MARYLAND ONLINE
Your Link to Lifelong Learning

A "W" Study

Why do students take a course online?
Why do they withdraw?

Executive Summary

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Introduction

The first known Distance Learning course is documented in the Boston Gazette of March 18-25, 1728. Caleb Phillips, a teacher of shorthand, offered to send several lessons weekly to "any persons in the country desirous to learn this Art… to be as perfectly instructed as those that live in Boston."[1]

It took some 270 years for Distance Education to fulfill its built-in promise and provide access to Higher Education for millions of people who previously did not stand a chance to enter the doors of academia. Distance Education has finally come of age and is now widely accepted as a serious player on the Higher Education turf. The growing pains, however, continue into adulthood: the accomplishments in "*student access*" have to be matched by advances in "*student success*" and, in turn, any contending definition of "student success" has to be matched by the rigor of its measurement. For most Distance Educators, researchers included, this was and still is a tall order with a long list of thorny issues.

Course level retention in online courses is one of the thornier ones. It is irksome by itself, but in addition, it is charged politically because College Presidents are prone to pick up reports to the effect that retention in online courses is anywhere from 5% to 10% lower than in on-campus counterparts. They wonder why. For example, the California Community College System reports a retention rate in the spring 2009 of 78.4% for asynchronous, credit enrollment in online courses, compared to 84% for all instructional modes statewide.[2]

Obstacles to completing an online course

When the U.S. Department of Education conducted a systematic review of the research literature from 1996 through July 2008, it identified more than a thousand empirical studies of online learning.[3] However, the literature on "retention" is not quite as rich, and, so far, little attention has been focused on the impact of social systems on distance learners and online learning. Research in this particular area is still scarce. As C.C. Gibson points out in the Handbook of Distance Education:

> "It's obvious that there are very few studies that explore the social and cultural systems and their impact on the learner and learning, perhaps because of our preoccupation with psychological variables in educational research in North America. We ignore the fact that the learner exists within a larger system of interrelating roles and responsibilities, mores and laws, all of which impact progress toward learning."[4]

There are some examples[5] that suggest lack of time as well as domestic factors, such as balancing work and family obligations, are significant factors influencing students' decision to withdraw. The study presented here adds evidence to the fact that, overall, students in online courses are under persistent pressure to prioritize between home, work, and study commitments.

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[1] Library of Congress "Ser Newspaper Microfilm #2895, 1719 Dec.21-1735 Dec.1"

[2] http://www.cccco.edu/ChancellorsOffice/Divisions/TechResearchInfo/MIS/DataMartandReports/tabid/282/Default.aspx

[3] Retrieved from http://www.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

[4] Learners and learning: The need for theory. In M. G. Moore & W. G. Anderson (Eds.), *Handbook of Distance Education* (p. 150). Mahwah, NJ. (2003)

[5] Susan May (Women's Experiences as Distance Learners: Access and Technology, Journal of Distance Education Vol 9, No 1 (1994) and Susan Tresman, 2002, Toward a strategy for improved student retention in programmes of open, Distance Education: A case study from the Open University UK. *International Review of Research in Open and Distance Learning, 3 (1).*

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The MOL "W" Study:

Purpose:
   (1) To investigate the reasons why students did not successfully complete an online course. Specifically, the survey was to test the hypothesis that there is a significant overlap between the reasons why the course was taken online and the reasons for dropping the course.
   (2) To identify areas of possible interventions to increase the completion rate in online courses.
   (3) To identify avenues for further research.

Dates: The survey was conducted in 2006/07 at Frederick Community College, MD and then replicated under the auspices of MarylandOnline (MOL) in 2008/09 in 44 other community colleges in Maryland and California.

Sample: The sample is comprised of 3352 "W" students (unduplicated) who had withdrawn from an online course. The sample did not include "F" students who never participated in any class activities and, for all intents and purposes, should be counted as having withdrawn from the course.

Instrument Development
The questionnaire consisted of 13 questions with 40 separate items ranging from very specific factual Likert-type questions to open-ended questions concerning advice students would give to other online students and the Colleges. (See Appendix A to the Source Book that accompanies the report)
Some of the items in the "W" student questionnaire were identical to items in a 2004 retention study at Monroe Community College (SUNY) for the purpose of cross-referencing results. The questionnaire was posted online and included narrative instructions to create a protocol to be used in telephone interviews and in the online survey.

