From interviews with managers of FIPSE-funded online learning projects, these authors derived and analyzed ten basic principles for planning a sustainable online program.

by Katrina A. Meyer, Janis Bruwelheide, and Russell Poulin

Introduction

Online education has exploded over the past decade, growing approximately 20 percent per year (Allen and Seaman 2004, 2006). Online programs or courses are offered in a full range of disciplines, from accounting to zoology (see www.petersons.com/dlearn). However, funding for higher education throughout the United States is likely to be constrained or even decline as a result of economic problems. In fact, by 2013, all 50 states are expected to face budget deficits (Boyd 2002).

In this environment of increased demand for online programs and decreased state funding for institutions, it is fair to ask whether there are rules or principles that improve the likelihood that online programs will be financially sustainable. If such principles exist, planners would have a tool to ensure their institutions identify and offer online courses or programs that contribute to the financial bottom line. This article reviews the literature on planning for distance or online education, describes the methodology for developing principles of financial sustainability, and discusses those principles in light of what planners should know

should know. The Literature on Planning Online Programs

While there are many good guides to planning in higher education (Bryson 2004; Dolence, Rowley, and Lujan 1997; Rowley, Lujan, and Dolence 1998; Rowley and Sherman

Online education

Katrina A. Meyer is currently an associate professor of higher and adult education at The University of Memphis specializing in online learning and higher education. She is the author of Cost-Efficiencies in Online Learning, a 2006 publication of the ASHE Higher Education Report Series. For more than three years, she was director of distance learning and technology for the University and Community College System of Nevada. Prior to this, she served for over eight years as associate director of academic affairs for the Higher Education Coordinating Board in the state of Washington and was responsible for technology planning and policy related to online learning.

Author biographies continued on page 55



2001), they contain no detailed discussion of how to best plan for online learning (although online learning is often mentioned as part of higher education's potential future). Perhaps the best book devoted to planning for and managing online learning is by Bates (1999), since his advice was based on his years of experience in developing and offering many online programs. Bates' work included examples of budget scenarios for covering the necessary costs of online education, as well as details regarding marketing, pricing, and the trade-off among various costs.

Yet the number of books on planning and managing online learning is growing. Melton (2002) followed the "how to" genre of guidebooks by focusing on practical advice. Santosh (2003) brought together the expertise of experienced leaders and practitioners and included chapters on policy and planning, management, and quality assurance. Both Melton (2002) and Santosh (2003) addressed how to make online learning cost-effective by controlling costs and ensuring a quality learning experience for the student. More recently, Johnstone and WCET Associates (2007) focused primarily on the planning required to achieve various efficiencies through the use of online services and courses. Each of these sources make the work of developing, designing, and offering online courses and programs less opaque and more accessible for individuals or institutions new to online learning.

Planning to expand online courses remains hit-or-miss.

Colleges and universities continue to increase their online offerings in an effort to tap into new student markets, increase student enrollments, and generate revenue. Planning to expand online courses or programs remains a hit-or-miss effort, depending on the preferences of the institution and the skills of those involved. Yet, solid thinking and planning for online learning is needed now more than ever. What is specifically needed is a guide based on the expertise of experienced managers of online education designed to help institutions plan for online courses and programs that will be financially and educationally successful. The study presented in this article is an attempt to develop that guide in the form of principles that will contribute to the financial sustainability of online efforts.

Method

In the summer of 2006, a Fund for the Improvement of Postsecondary Education (FIPSE) program director expressed interest in identifying the rules or principles for achieving the financial sustainability of online programs. A guick review of the literature revealed no publications exactly in this form (i.e., guidelines or principles). Therefore, one of this article's coauthors, a director of a FIPSE project that involved developing and offering online courses to prepare library media specialists for K-12 schools, approached the other coauthors about developing such a set of principles. The three coauthors (referred to as "the team") designed a process to develop and ratify principles with the proviso that the principles would, if followed, improve a program's likelihood of being financially sustainable. The team had experience in developing and offering online programs and in creating costing methods for online learning, as well as research expertise in the cost-efficiencies of online education (Mever 2006).

The team first needed to develop several definitions to guide the project. A *principle* is "a comprehensive and fundamental law, doctrine, or assumption" or "rule or code of conduct" (Merriam-Webster Online, n.d.). For this project, "principles" were defined as any rules of policy or practice that have a high likelihood of contributing to the financial sustainability of an online educational program.

Sustainability is "a method of...using a resource so that the resource is not depleted or permanently damaged" (Merriam-Webster Online, n.d.). FIPSE uses this term and defines sustainability as "the likelihood that a project will be continued and institutionalized beyond federal funding" (Fund for the Improvement of Postsecondary Education 2006, p. 18). For this project, "sustainability" was defined as those policies and practices that improve the likelihood that an online educational program will be financially viable.

Program referred to any course or set of courses, or module or set of modules, that are approved for study.

Prior to beginning the project, the team decided to follow two guidelines in shaping the final product or set of principles. First, the team wanted to compile a comprehensive list of questions—based on the principles—for administrators to ask before taking a course or program online. While a program or institution might not have answers to all of these questions, it would be wise to know as much as possible, since the answers would help

administrators make more informed decisions and increase the likelihood that the program would be financially sustainable.

The second guideline focused the principles on fiscal matters and issues that directly affect financial sustainability. Quality issues were not ignored, since quality certainly has a role in affecting a program's ability to enroll and retain students. But fiscal matters took precedence, and quality matters played a supporting role.

With these definitions and guidelines in hand, the team brainstormed an early set of principles that it felt would lead to financial sustainability; these preliminary principles were then submitted to an external consultant with expertise in online programs. After this round of reviews and revisions, a draft document on "principles of sustainability" was made available for wider review.

After gaining Institutional Review Board (IRB) approval to undertake this research, the team reviewed the FIPSE grant database (www.fipse.aed.org/subject.cfm?program=1) to identify FIPSE project directors with projects that involved developing online modules, courses, and/or programs and whose grants were in the latter stages of completion. The project directors of nine FIPSE projects were chosen because of their experience with going online. These projects involved different types of higher education institutions (medical schools, research universities, regional or comprehensive universities, community colleges), which the team thought might lead to a variety of project experiences. Because the project directors were busy professionals, the team decided that preparing an initial draft of the principles would allow the interviewees to respond to something concrete and therefore require less of their time.

