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# Chapter 4

# From 0 to 60: The Case Study of a School of Education's Successful "Online Start-Up"

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## **ABSTRACT**

This chapter reports findings from the case study of a school of education that had not previously engaged in online education and within two years was able to offer a total of 61 online courses (ranging from hybrid to fully online) as part of its existing programs, with high student and faculty satisfaction as well as limited upfront investments. With the goal of informing academic leaders planning similar online initiatives, the chapter examines how this start-up was realized, with a focus on how the school secured quality online instructors, other key resources and infrastructures, student and faculty buy-in, consistent policies and expectations about online courses, as well as how decisions were made about the specific courses to be offered online. This study was informed by entrepreneurship as a theoretical lens to study innovations.

## INTRODUCTION

Today's higher education institutions are facing increasing pressure to provide online learning opportunities to their students. Yet, the start-up process of beginning to offer high quality courses online can be quite daunting – especially in the absence of central institutional support. The Warner School of Education at the University of Rochester was recently in this position. As of May 2013, it had never offered an online course, and only three faculty had experience teaching online. Yet by summer 2015,

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the school had offered 35 fully online and 26 hybrid-online courses, enrolling a total of 809 students with high levels of student satisfaction. Most notably, this happened without major grants or gifts, nor centrally allocated funding.

This chapter reports selected findings from a case study of this successful launch (referred to as the Warner Online Start-up, hereafter), with the goal of informing similar online start-ups. More specifically, this chapter addresses the following questions facing academic leaders interested in offering online courses for the first time:

- How can you develop and secure a cadre of high quality online instructors for your school?
- What other resources and infrastructure are needed to ensure a successful launch, and how can these be secured?
- How should you select the courses to be offered online?
- How can you secure student and faculty buy-in?
- What policies, practices, and expectations need to be developed for long-term success?

Given the focus on how a specific innovation was initiated, launched and sustained, we chose to use *entrepreneurship* as our theoretical framework. After some background information, the body of the chapter provides a data-based reconstruction of key steps and decisions involved in the Warner Online Start-up informed by the research questions identified above, followed by key lessons learned from this case study. In the conclusions, we return to each of the research questions to provide concrete recommendations.

## **BACKGROUND AND RATIONALE**

Since 2002, higher education has experienced an explosion in online education, as documented by the Online Learning Consortium (formerly Sloan Foundation) in its annual research studies (see Allen & Seaman, 2014, for its latest iteration). The pressure to offer online courses for institutions that do not already do so is significant. Yet, starting online offerings for the first time is not easy.

Major innovations cause resistance in any organizational environment. Higher education institutions also have some unique challenges when it comes to innovation, due to governance structures in which faculty have significant decision making power and freedom of implementation, especially in academic matters (Weick, 1976). This situation has been described theoretically as a combination of professional bureaucracy (Mintzberg, 1979) and organized anarchy (Cohen & March, 1986). In practice, this means that any online start-up will require securing faculty buy-in and will take longer to implement than most innovations in business settings.

We also know from the rich literature on teacher education (e.g., Borasi & Fonzi, 2002; Capps & Crawford, 2013; Luehmann, 2007) that changing how one teaches (as required for online teaching) is not a simple matter, as it requires changes in beliefs, knowledge, skills, and everyday practices. Changes in beliefs and practices are especially hard to achieve and require much more than presentations or even hands-on workshops. For example, the literature on K-12 school reform (e.g., Borasi & Fonzi, 2002) points out the importance of developing an image of a new teaching approach in action by observing it modeled by experts, engaging as learners in genuine learning experiences employing the proposed

approach (experiences as learners), and being supported by experts when first employing the approach (scaffolded experiences as teachers).

Online education also presents some unique additional challenges. First, despite many studies documenting the positive outcomes of online learning (Bernard, et al., 2004; Means, et al., 2010), the 2014 Sloan report still documents skepticism among faculty about the quality of online courses and the learning students gain from it – especially in institutions without online offerings (Allen & Seaman, 2014). This suggests that faculty negative perceptions about online learning may be caused by lack of experience with effective online learning. Second, there are still many faculty members, especially in senior positions, who are not very comfortable with using technology. Third, there are lingering concerns that online start-up costs will be huge and take resources away from other projects, although this may not be true given recent advances in online technology. Given this reality, future online "start-up" initiatives can benefit from learning about how another institution overcame these challenges in a short timeframe and with relatively modest investments.

## **Theoretical Framework**

Entrepreneurship can provide a valuable theoretical lens to study the process of initiating an innovation (such as an online start-up) if defined not just as starting new businesses, but rather more broadly as pursuing and carrying out innovations – as consistent with Schumpeter's original definition (Schumpeter, 1934).

First, the entrepreneurship literature has identified key stages in the process of initiating a specific innovation that helped organize our case-study of the Warner Online Start-up. Specifically, we adapted the following stages from Baron & Shane (2005):

- Making the decision to undertake a particular innovation (including the evaluation and refinement of an initial idea/perceived opportunity);
- Planning the innovation (including securing the necessary resources);
- Launching the innovation;
- Ensuring long-term success.

By assuming an entrepreneurship lens, our approach also involves the following assumptions and values:

- Not Feeling Limited by the Resources at Hand: Stevenson and Jarillo (1990) described entrepreneurship as "a process by which individuals either on their own or inside organizations, pursue opportunities without regard to the resources they currently control" (p. 23). In other words, successful entrepreneurs do not let the limitation of existing resources constrain their decision to embark in a worthwhile venture, but rather proactively look for new funding sources and human capital.
- Considering "Missing the Boat" Risks as Well as "Sinking the Boat" Risks: Brown & Cornwall (2000) suggested that successful entrepreneurs often give greater weight to the risk of "missing the boat" (i.e., losing the potential benefits of pursuing an opportunity) versus the risk of "sinking the boat" (i.e., the negative consequences if the initiative fails). This is in contrast with the reality that educational leaders suffer real consequences for "sinking the boat" but are rarely held accountable for "missing the boat".

- Focusing on Risk Management Rather than Avoiding Risk: Contrary to common belief, research suggests that entrepreneurs are not greater risk-takers, but rather evaluate an innovation's risks differently because of their confidence in minimizing and managing such risks (Busenitz, 1999; Palich & Bagby, 1995) for example, by constraining their start-up investments and having "exit strategies" if the innovation is not successful.
- Accepting the Need to Make Decisions with Limited Information: While academia values
  most decisions made only after all possible alternatives are considered and all constituencies
  consulted, entrepreneurs recognize the cost of delaying decisions and therefore are willing to
  make decisions with limited information, especially when required in order to take advantage of
  a window of opportunity (Bygrave & Zacharakis, 2004). At the same time, entrepreneurs manage
  the risk involved by closely monitoring the decision's implementation and making adjustments as
  needed.

## Clarifications on Scope of the Study

Since online education can take different forms, let us clarify that this chapter focuses only on creditbearing higher education courses that leverage online learning but are otherwise treated as any other courses offered at the institution – that is, the courses referred to in this case study count toward degree programs, are run by an instructor serving a cohort of students taking the course at the same time, leverage collaboration among students (rather than being "self-paced"), and follow the same academic policies as traditional face-to-face courses. These online courses still involve considerable variety, though, as they could be fully-online, hybrid-online, fully asynchronous, or include synchronous sessions (see the end of the chapter for a definition of these terms).