Questionnaire Administration:
The questionnaire was administered through telephone interviews by three of the participating colleges. The interviewers were given information about the students on a spreadsheet which included Student ID and the ID of the course for which the student had withdrawn. The interviewer entered the student ID, all answers to the questions and verbatim responses to the open-ended questions in the questionnaire and submitted the completed form online to a database especially created for the survey. The remaining colleges sent students a link to the survey to be completed online according to written instructions. The data from the online questions were processed in the same database.

Privacy: Respondents were assured that only aggregate data and no personal information (like name, student ID etc.) would show up in any display of survey results. Data sets from individual colleges are contained in the study's source book but are not available without the permission of each college.

I.   Respondent Demographics

(1) Gender

Table 1

Demographics	Male	Female
East Coast (Maryland)	26%	73%
West Coast (California)	36%	64%

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(2) First Time

Question #1: "Was this your first experience with an online course?" (Yes/ No)

Table 2

Demographics	First ime	Previous Courses
East Coast (Maryland)	39%*	59%*
West Coast (California	33%	67%
Male	38%	62%
Female	32%	68%

*Percentage of non-respondents not listed

II. Survey Highlights

(1) Who chose the course online?

Question #2: "Did You Choose the Course Yourself or Were You Guided by a Counselor?"

Table 3

Demographics	Chose myself	Guided by a counselor	Other
East Coast (Maryland)	83%	16%	0%
West Coast (California	90%	7%	3%
Male	89%	7%	4%
Female	90%	7%	3%

The students from the East Coast (MD) reported a significantly lower percentage for choosing the course by themselves as opposed to students from the West Coast (CA). Conversely, Maryland students reported a higher percentage of being "guided by a counselor" as opposed to California students who reported a percentage for being "guided by a counselor" at less the half of Maryland. No gender differences in the distribution for this question.

(2) Participation in class activities: "No-Shows"

Question #4: "Did you participate in the course activities (assignments, discussions, quizzes etc.)?"

Table 4

Demographics	I did not participate	I did participate in some
East Coast (Maryland)	26%	74%
West Coast (California	26%	74%
Male	27%	73%
Female	27%	73%

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These are self-reported "No-Shows" among "W" students. The percentages are consistent across Gender and Coast. They seem comparatively high. More data on this cohort are presented in the Source Book.

(3) Reasons for taking the course online.
Two questions explored nine possible reasons: Question #5 asked for responses on a scale of "Very important", "Somewhat important", and "Not at all important". Question #6 asked for the single most important reason among the nine options. The responses are captured in two clusters

Table 5

By Coast	Single most important Unduplicated		"Very Important" Duplicated	
	MD	CA	MD	CA
Cluster "A"				
Heavy Work Schedule	43%	38%	64%	61%
Personal Circumstances	28%	25%	44%	56%
Cluster "A" Total	71%	63%	na	na
Cluster "B"				
F2F was full	6%	5%	10%	20%
Travel Sometimes	5%	5%	13%	25%
Curious	3%	3%	8%	14%
Good Prior Experience	4%	6%	26%	46%
Assumed Selfpaced	2%	4%	11%	23%
Assumed Easier	2%	3%	11%	15%
Graduate sooner	1%	4%	9%	25%
Cluster "B" Total	23%			

By gender the percentage distribution between Cluster "A" and Cluster "B" is very similar. The gender distribution in Cluster "A" is as follows

Table 6

By Gender	Single most important Unduplicated		"Very Important" Duplicated	
	M	F	M	F
Cluster "A"				
Heavy Work Schedule	38%	39%	58%	63%
Personal Circumstances	18%	29%	47%	60%
Cluster A Total	56%	68%	na	na

Across Gender and Coast "Heavy Work Schedule" and "Personal Circumstances" (Cluster "A") combine to the one single most important factor for taking a course online. Duplicated responses showing high rates for "Very Important" confirm the unduplicated results.
In comparison seven factors listed in Cluster "B" do not rise above the 6% level. With the exception of "Good Prior Experience" at 46%, duplicated responses showing comparatively low rates for "Very Important" confirm the unduplicated results.

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A third question, #7, asked the respondents to identify any other reason for taking the course online that was not listed among the nine options. Respondents added two reasons to the list: (a) The course was offered only online, and (b) Commuter time to and from the campus. Both reasons should be added to any new iteration of the questionnaire.