The team contacted the nine project directors by e-mail to explain the project and its aims, present the draft principles, and request a follow-up telephone interview to gather their critiques, additions, or changes to the principles. The team eventually interviewed seven project directors; scheduling problems prevented the two additional directors from being involved. One member of the team conducted all of the interviews, which lasted approximately one hour each, and proposed wording changes or additions to the principles based on the interviewees' suggestions. Initially, the team expected that this round of comments on the draft principles might produce conflicts that would need to be adjudicated, but this did not occur.

The team then prepared another draft of the principles that included the suggestions, additions, and clarifications

arising from the interviews. Both the team and the external consultant reviewed this draft, which resulted in additional word modifications, clarifications, and additions to accommodate special cases. The resulting final principles are described next.

Results

While the number of interviews was relatively small, there is reason to be confident that the interviewees' combined expertise resulted in valid principles of sustainability. Of the seven project directors interviewed, two were at medical schools, three at research institutions, and two at regional or comprehensive institutions. This grounds the principles in various institutional types. Some projects involved operating or offering programming using state funding, others used grant funding, and still others attempted to license their products to create a revenue stream. As a result, the principles do not assume any one funding method (although all the projects reviewed had received some funding from FIPSE). Some projects were local, some were regional, and some were national or conceivably international. Some projects were for undergraduate students, others for graduate students, and still others for adults seeking professional training. Some projects focused on developing online modules, others developed courses, and some even developed a full program (a certificate or degree program). Some projects were housed in an academic department, others in a continuing education or distance education department, and still others in a central office. And, projects were spread across science, allied health, education, and professional programs. These variations in program type generate confidence that the principles are more broadly grounded than they would be if based only on the experiences of individuals in programs similar in scope or design. In other words, this diversity of projects, with their varied needs, problems, and solutions, contributed to a stronger final set of principles. The final principles are listed here:

- Principle #1: Know your market.
- Principle #2: Know your costs.
- Principle #3: Determine a price.
- Principle #4: Negotiate with the institution.
- Principle #5: Observe good financial management rules.
- Principle #6: Develop and implement marketing.
- Principle #7: Have a Web identity.



- Principle #8: Identify and develop good faculty, including adjunct faculty.
- Principle #9: Improve retention.
- Principle #10: Improve courses and program.

The next section describes the kinds of questions and issues explored as part of each principle in the context of Bates' (1999) guide to online programs. (The entire list of questions for each principle is presented as a checklist in the sidebar "Principles of Sustainability.") To make the following discussion more relevant to an individual seeking guidance, we have addressed our advice to the "you" who plans online courses or programs.

Principle #1: Know Your Market

Why is this the first principle? Because only through a detailed and deep understanding of the market can a program achieve financial sustainability. Several elements comprise the "market," including the job market for graduates, the interests of potential students, the institutions or programs that will compete with the proposed program, and the secondary and tertiary markets within the institution (i.e., how the proposed online courses may be used by other programs or departments). All of these combine to form the proposed program's "competitive advantage," the preference for the program as expressed by students, accreditors, and employers.

For example, it is essential to understand the details of the job market, including the jobs your future graduates can fill, whether these jobs are growing, what the jobs require in terms of specific skills, and what standards have been established by certifying or accrediting associations for those jobs or the programs that prepare persons for such jobs. In terms of understanding the student market, you need to know about the target population: how many potential students there are and what economic influences affect their interest in your program (for example, is there job growth? is there a new employer in town?). It is advisable to conduct regular surveys of student interest in your programs, but estimates based on such surveys must recognize that only a small percentage of students who express interest are actually ready to enroll.

You need demographic information about potential students, such as where they are located, what occupation(s) they currently hold, whether they are traditional-aged or adults, whether they need entry-level preparation or professional development, and what price they can afford

to pay for your program. You also need to know about students' skills, such as whether they have the educational preparation and/or specific skills needed for your program; whether they have computer skills and the necessary equipment; what their experience and expectations for online learning may be; and whether they have Internet service provider (ISP) access, digital subscriber line (DSL) capacity, and/or other necessary technologies. If they do not have some of the necessary skills, you need to either redesign the program to meet students where they are or provide the appropriate training to bring their skills up to the level needed.

You also need to know about your competitors, which may be local, regional, or international institutions. You need to know how many there are, what delivery methods they use, whether they require on-campus time, what they charge, how long their programs are, and who is in their market. You need to know about their programs: whether they have the same focus or requirements as yours and their degree level, fiscal success, number of enrollments, and accreditation status. In addition, you need to know the markets within your own institution so you can determine whether your program competes with an on-campus program (which may require some internal negotiation) and whether your courses may be adopted by other programs within your institution. You may also want to explore licensing your course or program to other schools, companies, or associations, which should be negotiated within your institution as well as with the licensor.

You need to ask yourself some hard questions.

All of this information helps a program to understand its "competitive advantage": where it has advantages over its competitors and is therefore more likely to achieve financial success. This includes understanding whether and the extent to which students are loyal to your institution or program; whether you have the preferred accreditation; and whether your advantage is based on price, focus, employer preference, the part-time or full-time nature of study, or delivery type (e.g., flexible, cohort, online, blended). You need to ask yourself some hard questions: whether, in a crowded market, there is room for your program; whether you can adjust your program to improve its market competitiveness; and what level of enrollments you can



reasonably expect. However, even once you understand your competitive advantage, you must still continue to monitor the marketplace and reassess your situation; new competitors entering the market can affect your advantage with a better price or different delivery method. Creating an advisory board to help sift through these issues is one way to manage this process. (The board can also help with keeping the curriculum fresh and recruiting new students.)

