Game Changers

EDUCATION and INFORMATION TECHNOLOGIES

Edited by **DIANA G. OBLINGER**

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Game Changers: Education and Information Technologies

> **FROM THE EDITOR**
>
> I would like to thank the many people who made this book possible, particularly Gregory Dobbin for managing the project and Karen Mateer for her research.
>
> —Diana G. Oblinger

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The Postmodality Era: How "Online Learning" Is Becoming "Learning"

Thomas B. Cavanagh

JENNIFER IS A 20-YEAR-OLD SOPHOMORE at a large state university. She lives in a dorm, works as a resident assistant, belongs to a sorority, works part time at a local hotel, and dances ballet. By all external measures, she is the typical "traditional" college student. Yet, within the past year, she has not only taken "traditional" face-to-face courses, but has also taken courses in what many might consider "nontraditional" modalities: both fully online and blended formats (blended learning mixes both online and face-to-face elements). And she is not alone.[1]

Jennifer is representative of a trend in higher education, where the growing ubiquity of online learning is eliminating the lines between what was once considered traditional and nontraditional. Nontraditional students—typically adult learners and other working adults—have always required flexibility. Before online learning, nontraditional students took night classes, weekend seminars, and correspondence courses. They had no choice. Their family and work commitments prevented them from participating in traditional weekday courses during daylight hours. The advent of online learning has provided these students with another option for accessing higher education.

Now we find ourselves in an era where even the traditional 18- to 24-year-old college student increasingly requires nontraditional flexibility. Ironically, many of these students leverage the convenience of online courses to more deeply engage in the on-campus experience. Like Jennifer, they may be involved in sororities or fraternities, play intramural or intercollegiate athletics, be involved in clubs or other affinity groups, or even work part time. Where it is offered widely at an institution, online learning affords these traditional students much greater scheduling flexibility and enables much deeper on-campus participation.

Introduction

According to the National Center for Education Statistics, between 2000 and 2008, the percentage of undergraduate students taking at least one on-line class grew from 8 to 20 percent.[2] The Sloan Consortium states that approximately 5.6 million students enrolled in at least one online course during fall 2009, and nearly thirty percent of all higher education students now take at least one course online.[3] Clearly, the percentage of students taking one or more courses online is trending upwards, reflecting an increased reliance on the flexibility they afford.

Juxtapose these online learning growth trends with the following statistics: of the 17.6 million undergraduates currently enrolled in American higher education, only 15 percent attend four-year institutions *and* live on campus. Thirty-seven percent are enrolled part time and 32 percent work full time. Only 36 percent of students who are enrolled in four-year institutions actually graduate in four years.[4]

What these statistics indicate is a blurring boundary between the traditional and nontraditional. Even classically traditional students at classically traditional institutions, such as Jennifer, increasingly require nontraditional flexibility to meet their educational goals. Online learning has become the catalyst for this change and it is forever altering the landscape of higher education. Classifying a student as "main campus" or "extended campus" or "distance" becomes meaningless in an environment where students take whatever courses they need in whatever location or modality best suits their requirements at the time. These students are unconcerned with categorical labels—they are concerned with getting the courses they need in the formats that fit their lifestyles, whether they are a working adult or an undergraduate who travels frequently as part of the volleyball team. The Sloan Foundation has dubbed this concept "localness," meaning that student access to education is always local to them, even if they do so through online learning. Students may take courses at an institution's main campus, regional or extended campus, completely online, or in a blended format. Institutions can support "localness" by constructing programs that are flexible and that deliver courses in multiple modalities.

