# The New Face-to-Face Education

## Scalable Live-Engagement

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Abstract. The iMBA, which is delivered 100% online, was launched by Gies College of Business at the University of Illinois at Urbana-Champaign in 2016. By fall of 2018, the program will enroll more than 1,700 students from 70 countries. With its US\$22,000 tuition, about 1/3 the price of programs of similar caliber, the iMBA is reaching under-served populations, including those unable to pay premium prices or make time for in-person residency as well as late-career learners who are disinclined to attend a conventional program. One of the iMBA's major breakthroughs is its scalability, and that scalability has been accomplished in ways that enhance the quality of education. An iMBA course has two main components-an open MOOC, which delivers core concepts equivalent to what might be covered in a conventional in-person lecture, plus a live global classroom led by a professor and supported by a team of course assistants. As the MOOC delivers the fundamentals of a topic, the live-engagement class focuses on a richer exploration of the material. In the live-engagement classes, hundreds of students can participate simultaneously—yet receive significant individu-

al attention and personalization by interacting with professors and course assistants in real time through chat technology. Students also interact with each other, which often results in side topics being explored, thus producing a richer environment for knowledge discovery than would be possible in a traditional lecture hall in which side conversations are discouraged. Course assistants answer basic questions, and elevate particularly important insights or questions to the professor at the head of the full class, also in real time. Another distinctive feature of the iMBA is that it is delivered in "stackable" components: A MOOC plus live-engagement element stacks into a for-credit course. A series of for-credit courses stack plus a capstone project stacks into a "Specialization." In turn, a series of Specializations stack into the full MBA degree. In this way, students have various on-ramps to the full degree. The iMBA has to a significant degree cured the cost disease in higher education. Faculty create content for multiple uses—for the full MBA as well as for certificate programs, for example—producing multiple revenue streams. Plus classes can be large owing to the novel teaching-team structure, enabling one senior faculty member to potentially teach thousands.

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The iMBA from the University of Illinois at Urbana-Champaign's Gies College of Business was launched in 2016. It is delivered 100 percent online and by fall 2018 will enroll over 1,700 students from more than 70 countries. Yet it is an intimate, personalized, in-depth learning, and developmental experience with content taught by senior faculty as well as highly-placed practitioners and is delivered at a price point which, at US\$22,000, is about one-third that of programs from institutions of similar caliber.

The program was developed in partnership with the private-sector online education provider, Coursera, while also drawing on the University of Illinois' long experience with e-learning. Content comes mainly from existing Gies College of Business MBA-level classes, though courses are grouped in ways that don't always follow traditional academic-department silos, which we will discuss later in this essay. In some cases, we pull material and faculty from beyond the business school—from other schools and colleges at the University of Illinois, as well as from practitioner-partners, such as a senior executive at Google.

The iMBA has been called a disruptive innovation. We have found a way to serve an under-served market globally. The market includes people unable to pay premium prices and unable to make time for in-person residency, yet talented enough to succeed in a premium educational environment. It also includes those who are at later stages in their careers, disinclined to return to school but eager to learn. In the process of inventing a better way to serve these and other markets, we've created something that's as powerful in terms of educational impact and potential to transform lives as the traditional version of face-to-face education.

# The anatomy of an iMBA course

Before discussing the strategy and impact of various aspects of this program, it is instructive to outline the nature of the iMBA program. The following section will provide a framework of the program by considering the elements of a typical iMBA course.

Each course is composed of three key parts: the MOOC videos accessible on the Coursera open platform, assessments on Coursera and on assignments distributed through a secure server at the University of Illinois, and weekly live sessions with faculty and students.

Each iMBA course lasts for eight weeks. Each week is a module that, consistent with the brick-and-mortar versions of these courses, builds upon previous modules.

Videos

On-demand videos contain the core material of the course—all the essential elements to give them mastery of the content. The videos mainly follow a lecture format but may also include vignettes in which faculty, for example, go with cameras to locations other than the studio.

