Chapter 7

Evolution and Transformation: From Physical to Virtual Classroom, from Teaching to Learning

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When I came to the University of Colorado Denver (UCD) in 1992, I worked with my colleagues to move our principal-preparation program (PPP) from freestanding courses that students took almost randomly to an integrated, sequential cohort program. Over the years, we have consistently examined what we do and made changes necessary to improving our program following the conclusion of each cohort. When challenged in 1998 to convert all or part of our program to an online format, my colleagues and I jumped at the opportunity and created a 32-credit online principal licensing program to serve rural Colorado.

This chapter is a story about what I learned over the last 12 years about learning (and teaching) since converting our program to an online format. Through this process over the years, I also learned that my ideas about learning and teaching had evolved, albeit somewhat unconsciously, out of opportunities that stimulated my curiosity and led me and my colleagues to discover new ways to think about learning (and teaching), especially in online environments. My growth has been slow but steady, and, just as I begin to think that I understand what I am doing, why, and to what ends, I learn that many, many possibilities remain to be explored.

Online Program Development in the Early Days

While nowadays people often quickly jump into developing programs online, in the late nineties considerable skepticism existed about online learning, compounded by a general lack of experience. Before we began converting our program to an online format, we took the opportunity to learn more about online programming: about transferring, revamping, and reconceptualizing classroom practices for online environments; about instructional design; and about delivery platforms. Each of these elements presented classroom-based faculty with challenges such as redesigning curricular sequences, creating alternatives to classroom practices, and re-examining the role of group activities and how to manage them as well as clarifying the role of discussion in learning.

We were fortunate though to have received funding for our project. Given our funding, we were able to hire three instructional designers. Their coaching, assistance, and support were essential to our success. Using outside expertise to assist with such transitions can be very helpful; it can cut the time it takes to make the transition and ensure that changes made are likely to be productive.

The instructional designers met with the faculty regularly, sometimes weekly as a group and often as individuals, to work out design and transfer issues. Each group meeting focused on a topic, often an article on one or more phases of online learning, spending an hour or more questioning, debating, and discussing issues involved in putting a whole licensing program online. These conversations and one-on-one sessions gave faculty both time to assimilate new ways of thinking about teaching and learning generally and specifically in online settings as well as the security necessary to making

sometimes threatening changes. When thinking about developing a brand new program online or converting a current face-to-face program online, finding instructional designers or experienced faculty or staff (such as CU Online provides) can be of immeasurable help.

The 32-credit program that evolved became a 14-month preparation sequence that included an eight-day boot camp in June of the first summer with online activities the rest of the summer for 8 credits, two academic semesters of 8 credits each, and a concluding face-to-face session in July the following summer (8 credits) during which students complete their projects and review their assessment portfolios with faculty.

The current boot camp is three days shorter, and students now return to campus for two days twice each semester and for additional days during the final summer. Students in early cohorts asked for some face-to-face time, and following cohorts asked for more. The current two sessions each academic semester seem to work well.

While the face-to-face parts of this hybrid program in ways may seem minimal, they are designed to be short and intense, provide opportunities to create and reinforce culture during each face-to-face visit, and lay the groundwork for and follow-up on all curriculum and assessment activities. Each return visit during the academic year focuses on assignment reviews and evaluations, clarification of expected and upcoming work, and small- or whole-group activities that advance each of these objectives.

Another novel feature of our online program is what we now call "stretched" assignments. While students enroll for a particular "course" each semester, an assignment given semester 1 (summer 1) might not be completed until semester 3 the following spring. These stretched assignments seek to replicate the cycle of work that our students confront in their schools. Thus, in their content-based and their clinical-practice activities in which they apply knowledge to practice in real settings, they work on problems that mirror the work that they are preparing to undertake after graduation. The combination of the boot camp, the stretched assignments, and the integrated clinical practice have become defining features of our online program that persist today.