(4) Reasons for withdrawing from the online course

Two questions explored 19 possible reasons: Question #8 asked for responses on a scale of "Very important", "Somewhat important", and "Not at all important". Question #9 asked for the single most important reason among the 19 options. The responses are captured in three clusters. Cluster "C" contains nine options with ratings in the unduplicated "Single Most Important" column so low that, looking at overall results, they could be removed from the list of reasons for withdrawing from an online course. Two of the items, "Financial Problems" (20%) and "Space opened up in F2F" (19%) deserve some attention as CA students deem both "Very Important." Cluster "B" with six options needs further investigation and cross-referencing in another report. Cluster "A" groups the four options that are materially related and the 49% level cumulatively account for the single most important set of factors for withdrawing from an online course.

Table 7

By Coast	Single Most Important Unduplicated		"Very Important" Duplicated	
	MD	CA	MD	CA
Cluster "C"				
Financial Problems	0%	4%	6%	20%
Many technical problems	3%	0%	11%	11%
Didn't know about help	1%	1%	4%	8%
No access to computer	1%	2%	4%	9%
Too Alone	0%	2%	5%	11%
Didn't like the online format	2%	2%	6%	11%
Didn't know it was online	0%	1%	1%	3%
Lacked Computer skills	0%	0%	0%	2%
Space opened up in F2F	0%	0%	1%	19%
Total Cluster C	7%	12%	Na	Na
Cluster "B"				
Course too difficult	8%	6%	21%	19%
Directions unclear	5%	7%	14%	23%
Interaction is lacking	5%	7%	14%	23%
Too much reading/writing	1%	10%	5%	11%
Not Motivated	5%	4%	7%	12%
Not interested in subject	2%	6%	5%	8%
Total Cluster B	26%	40%	Na	Na
Cluster "A"				
Couldn't handle Study +Work	20%	12%	33&	29%
Personal Circumstances	14%	21%	30%	38%
Got Behind	8%	8%	22%	30%
Too many Courses	7%	8%	14%	12%
Total Cluster A	49%	49%	na	na

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By gender, the percentage distribution in Cluster "A" is similar and confirms importance of Cluster "A" at the 49% level.

Table 8

By Gender	Single most important Unduplicated		"Very Important" Duplicated	
Cluster "A"	M	F	M	F
Couldn't handle Study +Work	12%	12%	29%	29%
Personal Circumstances	19%	22%	32%	40%
Got Behind	9%	7%	29%	29%
Too many Courses	8%	8%	13%	11%
Total Cluster A	48%	49%	na	na

(5) Is there a statistically significant and practically relevant overlap between reasons for taking the course online and reasons to withdraw from that course?

Table 9

By Coast	Single Most Important Unduplicated	
	MD	CA
Cluster "A" (2) Reasons for withdrawing from an online course	49%	49%
Cluster "A" (1) Reasons for taking the course online	68%	64%

The table confirms the overlap. The overlap is relevant in practical terms as it identifies students who choose to take a course online for reasons associated with Cluster "A" (1) as a cohort "at risk" as far as course completion is concerned. The overlap is relevant in practical terms also as it suggests a most promising time frame for any intervention around the time of the student's decision to take the course online.

(6) One Piece of Student-to-Student Advice

Question #12. "What advice would you give to students who are considering registering for an online course?"
2613 students responded with comments collected in APPENDIX B to the report. The comments ranged from "Don't ever take a course from Professor XX…" to concerns about self discipline, having enough time, and being motivated. The one piece of advice that stands out with 30.3% as the highest single most important statement simple says "Don't fall behind". This percentage of 30.3% underscores the integral role of the item "Got Behind" in Cluster "A" (2) listing the reasons for withdrawal. (See Appendix B to the Source Book that accompanies the report)

(7) Taking another course online?

Question #11: "How likely are you to register for another online course?
Would you say: 1. Very likely; 2. Somewhat likely; 3. It's possible; 4. Not likely; 5. Not a chance?"

Table 10

By Coast	Very Likely	Somewhat Likely	It's Possible	Not Likely	Not a Chance
MD	49%	15%	9%	17%	8%
CA	64%	13%	11%	7%	5%

The students from Maryland reported a lower percentage (64%) to a cluster of "Very Likely" or "Somewhat Likely" as opposed to students from the West Coast (77 %). Conversely, the Maryland students reported a higher percentage (25%) of "Not Likely" or "Not a Chance" as opposed to the California students who reported a lower percentage (12%).

Table 11

By Gender	Very Likely	Somewhat Likely	It's Possible	Not Likely	Not a Chance
F	67%	12%	10%	7%	5%
M	56%	15%	13%	9%	6%

79% of the female students are "Very" or "Somewhat" likely to take another class online, compared to 71% of their male colleagues; conversely, 12% of the female students indicated that they are not likely or that there is not a chance of taking another online course, compared to 15% of their male colleagues.