#### Assessments

In addition, there are assessment assignments for each module, available on a secure server at Illinois. Some are timed in the sense that students have *X* hours to complete them and submit their answers after they first download the assignment. Some assignments have no time limit. All assignments associated with a given module must be submitted by 11:59 p.m. on the last day of the module. These assignments can be machine gradable or require grading by the teaching team associated with a particular iMBA course.

#### Live sessions

The live sessions elaborate on the videos and are one of the places students can bring their questions and comments. The live sessions also tend to include advanced material and thought-provoking insights from both the professor and students.

A typical live session starts with a brief reminder of the material covered in the previous module and ends with a brief discussion of the content of next week's module. The majority of the live session, however, is devoted to the content of the current module.

The live session studio includes the professor, a senior course assistant, and the studio engineer. Students submit questions via a chat feature in the ZOOM platform. These questions could be about material currently being discussed in the live session, or about some other material relevant to the current module. In addition to the senior course assistant (SCA) working on camera with the professor, there are additional members of our live-engagement team: two or three more course assistants (CAs) sit in a satellite location and monitor the questions submitted by students. These CAs can and do answer the majority of questions submitted; however, they forward the questions they cannot immediately answer to the SCA. The SCA can answer the question directly or move the question to a video board that the professor can see. The professor will then decide to answer the question or defer it to post-session answering, depending on the time available.

### Office hours

There are also individual live-session opportunities. Faculty members hold online office hours, during which time any student can receive personal attention. Those sessions give students an opportunity to ask questions and discuss content with the professor.

#### The mission

Our core mission, and our passion, is to democratize high-quality higher education. We are out to remove obstacles in the way of talented people getting an MBA and getting ahead in life. In fact, we have expanded our definition of an MBA student. We are finding talent from around the world—in jobs and in places such that they would not otherwise come to an MBA program and are huge contributors to the learning process. This includes people who find the current MBA offerings inconvenient, or students who traditionally did not look at MBA as a career option, and even people not looking for MBA for career

advancement. By virtue of attracting this "knowledge for knowledge's sake" segment, we're expanding the market. And in doing so, we're enhancing the learning experiences. It is a virtuous cycle.

The diversity our students represent enriches everyone's learning—all the more because it's "real-time diversity" in that students are coming to us live from their daily lives and bringing insights from that day's work.

Even online programs, if they are truly high-quality, carry high price tags and require a residency. Not ours; we found a way to keep prices down and the educational experience as rich or richer than traditional face-to-face. Our target market doesn't require all the accoutrements of a traditional residential education. They do, though, expect not just convenience but also quality and high impact—a combination that is rare.

Democratizing education is in our blood: We are one of America's top public universities. Public universities were founded to expand access to high-quality education, to provide access to opportunity. At the same time, the best public universities easily rival or surpass the best private universities. (The University of Illinois at Urbana-Champaign, for example, is rated by *The Times* of London as one of the world's 30 most powerful university brands.) We carried that mission of access and quality over to the creation of the iMBA.

## The new face-toface: Intensely personal yet highly scalable

As we've seen, the new face-to-face in the iMBA centers on two major elements—the live-engagement classes taught by a team of instructors and the individual live sessions for those who want them.

So what do the live-engagement classes look and feel like? They are global and large, yet deliver a rich and personalized experience that in some ways bests traditional face-to-face. Bigness turns out to be, in the online ecosystem we've created, an educational advantage. It is one aspect of how we cure the cost disease in higher education. But it's also a major aspect of what makes the iMBA great. The degree and quality of connectedness in these classes is truly exciting.

There is connectedness on two levels—student/teacher and student/student.

First let's look at student/teacher connectedness. In the iMBA, live classes are centered on the senior faculty member, but we are not the only ones teaching. We are part of a teaching team working together in real time. The team makes each class hum on multiple levels simultaneously. Senior faculty address the highest-level content. The faculty member's teammates—associate instructors and course assistants—work with students on a fuller range of questions and take comments through technology-facilitated side discussions during the class. There is far more engagement going on than you'd find in a typical brick-and-mortar lecture hall, where students are less inclined to raise their hands and have far less opportunity to do so.

