

Improving Student Performance Online with Careful Infrastructure Organization

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Author Biography

Wendy J. Turner is a Professor of History and an Affiliate Professor of Health Policy at Augusta University. She researches the intersections between law and medicine in medieval England as well as the history of disabilities and bioethics, with special attention given to mental health, learning disabilities and intelligence. Turner has received several honors, including the 2020 Research Award from the Southeastern Medieval Association and a Leverhulme Trust visiting Professorship to Swansea University in Wales.

The physical infrastructure of a traditional classroom typically includes lights, chairs, a podium, and a learning management system (LMS) that contains reading materials and assessments such as written assignments and quizzes. Many of these are taken for granted, often ‘disappearing’ in the minds of learners. Unless the lights buzz or the book is poorly printed, students are not likely to think about them. In a good learning environment—a flipped classroom (Bergmann and Sams 2015), active or engaged learning (Bonwell and Eison 1991), etc.—students focus on the material or discussion, not the environment. Current digital teaching and learning literature concentrates on strategies to create active learning virtually and spends little time discussing effective course design (via the LMS) for the virtual classroom.

Many face-to-face courses also use an LMS to offer supplementary materials, collect coursework, and post grades, and the technique that follows can be used in both a traditional class-LMS interface as well as a completely virtual environment. While physical classrooms may differ in size and layout, learning is similar across these spaces insofar as they all include elements students understand, such as lights, chairs, lab-tables. Students adapt without really thinking, “What do I do here? Where is the instructor?” In the online environment, however, those clues are missing; the space is foreign.

Problems with Course Infrastructure

In the last several years, I have steadily incorporated more online materials and activities. Many of my courses are now half online, half in-person. As the online portion increased, however, I noticed my students gradually seeming more “lost,” especially in terms of dates and navigating to drop boxes. What follows is my preliminary attempt to correct this student confusion, and it is working.

While some universities use the same LMS across the campus, others have several, forcing students to learn the infrastructure of each LMS for different subjects. In essence, they must relearn how to turn on the virtual ‘lights,’ locate their virtual ‘chairs,’ and track down the instructor before each virtual space can feel familiar or comfortable to them. In my experience, this can impede learning by creating stress and obstructing the relationship between students, content, and instructor.

I reevaluated my online classroom and rearranged it to make the ‘furniture’ of drop boxes, discussion spaces, and grade books more familiar and intuitive. Every LMS may be different, and the appearance is often uninviting and uninspiring, but the same can be said of many physical classrooms. Good course experiences are inspired by teaching and learning, and inspired learning takes place in the minds of students with guidance and motivation from instructors. The more I reflected on this, the more it became clear that the LMS had become a barrier between me and my students.

The Fix

Some experts in online teaching suggest that every class should have a ‘Start Here’ page (Quality Matters Standard 1.1) where the instructor can guide students to the syllabus and explain a bit about the LMS. This might be followed by a brief biographical introduction of the instructor and an enthusiastic statement about the course.

I contend that students need both a guide to the LMS—a navigational chart if you will—and an old-fashioned check list of tasks for the course. My students were noticeably less confused and more engaged after I included all three of these elements (start page, LMS explanation, and check list) *and* adopted three organizational rules: 1) organize the LMS like a syllabus, 2) standardize all headings and terminology used on the LMS, syllabus, and drop boxes, and 3) explain why each assignment is important.

Organize the LMS like a syllabus.

Just as you organize your course in a syllabus—by units, sections, topics—the online environment should echo this structure. The syllabus (and checklist, etc.) should all follow the same format. This is much less confusing for students.

Rather than organizing the LMS into folders of “tests,” “assignments,” and “discussions” (which is often the default), these materials should be presented in syllabus order, utilizing the same unit, section, or topic labels. Each subtask or related activity (rubrics, discussions, readings, etc.) should also be kept together in the LMS even if this means, for example, that the same rubric link is repeated for several tasks. This ensures students have ready access to the rubric for each assignment.

Standardize all headings and terminology used on the LMS, syllabus, and drop boxes.

While the organization should echo the syllabus, it is also critical to use the same headings and terminology across everything the student sees to avoid confusion. For example, something as straightforward as a discussion about “Politics in the Twenty-first Century” can become confusing to students if it is spelled out that way on the syllabus but shortened to “21st Century Politics” on the checklist and phrased alternatively as “Questions about Modern Politics” on the LMS. Pick one title and use it consistently, everywhere you reference it.

Explain why each assignment is important.

This is a good practice in all classroom settings but for online learners, it is essential (Winkelmes, 2015). Each time I assign a task – a discussion, a writing assignment, or exam – I tell them specifically what I want them to learn and why it is important. If, for example, I give them an assignment of writing two pages about a history article, I include an explanation like this:

This assignment will help you in several ways:

- You will practice good writing.
- You will cement the articles’s ideas in your head, becoming prepared for the exam.
- You will have opportunities to connect some of the ideas we’ve learned with the concepts the author offers on this topic.
- You will add to your overall cultural competency, your writing abilities, and your critical thinking abilities – all things you will need no matter what career is in your future.

I now have obvious goals for students and reasons for them to work at this assignment. I also have an opportunity to connect these assignment goals to the course goals, as well as to department, college, and university assessment goals later (making my chair and dean squeal with delight).

The student responses to these changes speak for themselves:

You are the only professor I have that I felt actually cared about me as a person and about my learning. Thank you for making my life as a student better. (1st year student, Premodern World History)

This was so much fun; I don't feel like I took a course. I will miss it. I have learned so much. (1st year student, Premodern World History)

I love the schedule, it appeases my organization-oriented brain, and it makes it easier on me when I have to schedule what I need to do and what assignments take priority by due date. (Junior level, Honors Course)

This class is very well-organized. One class I'm in is absolutely impossible to navigate because of the way he has the discussions labeled, the way the content is organized, etc. I'm not criticizing him as an instructor but I think it's just something he's not used to doing. But this class doesn't give me that trouble. (Junior level, Honors Course)

My goal is to eliminate unnecessary stress about the online space and how that works, allowing students to focus on the subject matter, minus the distractions and impediments of a confusing LMS experience. I think that is what we all seek: to have engaged and active learners of our given subject. Unfortunately, many of our students are arriving to the online classroom only to find the lights are off and it is difficult to find the light switch. In the past, I had always had a few students struggle to pass, but I attributed it to lack of interest.

This year, except for a few students who withdrew for health reasons, *all* of my students finished with a C or better—and I'm convinced it was my approach to establishing a more familiar virtual space that made the difference. If we guide our students in how to navigate that space, their focus will shift away from structural impediments toward the materials and experiences that drive what is truly important: learning.

References

Bergmann, Jonathan, and Sams, Aaron, "The Flipped Classroom," University of Waterloo, 2015, White Paper, Online: https://uwaterloo.ca/centre-for-teaching-excellence/sites/ca.centre-for-teaching-excellence/files/uploads/files/the_flipped_classroom_white_paper.pdf.

Bonwell, C., and Eison, J., *Active Learning: Creating Excitement in the classroom AEHE-ERIC Higher Education Report No. 1*, Washington, D. C.: Jossey-Bass, 1991.

Quality Matters, "Rubric Standards," Online: <https://www.qualitymatters.org/qa-resources/rubric-standards>.

Winkleme, Mary-Ann, Interview, "Transparency in Teaching and Learning," Project Information Literacy, September 2, 2015, Online: <https://projectinfolit.org/smart-talk-interviews/transparency-in-teaching-and-learning/>.