Table 12

By First Time	Very Likely	Somewhat Likely	It's Possible	Not Likely	Not a Chance
First time	41%	13%	17%	14%	11%
Previous Courses	74%	11%	8%	4%	2%

The percentage distribution is somewhat different when you ask first timers or respondents who had taken online courses previously. 85% of the students with previous experience are very or somewhat likely to take another class online, compared to 54% of their first time counterparts. Conversely, only 6% of the students with previous experience are not or not at all likely to take another class online, compared to 25% of their first time counterparts

III.   Discussion

The "W" Study has generated a number of data sets that await further processing and scrutiny. As perhaps the most significant outcome of the study, we identified the cluster of four related factors that, across gender and coastal location, delineate an obstacle course towards course completion which about half of the respondents were not able to master. The cluster consists of

    (a) Student chooses too many courses;

    (b) Student gets behind in the course;

    (c) Student experiences personal and family related problems;

    (d) Student cannot cope with the combined workload of employment and academic studies.

In order to interpret the findings, we suggest the use of two constructs that would help to place those factors in a broader social and institutional context.

(1) The Construct of the "Learning Space"

The traditional classroom setting provides, at average, a 1-hour "learning space" twice a week in one physical location on campus. Workers leave the workplace, moms and dads leave the kitchen or family room to drive to that "learning space" on campus and be students. This space is booked for the duration of the semester in both the College's and the student's schedule.

In contrast, online courses move that "learning space" from the campus right into the middle of the student's kitchen or living room, or wherever they park their computer. Historically, it was this relocation of the "learning space" that facilitated the unprecedented increase in access to Higher Education.

However, the relocation of the learning space comes with a price. Distance Learning students say they prefer having their classroom at home for any number of reasons ranging from "staying home with the kids" to providing a more "flexible schedule" etc. However, they also realize very quickly that the convenience gives rise to some inconvenient, albeit mundane questions such as: Do you clean up the kitchen before you go to your virtual "learning space" or after? How do you keep the kids at bay while trying to concentrate on your Civil War essay? In other words: In the midst of home demands, the "learning space" has to be constantly recreated. Arranging and re-arranging the student's study priorities turns into a high level stress test of more or less developed time management skills and the ability to compartmentalize. The concept of "Online Learning" has been most useful in directing attention to the quality of course design and instructor competence, but it also masks the fact that learning online "anywhere- any time" takes place at a physical/social location, somewhere off-campus.

There has been substantial research into the psychological variables of online learning. The "Learning Space" construct is helpful as it leads into a more thorough exploration of the social components, i.e. a wider system of interrelating roles and responsibilities which effect learning.

(2) The Construct of the Load/Power Margin

A second useful construct comes from Howard Y. McClusky, a Professor of Educational Psychology and Community Adult Education at the University of Michigan from 1924 to 1982. He introduced his "Theory of Margin" (McClusky, 1963) to help us understand adults' lives, as they aged and various demands or pressures increased. McClusky's theory configures three factors into the formula **M=L/P.**

Load (L) the adult carries in living [social and psychological demands, financial pressures etc.]
Power (P) the resources [abilities, time, possessions, position, allies etc.] that are available to carry the load.
Margin (M) expresses the differential between the "load" and the "power" to carry the load. The formula suggests that the greater the power in relationship to the load the more "Margin" will be available.

McClusky himself suggested that the theory also can be applied to learning activities (1970, p. 146). The proposition then is this:

The smaller the margin (M), the higher the probability of non-completion as resources (P) diminish and/or load (L) increases.

The Construct of the Load/Power Margin helps to identify four main (L) factors (a) "Student chooses too many courses"; (b) "Student gets behind in the course"; (c) "Student experiences personal and family related problems"; (d) "Student cannot cope with the combined workload demands of employment and academic work".

The construct calls for an inventory of resource factors (P) that would increase the margin (M) in both the social location as well as in the institutional environment of the online learner.

IV.   Future Research Recommendations:

- A larger sample from East Coast Colleges
- Increased collection of demographic data such as GPA for inclusion in the analysis
- An analysis of variables for inclusion into a potential regression model to predict online course success/retention.
- Revisions and refinements to the assessment instrument
- Addition of an instrument to measure locus of control.
- Future statistical analysis with regard to specific social factors such as employment hours, family status, computer availability and location in the home environment, etc.
- Analysis of the "No Show" phenomenon.

V.   Areas of Possible Interventions

- An "early alert" program.
- An online course level tutoring program.
- A student success course.
- Online Learning Communities.
- Student orientation to distance learning.
- Advising

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