With this system, a single senior faculty member can teach hundreds of students at a time but deliver an experience that's textured, personal, and continuously interactive.

With respect to student/student connectedness, learners are not only connected with instructors but also with each other, as they swap insights and observations on the side. Unlike a traditional classroom, such chatter is not only possible; it's encouraged. Side conversations have a tendency to produce novel thinking. It's where students can try out their ideas on each other. And great insights get floated up to the entire class. This is one way in which bigness is a virtue: The quantity and variety of side conversations is exceptional.

In a traditional classroom, it's critical that I stay on plan—and every question and answer needs to move the discussion in a linear and largely preordained fashion. There is a particular lesson to be imparted in any given class session, and that has to be the primary objective. Tangents, even valuable tangents, can only be allowed to go so far lest the main lesson be lost. But in our live-engagement global classroom many things can happen at once. There's room for varied and deep deviations from the norm because the main lesson can go on even as new ideas are being discussed, and as basic questions are being answered away from the main event.

When I taught large introductory economics classes in a lecture hall, nobody raised a hand and there was minimal discussion or true interaction, but in this online global classroom, there is constant interaction.

There's yet another layer of live engagement, a critical one that prepares students to apply what they learn. All students take part in capstone projects at the end of each three-class sequence in our program. The sequences, which we call Specializations, are career-curated in that material is organized according to how it will be brought to bear in the real world, not necessarily according to traditional university departmental structures. So the material is ready to operationalize, and the students are given projects which demand a multi-dimensional approach. Students work in teams on real issues inside real organizations, which play virtual host—all online.

# Stackable courses & credentials

Which brings us to another way in which the iMBA is disruptive: It is delivered in a novel "stackable" format. This format creates educational benefits even as it produces multiple revenue streams from a single product, which helps us keep tuition affordable.

There is stackability at several levels. Here's what that means.

At the course level, teaching takes place in two segments. The first segment is the foundational content of the course. It is delivered via a non-credit MOOC. It includes video lectures, machine-graded quizzes, and group projects with that extraordinary mix of fellow students.

Anyone can take that portion, and indeed thousands (in some cases hundreds of thousands) of people do.

The second segment of each course is the advanced-content, live-engagement class, open to those who pay tuition. The two parts "stack" into a complete for-credit course.

A collection of these two-part courses then "stack" into a Specialization—the sequence of career-curated courses that produce mastery in a major area of business mentioned in the previous section. For example, Strategic Leadership and Management is a Specialization. The capstone project tops off each Specialization.

In total there are seven Specializations, five of which are needed to stack into a full MBA degree. Students can stop at the Specialization level and earn a certificate for a fee—or they can go on to earn the full MBA.

Most of our students apply to the iMBA and enter the program with the intention of going on to complete the full degree (and currently our completion rate stands at about 97 percent).

Not all learners take classes with that intention. Many start out with the intention of earning a certificate in a particular Specialization, and then stopping. Others just want to try out a single course. In so doing, students often find once they've completed a first level of stackability they're eager—and ready—to go on to the next level. This creates on-ramps and entry points to the iMBA, which effectively creates new markets: People who never intended to get an MBA end up doing just that.

Another reason for stackability is that students may be hesitant to have an upfront commitment of two to three years. In this program, they can do one certificate at a time.

The certificate-only learner makes up a significant portion of our students. A certificate in, say, digital marketing is all they need for their purposes. So this course flexibility works incredibly well for both us and them. The students receive the certificate they need, and we deepen our revenue stream (in addition to the MBA) without the cost of creating new content. This, too, is part of how we cure the cost disease.

# Harnessing the power of the MOOC

There are learning and developmental advantages to MBA students that come from having an open MOOC as part of every class. Most MBA programs are completely closed systems: You study with people who are more or less like you, because that's who gets into an MBA program. In the MOOC, however, you are exposed to a wider variety of people—people who think differently, who might be customers, colleagues, sources of innovation. We see value in the creative collisions this produces and believe it's another educational advantage to the disruptive iMBA approach (and another advantage of bigness).