Bates (1999) identified this step as "scanning the environment," which includes all of the elements in principle #1 and is broader than simply understanding an institution's market. This first principle is an attempt to think strategically about what the proposed online program is, who it might serve, and whether it has an important role to play within the institution. It identifies stakeholders—students, employers, institutional partners—and realistically assesses the proposed online effort in terms of what it can offer better than other online providers. In other words, it is an essential first step to planning for financial sustainability.

Principle #2: Know Your Costs

Why is knowing your costs so important? This is the only way you can set a price that covers your costs and generates a surplus. Therefore, identifying and estimating the costs involved in developing and offering online courses and programs is an essential second step. You can use your institution's preferred method; the cost categories found in the Technology Costing Methodology Handbook (Jones 2004); or any other method as long as you end up with a detailed understanding of the costs of development, delivery, and administration (Rumble 2001). While development costs are often higher for online courses, these costs can be justified if the process of development includes an effort to improve the cost-efficiencies of the final product. This includes designing the course or program to take advantage of several techniques for increasing cost-efficiencies, including greater scalability (i.e., large-enrollment classes or repetitions of courses over time) and substituting (a) lower-cost for higher-cost labor, (b) technology for higher-cost labor, or (c) technology for capital space (see Meyer 2006 for several examples).

To identify costs, it is important to know what rules or policies will govern your program. Will you be expected to operate as a regular departmental program or in a continuing education or extended program unit? Each of these locations may have different costs and expectations for revenue. For

example, what services does the institution expect the online offering to pay for (also known as "chargebacks") and what costs will the institution bear? Some institutional services may be free while others may cost the program, so it is important to know which is which from the beginning (and to monitor these agreements, because practices or policies do change). Find out whether the program has to pay a general overhead to the hosting institution. In addition, be sure to monitor your institution's policies on copyright, intellectual property, and licensing, since these may affect your costs (as in copyright fees paid to others) or revenues (if a licensing agreement is possible).

If the program involves partners, which partner will cover which costs and which services can be donated? And if these costs must be recouped, be sure they are included in an estimate of the course or program's price (discussed under principle #3). Also, take the time to do some research on campus to identify those hidden costs that often surprise the novice administrator, such as fees that must be paid for such services as information technology (IT) support. Knowing the costs of the online effort is essential to calculating both the number of students needed to cover those costs and to calculating a price to do the same.

If the institution is not concerned about the cost of online education and therefore covering costs is not important, then this principle is less of a concern. But most public higher education institutions are not so lucky—they face constraints on budgets that make a focus on costs a high priority. Certainly, Bates (1999) stressed the importance of calculating the cost of online programs and included detailed lists of costs to incorporate into budgets, different ways of analyzing costs (e.g., Activity Based Costing), and methods for determining if the development cost can be recouped over time. By knowing the costs of an online program, a manager has a much greater likelihood of knowing the level of resources needed to make financial sustainability a reality.

Principle #3: Determine a Price

Why is determining a price so important? It is the key to both covering the costs of your online program and generating the surplus you need to pay for hidden costs or to finance improvements in your program over time. In this case, price is the sum of tuition and fees. For some online providers, the price of the offering is dictated by institutional policies. You may want to seek a waiver from these policies;

it does not hurt to ask. Often there is some leeway, so setting a price becomes an important step, especially when costs must be covered. The price must be high enough to cover costs but at the right level to keep enrollment steady. This involves assessing what students will do, their ability to pay, and what other institutions are doing.

If you must follow institutional or system policies on tuition and fees, it is important to determine whether state funding will be available to support your program or whether the institution will support your program in other ways. Also, you need to determine if there are special fees (such as technology fees and distance education fees) your students must pay; this helps you evaluate whether your target students can pay the real total price. You might also explore whether some fees can be waived for your students; it makes little sense for students at a distance from the campus to pay fees that support resources available only to students on campus.

You need to assess how the price affects potential student behavior. Have you priced your program above students' ability or willingness to pay? Are there financial aid or grant opportunities you can help students access to offset these costs? If you choose to keep the price low and hope to make up the difference by enrolling more students, are there enough students in the market to keep enrollments at that level? Have you priced the program in such a way as to create competition with another institutional program, which might cause you political problems? You also need to investigate the price set by other, competing programs or, if there is no competition, the price you can reasonably justify. Having asked these questions, estimate the number of enrollments you need to cover costs and the number of years of enrollments you need to reach the financial break-even point. Given the high cost of developing an online program, it may take several years to pay for.

Setting your price to generate a surplus is key. However, before you start spending that surplus, you need to find out where any excess funds your program generates will go: the institution's general fund, a dean's account, or somewhere else? Is there a policy in place to govern these types of situations, so your surplus can be returned in whole or in part to you? If not, negotiate an arrangement where these funds can come back to your program so you can cover those unexpected expenses that invariably arise, including retooling the course, improving faculty skills, and perhaps even developing new online programs.

Bates (1999, p. 144) wrote, "Perhaps the most important decision that needs to be made when choosing technologies

is how to calculate the price of a course so that costs are covered (or exceeded) by revenues or income." This principle focuses on managing available resources in order to cover costs, ensuring the online offering enrolls the right number of students over a set period of time, and generating a necessary surplus to cover unexpected or hidden costs, upgrade courses and materials, add new technologies, and address needed improvements. By pricing wisely, it is more likely that the online program will achieve financial sustainability.

Principle #4: Negotiate with the Institution

Why is this principle so important? It is critical to identify and understand the departmental, college, institutional, or system policies that govern programs; these policies need to be followed or exceptions negotiated. The experiences of the interviewees stressed the importance of acting as though all issues can and ought to be negotiated. However, they also stressed that these negotiations should be captured in agreements confirmed by writing or e-mail. (This should not be taken to imply that people are untrustworthy, but time passes and people forget agreements.) Even if a policy exists, exceptions can often be negotiated to the benefit of all involved: for example, an institution gets a new online program and the program receives a portion of tuition dollars generated. Among the issues to be negotiated are monies returned to the originating faculty or department (e.g., tuition, fees, licensing revenue, indirect costs if your program receives grant funding); fees paid and services provided; approvals needed from whom and when; and how partnerships between departments or institutions will be conducted. When you negotiate, be sure to be consistent, find the right person to negotiate with, and realize that you may need to negotiate at several institutional levels. If your institution has not implemented online student services (e.g., course registration), you may need to negotiate how your students will be served by several offices.