It is also important to keep in mind that introducing online courses at Warner was conceived not to reduce costs, but rather to capitalize on online learning to:

- 1. Provide current students with a richer learning experience;
- 2. Increase current students' satisfaction by addressing scheduling constraints and increasing convenience;
- 3. Recruit new students that could not previously be served because of their geographical location, working schedules, and/or family commitments.

## **Research Methodology**

The Warner School's decision to launch online courses was part of a larger Online Initiative involving a research component. Therefore, systematic data were collected on activities related to online teaching and learning, with the goals of (a) producing a case-study for research purposes and (b) improving the initiative's implementation in the spirit of action research (Anderson, Herr, & Nihlen, 2007; Glanz, 2003; Kemmis & McTaggart, 1988) and design-based research (Penuel et al., 2011). These data included:

- Official documents (such as memos, policies, web content, etc.).
- Online materials created by course instructors and associated online student work.
- Anonymous course evaluations and other surveys of students taking online courses.
- Field notes and/or audio recordings of meetings and events.

Following an exploratory case-study approach (Yin, 2003), these data were used to reconstruct the process and key decisions made at various stages of the process of implementing the Warner Online Start-up, guided by the questions articulated earlier in the Introduction.

Our report also identifies contextual characteristics that may have affected decisions and their outcomes and focuses on the roles of three key individuals (the co-authors of this chapter):

- Raffaella Borasi (referred to as Dean hereafter), dean of the Warner School since 2001 and by training a teacher educator with expertise in instructional innovation.
- Eric Fredericksen (Online AVP), university-wide Associate Vice-President for Online Learning
  with a clinical faculty appointment at Warner, and also a Sloan Consortium Fellow with more
  than 20 years of experience in teaching online and starting new online initiatives in a variety of
  institutions.
- Dave Miller (Online Instructional Support), currently a clinical faculty member at Warner spending about half of his time supporting novice online instructors, with extensive experience in both instructional technology and business start-ups.

## CASE STUDY OF THE WARNER ONLINE START-UP

The Warner School of Education is one of six academic units within the University of Rochester (UR), a nationally-recognized research university. The UR is highly decentralized, with each academic unit having full authority on its instructional programs and being fully responsible for revenues and expenses. In this system, each school's dean has great latitude to initiate and fund innovations, yet each cannot rely on central funds to support these initiatives. The UR is essentially a residential university, with little online offerings except for the School of Nursing, where 42% of student registrations are in online courses.

A graduate-only school of education with about 600 students, Warner is highly tuition driven – so student recruitment and student satisfaction are critical. Under the current dean, the school has engaged in many innovations that more than doubled student enrollment and operating budget over the last ten years. The school prides itself on the high quality of its courses and its innovative instruction, yet until May 2013 Warner had not offered online courses.

The Warner Online Start-up was also affected by the following events:

- In 2012, all UR schools engaged in a strategic planning effort informed by a memo from the UR President identifying key environmental changes to be addressed including online education.
- In January 2013, a new university-wide position of Associate Vice-President for Online Learning (Online AVP) was created.
- Also in 2013, a new Committee on Online Learning (COOL) was formed with representatives
  from each school, led by the new Online AVP. This committee was instrumental in deciding to join
  Coursera (and develop a few MOOCs), creating a university-wide Online Learning Symposium
  and faculty workshops, and coordinating online learning technologies and platforms across the
  university.
- In 2010-11 and 2011-12 Warner experienced a significant decrease in enrollment in traditional programs that prepare K-12 school personnel.

## Making the Decision

While the value to engage in online learning had been debated before, no school-wide initiative was undertaken at Warner prior to 2013. Reasons behind this reluctance included:

- Concerns about the quality of online courses;
- Lack of a critical mass of faculty interested in teaching online;
- Lack of a "champion" to lead an online initiative;
- Concerns about technology start-up costs;
- Competing projects including the construction of a new building, completed in December 2012;
- The Dean's own lack of confidence with instructional technology.

What changed, then, to make the Online Initiative the #1 priority in Warner's 2013 strategic plan? While the President's call for action about online education and the university-level discussions that followed played a role, other factors were even more influential.

First, the nationwide K-12 school crisis and the resulting decrease in Warner enrollment brought new urgency to exploring changes in existing programs to make them more attractive for prospective students. As a result of this exploration, offering online courses was identified as an opportunity to increase enrollment and preparing future online instructors. A benchmarking study of New York education schools by the Online AVP also made clear that Warner's lack of engagement in online education represented a significant "missing the boat" risk.

Second, the new Online AVP expressed an interest in a joint faculty position at Warner. This formal appointment (at 20% effort) provided "in house" expertise Warner did not have before, as well as opportunities for synergy with university-wide online initiatives.

Third, a Warner dissertation involved piloting a new course on "Online Teaching and Learning" in Fall 2012 and, as a member of the dissertation committee, the Dean was a participant observer of online learning activities in this course. This personal experience, combined with readings and participation in university-level conversations about online learning challenged many of the Dean's preconceptions about the potential of online learning.

Fourth, this experience also demonstrated that the university's Learning Management System (LMS), Blackboard, already had most of the capabilities needed to run online courses – so there would be no need for substantial start-up technology investments.

Fifth, in the discussions that led to the 2013 strategic plan, Warner faculty members were now supportive of an Online Initiative that would include not only developing some online courses, but also eventually creating new programs to prepare online instructors and capacity to offer online support services, and also doing research on online teaching and learning.

Before finalizing the decision to undertake an Online Initiative, however, the Dean felt the need to create a new half-time staff position (Online Instructional Support) to provide Warner faculty with the needed support to design and teach online courses. Hired into that position was the doctoral student who successfully piloted the Online Teaching and Learning course. With the support of the Online AVP and the new Online Instructional Support and building on her own background as an expert in instructional innovation, the Dean finally felt sufficiently confident to personally take on the leadership of the Online Initiative – despite her own insecurity as a technology user!

## Planning and Gathering Resources for the Warner Online Start-Up

Once a commitment to an Online Initiative was made and key personnel were secured (i.e., Dean as project leader, Online AVP at 20% effort, and Online Instructional Support at 50% effort), much still needed to be done to develop a plan for the Warner Online Start-up and gather the needed resources. To support this effort, the Dean constituted an Online Teaching and Learning (OTL) Team consisting of herself, the Online AVP, the Online Instructional Support, and two faculty members with expertise in online learning and instructional technology.

One of the first key decisions for the OTL team was which courses should be offered online in the forthcoming 2013-14 academic year and who could teach those courses.

The OTL Team started with the premise that this first set of online courses should be of very high quality, both to set expectations and influence student and faculty buy-in. Potential online instructors at the time were limited to:

- The Online AVP and Online Instructional Support;
- Two early-career Warner faculty with prior experience teaching online elsewhere;
- Two senior "early adopter" Warner faculty who had used online learning experiences in their faceto-face courses (although neither had taught an online course);
- The Dean and the Director of the Health Professions Education program, who were not early adopters but are experts in pedagogy and instructional innovation and were willing to co-teach online with expert support;
- Three advanced doctoral students/alumni, who previously taught courses at Warner as adjunct instructors and took the pilot course, "Online Teaching and Learning", in Fall 2012.