> Most traditional, non-profit institutions with large commuter, non-residential and part-time student populations are well-known and trusted within their localities. When online learning burst into the academic consciousness in the mid-90s there was a rush by many of these institutions to downplay their locality, and to emphasize their role in meeting the needs of all kinds of geography-independent and global

student populations. However, many of these same institutions even-
tually came to realize that many of their local and in some cases *even
their residential student populations were as interested in enrolling in
online learning courses as were students living afar*. The institutions
are known in their local regions; that's not the issue. What is not al-
ways known is that they are offering a "quality" online or blended
product.[5] [emphasis added]

Some research indicates that even in end-of-course evaluations, students
do not consider modality an important factor in their course-taking experienc-
es. According to Dziuban and Moskal,[6] "When students respond to the end-
of-course evaluation instruments for online, blended, and face-to-face courses
. . . they do not differentiate the instructional idiosyncrasies found in the three
modalities."[7] Students are able to translate specific end-of-course evaluation
questions to apply to any of the three modalities without any problem. The
modality is not a factor. Further, the same study indicates that course mode
is not an effective predictor of success or withdrawal within a course. "Histor-
ically, students who have done well in courses do well in any mode; a course
is a course."[8] To these students, *a course is a course*; modality makes no
difference.

The postmodality blurring of boundaries between traditional and nontra-
ditional is being hastened by the intersecting dynamics of these student pref-
erences for flexibility and convenience with the desire for efficiency by system
and state policy leaders. The University System of Maryland now requires un-
dergraduates to complete twelve credits in alternative-learning modes, which
include online learning. Texas has proposed a similar rule with a 10 percent
threshold. The Minnesota State Colleges and Universities system is advocating
that 25 percent of all student credits be earned online by 2015.[9] When top-
down systemic mandates such as these align with the bottom-up preferences
of students to have maximum flexibility in their course-selection practices, a
powerful force for change across all of higher education is created. Online
learning has catalyzed these forces into a movement that university administra-
tors and faculty members are trying to address in a variety of ways, depending
upon the institutional mission and available resources. This chapter will high-
light several examples, from several different types of schools.

University of Central Florida

If there is a "ground zero" for this postmodality phenomenon, it may be the
University of Central Florida in Orlando. When UCF began its online learning

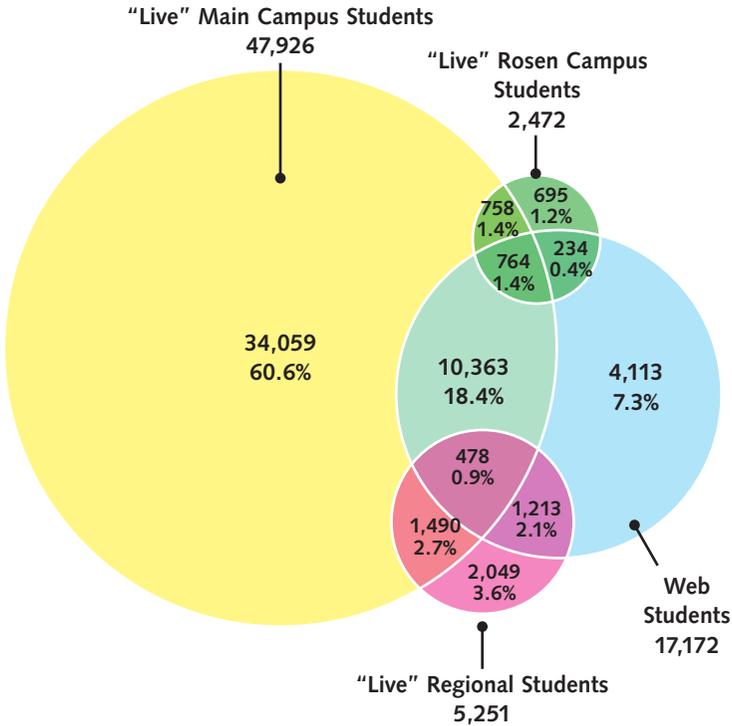Table 1. **UCF Student Head Count by Modality Combinations (Fall 2010)**

Total UCF Students	56,129
Students in Face-to-Face (F2F)	49,510
Web OR Blended	23,741
F2F + Web	12,157
F2F + Blended	8,827
F2F + Web OR Blended	18,288
F2F + Web + Blended	2,696
Online Exclusive (excluding video-lecture capture)	4,109 Summer 2011: 6,972 (Online exclusive students always increase during the summer semesters.)