Now more than 12 years later, the program has evolved from a rural-only focus to serve any Colorado student who wants to complete our program online. Each cohort has numbered about 20 at graduation, given attrition, but as many as 70 percent of each cohort eventually take school-leadership positions, a proportion considerably higher than that achieved nationally in principal-preparation programs. Due to our successes preparing principals online, our formerly face-to-face cohorts now are hybrid programs with fewer face-to-face sessions and more work online.

Teaching vs. Learning

The juxtaposition of teaching and learning is the heart of what I have come to appreciate over the years (regardless of the learning environment): How well I teach is meaningless if my students are not learning or if what they "learn" has no staying power. As I made the transition to online teaching, I had to ask a simple question: What do I want my students to know and be able to do when they finish the term with me? Previously, I knew that my students needed to learn, say, the contents of some source materials, have some experiences through various activities, and show in some way that they had acquired some skills and knowledge along the way. I did not, however, concern myself particularly with the depth, longevity, or usability of what they were learning. I also came to realize that proof of learning perhaps was more usable, durable, and transferable if the learning was demonstrable in some authentic ways.

Thus, in addition to attending to the key elements in the previous section, I also began developing learning objectives that covered skills, knowledge, and (more rarely) dispositions to demonstrate that what was learned could be maintained and carried into new circumstances. Doing so was aided and abetted by the state of Colorado's standards of practice and criteria for program outcomes. For example, threaded discussions and reading logs can show that students have mastered knowledge and skills, and group research papers can demonstrate that both have been retained and that the concepts and practices are likely applicable under different, future conditions. Further, having clear outcome expectations (rubrics) related to group projects, I am able to discern evidence of knowledge durability in the products the group produces. Again, their developmental work proceeds in threaded discussions, so I am able to monitor what they do and give them useful feedback there as well as on the drafts of their projects.

Lessons Learned From an Early Adopter

Typically, I learn by "just doing it," by figuring out what works and what does not. Often, this starts with an idea or something I read or heard from a colleague, and I simply jump in with both feet. My impetuousness often leads to mistakes but most often to significant learning. With PPP, for example, the dean's agenda looked good and resonated with our need to serve the Western Slope of Colorado, so we just went for it, not fully recognizing what would be involved. Transitioning our program online, we reshaped, expanded, or reoriented the best of our successful classroom practices (e.g., standards-based knowledge and skill development, problem-based learning, clinical applications) and created supports to ensure that our students learn how to be effective school leaders. For example, we developed chats to emulate in-class discussions; maintained regular online presence to be quickly responsive to student needs, both technical and instructional; and created assignments that focused on problems of practice in the school settings to give them hands-on experience applying their knowledge in real settings.

Structure

After more than 11 years teaching online, I have come to realize that three key words are critical to online success: *structure, structure, structure*. For me, structure includes the following elements:

1. Clear outcomes expectations (learning objectives)
2. Clear deadlines for assignments
3. Clear directions on how assignments are to be completed, supported by detailed rubrics that provide a shared architecture for levels of student accomplishment as well as grading criteria for activities (which helps students understand what is important and how they will be assessed)
4. Clear description of an instructor's availability so that students are confident that their queries will be addressed quickly and regularly
5. Clear communication strategies and expectations for regular student-to-student and student-to-instructor contact:
    - a virtual office
    - easy-to-find weekly discussion threads
    - regular announcements

The point is to give students multiple sources of the same information, lots of clear expectations backed by rubrics and other supports, and plenty of ways to reach out and get help. Providing lots of structure assures students that instructors know what they are doing and gives them confidence that they can tackle online learning successfully.

Repetition

Repetition is essential (see above!). Online students need continuous reinforcements. In face-to-face environments students most often receive this continuous reinforcement from informal conversations with fellow students; from informal questions and feedback from instructors before, during, and after class sessions; from information conveyed through inquiries by others; and from focused classroom discussions. Some of these methods are replicable online, but formal attention to repetition ensures that students' needs are anticipated and addressed in timely ways.