While constrained by this short list, the OTL team also articulated the following principles to guide the choice of the first courses to be offered online:

- As many Warner students as possible across Warner programs should have the option to experience an online course → which meant targeting first electives of interest to students in many programs.
- To ensure student buy-in, Warner students should not have to take an online course unless they
  wanted to → which meant offering either online electives or both online and face-to-face sections
  of the same required course.
- Courses preparing online instructors should be offered at least partially online, to provide rich opportunities for experiences as learners.
- To increase geographical reach, we should be able to offer at least one "distance" program accessible to students not residing in Rochester (i.e., all required courses in that program, as well as sufficient electives. should be available online); the M.S. in Health Professions Education was chosen as our first "distance" program because:
  - Many students in this program had work schedules impeding weekly attendance in campusheld classes;
  - This program was offered jointly with the Schools of Medicine and Nursing, and we could leverage existing online courses and expertise in the School of Nursing;

- The program director and other program faculty were willing to co-teach (with support) all core courses in this program using a hybrid-online model;
- We were also at the time considering the possibility of offering the program in New York City as part of a university-wide initiative (although we did not end up pursuing that initiative).

By combining these principles with the expertise of the qualified online instructors available to us at the time, for 2013-14 we planned to offer 6 fully-online and 7 hybrid-online courses (as identified in Table 1, along with the rationale for their selection and some information about their format).

Early in the process of designing these first online courses, the need for shared understandings and policies about online courses became evident along with the need to address emerging questions such as:

- 1. Should learning goals and expectations for online and face-to-face versions of a course be the same?
- 2. Who could decide whether a course would be offered online?
- 3. How should online instructors be compensated?
- 4. What kinds of support should online instructors expect?
- 5. Who would be expected to teach online among the faculty?
- 6. Who would hold intellectual property rights on online course materials?

The Online AVP was instrumental in helping Warner faculty and the Dean grapple with these policy issues as they arose. Based on his experience in previous online start-ups, he could share approaches and solutions that worked in other situations; in his university role, he also worked at creating university-wide policies addressing questions such as #6 above. Most notably, he suggested the guiding principle that "a course is a course regardless of its format." So when approaching an issue related to online courses we would first ask: "How do we deal with this situation with our current courses?" Most often, we realized that we could extend current rules and practices rather than develop new ones specific to online courses.

Some of these policy decisions were articulated in a memo by the Dean to the Warner faculty in Spring 2013. Excerpts from this memo have been reproduced in Table 2.

Based on his previous experiences, the Online AVP occasionally anticipated and addressed potential issues before they occurred. For example, before faculty began designing their first online courses, the Online AVP suggested the development of a (flexible) course template in Blackboard to be used for all Warner online courses. While this idea met some resistance at first, the OTL Team eventually charged the Online AVP to create such a template. The template was designed based on best practices and aligned with the Quality Matters rubric (Standards from the Quality Matters Higher Education Rubric, 5th Edition, 2014) and with faculty input.

In this planning phase we also recognized the need for a staff member to support faculty with technical issues, and even more importantly be the point person for students experiencing technical difficulties when taking online courses. As we already had a capable Warner staff member supporting Blackboard as part of her duties, it was straightforward to modify her assignment to include assisting online students and faculty – although this ultimately required new resources, as some of her previous duties had to be re-assigned.

In the end, though, cash costs for the first year of the Warner Online Start-up were considerably less than initially expected (i.e., 20% of Online AVP; 50% of Online Instructional Support; 30% of Blackboard Support staff; extra-compensation for designing online courses). It was not difficult for the Dean

Table 1. Online courses planned for launch in 2013-14

Course [# Students Enrolled]	Format	Rationale for Offering the Course Online				
Summer 2013						
EDU446 – Entrepreneurial Skills for Educators [18+9]	6-week; fully online w/ weekly 1.5 hr. synchronous session (SS)	Instructor: Dean and Online Instructional Support     Course previously taught by Dean and Online Instructional Support, so ideal to redesign and teach together and use as a "model"     Possible elective for HPE & many other programs     Summer course (may be attractive for students on vacation)				
ED406 – Master's Research Methods [7]	12 weeks; fully online asynchronous (AS)	<ul> <li>Instructor: New faculty, previously taught the course F2F, took EDE484</li> <li>Required course for most MS students (including HPE), mostly taught by doc. studen multiple offerings</li> </ul>				
ED432 – Professional Writing [8]	6-week; fully online w/ weekly 1.5 hr. SS	<ul> <li>Instructor: Doc. student in EDE484; previously taught the course F2F</li> <li>Writing course (which OTL team thought could be interesting to offer online)</li> <li>Elective for ALL students; of particular interest to international students</li> </ul>				
*EDE479 – Assessment and Accountability in Higher Ed. [17]	6-week; hybrid online (1 instead of 2 classes/ week)	<ul> <li>Instructor: "Early adopter" faculty (new course)</li> <li>Faculty thought that meeting once/week instead of twice/week in a 6-week intensive summer course would serve students well in this course</li> <li>Elective of great interest to students in higher education</li> </ul>				
EDU498 – Lit. Learning as Social Practice [27]	6-week; Hybrid online (shorter class time)	<ul> <li>Instructor: "Early adopter" faculty; previously taught the course</li> <li>Required course for all teacher preparation students; offered multiple times</li> <li>Desire to shorten class time to "fit in" another course afterward</li> </ul>				
		Fall 2013				
EDE422 – Motivation in HD [22+20]	14 weeks; fully online (AS)	Instructor: Faculty w/previous online teaching experience who previously taught the course F2F, and was interested in teaching online     Possible elective for HPE & many other programs				
ED482 – Technology in Higher Educ. [11]	14 weeks; hybrid (less classes)	<ul> <li>Instructor: Online AVP, who previously taught the course</li> <li>Possible elective for HPE, HE &amp; other programs</li> <li>Value of having students in this course "experience as learners" online format</li> </ul>				
*EDE484 – Online Teaching and Learning [24+20]	14 weeks; hybrid (~ ½ classes)	<ul> <li>Instructor: Dean and Online Instructional Support</li> <li>First course in the sequence of courses to learn to teach online; elective</li> <li>Hybrid to enable students to experience various kinds of online learning and yet not be overwhelmed by a fully online course</li> </ul>				
ED528 (1) – Quantitative Data Analysis Software [22]	Flexible; fully online (AS)	<ul> <li>Instructor: Doc. student in EDE484 pilot; took this course as a student; high technical skills (in charge of Blackboard for UR)</li> <li>Course appropriate for a more independent/"self-paced" online course</li> <li>Multiple sections offered; taken by most doctoral students</li> </ul>				
	Spring 2014					
*EDE486 – Designing Online Courses [13]	14 weeks; fully online (weekly SS)	<ul> <li>Instructor: Online AVP</li> <li>Second course in the sequence of courses to learn to teach online; elective</li> <li>Fully online to enable students to experience this format</li> </ul>				
Year-long sequence of HPE core courses (EDU497; EDU581; EDU580) [13]	Hybrid – meeting 6 full days + online	• Instructors: HPE director ("novice"), 2 nursing faculty (experienced), "Early adopt				

Note: Asterisk (\*) indicates a new course; HPE stands for "M.S. in Health Professions Education"

to absorb these costs in the school's operating budget, especially with the expectation that the new online courses would produce additional tuition revenues. It is important to note, though, that the additional cash costs do not fully capture the significant time investments made by the Dean, Online AVP, Online Instructional Support, and select faculty.