enterprise in the mid-1990s, it quickly discovered that 75 percent of online students were already on campus or lived nearby. That gave rise to the university's blended learning initiative, which mixes both face-to-face and online elements. UCF has grown rapidly, with enrollment expanding from 21,000 in 1991 to 58,600 in fall 2011, and it now ranks as the nation's second-largest university. Constructing physical classrooms quickly enough to keep pace with this growth has been a challenge, exacerbated in recent years by reduced state funding. By some estimates, the university is 40 percent short of classroom space. Offering online learning has become a key strategy for fulfilling UCF's institutional mission of educational access. As more and more students choose to attend UCF, the institution has expanded the ways that they can access courses and services.

Students at UCF, such as Jennifer, make little distinction between face-to-face, online, and blended courses when registering for a particular semester. As illustrated in Table 1, UCF students mix and match modalities in a variety of ways. Of particular note is that during fall 2010, almost 2,700 students took face-to-face, online, and blended courses *at the same time*. This is the definition of student behavior in a postmodality era. These students are not "online" or "distance" or "main campus"—they are simply students. In fact, UCF's online learning unit is intentionally called the Center for *Distributed* Learning, eschewing the more commonplace "distance" for "distributed" in recognition of its students' "localness" and course-taking preferences.

UCF's students don't even draw much distinction between "main campus" face-to-face classes and "regional campus" face-to-face classes. The university maintains a network of ten regional campuses located throughout central

Figure 1. **UCF Head Count by "Location" (Fall 2010)**

"Live" Main Campus Students
47,926

"Live" Rosen Campus
Students
2,472

758
1.4%

695
1.2%

764
1.4%

234
0.4%

34,059
60.6%

10,363
18.4%

4,113
7.3%

478
0.9%

1,490
2.7%

1,213
2.1%

2,049
3.6%

Web
Students
17,172

"Live" Regional Students
5,251

Note: Students in "blended" courses are not included in the "web students" category.

Florida, from Ocala to Daytona Beach to Palm Bay. Students will not only register for courses in various modalities but will also register for courses at various locations, depending upon what they need and the times at which they need it (Figure 1).

As indicated in Figure 1, during fall 2010, 478 students took courses on the main campus, at one or more of the regional campuses, and online. Additionally, 764 students took courses on the main campus, at the Rosen campus (which is a separate residential campus located near Orlando's attractions area and is not part of the regional campus system), and online. These students are unconcerned with labels of "main," "regional," or "distance." They are highly mobile, often changing their location/modality mix from term to term. In tracking these numbers over several years, researchers discovered one undeniably clear trend: growth in online learning continues to far outpace all other

university growth. During the 2010–2011 academic year, overall online-student credit-hour production increased 32.2 percent, while classroom-based student credit-hour production increased 4.1 percent. Online learning now represents 30.2 percent of UCF's total student credit-hour production. While UCF offers nearly sixty exclusively online programs, the vast majority of these online credits are produced by students in traditional (not online) programs. Of the top-ten programs (graduate and undergraduate) for students taking online courses,

- only three completely online undergraduate programs are represented and none are in the top three, and

- only five completely online graduate degrees are represented and only one is in the top three.

What this indicates is that students from all majors, both graduate and undergraduate, traditional and online, all across the university, are integrating online courses into their studies, leveraging the flexibility offered by technology to meet both their educational goals and lifestyle needs, whether they are a traditional student in a dorm on campus or an adult learner with a mortgage forty minutes away by interstate highway.

Embry-Riddle Aeronautical University

A very different sort of institution from UCF is Embry-Riddle Aeronautical University (ERAU). Yet ERAU finds itself with a student population just as illustrative of a postmodality mind-set. Founded only twenty-two years after the Wright brothers' first flight, ERAU is a private, nonprofit university best known for its emphasis on education and research related to aviation and aerospace. The university is comprised of three distinct campuses: a residential campus in Daytona Beach, Florida, with approximately 5,100 students; a residential campus in Prescott, Arizona, with approximately 1,700 students; and Embry-Riddle Worldwide, global teaching centers and online offerings with approximately 27,260 students. The university's total unduplicated head count is 34,532 (fall 2009–summer 2010).

