Retrieved May 27, 2013, from <http://www.insidehighered.com/news/2013/01/23/public-universities-move-offer-moocs-credit>
- Kingkade, T. (2012, November 26). MOOC skepticism persists among university presidents, despite rapid growth of online courses in 2012. *Huffington Post*, Retrieved May 24, 2013 from http://www.huffingtonpost.com/2012/11/26/moocs-skepticism_n_2191314.html
- Kohlmeyer, J. M., Seese, L. P., & Sincich, T. (2011). Online versus traditional accounting degrees: Perceptions of public accounting professionals. In A. H. Catanach & D. Feldmann (Eds.) *Advances in Accounting Education*, 12, 139-165.
- Larson, N. C. (1999). Distance learning: Linking the globe through education. *World Trade*, 12 (12), 74-79.
- Lederman, D. (2013, January 8). Growth for online learning. *Inside Higher Ed*. Retrieved May 27, 2013, from <http://www.insidehighered.com/news/2013/01/08/survey-finds-online-enrollments-slow-continue-grow>
- Lenox, M. (2013, March 29). The imminent shakeout? Disruptive innovation and higher education. *Forbes*, Retrieved May 24, 2013, from <http://www.forbes.com/sites/darden/2013/03/29/the-imminent-shakeout-disruptive-innovation-and-higher-education/>
- Linardopoulos, N. (2012). Employers' perspectives of online education. *Campus-Wide Information*, 29 (3), 189-194.
- Mann, J. T. & Henneberry, S.R. (2012, Winter). What characteristics of college students influence their decisions to select online courses? *Journal of Distance Learning Administration*, XV (V).

- Marks, R. B., Sibley, S. D. & Arbaugh, J. B. (2005). A structural equation model of predictors for effective online learning. *Journal of Management Education*, 29 (4), 531-563.
- Metrejean, E. & Noland, T. (2011). An analysis of CPA firm recruiters' perceptions of online Masters of Accounting Degrees, *Journal of Education for Business*, 86 (1), 25-30.
- Mupinga, D.M., Nora, R. T. & Yaw, D.C. (2006). The learning styles, expectations, and needs of online students. *College Teaching*, 54(1), 185 – 189.
- Nielson, B. (2014, March 17). Using MOOCs: Finding and onboarding new employees. *Your Training Edge*, Retrieved March 24, 2014, from <http://www.yourtrainingedge.com/using-moocs-finding-and-onboarding-new-employees/>
- Oh, E. & Lim, D. (2005). Cross relationships between cognitive styles and learner variables in online learning environment. *Journal of Interactive Online Learning*, 4 (1), 53-65.
- Pappano, L. (2012, November 4). “The year of the MOOC,” *The New York Times*, ED26.
- Smith, A. D., & Rupp, W. T. (2004). Managerial implications of computer-based online/face-to-face business education: A case study. *Online Information Review*, 28(2), 100-109.
- Steward, K., & Felicetti, L (1992). Learning styles of marketing majors. *Educational Research Quarterly*, 15(2), 15-23.
- Tabatabaei, M. & Gardiner, A. (2012). Recruiters' perceptions of information systems graduates with traditional and online education. *Journal of Information Systems Education*, 23 (2), 133-142.
- Truell, A. D. (2001). Student attitudes toward evaluation. *The Delta Phi Epsilon Journal*, 43(1), 40-49.

The Pros and Cons of Online Education (2012, January 18). *California Miramar University*

Retrieved May 23, 2013, from www.calmu.edu/blog/the-pros-and-cons-of-online-education

United States Department of Education. (2012). *Fast facts: Back to school statistics*. Institute of

Education Sciences, National Center for Education Statistics. Retrieved from

<http://nces.ed.gov/fastfacts/display.asp?id=372>

Vachris, M.A., Bredon, G. & Marvel, H. P. (1999). Teaching principles of economics without

“Chalk and Talk”: The experience of CNU online. *Journal of Economic Education*.

30(3), 292-307.

Vamosi, A. R., Pierce, B. G. & Slotkin, M. H. (2004). Distance learning in an accounting

principles course – Student Satisfaction and Perceptions of Efficacy. *Journal of*

Education for Business, 79 (6), 360-366.

Vermunt, J. D. (1998). The regulation of constructive learning processes. *British Journal of*

Educational Psychology, 68, 149-171.

Wang, X. C., Hinn, D. M., & Kanfer, A.G. (2001). Potential of computer-supported collaborative

learning for learners with different learning styles. *Journal of Research on Technology in*

Education, 34(1), 75-85.