## Table 2. Excerpt from Dean's memo on expectations about online courses

- The new fully-online and hybrid-online courses will all be equivalent to our traditional courses carrying the same number of credit hours in terms of goals and content to be covered, number of students enrolling in a class session (i.e., no more than 25), and teaching load for faculty.
- Decisions about which courses should be offered online, or as hybrid-online, will need to be made by the dean in conjunction with the chair of the program responsible for each course to ensure optimal course offerings to all of our students, and a strategic use of the limited resources available to support online courses at this point. [...]
- Recognizing that designing materials for online experiences requires additional time, instructors designing a new fully online course at Warner will be eligible to receive an additional one-time extra-compensation equivalent to teaching a course [...]
- [...]
- Faculty who have designed an online course will be given priority for teaching a section of that course each year provided that this does not conflict with higher priorities for their teaching services.
- We will address intellectual property issues related to online courses that may arise in a way that is consistent with how we treat other intellectual property issues at this university.
- We will address any other issues that may be encountered with online courses in a way that is consistent with how we would treat the same issue in traditional face-to-face courses.

## Launching the Warner Online Start-Up

The first Warner online courses were offered in Summer 2013 – although some important "launch" work took place earlier as these online courses were designed. Student satisfaction on all Summer 2013 online courses, and most online courses taught since, was monitored through anonymous online surveys. To improve the next set of online courses, the OTL Team reviewed these survey results and invited the online instructors to a sharing meeting. This process was repeated after Fall 2013 and Spring 2014.

Although all online instructors were offered one-on-one support by the Online Instructional Support, they made different uses of this opportunity. The three novice instructors who had taken the Online Instructional Support's "Online Teaching and Learning" course in Fall 2012 (and thus had already established a mentoring relationship) took significant advantage of the Online Instructional Support's services to review lesson designs, participate in synchronous sessions "behind-the-scenes", and provide on-going mentoring. The three faculty with prior online experience were mostly independent, although they used the online course template. The Director of the Health Professions Education program mostly worked with the Nursing faculty co-teaching the three hybrid-online core courses, capitalizing on their online experience. The Dean's experience of co-designing and co-teaching the online version of "Entrepreneurial Skills for Educators" with the Online Instructional Support was truly transformative and, thus, worth further analysis.

As a pedagogy expert but not an early adopter of technology, the Dean made special efforts to utilize online affordances in transforming a 13-week course she previously designed into an equivalent 6-week fully-online summer course with weekly 1.5-hour online synchronous sessions. She first re-organized the course resources and envisioned possible online learning activities, trying to leverage the online space to foster sharing of work and other collaborations among students. She then discussed these ideas with the Online Instructional Support, who helped refine the online activities and created all online materials. The Dean and Online Instructional Support actively participated in each online synchronous session, with the Online Instructional Support taking care of all the technology aspects. Both the Dean and the Online Instructional Support interacted with students' synchronously and asynchronously. This "scaffolded experience as teacher" enabled the Dean to develop novel online learning activities and directly experience the power of these activities, which affected her entire vision for online education at Warner.

The goal of starting with high-quality online courses was achieved beyond expectations. All courses planned for 2013-14 reached sufficient enrollment to be offered, and three of them (EDU446: Entrepreneurial Skills; EDE422: Motivation; and EDE484: Online Teaching & Learning) were so highly subscribed that we offered a second section later in the year. In total, 257 students enrolled in these online courses (see Table 1). The Motivation and Entrepreneurial Skills courses more than tripled their enrollment, as when previously offered face-to-face, they averaged 8-12 students each year - a clear indication of Warner students' interest in the new online format.

Student satisfaction was overall very high for all online courses. For example, in a follow-up survey administered in Fall 2015 to all students who took online courses at Warner, of the 296 students who responded only 18 (6.1%) disagreed or strongly disagrees with the statement, "I was satisfied with this course", and 20 (6.7%) disagreed or strongly disagreed with the statement, "I learned a great deal from this course." In Table 3 we have reported selected quotes from course evaluation surveys that are representatives of the reasons behind the widespread student satisfaction.

Sharing sessions and informal conversations with the online instructors also revealed their high level of satisfaction, along with important insights including:

- Surprise about the quality of student experiences in the online courses, especially in terms of collaborations and learning from each other;
- Better learning outcomes than expected in many cases superior to outcomes experienced in previous face-to-face versions of the same course;
- The value of using the course template to build their online course;
- The power of holding short weekly synchronous sessions in fully-online courses;
- The significant time it actually took to interact online with the students along with the value of this interaction.

Achieving the desired quality in Warner's first online courses, however, was not enough. To establish credibility for online learning, we also needed other students and faculty to know about these positive

Table 3. Selected quotes from online students

## Question: How has the Experience of Taking this Course Online been Different from Traditional Face-to-Face Courses You've Taken?

- Actually, I felt there was more interaction between the students and more feedback given from the instructor than in a F2F class.
- More written participation. One benefit is that you can craft well-thought-out responses that are saved online for everyone to go back to reference.
- The online experience almost made it seem like a well-organized and regulated self-study.
- I thought the workload was actually more manageable, which surprised me. Not having to go to class for 3 hours a week allowed me to spend time on coursework.
- I enjoyed the interactivity with the instructors, and this format provided me with as great an access as I have experienced with other F2F courses.
- I had a great sense of community and received excellent feedback. In the [F2F] classes I have taken there was not peer feedback. I enjoyed the flexibility when I was going to go online and review work.
- More convenient, which is important for my life circumstances.
- Much more convenient and actually much more interactive.
- I've been surprised how much of it could take place face-to-face even though it was online. Collaborate made both synchronous sessions and partner work very easy.
- It was awful. I really enjoyed the topic but I'm definitely not taking an online class again.

experiences. Therefore, we organized a series of events including testimonials from online instructors and students to share their experiences with various constituencies. These events included:

- A presentation at a weekly "Lunch Hour" series open to all Warner faculty, staff, and students;
- A presentation at a university-wide Online Learning Symposium;
- An information session about new courses to prepare online instructors;
- Presentations to groups of Warner alumni and donors.

These events, hosted in the Warner School's new building, attracted Warner faculty and students as well as faculty from across the University and facilitated thoughtful dialogue about online teaching and learning.

The concurrent design and implementation of EDE484, EDE486, and EDF488 – the new courses preparing online instructors (OTL sequence hereafter), was also very significant. First, the OTL Team co-designed this sequence, building on what they learned from the experiences of the novice teachers teaching Warner online courses, thus creating an incentive for immediately processing the data collected from the implementation of these courses. The OTL Team also used these courses to train promising doctoral students to teach the next online courses at Warner and to "incubate" new high quality online courses for Warner, a point we revisit in the next section.

## **Ensuring Long-Term Success and Sustainability**

Building on this successful start, the next challenge was to develop systems to grow and sustain this initiative in the long-term. This involved complementary elements. The need to maintain the same quality of one-on-one support to faculty and students while increasing the number of online offerings was immediately recognized as critical. This called for increasing the effort on the project for both the Online Instructional Support and the Blackboard Support staff. In the process, the original Online Instructional Support staff position was transformed into a full-time clinical faculty line – to increase this individual's capacity to teach more online courses and also increase his credibility with other faculty. The Dean also planned to identify doctoral students who, with appropriate training and supervision, could provide similar services in the future.