Open Communication & Feedback

From colleagues, I have learned to augment these structures and forms of repetition through weekly "plus-delta" questions to and feedback from students about the preceding week's activities and outcomes. Based on their feedback, I make immediate course corrections. The following are some of the questions I ask, given how the students are responding to activities and assignments and the questions they raise in our virtual office or in threaded discussions:

- "What went well for you last week?"
- "What issues or problems need to be resolved to make your learning experience better?"
- What needs to be changed to help you be successful in upcoming assignments?

While responses in a threaded discussion are open for all to see, these discussions encourage side-bar questions that some may feel reticent to post publicly. Such side-bars include private e-mails or phone calls and even face-to-face visits for those able to come to campus; Adobe Connect or Skype support conversations for distant faculty and students to talk in real time, and all of these techniques can be used with small groups as well.

Power of Collaboration & Group Work

Student engagement for me means grappling with concepts, information, and practices in context—the student's, the situation, and the future. Successful engagement brings both visceral and intellectual apperceptions to bear on problems of practice that can be translated from the immediate situation to others across multiple circumstances. Engagement should lead students to assimilate what they are learning, making it their own by integrating it with their experiences, and enabling them to use what they have learned in novel settings over time. However, engaging activities have to be real, related to the students' experiences, and useful to their professional aspirations. One of the ways that I seek to engage students is through group work.

I favor group work over individual work primarily because as future school leaders they must work with and through others to accomplish the tasks necessary to reach school goals. Although I do expect my students to submit some individual products, to clarify their roles in their group work, and to identify their contributions to any products developed, the focus remains on collaboration and working with others to achieve common ends. Our program also requires reflections on learning, and these reflections

are essential to effective learning because students have to think about what they learn, its relations to standards for effective practice, and how such learning applies to future work.

I lean heavily on collaboration and group work because most of what my students do in their professional lives involves working with and through others, often collaboratively. So, learning how to work with others, how to assess others' contributions, and how to adjust for idiosyncrasies and the failures of others is critical a big part of those environments and a big part of learning, doing, and succeeding in those environments. Further, as social beings, students learn more in social interactions around problems of practice than they might in isolation. Through interactions, experiences are tested and moderated, new information is tailored and re-tailored relative to the problem at hand, and better solutions are derived, developed, tested, and advanced.

So after 11 years of teaching online, I have found that structure, repetition, open-communication/feedback, and finally collaboration/group work are a few key elements of a successful online course..

Concluding Thoughts

All in all, I have learned much about my own teaching by starting not with what I want to convey but with what students need to learn. I ask, what do these students in this learning setting need to know and be able to do when the complete their work? By starting here, I am forced to clarify issues of content and application, develop rubrics that illustrate levels of accomplishment in important areas. Further, by focusing on student learning—and letting them know that this is paramount—I empower them to take charge of their own learning. In these ways, students know from the beginning what is expected of them, surprises can be minimized and they understand their role in becoming leaders.

References

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Bio

Rod Muth is a professor of educational leadership and policy at the University of Colorado Denver, who teaches in the licensing, master's, Educational Specialist, EdD, and PhD programs in the School of Education & Human Development to prepare educators for leadership positions in elementary, secondary, and higher education. On coming to Colorado in 1992, he coordinated the Administration, Supervision, and Curriculum Development (now Administrative Leadership and Policy Studies) program for 9 years, helping to revise it from a traditional, course-based program to one that was domain-based program, a transition point on the way to its current problem-, project-, and performance-based manifestation. In the mid-1990s, Rod helped redesign the old administrative leadership PhD as a schoolwide PhD that focused on problems of practice, using a laboratory approach to educational research and portfolios and annual reviews for student and program assessments. Rod has written extensively on problem-based learning, preparation program coherence, program standards, cohorts in preparation programs, the transition of adult learners into professional roles, distance learning, doctoral programming and research, leadership and power, and educational governance and decision processes.