For faculty, it means we get to use our live sessions to really elaborate, explain, and explore. It's fun to do the videos for the MOOC. And it's also fun to be done with that, and to be able to have deeper conversations with students about the material in the live sessions. Students have an opportunity to digest concepts through the on-demand foundational content in the MOOC.

When they come to live sessions, that's where they connect the concepts to real-world business issues using case studies, and where we get into those rich multilayered discussions.

By contrast, in the brick-and-mortar world, the contact in the classroom is core content delivery, the equivalent of what the iMBA does in the MOOC. In a residential MBA, it is a 50-minute footrace to get all the concepts introduced in the short timeframe. In the iMBA, students absorb that core content at their own pace. They can watch and re-watch the MOOC videos as much as they want. That frees us up to do more in the live-engagement class.

# Shifting fundamentals

Along the way, the iMBA alters what it means to be a faculty member, and not just in the sense that we now deliver our lessons on video and in large, global live-engagement classrooms. In the iMBA the faculty member has two roles. We are content creators, producing videos and quizzes that will be used across multiple product lines. And we are members of a real-time teaching team, working with others to produce a deep and personalized learning experience for students in our live-engagement global classrooms. That's a departure from what most faculty are used to—being a solo operator in front of a lecture hall.

Another fundamental role change is in the area of admissions. Our stackable approach creates new ways to discover great business talent and get them into a top MBA program. Many outstanding future business leaders are screened out by traditional admissions procedures. Maybe they had a mediocre undergraduate GPA or their GMAT-taking skills are not strong. But with stackability, we have a way to enable students to test and prove themselves on actual content before they are admitted to the full iMBA program. If a student is enrolled in one of our certificate programs and does well, it improves his or her chances of getting into the iMBA. Over time, this could mean thousands of people with high potential being discovered, earning MBAs, and boosting both their personal careers and their contributions to the world as a result.

The iMBA is truly a disruptive innovation in business education, delivering an online experience in a way that brings cost down while ratcheting up the program's quality, richness, depth, convenience, and features to serve a global audience.

Programs like the iMBA are often referred to as distance learning. I believe that is a misnomer. In the online live sessions, the students are right in front of you—someone sitting at a kitchen table in Kabul,

on a couch in Moscow, at an office desk in New York. They appear to me as individuals, not an audience. And they are connected to me or a member of my teaching team the instant they want to be.

### The genesis of the iMBA program

When we began our work, we were looking for ways to serve working professionals. Like most universities, until relatively recently we were confined to who we could serve within commuting distance—or else open up satellite campuses. In recent years, the advances in technology offered a chance for Illinois to take our programs to the professionals rather than make the professionals come to Champaign.

When we turned out attention to online, we initially were planning was to offer executive-style certificate programs, not a full MBA. But as the Gies team pushed deeper into the construction of a number of online certificate offerings, the idea of growing this to the level of an actual online MBA program began to take shape. College leadership devoted significant time to the feasibility of such an undertaking.

We decided that it would indeed be a good move for us to create an online MBA. We formed task forces and committees, met with top faculty and administrators from the university, and began the long process of creating the program and obtaining the necessary approval to launch it. We held town halls to get the valued input of our faculty, which we used to further shape the program. Then we began the approval process, first meeting with the Education Policy Committee (EPC). Gaining the approval of this committee was a long and painstaking process, because the committee recognized the iMBA as something very new; it was not like approving a program that the university had created before. When we gained approval of the EPC, our final step for approval was the university's Academic Senate. We gained approval from the senate in spring of 2015, and were cleared to launch a program that we believed was going to change the way we do business education.