Last but not least, identify any processes, time lines, and content required for the approval of your course or program by your department, college, institution, system, or state. Remember that every review may have a different audience and may require different information at a different level of detail. This is a good time to identify your institutional advocates so that if one advocate leaves, others can continue helping you. In fact, having a "succession plan" may be wise, so identify individuals who can take over your

job if you are incapacitated for a short time or decide to take another position.

This principle is focused on creating necessary arrangements and forging relationships to make an online course or program a reality and on understanding that online activities are embedded in organizations where the rules were forged in a pre-Internet world. It takes time and fortitude to forge new rules, but most institutions appear willing to negotiate exceptions so that innovations can flourish. Bates (1999) asserted that many universities operate as "Fordist" hierarchies, but new technologies require a more flexible organization, one where new rules can be discussed or exceptions to old rules negotiated. By negotiating, a manager can create conditions that improve the likelihood that an online program is financially sustainable.

Principle #5: Observe Good Financial Management Rules

Why is this principle important? Because now you are a money manager, so you need to identify and follow the financial rules in place at your institution. This principle focuses on managing finances within the institution by identifying the rules for budgeting, paying, and accounting for funds. For the academic not used to operating a budget, this is a serious transition in which new rules must be learned, especially as they affect students, employees, and adjunct faculty. These rules include procedures for getting people paid or reimbursed, as well as the process for billing students for the program or finding out if financial aid covers their obligations. This also involves regularly tracking a budget; understanding whether funds will roll over or must be spent by a certain date; and learning how to make contracts, hire instructors, and forge relationships with various offices across campus where your questions can be answered. You may need to create contracts for any work performed by adjunct faculty or a partner institution, and you may need to understand some parts of contract law to do this. The interviewees advised having your own budget rather than having funds come from or to another account used by others. You may even need to create a "shadow" budget in a Microsoft Excel spreadsheet, and you must make sure you understand all of the charges against it and the fiscal implications of decisions made by you or others.

Bates (1999), whose experience was gained in a revenue-producing segment of a university, is naturally a proponent of keeping careful financial records and advocates

for activity-based financial systems because they break down costs by activity performed rather than by using large categories. For someone for whom budget responsibility is new, this principle recognizes that there is much to learn and that learning these skills is strategic to managing resources as well as ensuring the program's financial sustainability.

Principle #6: Develop and Implement Marketing

Why is this principle so important? You need a reliable way to locate and communicate with potential students and, in particular, the right students (the ones who will succeed and stay enrolled). So, marketing is essential. This includes having a clear idea of where such students are located, their occupations, the professional groups or certifying agencies with which they may be affiliated, and their likely employers; in other words, you need to be able to find them. Marketing can include postings about your program in organizational and professional association newsletters, alumni publications, newspapers, Web sites, Listservs, and even on the radio. You need to know which of these may charge you a fee to advertise and which are free. Try to locate marketing expertise on your campus, including individuals who can help you design the right materials that will appeal to your target population. You also need your marketing to help students determine whether online learning will work for them and if your course or program fits their needs.

Bates (1999) spends considerable effort on the need to develop both appropriate marketing as well as the program's "brand image." Finding the right students is critical to covering costs. Without enough students enrolling—and staying enrolled—financial sustainability cannot be achieved.

Principle #7: Have a Web Identity

Why is having a "Web identity" so important? Your program needs a "face": a way for the right students to find, evaluate, and choose your program. Not surprisingly, the directors of online courses and programs are well-versed in—and committed to—advertising their programs on the Web, using the Web to find the right students for the program, and providing Web-based services for students who enroll in the program. First, you need to find out and follow any institutional guidelines for Web design. Then you can design the program's face or Web identity to Google well; to provide information about the program (e.g., what

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jobs it prepares graduates for, what it requires of the student, when it is offered, who it is for, how it can be used, its delivery method[s]); and to perhaps share stories about program graduates and their professional successes.

The program Web site needs to link to application forms and financial aid applications; course registration; and information about costs, deadlines, resources, and important policies. Helpful options include a way for students to ask questions of a faculty person (who needs to respond promptly and maintain contact) and an RSS function to notify students of updated program information. The site can also be used to conduct various surveys so you can find out whether you are reaching the right students, whether they are interested, and whether your understanding of the market is accurate. In addition, the site can be used to make students' responsibilities clear. While you may not personally have these Web design skills, you should probably learn them or hire someone who has them; this way, you or your Web designer can make the constant updates needed to keep the site up-to-date.

While Bates (1999) does not refer specifically to developing a Web site that presents all of the information about the program that students may need, it may be implied in his emphasis on branding and providing quality student services. Developing a Web identity addresses a major concern related to achieving financial sustainability: finding the right students and getting them enrolled. A Web site can also convey an attitude toward students—a willingness to answer questions promptly, a thoroughness of useful information—that sends an important message about the program and its faculty and staff. In any case, without students, financial sustainability will be unattainable.

Principle #8: Identify and Develop Good Faculty, Including Adjunct Faculty

Why is this principle important? Good faculty are critical to an online program's success, and adjunct faculty may be the solution to enrollment growth. This argues for finding the right faculty—individuals who are interested, flexible, willing to learn, and able to troubleshoot the inevitable problems. When dealing with faculty, various workload and promotion policies need to be understood and either accommodated or revised. Both faculty and adjuncts need ample training with new pedagogies, technology applications (such as learning objects), instructional design principles, and the course management system. Faculty need to know the institutional policies on grading or dropping

courses and the institutional resources available to students who may need them. Faculty also need to know what is expected of them and how to manage online interaction, assess student learning, and resolve problems. In addition, they need to know about student expectations, how the course fits into the program, and the program's philosophy. And, they need to pursue improvements, term by term, as they learn what works and discover how to make the next class better than the last one; these discoveries can feed into a course and program assessment plan that documents student learning, improves student retention and learning each term, and increases student graduation rates, which improves the program's financial sustainability. Once faculty have a good understanding of these issues, they should be co-designing courses and learning how to increase cost-efficiencies while at the same time improving student learning.

