

Effective Quality Online Course Design, Delivery and Evaluations



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Introduction

Distance education enrollment growth continues in the U.S. even as overall higher education enrollments decline (Online Learning Consortium, 2017).

The distance education enrollment report 2017, conducted by the New Digital Learning Compass Organization, revealed the number of higher education students taking at least one distance education course now tops six million, with 21 million total college students in the United States.

Objectives of Session

- Compare effective online learning systems with effective face-to-face learning systems
- Understand the guidelines for the evaluation of distance education as offered by the council of regional accrediting commissions (C-RAC)
- Become familiar with tools and methodologies appropriate for effective evaluation of online learning systems.

Distance Education Facts

- According to Digital Learning Compass (2017), there has been a year-to-year increase of 226,375 distance education students, a 3.9% increase, up over rates recorded the previous two years.
- In the U.S. nearly one in three students (29.7%) now takes at least one distance education course (a total of 6,022,105 students).
- Distance education students are composed of 2.9 million taking all of their courses at a distance and 3.1 million taking some, but not all, distance courses.
- Public institutions command the largest portion of distance education students, with 67.8% of all distance students.
- Large enrollment drops among for-profit institutions were driven by a few of the largest institutions; the majority of for-profits grew their distance enrollments.
- The number of students studying on a campus has dropped by almost one million (931,317) for the three year period through 2015.

How do effective online vs. face-to-face learning systems compare?

Despite a proliferation of literature, student performance measurement for online instruction is difficult and often problematic. More theoretically grounded research is needed (Bettinger and Loeb, 2017).

Distance Education vs. Classroom Learning Environment

	Online	On-ground
Mode	Discussions through text only; permanent	Verbal discussions; impermanent
Instructor Control	Less sense of instructor control	More sense of instructor control
Group Dynamics	More equal participation; more time to introspect; less sense of anxiety	Participation unequal; less "thinking time"; anxiety at beginning/during meetings
Feedback	Individual feedback detailed and focused; permanent record	Less likely to cover as much individual detail; possible to "free-ride";
Divergence/Choice Level	Loose-bound nature encourages divergent talk; "other source" learning	More tightly bound, requiring adherence to accepted protocols

What tools and methodologies are most effective in evaluating online learning programs?

Interregional Guidelines for the Evaluation of Distance Education (C-RAC)
<http://nc-sara.org/files/docs/C-AC%20Guidelines.pdf>

1. Online learning is appropriate to the institution's mission and purposes.
2. The institution's plans for developing, sustaining, and, if appropriate, expanding online learning offerings are integrated into its regular planning and evaluation processes.
3. Online learning is incorporated into the institution's systems of governance and academic oversight.
4. Curricula for the institution's online learning offerings are coherent, cohesive, and comparable in academic rigor to programs offered in traditional instructional formats.
5. The institution evaluates the effectiveness of its online learning offerings, including the extent to which the online learning goals are achieved, and uses the results of its evaluations to enhance the attainment of the goals.
6. Faculty responsible for delivering the online learning curricula and evaluating the students' success in achieving the online learning goals are appropriately qualified and effectively supported.
7. The institution provides effective student and academic services to support students enrolled in online learning offerings.
8. The institution provides sufficient resources to support and, if appropriate, expand its online learning offerings.
9. The institution assures the integrity of its online offerings.

- Focus Groups
 - Students, Alumni, Staff/Advisors, and Faculty
- Surveys
 - Online course evaluations
 - Student Satisfaction Surveys
 - Faculty and Staff Feedback Surveys

Tools and methodologies, continued

Course Evaluation Survey Specific to Online Sections : Fall 2017 (Scale: 1 to 5)

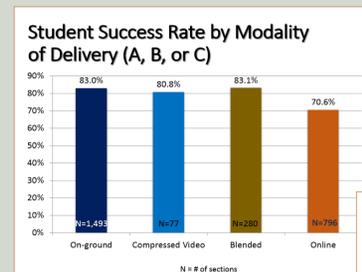
Survey Question

The course design (look, layout, navigation) was effective in providing the information in the course
The instructor knew how to use the [LMS online course system] tool.
The instructor replied promptly and graded assignments in a timely manner (within 24 hrs).
The instructor provided meaningful, and engaging activities and assignments.
I was satisfied with the 24/7 Help Desk service after hours.

Research Question: Does mode of delivery affect student success?

$$H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4$$

Where: μ_1 = mean on-ground course GPA
 μ_2 = mean compressed video course GPA
 μ_3 = mean course blended GPA
 μ_4 = mean online course GPA



Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8.465	4	2.116	87.852	<.001
Intercept	522.401	1	522.401	18,291.675	<.001
Total	2.872	3	0.957	106.806	<.001
Mode of Delivery	7.200	3	2.400	86.348	<.001

Results

Significant differences resulted in mean student GPA between modes of delivery for a subset of high enrollment courses when accounting for class size. Post hoc testing revealed that when differences existed, students were more likely to struggle (i.e., earn lower course grades) in online courses compared to on-ground courses. Overall, blended GPA was unlikely to vary from on-ground GPA.

Conclusions and Recommendations

Compare effective online learning systems with effective face-to-face learning systems

Understand guidelines for the evaluation of distance education as offered by C-RAC

Become familiar with tools and methodologies appropriate for effective evaluation of online learning systems

1. Convenience and flexibility in schedule, accessibility, range of degree options and control of study time.
2. Student enrichment re: student interaction, approachability of faculty/communication, and time to absorb material.
3. Cost effective choices including transportation and childcare as well as web-based texts and reading materials.

4. Nine C-RAC Guidelines with 55 elements of analysis/evidence.
5. National Council for State Authorization Reciprocity Agreements establish/support guidelines in the U.S.



6. Differences in mean student GPA exist by modality of delivery. Students are more likely to struggle online.
7. Design courses following C-RAC Guidelines and certify all online courses and online faculty (e.g., Quality Matters).
8. Continuously evaluate online effectiveness through quantitative and qualitative student and faculty feedback.

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"If we teach today as we taught yesterday, we rob our children of tomorrow."

John Dewey