Where ERAU finds its students most exhibiting postmodality course-taking behavior is within its Worldwide campus. Headquartered in Daytona Beach, Florida, ERAU's Worldwide campus consists of both its online operation (Worldwide Online) and approximately 150 teaching locations throughout the United States, Canada, Europe, and the Middle East (many of which are affiliated with U.S. military bases). Distance learning at ERAU began in the 1970s with correspondence courses designed to support the highly mobile military

student. That distance-learning operation has since evolved into a significant online initiative, with thirty-seven different completely online programs, from undergraduate certificates of completion to associate's, bachelor's, and master's degrees. The university also recently launched an online/low-residency Ph.D. in Aviation.

On its website, Embry-Riddle Worldwide specifically advertises that it offers "five ways to learn." These five modalities are as follows:

- Classroom Learning, which is traditional face-to-face instruction in a synchronous, physical location
- EagleVision Classroom, which is a synchronous web-video conferencing platform that connects multiple physical classrooms into a single live, real-time classroom
- EagleVision Home, which is a synchronous web-video conferencing platform that connects individual users for live online learning
- Online Learning, which is completely online, asynchronous instruction facilitated through a learning management system
- Blended Program, which combines elements of Classroom and Online Learning

Here is how the university describes its approach to serving its postmodality student:

> At Embry-Riddle Aeronautical University—Worldwide, our goal is to give you exactly the education you need, exactly the way you need it. That's why, in addition to offering the industry's most sought after degrees and programs, we offer you more ways to take courses and complete those programs. Each of our learning modalities, while distinct in its delivery and operation, provides the same high-quality information, instruction, and opportunities for interaction with faculty and fellow students. Simply pick the one that fits your learning and lifestyle best, and embark on the road to educational success.[10]

This is "localness" writ on a large, global scale. ERAU's students are especially mobile, literally traveling the world as pilots, military service personnel, and other aviation-related professionals.

While the Worldwide campus students might primarily be considered "nontraditional," their course-taking behavior mimics that of the more traditional students at UCF. As described in Table 2, ERAU's Worldwide campus students are not only creating their own mix of modalities, but they are doing so at a growing rate. The registrations listed in Table 2 represent duplicated

Table 2. **ERAU Worldwide Campus Course Registrations by Delivery Modality**

	2009–10	2010–11	% Growth
Blended Program	1,140	1,763	54.65
Classroom Learning	42,747	38,577	–9.76
EagleVision Classroom	4,219	5,625	33.33
EagleVision Home	3,080	5,870	90.58
EagleVision/Blended Program	917	1,389	51.47
Online Learning	37,606	39,478	4.98
Total	89,709	92,702	3.34

head count, meaning that a single student taking more than one course is likely represented in more than one category. Of particular note in Table 2 is the year-to-year growth in the Blended Program and the EagleVision modalities, contrasted with the decline in Classroom Learning registrations.

This growth (and decline) indicates a shift away from the "traditional" forms of instruction to technology-enabled modalities, enabling the kind of flexibility ERAU's mobile students need. As the university continues to expand both overseas and domestically, this type of postmodality flexibility has become a key strategy for achieving institutional goals.

University of Wisconsin–Milwaukee

The University of Wisconsin–Milwaukee (UWM) is similar to UCF in that it is a relatively large state university. With almost 31,000 students, UWM sits in an urban location, which complicates its ability to grow physically. Online and blended learning have proved to be key strategies for the university to serve its students. UWM Online was the recipient of an Alfred P. Sloan Foundation Localness Blended Learning grant (as was UCF) and has leveraged that funding to expand its blended-learning initiative.