Adjunct faculty may be found through professional associations, employers, or program graduates; wherever they are found, they will still need the appropriate educational preparation for teaching at your institution. New teachers can learn by participating in an existing course, which can also help them determine if online teaching will be a good fit.

Bates (1999) focused on developing and training faculty so that their online teaching fully supports student learning; he also encouraged online faculty to experiment with new technologies. Focusing on faculty is an important strategic issue in online education: faculty are critical to making the experience both successful educationally and sustainable financially through the continued enrollment of students.

Principle #9: Improve Retention

Why is this principle so important? Recruiting new students to replace students who have dropped out of a program costs more than retaining the students you already have. Earlier principles stressed the importance of finding the "right" students. Students who drop out or fail must be continuously replaced by new students; if you have a multiyear program, lost students represent a financial hole that you cannot fill. Therefore, it is important to continually improve admissions screening for the program, orient new students to the program and to online learning, build community among classmates and faculty, design high-quality courses, contact missing students or students who have not logged into the course for a week or so, and



provide regular feedback to students about their progress in the course or program. A personal touch, something as simple as an e-mail from a faculty person or the program director, may be just what is needed for a student to stick with the class.

An institution with a mission to provide quality education while improving retention and/or graduation rates will find this principle particularly important. And, with improved retention comes the greater likelihood of financial sustainability.

Principle #10: Improve Courses and Program

Why is this principle important? The developers of the principles of sustainability recognized that the quality of a program affects not only recruitment and retention, but also the bottom line. By assessing student learning; using rubrics or other tools to evaluate your program (we recommend the Quality Matters rubric found at www.qualitymatters.org/Rubric.htm); listening to student feedback; monitoring accreditation changes; tapping the expertise of an instructional designer to critique your courses; and continuously updating and improving courses, curricula, pedagogies, and online resources, the faculty and the program demonstrate their commitment to improving the student educational experience. Added to these activities should be a regular scan of the market so you can identify any innovations implemented by other programs that you should consider adopting.

This principle is directly connected to the institution's values regarding student learning and success and continuous improvement of the curriculum and teaching; as such, it requires taking specific strategic actions. Bates (1999) stressed the importance of improving the quality of learning materials and the educational experience and of conducting research so that faculty can improve their online teaching. Quality is clearly relevant to finances, and a quality online course or program has a good chance—all other principles having been addressed—of being financially sustainable.

Conclusion

The 10 principles for achieving the financial sustainability of online ventures were developed and revised by asking experienced online program directors. There is close alignment between the principles and the work of Bates (1999), who focused exclusively on designing and managing financially sustainable online programs that could cover the costs of their development and management while generating a surplus to pay for unforeseen costs or later new program development. In the final analysis, one can be assured that the online program directors interviewed for this research have developed reliable expertise.

Why is basing this research on the experience of online program directors important? First, we have a better sense that these principles are sound. Second, because the principles were based on a diverse set of institutions, programs, and funding models, perhaps they can be characterized for now as universally applicable. Third, the principles confirm and expand upon the advice of a recognized expert (Bates 1999) in the field. These reasons provide us with some confidence that the 10 principles can guide the new administrator in his or her planning for a new online program. However, we also recognize that because the online market will continue to evolve, it is essential to periodically test these principles with other experienced program directors to determine if changing conditions in the market or higher education should dictate changes to the principles, the questions and issues raised, and/or their priority or relative importance.

The more you know, the better the outcome will likely be.

If there is one final conclusion to be drawn from these interviews and analyses, it is this: planning is necessary to ensure that online programs achieve the financial sustainability their students, administrators, and institutions need. The 10 principles comprise many questions, and it is fair to ask if the planner needs to answer them all. Perhaps not, but the more answers you have, the more likely you will identify problems before they occur and be able to shape a satisfactory response. In other words, using these principles as a planning tool will take much time and effort, but the more you know, the better the outcome will likely be. Certainly, it takes effort to align the needs of the marketplace and the institution so that students benefit and the program thrives, to plug the holes that drain financial resources, and to ensure a steady revenue stream that covers costs and builds a reserve. You can be assured that financial sustainability will not happen by chance or good luck; it will happen only by planning. 38

April-June من المنتشارات المنتشارات

Sidebar: Principles of Sustainability

1. Know your market.

- A. Why? It is essential to know your market in order for a program to be sustained financially.
- B. How to do this:
 - 1. Know the job market.
 - a. Know what jobs your graduates can fill.
 - b. Know if these jobs are growing.
 - c. Know what these jobs require in terms of skills.
 - d. Know what standards are used by certifying or accrediting associations in the field.
 - 2. Know the student market.
 - a. Know your target population.
 - b. Know how many potential students there may be.
 - c. Know the economic influences that affect students' interest in the program.
 - d. Know that a survey of student interest does not translate into enrollments. Only a small percentage of students interested in the program may be ready to enroll.
 - e. Know about your potential students:
 - i. Demographic characteristics:
 - 1. Are they in a single geographic location or in many locations across the nation or world?
 - 2. Are they in a particular occupation?
 - 3. Are they traditional-aged or adults?
 - 4. Do they need entry-level preparation or professional certification?
 - 5. Can they afford the price of the program?
 - ii. Student skills:
 - 1. Are they educationally prepared with the appropriate degree for this program?
 - 2. Do they have the skills or preparation necessary?
 - 3. Are they computer savvy or novices?
 - 4. Do they believe that online education is easier, or are they experienced with the demands of online education?
 - 5. Do they have the necessary equipment and ISP access with sufficient speed?
 - 6. Is DSL necessary or will dial-up work?
 - 7. Do they have CD-ROM or DVD technologies?
 - 8. How will you address any deficiencies in their skills or understanding (e.g., through orientation or training sessions)?
 - 3. Know your competitors.
 - a. How many competitive programs or institutions exist?
 - i. Make sure you include programs at institutions in the region, nation, and world.
 - b. What delivery methods do they use?
 - c. Do they require on-campus experiences?
 - d. What do they charge (tuition and fees)?
 - e. How long is the program (e.g., time, credits)?



