The Inevitable Coming Impact of Online Education on State Universities and Rational Response to What is Coming

Stephen B. Vardeman and Max D. Morris

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The recent appearance and publicity of organizations created to provide “massively open online courses” (MOOCs) is a truly revolutionary development in higher education. The free-for-anyone web-based courses offered by professors at select universities, and produced by Coursera, EdEX, and Udacity, were initially offered without traditional college credit. But this is already changing; participating universities are already offering credit for courses delivered through these outlets, at prices (split between the university and the MOOC provider) well below standard tuition levels. It seems clear that in relatively short order, there will be MOOC versions of many of the large-enrollment freshman- and sophomore-level courses taught at most major universities, and that students will be able to acquire transferable credits for these courses at the accredited schools for substantially less money than the tuition now charged for similar on-campus courses. In 21st century America, where many new college students reach graduation only by acquiring a mountain of personal debt, this can be regarded as welcome news. But for the nation’s educational institutions, the changes (which we believe will unfold very quickly) will present massive challenges.

In the following, we outline what we see as the “realities” and “consequences” of this revolution, and “options” that should be considered now for university administrators and faculty. Our particular perspective is in the context of the generic “Well Respected State University” (WRSU), which represents an enormous proportion of the traditional American college system.

**Realities**

The coming impact of MOOCs is begin made possible by a number of factors. First among these is clearly the technical capability, via the evolving internet, to physically produce courses that can be viewed at little or no expense by a huge proportion of the world’s population. But there are other factors involved as well, including the public perception of the nature and value of higher education, and economic forces. In particular,

1. The American public now views most of "higher" education (extending through masters level) as a "commodity," something thought of primarily in business terms, that will be sold primarily on the basis of price and convenience, subject to meeting of a minimum standard of quality (for the given species of product). University administrators have generally
adopted this viewpoint as well, often using terms such as “customer,” “stake holder,” and “marketing” to describe how the school relates to students, their parents, and others.

2. Technology is now enabling mass production and mass distribution of increasingly low cost coursework of acceptable (and increasing) quality. The organizations that produce MOOCs are well-funded and have selectively associated themselves with universities that have the capability of meeting any “quality” challenge that could arise.

3. The economics of commodity education (as with all other commodities) will always be driven by competition toward increasing efficiency, lower cost, and improved quality. The innovation of combining high-quality on-line education with traditional college credit at a reduced cost can be compared to the innovation of the Model T Ford. Just as mechanization forever changed agriculture and mass production forever changed the making of hard goods, these innovations will change commodity education forever.

4. Specialty/niche markets can exist where "hand crafting" with relatively high "profit" margins carries on, while commodity prices decline drastically. Highly respected liberal arts colleges will continue to attract the small minority of students for whom the element of personal involvement is important … and who can afford to pay the required fees. The majority of state universities, however, will not be able to continue operating as they have in the past.

5. To be absolutely clear, in almost every case, WRSU is not positioned to be at all successful competing for commodity sales. The well-funded start-ups and consortia already have huge professional production staffs working with the best academic institutions on delivering very carefully made courses. In contrast, most university "Distance Ed" programs could be carried out as effectively by arming every faculty member with a tablet PC and capture software. Existing (or even improved) on-line courses, produced by most educational institutions, offered at present rates of tuition, cannot hope to compete with the coming alternatives. And there will be no incentive for any of the current MOOC providers to affiliate with more schools than are really needed to support the new system. The inevitable fate of most state universities is that more and more of their future graduates will be taking (and paying for) fewer and fewer of their courses at their alma mater.

Consequences

The realities described above carry with them consequences which will constitute a massive change in the environment in which WRSU must operate. Our belief is that these will evolve more quickly than most people expect, but whether the time-frame is 1 year, 2 years, or 5 years, these consequences are very predictable:

1. For most state universities, tuition income will drop precipitously, as students do more and more of their courses at their kitchen tables. In addition, the state revenue reductions of
the last few decades will surely continue, especially as on-campus enrollments drop and legislators are even more tempted to spend public money elsewhere. Together, these two trends will force dramatic decreases in funding available to state universities. Except at the very best research institutions (and despite the self-images that may exist on campus, very few WRSU’s can claim to be these exceptions), funded research cannot begin to cover these losses.

2. It will be increasingly hard to justify the expense required to maintain the faculty and physical plants of most state universities. In the worst case, draconian measures will be necessary to reduce faculty head counts, some institutions will simply close down, and university assets, no longer needed to physically educate so many on-campus students, will be sold. In general, pressure on faculty and departments will increase dramatically as the issue becomes one of institutional survival.

3. Especially for large departments that have, in the past, justified faculty lines with large-enrollment service courses, there will be increased pressure to justify their relatively large departmental budgets.

Options

As outlined above, the rapidly changing environment of higher education will impose severe constraints on most public universities. However, there are choices that can be made. While many of them will be unpleasant (at least in the minds of those invested in the traditional system of higher education), they should be addressed by WRSU administrators and faculty now, because delay will only reduce the number of alternatives available. First of all, current strategic plans, based primarily on pre-MOOC logic, should be immediately reviewed, and much in them modified. In particular:

1. For most state universities, a hiring freeze should be seriously considered immediately. Even if enrollments have seen recent increases, the evidence that this cannot continue is overwhelming.

2. For most state universities, serious consideration should be given to radically changed building plans immediately. In place of big lecture halls, testing centers should be built. Physical inefficiencies should be addressed, and the overall strategy of physical plant development should be reoriented toward the idea that less, rather than more, facilities will be needed.

But simple reduction without a strategy for what comes next is not sufficient. WRSU will need to develop a clear value proposition, and put full energy into delivering it:

3. Institutions and departments must immediately face up to the value proposition required in commodity education. Most state institutions cannot participate in the MOOC movement
and do not have the capability to justify themselves by shifting from “education” to “research.” The question that must be answered by WRSU is: What do we have, or can we quickly develop, that is of real value and can be delivered at a price the new market will bear and will support us going forward? And the first step in answering this question must be an honest reflection on the “ground truth” of the institution; these decisions cannot be made with a “Lake Woebegone” mentality that insists on an “above average” self-image.

4. Each institution will need to come to terms with what its role can be in commodity education. In nearly all cases, it will at best be a user of MOOCs, NOT a provider. One of its major roles will be in offering the kind of assistance that can only be provided personally (e.g. tutoring), and testing/providing credit for what is learned from externally provided course material. It is likely that courses that contain hands-on experience in laboratory facilities (e.g. chemistry), require one-on-one interaction (e.g. music), or rely on group experiences (e.g. engineering design) will be difficult to adapt to the MOOC model – How can WRSU make the most of its ability to continue this kind of education? Specific strategies will vary by institution, but they will all require huge changes.

5. All WRSU units, both administrative and academic, need to immediately focus on efficiency and activities that deliver unique value to the institution and students. Administrators must become much more responsive to the new, real challenges that face their institutions, focus on what roles their institutions can realistically play, and become much more willing to make well-reasoned hard choices concerning change. Faculty must understand that former cultures of “entitlement” cannot continue, that the concept of “academic freedom” is likely to be reshaped to focus more on the needs of the institution than the individual faculty member, and that these challenges will require substantial sacrifices from everyone.

Almost inevitably, the advent of large-enrollment, on-line college courses will put many colleges and universities out of business, and dramatically reduce the size of many others. In this new environment, there may also be opportunities for some educational institutions to offer new and valuable components to college education (even if much-reduced in scale relative to plans they have made in the past). But this will not happen without serious and realistic thought and planning – of a qualitatively different nature than has ever been needed before -- by administrators and faculty.