Timing was fortuitous. The College, founded in 1915, was preparing for its coming centennial. We felt this was a perfect way to celebrate the occasion, and it was also an ideal fit for the University of Illinois, which is a land grant school, meaning that it has a mission to offer affordable education. Consistent with this mission, the College worked with the campus to push for a very low price point for such a degree. This democratization of top quality education, along with the ability to deliver this education around the world, was a key driver in the College's development and introduction of the iMBA.

The best partnerships happen when both parties benefit from the relationship. The partnership of Coursera and Illinois is a great example of this win-win collaboration. The Gies College of Business has world-class faculty and a reputation for excellent teaching. However, we are also located in a small town, and the world has to come to us for education.

Coursera brought Illinois to the world. They took us to the homes and offices of learners in the US and in Afghanistan, China, Kenya, Russia, and more from around the world. It is hard to overstate this great advantage. With millions of learners on their platform, Coursera was able to help Illinois reach a much wider market. On top of that, Coursera brought an unbelievable amount of data to our relationship. And, with the data gathered from this large number of learners, Coursera helped us focus our early attention on the content with the highest interest.

# Faculty experience with changing pedagogy

Every major business school has more than a handful of scholars researching and writing about the effect of disruptive innovation. Disruptive innovation is just what it says: an innovation that disrupts an industry. Throughout the 1990s, Blockbuster Video grew to be the dominant firm in the video rental market. By 2004, it employed over 80,000 people and had more than 9,000 stores worldwide. By 2010, it had filed for bankruptcy. How did this happen? A startup named Netflix grew to dominance in the market. The irony is that Blockbuster rejected an opportunity to buy Netflix for just US\$50 million in 2000.

Disruptive innovation happens in every industry, and higher education is certainly not immune to its impact. Faculty at America's great universities are no different. They have been teaching, usually with great success, with one delivery method for years. But the technological revolution brought about by the rise of the internet has made things different. Faculty were being asked to change their old ways of delivering their courses and join the online education world. Ex-post it is clear that Blockbuster should have adjusted. But ex-ante, it is difficult for the market leader in a particular business to abandon what got them to that position and adopt a fledgling innovation.

This same challenging dilemma has been playing out in faculty meetings across academia as the pressure by some to adopt the new technology of content delivery is met with (sometimes fierce) resistance by those who wish to continue with methods that have proven successful for years. Fortunately, the faculty in Gies College of Business agreed with the plan to introduce the iMBA. And, since the launch of the iMBA in 2016, faculty in other colleges at the University of Illinois have also moved forward with several new online degree initiatives.

Even though faculty agreed to push forward, most were like me: quite unsure how to convert comfortable lecture notes into successful videos. This uncertainty translated to reluctance to dive into the process, even if these same faculty agreed with the decision to offer such an online degree.

We were fortunate in two ways. First, we had an exceptional faculty task force that was guiding us through the process. Second, we have an exceptional faculty. Faculty at leading universities make their mark by producing important research and gaining worldwide visibili-

ty. But they also walk into classrooms year after year and teach eager students. Nearly every one of those faculty members clearly want to be successful in this teacher-student relationship. They took four to seven years earning a PhD in a discipline, and they have spent many years becoming a world-class expert in some small segment of that discipline. No faculty member wants her students to think this area of expertise is a waste of time. Rather, they strive to convince their students that this material is not just interesting; it is important. They spend hours outside of the classroom constructing better lectures, better examples, better exercises, etc.

In the case of the iMBA and Gies College of Business, the first few faculty members to agree to teach in the iMBA program were some of the most successful teachers in our College. They were winners of College and university-wide teaching awards. They had demonstrated great success in the classroom using the traditional delivery methods, but were willing to put those methods aside and convert their successful methods into the new delivery paradigm.

This was a key moment for the program. Those faculty who were reluctant to jump in could see that these first-mover faculty, who had built wildly successful courses already, were willing to abandon that methodology for the new delivery platform. Clearly, these academics did that because they could see the advantages of using this new technology to better help their students learn. As a result, more and more faculty agreed to teach in the iMBA.