- f. Does the program have the same focus as yours?
- g. Who do they market to?
- h. What is the title of the program?
- i. What level is it (e.g., baccalaureate, graduate)?
- j. What prerequisite courses does it require?
- k. Are they fiscally successful?
 - i. How are they funded?
 - ii. Are they licensing courses?
- I. How many students do they enroll?
- m. Are they accredited? By whom?
- 4. Know your secondary and tertiary markets.
 - a. How does your program fit into other programs at your institution or partner institutions?
 - b. Can your curriculum be adopted by other programs? Will you allow your curriculum to be a dapted by other programs?
 - c. Are you directly competitive with other programs at your institution? (This may require internal coordination with your institution's administration.)
 - d. Can you forge a transfer or articulation agreement?
 - e. Can you license courses to other schools or companies? What process must be followed to license to other institutions or companies?
- 5. Know your competitive advantage.
 - a. How loyal to your institution are the potential students?
 - b. Does your program have the preferred accreditation?
 - c. Have programs entering or exiting the market changed the dynamics of the marketplace?
 - d. What is the preference for your program? Who decides?
 - i. Is it based on price?
 - ii. Is it based on the program's focus?
 - iii. Is it based on employer preference?
 - iv. Do students want part-time or full-time?
 - v. Can your program be flexible (e.g., use multiple delivery methods, have open-ended courses)?
 - e. Be sure to update this analysis annually. Technology and competitors change rapidly.
- 6. Take a hard look at your data on students, competitors, and jobs.
 - a. Is there room for your program?
 - b. Can you adjust your program to make it more marketable or fit better with student or job needs?
 - c. What level of enrollments can you expect?
 - i. You may need a low and high estimate.
- 7. One mechanism to help with this process is to form advisory boards with members drawn from groups appropriate for the program.
 - a. Include representatives from business, education, professional organizations, the community, or government.
 - b. The board can help identify the market, design curricula, advertise, recruit students, and form helpful partnerships.



2. Know your costs.

- A. Why? It is essential to set a price and generate a surplus to reinvest in the program.
- B. How to do this:
 - 1. Create a process to identify and estimate costs with all parties.
 - 2. Investigate your institution's method of identifying and classifying costs.
 - 3. Or, use cost categories from Jones (2004) Technology Costing Methodology Handbook for more details:
 - a. Instruction:
 - i. Curriculum planning/course design.
 - ii. Instructional materials, including development, production, and acquisition.
 - iii. Course content delivery.
 - iv. Tutoring, mentoring, interaction with students.
 - v. Assessment of learning, including assignment of course grades.
 - b. Academic support:
 - i. Computing support.
 - ii. Telecommunications support.
 - iii. Library and information support services.
 - iv. Assessment support services.
 - v. Academic logistical support.
 - vi. Academic administration.
 - vii. Academic personnel development.
 - c. Student services:
 - i. Academic advising.
 - ii. Counseling and career guidance.
 - iii. Student access services/student records.
 - iv. Advertising and marketing.
 - v. Recruitment.
 - vi. Admissions.
 - vii. Financial aid:
 - A. Financial aid counseling and evaluation.
 - B. Records maintenance and reporting.
 - C. Student employment services.
 - viii. Student records.
 - 4. Or, use alternative method for classifying costs into
 - a. Development costs (generally higher for online learning to take advantage of redesigning instruction; key to improving the quality of learning).
 - b. Delivery costs.
 - c. Administration costs (Rumble 2001).
 - 5. Consider improving cost-efficiencies through the following substitutions (Meyer 2006) by using instructional design to also improve quality:
 - a. Higher scalability (using large-enrollment classes or repetitions of courses over time).



- b. Lower-cost for higher-cost labor.
- c. Technology for higher-cost labor.
- d. Technology for capital space.
- e. This process requires careful planning and assessment to ensure quality learning.
- 6. Identify and calculate direct costs.
- 7. Know the policies that govern your program.
 - a. Do you fall under the rules of Academic Affairs, a particular college, extended programs, or continuing education?
 - b. If this is not known, negotiate where the program will be governed and document that decision in writing.
- 8. Know what your institution expects you to pay.
 - a. Paybacks (also known as "chargebacks") to the department, college, university, system, graduate college, continuing education, etc.
 - b. Overhead calculations (these may be taken from indirect paid by a grantee or be a direct charge to you).
 - c. Get agreements in writing.
- 9. Know costs borne by your institution.
 - a. These may be the same as above or the paybacks the institution expects the program to pay, but they may not.
 - b. Know which services are "free" to you and which will cost you.
 - c. Monitor these costs since they may change as a result of budget cuts or other reasons.
 - d. Be sure to get approval for copyrighted material in your program.
 - e. Investigate your institution's intellectual property policy and licensing policies.
- 10. Know costs borne by partners.
 - a. What costs will partners contribute for free?
 - b. What costs must be reimbursed to the partners?
 - i. Ensure these costs are built into the price.
- 11. Calculate number of students needed to cover costs and generate a surplus.
- 12. Be alert to hidden costs.
 - a. Identify knowledgeable individuals at the institution and ask about costs that are not obvious or talked about.

3. Determine a price.

- A. Why? You need to cover costs and generate a surplus to reinvest in the program.
- B. How to do this:
 - 1. Define the price charged to students as the sum of tuition and all fees.
 - 2. Questions for the institution:
 - a. Identify the institutional and/or system policies on tuition and fees.
 - i. Are waivers from these policies or fees necessary or possible?
 - ii. Is there a separate "distance learning" fee that students must pay?
 - b. Is there state subsidy available to support the program and students?
 - c. If the price is already set by existing policy and the cost exceeds the revenue generated by this price:



- i. Will the institution subsidize the program?
- ii. Can enrollments be increased? What are the impacts on learning and faculty workload?
- iii. Will increasing enrollments diminish the market?
- iv. What student fees do distance or online students pay (e.g., parking, athletics, on-campus services)? Can they be excused from these?
- v. Will the price cannibalize enrollments of similar courses taught by the institution?
- vi. Negotiate the number of years the program has to get to the financial break-even point, but be realistic. Review your market information and competitive advantage.