Expanding the pool of high-quality online instructors in a short time was also critical, and called for some complementary strategies.

First, the success experienced by the novice instructors who had taken the 2012 pilot of "Online Teaching and Learning," together with the number and quality of the students in the 2013-14 OTL courses, made us realize that the OTL sequence could be used as an "incubator" to develop both new online courses for Warner and quality instructors for those courses. By summer 2015, 20 students had completed this sequence, and of these 10 developed and taught new online courses for Warner.

Second, the Dean's successful co-teaching experience in two of the early online courses made her recognize the value of proactively providing similar opportunities to other faculty. Four newly hired faculty were assigned to co-teach an online course with the Online Instructional Support in 2014-15. To increase online teaching capacity more of these co-teaching experiences are planned, and the Dean has also assigned selected doctoral students who completed the OTL sequence to co-teach online with interested Warner faculty.

Third, while reaffirming the commitment that existing faculty would not be required to teach online, when hiring new faculty, the Dean made clear the expectation that online teaching will be part of their responsibilities. To prepare for this role, new faculty members are first assigned to be a participant observer in or co-teach an online course with an expert. All the new faculty members that engaged in this experience found it very beneficial, not only to prepare them to teach online, but also to improve their teaching practices more generally.

The Dean, in collaboration with program directors, also continued to plan proactively to expand Warner online offerings, taking advantage of the opportunities offered by the new online courses developed by students through the OTL sequence. The set of new online courses planned for the academic years 2014-15 and 2015-16 are reported in Table 4, along with their rationale.

Of particular interest are a couple of courses (EDE401 and EDE434) specifically designed for International students before they join their Warner program. These courses were created to provide an opportunity to our international students to get a "jump start" on their programs while still in their home country, to ensure a better transition and success.

Expanding online offerings into more required courses was also strategic, as it created the critical mass needed to request state approval for offering 12 of our existing programs in a "distance" format. Until this approval was obtained, Warner could not openly recruit students residing outside of Rochester to its new online courses.

The total number of online courses offered at Warner each semester during the first two years of its online Start-up, along with other information including the number of students enrolled in online courses each semester, can be found in Table 5.

Other unintended yet worthwhile consequences of offering online courses included:

- Offering the Motivation course online while the faculty member teaching it was in Russia on a Fulbright Scholarship.
- Enabling current students to take courses even if they could not be physically on campus including a student who broke her leg, another who had a Visa problem that delayed his entry to the US, and others with temporary assignments out of town.
- Allowing international students to take some courses from their own country to get a jump start before joining their Warner program, take some summer courses while visiting their families, or complete their last few courses after returning home.
- Exploring a possible joint program with a university abroad, starting with a pilot that allowed about 20 students from that university to take online courses at Warner in summer 2015.

## **Key Lessons Learned**

The outcomes of the Warner Online Start-up greatly surpassed our expectations – in terms of number of online courses offered, student and faculty satisfaction, and increased appreciation for online learning school-wide. Therefore, it is worth examining what contributed to this success, so that others can benefit from our experience.

In what follows we look across the "story" of the Warner Online Start-up, as reconstructed in the previous sections, to identify key lessons learned about the main categories that informed our analysis – as identified in the Introduction. This section concludes with observations about what was entrepreneurial about this initiative and the value provided by explicitly employing an entrepreneurial approach.

Table 4. Additional online courses developed after launch and their rationale

Course Format		Rationale for Offering the Course Online				
ED429: Theories of Human Dev. (Su, Sp)	12-week; fully online w/ SS	Instructor: OTL practicum student, who designed course in EDE486 Required course for counseling and human dev. students + elective				
*EDE401: Intro. to US Education (1) (Su)	6-week; fully online (AS)	Instructor: OTL practicum student, who designed course in EDE486 New elective course for international students (to be taken before coming to US)				
*EDE434: MS Academic Writing (2) (Su)	12 weeks; fully online (w/ SS)	Instructor: New faculty who completed OTL sequence New elective course for international students (to be taken before coming to US)				
EDE491: The Entrepreneurial University (Su)	6-week; hybrid	Instructor: Faculty who taught online in summer 2013 Elective for ALL students; of particular interest to higher educ. students Summer course meeting once instead of twice a week				
EDU468: Data–Driven School Improvement (F, moved to Su)	14/6-week; hybrid	Instructor: New faculty co-teaching w/ Online Instructional Support Required course for school leadership program, offered only this time Preparing for potentially offering the school leadership program hybrid, to serve teachers in rural districts in the region				
EDE473: Mental Health Issues in School Settings (F)	14 weeks; fully online (w/ SS)	Instructor: Doc. student who took EDE484 pilot, taught online elsewhere, and previous taught this course F2F Elective course for school counseling students, that could be taken by recent graduates to meet course requirements for permanent cert.				
ED415: Adolescent Development (Su)	6-week; fully online w/ SS	Instructor: OTL practicum student, who designed the course in EDE486 Required course for teacher preparation + elective Summer course; now could be taken by students at beginning or end of program when not in town; solving some scheduling problems				
ED404: Teaching, Curriculum & Change (Su)	6-week; fully online w/ SS	Instructor: OTL practicum student, who designed the course in EDE486 Required course for teacher preparation + elective Summer course; now could be taken by students at beginning or end of program when not in town; solving some scheduling problems				
EDU481: Integrating English & Technology (Su)	6-week; fully online w/SS	Instructor: OTL practicum student (although this was not the course she designed in EDE486) Required course for English pre-service teachers + elective Experiencing online as learners important given the focus of the course				
EDU481: Integrating Math & Tech. (Su)	6-week; hybrid	Instructor: OTL practicum student, who designed the course in EDE486 Required course for math pre-service teachers + elective Experiencing online as learners important given the focus of the course				
ED513: Academic Writing (Su)	6-week; hybrid	Instructor: OTL practicum student, who designed the course in EDE486 Strongly recommended course for doctoral students				
ED525: Interview Techniques (1)	3-week; fully online w/SS	Instructor: OTL practicum student, who designed the course in EDE486 Required course for most doctoral students; multiple offerings				
*EDE476: Teaching ELLs (Su)	6-week; hybrid	Instructor: OTL practicum student, who designed the course in EDE486 New course developed (for a grant) for teachers, with the intent to eventually offer it online to teachers state-wide				
*EDF488: Practicum in Online Teaching	Hybrid (only 2-3 F2F meetings)	Instructor: Online AVP + Online Instructional Support Online space seemed more suitable for individual mentoring; F2F sessions useful to share experiences				

## Securing the Needed Resources and Infrastructures: Critical Roles Played by Specific Individuals

As mentioned earlier, we were surprised by the low technology investment needed to launch Warner's first online courses. The only additional technology start-up cost involved extending the current university LMS license to include the use of Blackboard Collaborate for online synchronous sessions. Being

Table 5.	Online courses	offered and	student	enrollment	by semester
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	Su13	F13	Sp14	Su14	F14	Sp15	Su15	Total
Total # online courses offered	7	6	4	11	8	7	18	61
Total # students enrolled	86	105	66	128	119	65	240	809
# fully online courses	4	2	2	8	3	4	12	35
# hybrid-online courses	3	4	2	3	5	3	6	26
# required courses offered online	3	2	1	4	2	3	8	23
# online electives offered	4	4	3	7	6	4	10	38

able to use the same LMS turned out to be a great advantage, as it not only made the transition easier for faculty and students, but it also helped blur the lines between online and traditional course offerings. Creating a common course template for all Warner's online courses was also very important – and it did not add cash costs although it required staff time. In contrast, we came to realize the importance of the special roles played by the Dean, the Online AVP, and the Online Instructional Support, as an integral part of the infrastructure that made this project successful.