When examining UWM student course selections, we again see evidence of postmodality behaviors (Table 3). Of UWM's 7,017 students taking at least one fully online course (fall 2011), 5,654 of them are also taking face-to-face courses. Of the 1,783 students who are taking at least one blended course,

Table 3. **University of Wisconsin–Milwaukee Student Head Count
by Modality**

	Fall 2010	Fall 2011
Number of students taking at least one fully online course	6,181	7,017
Number of students taking exclusively fully online courses	1,299	1,363
Number of students taking at least one blended course	1,918	1,783
Number of students taking exclusively blended courses	74	58
Number of students (unduplicated) taking a blended OR online course	7,707	8,329
Number of students taking a combination of face-to-face AND fully online courses	4,881	5,654
Number of students taking a combination of face-to-face AND blended courses	1,844	1,725

1,725 of them are also taking traditional face-to-face courses. When compar-
ing these numbers to previous terms, as at UCF and ERAU, we see the amount
of course-taking variety continuing to grow.

UWM Online's website describes its localness philosophy thusly:

> UWM offers the opportunity for you to take both online and on-cam-
> pus courses and programs. It's your option. Some students like en-
> tirely online while others choose the combination of both online and
> in-person courses. Either will provide a quality, student-centered expe-
> rience. For most students looking to save time and for students who
> prefer a more flexible learning and study environment, online classes
> and programs are often a preferred option.[101]

Similar to UCF and ERAU, UWM has structured its online support infra-
structure in a manner conducive to student choice. The university has posi-
tioned itself to meet the needs of students who are increasingly unconcerned
with the labels of modality and location.

Rio Salado College

Part of Arizona's Maricopa Community College system, Rio Salado College
was founded specifically to be innovative and to meet the needs of the nontra-
ditional student. Founded in 1978 as a "college without walls," the institution

Table 4. **Unduplicated Head Count of Rio Salado Students Enrolled by Modality (Academic Year 2011)**

Modality	Credit Students	Noncredit Students	Total
Blended (Hybrid)	51	2	53
In Person	14,463	286	14,749
Independent Study	122	0	122
Internet	40,481	436	40,917
Mixed Media	176	0	176
Print-Based	1,002	13	1,015
Multiple Modalities	2,002	29	2,031
Total	**58,297**	**766**	**59,063**

has grown into a well-known practitioner of online learning, leveraging technology to serve students both local and distant.

When examining the course-taking behavior of Rio Salado students (Table 4), it is interesting to observe that a college now known primarily as an online institution sees 25 percent of its students taking courses in traditional classrooms in one of the college's fifteen locations in and around Phoenix and Tempe. It is also noteworthy that more than 2,000 Rio Salado students are concurrently taking courses in multiple modalities, a figure not too different from UCF's 2,700 students (each institution's total student head count is comparable).

What these figures indicate in the context of a postmodality discussion is that where UCF's traditional students are leveraging technology to achieve nontraditional flexibility, Rio Salado's nontraditional students are doing the same to choose more traditional course options for supplementing their online coursework. Postmodality behavior works both ways—originating from either the traditional or nontraditional student populations. This phenomenon is consistent with the institution's stated mission:[12]

> Rio Salado College transforms the learning experience through
> - choice, access, and flexibility;
> - customized, high-quality learning design; and
> - personalized service and organizational responsiveness.

"Choice, access, and flexibility" are at the core of localness and are the driving forces behind postmodality behavior.

K–12 Perspective

If the alignment of student preferences and state-level initiatives (enabled by technology) has created a higher education ecosystem supportive of post-modality course-taking behavior, then the future growth of that environment may actually lie outside of higher education. Postmodality course-taking behaviors are occurring at a rapidly growing pace in K–12 schools all across the country. Among the statistics compiled by the International Association for K–12 Online Learning,[13] the following are particularly relevant to this discussion:

- Supplemental or full-time online-learning opportunities are available statewide to at least some K–12 students in forty-eight of the fifty states, plus Washington, DC.