3. Questions about students:

- a. Identify the target population's ability to pay.
- b. Can a student rationalize a higher tuition level if it results in a more lucrative position?
- c. Determine financial aid options for your students.
- d. Pursue grant funding to help pay costs of students.
- 4. Questions about other institutions or programs:
 - a. What do other competing institutions or programs charge?
 - b. If there are no competing institutions, what is the moral or practical limit to what can be charged?
- 5. The price needs to be low enough to attract students and high enough to cover your costs *plus* generate a surplus for contingencies.
 - a. Know where excess funds go. Will they be taken by the institution? Can you negotiate that these funds be retained by the program?
 - b. Need funds for unexpected expenses in future.
 - c. Need funds for retooling the program in future.
 - d. Need funds for new programs.

4. Negotiate with the institution.

- A. Why? All educational programs are offered by the department, college, institution, or system. You need to follow the appropriate rules or negotiate exceptions.
- B. How to do this:
 - 1. Work on agreements before offering the program with the department, college, university, graduate school, continuing education, etc., and/or partnering institutions.
 - a. If your program generates revenue for the institution, ask what dollar amount or percentage of revenue can be returned to the program or department. In the absence of policy, negotiate.
 - b. If courses will be licensed, what percentage of royalty will go back to the faculty, author, program, school? In the absence of policy, negotiate.
 - c. If your project is grant funded, find out how indirect costs are shared with the program, department, school, etc. In the absence of policy, negotiate.
 - d. Negotiating takes time; allow sufficient lead time to do this.
 - e. Document decisions resulting from negotiations.
 - 2. Agreements should cover:
 - a. Fees to be paid to any and all institutional parties.



- b. Services provided by other institutional parties.
- 3. For partnerships among institutions, include:
 - a. How financial aid will be provided.
 - b. How other institutions can access student records.
 - c. How courses will be transferred or accepted at institution(s).
 - d. How charges will be shared.
 - e. If partnerships are within or between systems, check on system- or state-level rules for collaborations.
- 4. Get all agreements in writing and have them signed and dated.
 - a. An example Memorandum of Understanding from the Great Plains IDEA Project can be found at www.gpidea.org/alliance/ResourceCenter/modelDocuments.html.
- 5. Remember that many practices and policies are negotiable.
 - a. May need to negotiate with department, college, university, or system.
 - b. Make consistent arrangements with all parties.
 - c. Determine who is best placed to conduct negotiations: program coordinator, department chair, etc.
- 6. Identify approval processes, time lines, and content needed for approval of courses or program.
 - a. There may be separate approval processes for department, college, university, system, or state.
 - b. Each approval process has a different audience and reviews different issues.
- 7. If not already possible, make sure students can:
 - a. Order and pay for transcripts online.
 - b. Register for courses online.
- 8. Identify an institutional succession plan if the program's main advocate(s) leaves or retires.

5. Observe good financial management rules.

- A. Why? You need to know and follow financial rules. You are now a money manager.
- B. How to do this:
 - 1. Identify the financial rules at your institution.
 - 2. Know how to set up a budget with the institution.
 - 3. Know how to keep your own books (you may need a "shadow budget" to stay up-to-date on what has been spent).
 - a. If you cannot do this, make sure you have a highly qualified and trustworthy person who can.
 - b. Regularly review charges against budget.
 - c. Ensure payments are made (especially important to pay people in timely manner).
 - 4. Know:
 - a. How to work with accounting.
 - b. When dollars are available or "released."
 - c. What account types are available:
 - i. Some accounts allow for rollover and others do not.
 - ii. Other account types have restrictions.
 - d. How to get reimbursed.
 - e. How to pay people.



- f. How students are billed.
- g. When student financial aid is available or paid.
- 5. If at all possible, you need to have a separate program budget.
 - a. Have a designated account within the university's accounting system.
 - b. Try to avoid having funds go into an account that others can use.
 - c. If this is impossible, be sure you understand what charges and amounts you can obligate.
- 6. Have contracts for all work subcontracted to others outside the institution.
- 7. Pay attention to building and sustaining relationships with various offices and individuals at your institution and partner institution(s).

6. Develop and implement marketing.

- A. Why? You need a reliable way to locate and communicate with potential students.
- B. How to do this:
 - 1. You need to find the right clients (students who succeed and stay enrolled).
 - 2. Review what you know about your market and identify routes to distribute information about the program:
 - a. Geographic location of students.
 - b. Their occupations.
 - c. Organizations that train for targeted occupation.
 - d. Employers (may be willing to identify students and pay for their education).
 - e. Certifying agencies.
 - f. Professional associations.
 - g. Agencies knowledgeable about occupation.
 - h. Advisory boards, if you have them.
 - 3. Develop marketing plan.
 - a. Check out organizational and professional association newsletters, alumni publications, newspapers, Web sites, Listservs, state agency bulletin boards, media channels, etc. (Some of these may be free.)
 - b. The institution may have personnel or departments with expertise.
 - c. Develop materials appropriate to target population. (This may include a Web site [see next] or published materials.)
 - 4. Find the "right" students.
 - a. Help students understand if online learning is for them.
 - b. Help students understand if the course or program fits their needs.

7. Have a Web identity.

- A. Why? Your program needs a "face" and ways to help the right students find you and choose your program.
- B. How to do this:
 - 1. A good Web page Googles well and allows potential students to find you.
 - 2. Use institutional guidelines for Web design.
 - 3. Provide information about your program:
 - a. What it does (e.g., the jobs it prepares students for).