The Dean's decision to personally lead the initiative was a significant factor in the school's ability to put in place so many online courses in a short period of time. Given the UR decentralized structure, the Dean had the ultimate authority to make strategic decisions about teaching and staff assignments, course offerings, hiring, and scholarships for students taking the OTL sequence – so she could be more effective than a faculty member leading the project. To make these decisions well, though, the Dean needed a deep understanding of the potential and implications of online teaching and learning, something she lacked at first, but developed by co-designing and co-teaching two of the first online courses. This scaffolded experience was transformative, in that it provided the Dean with first-hand experience of the power of online learning and made her realize what it takes to leverage online learning affordances when redesigning a "traditional" course into an online format. This in turn helped her with decisions about the appropriate training, one-on-one support, and compensation to provide to faculty creating online courses. Given her well-known fear of technology, her success in designing and delivering a fully online course became a powerful testimonial and inspiration for other faculty, and thereby illustrating the value of "leading by example."

When the Dean seized the opportunity to secure the Online AVP's expertise and services through a joint faculty appointment, she did not fully appreciate the significance of this decision. Given his prior experience with online start-ups, the Online AVP proactively brought to the attention of the OTL Team potential challenges and policy issues before these could become problems. The Online AVP also shared the wisdom of other implementations so the OTL Team could learn from both successes and mistakes. This proactive stance saved not only time and money, but most importantly reduced potential aggravations that could have negatively affected faculty and student buy-in. The joint faculty appointment was an added bonus, as it helped the Online AVP gain recognition by other Warner faculty and also added an experienced online instructor who could offer quality online courses from the very start.

Creating the Online Instructional Support position was also a critical factor. As the Warner Online Start-up was only a small piece of the Dean's and Online AVP's portfolio, it was critical to have someone whose main job was to spearhead the creation of new online courses and support novice instructors. As

the Online Instructional Support transitioned to a clinical faculty position, his new faculty status added credibility for faculty and students, and also leveraged his capacity to teach online courses. It was also critical, though, that his "clinical" (rather than tenure-track) faculty contract clearly stated that half of his time should be devoted to supporting other online instructors.

The Online Instructional Support and Blackboard Support position played important complementary roles in supporting faculty and students. While the Online Instructional Support focused on working with faculty on designing and implementing quality online instruction, the Blackboard Support staff was the person to whom students (and instructors) could go whenever they experienced a problem with the technology.

## Securing High Quality Online Instructors

At the start, Warner had a small group of individuals with experience in online teaching, and only five were full-time faculty. Given these limited human resources, it is worth examining the importance to the Warner Online Start-up of securing high quality online instructors.

Most importantly, we capitalized on the expertise of the Online AVP and Online Instructional Support to partner with novice online instructors to support their practice. This could involve having other faculty "observe" their online courses, co-design and co-teach lessons in the novice faculty's courses, and most notably co-teach entire courses with them. These scaffolded experiences as teachers enabled novice online instructors to experience early success – an important element for identity development, as highlighted in the identity theory literature (Luehmann, 2007). As some of the novice online instructors were experienced and innovative teachers in the traditional format, these partnerships became valuable learning experiences for both parties and resulted in innovative ways to use online spaces to promote meaningful learning. This confirmed the value of scaffolded experiences as teachers mentioned in the literature (Borasi & Fonzi, 2002).

Another critical decision was to launch simultaneously a program to prepare online instructors – the Certificate in Online Teaching comprised of the three-course OTL sequence (EDE484, EDE486, and EDF488) plus two pedagogy electives. While this was conceived as a separate component of the larger Online Initiative, it turned out to be very synergistic with the launch of new online offerings at Warner, as it produced prime candidates as adjunct instructors for Warner online courses – especially as the Dean offered some scholarships to take the OTL sequence at no additional cost to incentivize promising doctoral students and prepare them well to play this role.

## Selecting the Courses to be Offered Online

Given the desire to develop a critical mass of online courses impacting the entire Warner student population along with a limited pool of quality online instructors, being strategic in deciding which courses would be offered online was critical. This meant that decisions about offering a course online could not be left solely to the course instructors based on their preferences but rather needed to be coordinated and made by the Dean and program chairs based on program needs and other strategic considerations. This approach was consistent with other decisions made about courses in the past (such as when courses would be offered, maximum number of students, whether a course would be offered on campus or offsite), so it also followed the "a course is a course" principle.

As shown throughout the story, deciding which online courses to offer included both strategic and opportunistic elements, as the Dean (in collaboration with program chairs) strived to choose courses that could be taught by the available online instructors while at the same time keeping in mind the priorities identified in the planning process. It is worth noting that 10 of the 13 new online courses developed in the second year resulted from using the OTL sequence as an "incubator".

## **Developing New Policies and Practices**

The long-term success of Warner online offerings required not only developing a set of quality online courses and high quality online instructors but also creating well-thought-out policies and shared expectations about online learning. This included, among other things:

- Clear definitions of different kinds of online courses and how these courses would "count" vis-à-vis traditional face-to-face offerings.
- Figuring out fair and sustainable ways to recognize the additional investments and intellectual property involved in the design of new online courses.
- Ensuring the needed support for faculty and students engaging in online experiences.

As mentioned earlier, in developing these policies it was invaluable to have someone with prior experience of other online start-ups on the team. The most important contribution of the Online AVP in this area was the recommendation of assuming the principle that "a course is a course" regardless of the format in which it is delivered. This principle not only helped in making specific decisions, but more importantly contributed to our goal of leveraging online learning to enhance the academic experience for all Warner students rather than creating a separate division of our school doing online education. This approach to weaving online education into the academic fabric of our institution ensured that faculty were central to the effort – a vital element of success as noted in the research literature related to higher education organization and governance (Mintzberg, 1979).

## Securing Student and Faculty Buy-In

To our surprise, student buy-in did not present any problem. In fact, many students opted for the online format when this option was offered in required courses and chose online over face-to-face electives. The only complaints we received were from a few students who could not register for the face-to-face version of a required course after it reached capacity, and so had grudgingly registered for the online version of the same course. This confirmed the importance of not forcing students to take online courses.

In contrast, faculty buy-in was not straight-forward. Some Warner faculty are still skeptical about online courses and resist teaching online, although many more have significantly changed their attitudes about the value of online learning. The following factors emerged as the most determinant in this change, based on public testimonials and/or informal conversations:

- The high quality of the online courses offered as reflected in students' satisfaction and "word
  of mouth," and to some extent the reputation of the colleagues who volunteered to teach online
  courses.
- Realizing how some online courses increased access to students that were not served before.

- Engaging in "scaffolded experiences as teachers" (as defined at the end of this chapter).
- Not requiring current faculty to teach online (although new faculty were hired with the expectation that they would do some online teaching).