As the online course production proceeded, it was clear that this task was going to be more time-consuming than most faculty members had anticipated. After all, we were moving the content of an entire MBA course into video in sessions in a small studio in the basement of our building. Of course, while a face-to-face conventional course may involve many hours of classroom contact, much of that time is filled with questions and discussions. While this meant the total hours of video was not overwhelming, the process was sufficiently different as to cause delays.

### **Quality issues**

The first issue was the camera itself. Most faculty are not prepared to "teach" by talking to a camera lens in a small room with just a video engineer as the "live" audience. But, after just a few sessions, faculty became much more comfortable with this procedure. (It was not uncommon for professors to reshoot their first lecture video after completing the course, because they were uncomfortably "wooden" in their first appearance.)

The second issue was cleaning up the video lectures for the Coursera posting. This task was also quite time-consuming, but mostly invisible to the faculty members. Each of the faculty members who joined the program had already demonstrated they had a high-quality brick-and-mortar course that was well received by the residential

MBA students. What remained was the task of converting that course into a professional video format.

Last but not least was the time spent in editing and reshooting parts of the video lectures where faculty forgot some material or realized they misspoke about a concept.

The College decided to accept nothing less than professional studio quality output from our video production efforts. That meant investing many scarce resources into expensive top-drawer studios, cameras, video boards, etc. It also meant we needed to rapidly grow our video production staff.

Most of these decisions were handled by the eLearning office in the College. We also enlisted the help of the university's Center for Innovation in Teaching and Learning (CITL). CITL had already produced many courses for Coursera, working with various colleges and departments across campus to create online courses. The production of the iMBA became a collaboration among the College professors, the eLearning unit, CITL, and Coursera—each bringing their own strengths, perspectives, and experiences to the table, each contributing mightily in the process, each adding value that only they could add.

The final challenge to faculty is becoming part of a real-time teaching team in a dizzyingly robust global classroom, rather than an independent operator standing in front of a mostly quiet lecture hall. But most faculty find quickly that this kind of teaching, though it requires you to be more agile, is immensely rewarding. We spend time on content that generally goes beyond the standard syllabus, and we get to teach live the most sophisticated material—leaving the lower-order content to the videos, which are largely one and done. We also get to see students come alive in ways they seldom do in a live-lecture situation, and we get to see new lines of inquiry being hatched before our eyes. It all takes some getting used to—there's a lot going on. But with the right kind of technical and teaching support, it ends up being an exhilarating and nourishing experience.

# The future of online education

Online education is ubiquitous in the higher education landscape. It is not going away. In fact, it will only grow in prominence. That growth is the result of several factors: the advancing technology; our grasp on how to better use that technology to our advantage; and the changing needs of students. Higher education is adapting to those changing needs, and in the process, it is revolutionizing higher education. The greater impact will be on the nontraditional college students, yet even traditional students will be impacted.

Online education will also benefit well-respected universities, because the accessibility means more people can earn degrees from those universities. Online courses and programs only extend such a university's global reach, and they expand access to underserved populations. The universities that can provide access to quality edu-

cation at reasonable costs to the greatest number of people are going to be the winners.

Higher education is a massive institution, and sometimes change in large institutions is hard to detect. Our mission to educate has not and will not change, but how we go about achieving that mission is undergoing constant adaptation. Online education is one of our change agents, and it will be an increasingly important agent.

### A final word

Make no mistake, the creation of our iMBA was a painstaking process that involved many significant challenges and the combined efforts of (seemingly) a cast of thousands. But it has been a game-changer for us. It has been everything we have dreamed of, and more. It has proven to be the innovative disrupter we believed it could be.

When I speak with colleagues at other universities, they have lots of questions about the iMBA. They express a willingness to try such a venture at their school. But, for many, the decision to make such a change in pedagogy is overwhelming. My recommendation is to put skepticism aside and push forward. There is no question that the job will be difficult.

There is also no question that, if the results are like ours, it will be worth it. You will scale what you are teaching in ways that could never be accomplished before. And you will change lives—all over the world—for the better.

After all, isn't that what education is all about?