- Twenty-seven states, as well as Washington, DC, have statewide full-time online schools.

- 75 percent of school districts had one or more students enrolled in an online- or blended-learning course.

- 72 percent of school districts with distance-education programs planned to expand online offerings in the coming year.

- 82 percent of high school administrators interviewed in the United States had at least one student enrolled in a fully online course and 38 percent had at least one student enrolled in a blended or hybrid course.

- iNACOL estimates a total of 1,500,000 K–12 students were enrolled in online-learning courses in 2009.

- In 2010, over 4 million K–12 students participated in a formal on-line-learning program. This includes 217,000 students in cyber charter schools. Online-learning enrollments are growing by 46 percent a year, and the growth rate is accelerating.

In addition to the local preferences and desires of students and schools/districts to have online course offerings, statewide, systemic forces are also acting upon the K–12 ecosystem. States such as Michigan, Alabama, and Florida now require all high school students to take at least one online course in order to graduate. Idaho recently approved a plan to become the first state to require two credits to be completed online for high school graduation. These states are actually mandating postmodality course-taking behaviors, compelling secondary students to take online courses in addition to their traditional, face-to-face high school classes. Based upon the growth of K–12 online learning (46 percent a year, as cited above) in an environment where these state

requirements did not yet exist, it can only be assumed that the growth of on-line learning in this sector will now grow even more quickly.

Florida has not only established a requirement for high school students to complete at least one online course to graduate, it has also mandated that each of its sixty-seven K–12 school districts provide virtual-learning options to its students. Further, it is now possible for a student in Florida to complete his or her entire kindergarten-through-high-school experience completely online at state expense as a fully funded public school option. In practice, however, students are mixing and matching various modalities. "Most students who participate in virtual education do so to supplement their work in traditional schools. Last year, more than 115,000 students across the state took at least one course with the Florida Virtual School."[14]

As these students arrive on our postsecondary campuses, they will al-ready be accustomed from their high school experiences to taking a concur-rent mixture of face-to-face, online, and blended courses. They will expect (perhaps even demand) that same flexibility and choice from their colleges and universities.

Conclusion

During a panel of presidents at the 2011 EDUCAUSE Annual Meeting, James J. Linksz, president of Bucks County Community College in Pennsyl-vania, described how his institution's students move back and forth between face-to-face and online modalities. He estimated that approximately 20 percent of his college's student credit hours are generated online and that about dou-ble that number of students have taken one or more online courses. This type of behavior has become commonplace at both community colleges and univer-sities, at institutions serving both traditional and nontraditional students alike.

Demand for online and blended courses continues to grow at a rapid pace. Faculty and administrators who have not already done so need to rec-ognize postmodality student preferences and behaviors on their own campus-es and respond accordingly with a supportive infrastructure. Institutions will need to expand campus information systems to make it easier for students to select and register for online and blended offerings. Academic support ser-vices, including advising and library assistance, will need to be reconfigured to address online, asynchronous learners. On-campus classrooms will potentially need more multimedia and network capability to help bridge the online and on-ground environments for students moving seamlessly between the two. Campus technology infrastructure may need to be expanded to accommodate

greater numbers of students conducting online coursework from on-campus facilities and using on-campus bandwidth. Finally, faculty and course-development services will need to be expanded to prepare and support faculty who will also be moving back and forth between modalities just as their students do. It is not uncommon for a single faculty member at UCF to concurrently teach face-to-face, online, and blended courses, mirroring the course-taking behaviors of his or her students.

For students like Jennifer, and her younger peers currently in middle and high school, online learning is no longer a novelty. It is simply a regular part of their education. They are increasingly unconcerned with the distinctions between face-to-face and online learning, instead choosing individual courses that meet their particular needs at any given time, regardless of modality. This postmodality behavior, enabled by instructional technology, has become their normal routine. Going forward, meeting the needs of these students with institutional ecosystems that support, encourage, and enable them to succeed will become key components of college and university strategic plans.

Notes

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