## The Value of Assuming an Entrepreneurial Approach

As a scholar of entrepreneurship herself, the Dean made explicit use of some entrepreneurial mindsets and practices that contributed to the success of the Warner Online Start-up, including:

- Giving weight to "missing the boat" risks in the decision to undertake an Online Initiative, while also explicitly identifying and managing "sinking the boat" risks.
- Using risk-management strategies such as: not making a large upfront investment (by starting small and gradually building the online course offerings); purposefully seeking the buy-in of key constituencies (for example, not forcing current faculty to teach online or students to take online courses).
- Refining the original idea for the Warner Online Start-up through a systematic process to "evaluate the opportunity" so as to come up with an initiative that would be "doable" (i.e., reducing the scope of the initial launch while making strategic decisions to make the most out of the first set of online courses)
- Not being limited by the fact that, at the time the initiative was considered, there was almost no online expertise within the school, and looking for non-traditional human resources (in this case, training advanced doctoral students as online instructors, and the joint appointment of the Online AVP) as well as hiring a new clinical faculty (Online Instructional Support) to support the initiative.
- Launching the initiative with the clear understanding that it would be monitored through a vital and integrated research effort and refined as needed (e.g., using what was learned from the first online courses to inform the ones to follow).

The entrepreneurial culture of Warner and its tradition of innovation also impacted how this initiative played out. For example, because of past experiences and practices, Warner faculty and students were used to engaging in innovations. A quicker decision-making process than in most academic environments was already a norm, as was the practice of piloting new "risky" initiatives while closely monitoring their implementations. Finally, because of the decentralized nature of the university, the Dean had more flexibility than most academic leaders to deploy funds and other resources to this initiative, while also being more responsible for its fiscal success or failure.

## SOLUTIONS AND RECOMMENDATIONS

We hope our case-study provided valuable insights about what it takes to successfully launch, grow and sustain quality online courses with modest yet strategic initial investments. Based on the lessons learned in this particular experience, in this closing section we summarize a set of recommendations for higher education leaders planning to start online offerings, organized along the six key questions articulated in the Introduction.

How can you secure a cadre of high quality online instructors for your school?

The answer to this question may vary by institution, depending on current faculty composition, flexibility in hiring adjunct instructors, access to quality adjunct online instructors, and internal capacity to provide high quality professional development. However, the following considerations may be helpful:

- Having individuals on the faculty with expertise in online teaching is a big advantage, but not a
  necessary condition, as there are other ways to secure a sufficient number of high quality online
  instructors to get started.
- To ensure the success of the first online courses and create good models, be ready to hire a small group of new faculty or adjuncts with expertise in online teaching.
- Immediately invest in developing your own online instructors "in house", whether full-time or adjunct faculty. Training needs to include pedagogical and technology components so as to fully leverage the affordances of online learning. In addition to quality professional development/workshops, invest in providing sufficient one-on-one online instructional support to faculty so they can overcome their "technology fears" and learn a different way of teaching.
- Doctoral students in the field (whether available within the institution or from other local universities) are a natural resource, as they have strong incentives to learn to teach online to help secure faculty jobs in a challenging market. Many also have the advantage of being "digital natives."
   Training will be critical, though, to ensure these novice teachers can design and deliver high quality online courses.
- Do not require existing faculty to teach online, although all faculty should be encouraged to do so and supported when they volunteer to try.
- Hire new faculty with the explicit expectation that they will teach online and will engage in the necessary training.

What other resources and infrastructure are needed to ensure a successful launch, and how can these be secured?

Surprisingly, the answer to this question is unlikely to involve technology, as long as the institution already has a robust LMS. Rather:

- Before launching an online start-up, secure a "champion" who can effectively lead the initiative
  and make it an institutional priority. Our experience suggests that an academic leader, rather than a
  technology expert, can be the best champion, provided that the academic leader is willing to "lead
  by example" by teaching online.
- Rely on an expert who has participated in previous online start-ups. Such an individual may be
  available within the institution but if not, hire a consultant to fulfill this role; it will be well worth
  the investment!
- Secure an online instruction expert "in house" to provide high quality professional development on online teaching as well as one-on-one support to faculty as faculty start designing and teaching online courses. This individual may hold a faculty or staff position; s/he could already be an employee or be hired. In either case, a significant percentage of his/her time should be devoted specifically to this support function, and s/he should teach some online courses to earn credibility as well as to provide "demonstration sites" where other faculty can see creative uses of online learning in action.

- As a complement to the online instruction expert position, also secure the services of a support staff member who has sufficient knowledge, time, and commitment to support students and faculty with the technology. This will help you avoid frustrations that may create resistance and possibly cause the initiative to fail! Clarify upfront the different and complementary services provided by the person in this position and the "online instruction expert," and foster good communication between these individuals, so they can work synergistically.
- If at all possible, use the same LMS to support online as well as traditional course offerings, as this not only reduces the need for a major upfront investment but will also require less effort for online faculty and students alike. Make sure, though, that the existing LMS has the capability to support online synchronous sessions, and if it doesn't, acquire the technology needed to do so.
- Develop upfront a common course template to be used by all online courses (with flexibility to add special features as called for by specific courses). This will help ensure facility of navigation for faculty and students as well as quality of course design.

How should you select the courses to be offered online?

There is really no "general" answer to this question, as the best solution will depend on the rationale for the online start-up, resources available, and institutional short-term and long-term targets. So we recommend that each institution begin to address this question by clarifying their goals and targets. Based on our experience, however, we can share the following tips:

- If your main goal is to increase access for students who cannot easily get to campus, offering "isolated" online courses will likely not be enough. Rather, focus on creating sets of courses that will enable you to offer entire programs requiring low (or no) campus presence.
- If your main goal is to increase your current students' convenience and satisfaction, identify which courses are taken by students across programs (so as to maximize opportunities for all students to take some online courses even if only a few online courses can be offered at first). Also explore different models of hybrid-online courses to meet diverse learning needs and preferences.
- If the main goal is to enhance your students' learning opportunities through online learning, do not limit your focus to creating new online offerings, but also work with faculty to include appropriate online learning experiences in their "traditional" courses.
- To achieve a real transformation in your school in a reasonable period of time while "starting small", start with offering a "critical mass" of courses strategically selected to reach the maximum number of students and programs.

How can you secure student and faculty buy-in?

Our experience confirmed that gaining student and faculty buy-in is indeed essential to the success of an online start-up. While recognizing the need for institution-specific strategies, the following tips may apply across the board:

• Ensure that the first online courses offered are of very high quality and result in high student satisfaction – as these first courses will set expectations for future ones and can be used as "virtual demonstration sites" for interested faculty and students.

- Purposefully capitalize on the success of your first online courses through events, communications, and demonstrations to provide opportunities for as many faculty and students as possible to hear positive testimonials and "see" what quality online learning may look like.
- Do not require participation in online courses from either students or faculty, with the only exception of programs advertised as fully or partially online (where students enroll expecting an online learning experience and faculty will have been appointed or hired with the expectation of teaching online).
- Provide faculty and students with sufficient one-on-one support to help them overcome any technology fear and reduce the inevitable frustrations that come with learning new systems.
- To overcome biases and fears about online teaching, engage faculty in small "scaffolded experiences as online teachers"; for example, by partnering with the online instructional support person or experienced online instructors to co-design and co-deliver some online learning activities within their current face-to-face courses.
- Provide incentives for faculty to design new online courses, recognizing that it will take additional time and thus warrant some extra compensation.

What policies, practices and expectations need to be developed for long-term success?

Academic leaders should expect that introducing online courses for the first time will raise issues and prompt decisions about policies, practices, and expectations. Be prepared to proactively address these issues. Decisions that require changes will need to take into consideration the goals and organizational structure/culture of each institution. Here we will simply articulate the key questions academic leaders should be prepared to address:

- How are online courses going to count toward program completion?
- Who makes decisions about which courses are going to be offered online?
- On what grounds are those decisions going to be made?
- Will faculty be required to teach online?
- How will teaching online be compensated?
- Who "owns" the materials created for an online course?
- What kinds of support can online instructors count on?
- How can we help students get started with online courses?

Our experience suggests that assuming the principle that "a course is a course" can be a great starting point to answer these questions. This is especially important if the institution wants to capitalize on online learning as a way to enhance instruction overall, rather than setting up online education as a separate "side business." This approach also avoids the challenge of having differential academic policies for online and traditional courses, which would require first the ability to explicitly determine what counts as an online course and what does not (and this is becoming increasingly difficult given the growing reliance of traditional face-to-face courses on LMSs).

## CONCLUSION

To complement the recommendations articulated in the previous section, we conclude the chapter with a few additional suggestions informed by the entrepreneurial approach we assumed:

- Treat the decision to start online offerings as a major instructional innovation with the potential to transform teaching and learning within the institution not as something to be done "on the side."
- Make the decision to embark in such an initiative carefully, taking into consideration "missing
  the boat" as well as "sinking the boat" risks and your institution capacity and readiness for such a
  major initiative. In particular, make sure you have the right project leader for this initiative.
- Do not let a lack of experienced online instructors currently on your faculty deter you; rather, develop a multi-year plan to develop a cadre of high quality "in house" online instructors while securing qualified "adjunct" online instructors in the interim.
- Be proactive in securing faculty and student buy-in, and expect this to involve some purposeful internal marketing and communications as well as careful policy decisions.

In sum, we hope that the successful experience of the Warner School online start-up, as reconstructed and analyzed in this chapter, can serve as an inspiration to other schools as well as provide concrete suggestions to guide decisions and practices. Despite lack of experience and limited funding, our school was able to successfully embrace online learning to the benefit of our current and future students – so we encourage other institutions to take on this challenge.

## REFERENCES

Allen, E., & Seaman, J. (2015). *Grade level –tracking online education in the United States*. Babson Research Group. Retrieved from http://onlinelearningconsortium.org/read/survey-reports-2014/

Anderson, G., Herr, K., & Nihlen, A. S. (2007). *Studying your own school: An educator's guide to practitioner action research* (2nd ed.). Thousand Oaks, CA: Corwin Press. doi:10.4135/9781483329574

Baron, R., & Shane, S. (2005). *Entrepreneurship: A process perspective*. Mason, OH: Thomson South-Western.

Bernard. (2004). How does distance education compare to classroom instruction? A Meta-Analysis of the empirical literature. Retrieved from http://doe.concordia.ca/cslp/Downloads/PDF/CanKnow/Bernard%20(2004)%20Full%20Text.pdf

Borasi, R., & Fonzi, J. (2002). *Professional Development that Supports School Mathematics Reform. NSF Foundations Monograph Series*. Washington, DC: National Science Foundation.

Brown, R., & Cornwall, J. (2000). The entrepreneurial educator. Lanham, MD: Scarecrow Press.

Busenitz, L. W. (1999). Entrepreneurial risk and strategic decision making: It's a matter of perspective. *The Journal of Applied Behavioral Science*, *35*(3), 325–340. doi:10.1177/0021886399353005

Bygrave, W., & Zacharakis, A. (2004). *The Portable MBA in Entrepreneurship* (3rd ed.). Mississauga, Ontario: John Wiley & Sons.

Capps, D. K., & Crawford, B. A. (2013). Inquiry-based professional development: What does it take to support teachers in learning about inquiry and nature of science? *International Journal of Science Education*, 35(12), 1947–1978. doi:10.1080/09500693.2012.760209

Cohen, M., & March, J. (1986). Leadership in an organized anarchy. In M. C. Brown (Ed.), *Organization & governance in higher education* (5th ed.; pp. 16–35). Boston, MA: Pearson Custom Publishing.

Glanz, J. (2003). *Action research: An educational leader's guide to school improvement*. Norwood, MA: Christopher-Gordon Publishers, Inc.

Kemmis, S., & McTaggart, R. (1988). The action research planner (3rd ed.). Deakin University Press.

Luehmann, A. L. (2007). Identity development as a lens to science teacher preparation. *Science Education*, 91(5), 822–839. doi:10.1002/sce.20209

Means, B., Toyama, Y., Murphy, R., Bakia, M., Jones, K., & US Department of Education. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning*. Retrieved from http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

Mintzberg, H. (1979). The professional bureaucracy. In M. C. Brown (Ed.), *Organization & governance in higher education* (5th ed.; pp. 50–70). Boston, MA: Pearson Custom Publishing.

Palich, L., & Bagby, R. (1995). Using cognitive theory to explain entrepreneurial risk-taking: Challenging conventional wisdom. *Journal of Business Venturing*, 10(6), 425–438. doi:10.1016/0883-9026(95)00082-J

Penuel, W. R., Fishman, B. J., Cheng, B. H., & Sabelli, N. (2011). Organizing research and development at the intersection of learning, implementation, and design. *Educational Researcher*, 40(7), 331–337. doi:10.3102/0013189X11421826

Quality Matters. (2014). *Standards from the Quality Matters Higher Education Rubric* (5th ed.). Retrieved from https://www.qualitymatters.org/node/2305/download/QM%20Standards%20with%20Point%20 Values%20Fifth%20Edition.pdf

Schumpeter, J. A. (1934). The theory of economic development. Cambridge, MA: Harvard University Press.

Stevenson, H., & Jarillo, C. (1990). A paradigm of entrepreneurship: Entrepreneurial management. *Strategic Management Journal*, 11, 17–27.

Weick, K. (1976). Educational organizations as loosely coupled systems. In M. C. Brown (Ed.), *Organization & governance in higher education* (5th ed.; pp. 36–49). Boston, MA: Pearson Custom Publishing.

Yin, R. K. (2003). Case Study Research: Design and Methods (3rd ed.). Thousand Oaks, CA: Sage Publications.

## **KEY TERMS AND DEFINITIONS**

**Asynchronous Online Activities:** Online learning experiences that do not require students to participate online together at any specific time.

**Experiences as Learners:** Learning experiences that employ an innovative teaching approach and where novice teachers participate as genuine learners with the goal of becoming aware of the affordances and limitations of the proposed approach.

**Fully-Online Course:** A course that can be completed by students without ever having to come to campus.

**Hybrid-Online Course:** A course that is partially delivered online but requires some face-to-face meetings (usually, 30%-80% of the course will be delivered online).

**Learning Management System (LSM):** Web-based application that facilitates interaction between and among students and instructors, enables the sharing of course learning materials, supports the submission of assignments and learning assessments, and enables access to student grades. An LMS can be use to complement a traditional face to face class or as the foundational platform for a hybrid online or complete online course.

**Scaffolded Experiences as Teachers:** Learning experiences that employ an innovative teaching approach, designed and facilitated by a novice teacher with the support and supervision of an expert.

**Synchronous Sessions:** Specified times when students and instructors "meet" online, usually supported by software (such as Blackboard Collaborate or Adobe Connect) that allows the instructor and students to hold virtual meetings with audio and visuals.