- b. What it requires (e.g., number of courses, time frame).
- c. When it is offered (e.g., what semesters courses are offered).
- d. Who is it for (e.g., students with a certain educational preparation, certification).
- e. How it can be used (e.g., if it transfers).
- f. Learning preferences (e.g., are you able to work comfortably in an independent, computer environment?).
- g. Whether it is available in different formats (e.g., PDAs, podcasts, CD-ROMs, cell phones, other new technologies).
- h. Approvals (e.g., is the program approved for certification in your state?).
- i. Success of earlier students or graduates, if available (e.g., number promoted, employed).
- 4. Provide links to:
 - a. Application forms or process.
 - b. Registration or enrollment.
 - c. Information about costs and financial aid.
 - d. Information about deadlines.
 - e. Library or other necessary resources.
 - f. Policies about enrollment and continued enrollment in the program.
 - g. Other policies (e.g., grading).
 - h. Tracking systems (e.g., DARS or other degree audit systems) for program advisement.
- 5. Provide a way for students to contact someone for more information.
 - a. E-mail link or phone number.
 - b. Can be a single point-of-contact or many, if all individuals can provide same information and can coordinate information.
- 6. Have an automatic process for managing and following up on contacts.
 - a. Respond quickly.
 - b. Collect contact information.
 - c. Contact student if you have not heard from him/her to ask if more information is needed.
 - d. Identify status of that contact (not interested, not appropriate, very interested, applying, accepted, will enroll later, will enroll).
- 7. Have a process for students to receive updated information from the Web site.
 - a. Use an RSS function so that students receive changes to the Web site.
- 8. Identify the responsibilities of students:
 - a. Make sure program satisfies certification or employer needs.
 - b. Have appropriate equipment, ISP access.
 - c. Have educational preparation necessary for success.
 - d. Be ready for demanding online coursework.
- 9. Can automatically survey potential students to find out how they learned about program.
 - a. Find out if they are qualified.
 - b. Helps you identify if you are reaching the market.
 - c. Helps you adjust your understanding of the market.
- 10. Find out who maintains the Web site.



- a. Get the skills to make changes as necessary or hire someone who can do this.
- b. Changes happen all of the time, so you need to make sure your program's "face" is up-to-date.

8. Identify and develop good faculty, including adjunct faculty.

- A. Why? It is critical to find and develop good faculty, including good adjuncts to handle enrollment growth.
- B. How to do this:
 - 1. Identify faculty:
 - a. Who are interested in teaching online and learning how to do so well.
 - b. Who are flexible and able to troubleshoot some problems.
 - c. Have faculty new to online learning participate in an existing course to see if they are a good fit.
 - d. Identify institutional policies on workload and course enrollments that govern core faculty. Such policies can affect whether your program can grow and how many adjuncts you may need to address growth.
 - 2. Identify key administrator advocates.
 - a. Administrators at the program, departmental, and college level are essential to ensure that faculty are recruited, paid, and developed equitably and without detriment to their careers.
 - 3. Identify adjuncts.
 - a. May be found through professional associations, employers, and program graduates.
 - b. Do they have proper credentials or educational preparation?
 - c. Will they be successful and like teaching online?
 - i. If you do not know this, then involve them as a teaching assistant or co-teacher in an existing course so they can experience online coursework.
 - 4. Provide faculty and adjuncts with training.
 - a. Need to explore new and different pedagogies, technology applications (e.g., learning objects), and instructional design principles.
 - b. Need to know the course management system (including automatic assessment tools and tracking functions) and how to use campus resources. (You need to know the cost of training if it must be subsidized for adjuncts.)
 - c. Need to understand university, college, departmental policies.
 - d. Need to know expectations of students, how course fits into program, and program philosophy.
 - e. Need to know professor's role in the course, how to manage interaction, amount of discussion/interaction expected, and how to conduct student assessments.
 - f. Training and experience is essential to helping faculty improve what they do online.
 - 5. Have key faculty serve as co-designers for courses.
 - a. Faculty involved with designing programs should know how to improve quality and use substitutions to increase efficiencies.
 - 6. Focus on student learning and quality improvement.
 - a. This makes it easier to recruit new students, increasing the program's financial viability.
 - b. This also improves retention of existing students (see next), which will affect the program's sustainability.
 - 7. Have an assessment plan in place to document levels of student learning and how the curriculum was changed based on this information.



9. Improve retention.

- A. Why? Because recruiting new students costs more than retaining students.
- B. How to do this:
 - 1. Improve your screening methods so that students who are ready to learn online are enrolled.
 - 2. Provide students with an orientation to online learning, program expectations, and using the course management system (CMS).
 - 3. Build community among class members.
 - 4. Encourage interaction among students and with faculty.
 - 5. Design high-quality courses.
 - 6. Encourage faculty to reveal their personalities online.
 - 7. Contact students:
 - a. Decide who will be responsible for this function (faculty or staff).
 - b. Identify students who do not enroll in a course or do not log into the course sooner rather than later.
 - c. Contact them and express concern for them.
 - d. Encourage them to enroll again when it is appropriate to do so.
 - 8. Provide regular feedback to students about progress in the course or program.

10. Improve courses and program.

- A. Why? The quality of a program can help recruit and retain students, which has an impact on the program's financial viability.
- B. How to do this:
 - 1. Continuously assess student learning and the curriculum and make improvements each year. Document this work.
 - 2. Identify and use rubrics or assessment tools appropriate to your discipline or program (e.g., the "Quality Matters" rubric available at www.qualitymatters.org/Rubric.htm).
 - 3. Keep curriculum up-to-date.
 - 4. Listen to and visibly use student feedback (during and after the course, at the end of the program, and five years after leaving the program).
 - 5. Continuously evaluate faculty instruction and their role in the course so improvements can be made.
 - 6. Ask an instructional design professional to recommend improvements to the course.
 - 7. Perform regular scans of the market—other programs, other innovations, students, etc.—to reassess your competitive advantage.
 - 8. Monitor changes to accreditation standards.
 - 9. Seek external evaluations (e.g., advisory board members, professional associations).

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Author biographies continued:

Janis Bruwelheide is a professor of education in the College of Education, Health, and Human Development at Montana State University-Bozeman. She is director of the online graduate certification library media program at Montana State and was the project director and principal investigator of the Borderless Access to Training and Education (BATE) grant funded by the U.S. Department of Education FIPSE Learning Anywhere Anytime Partnership (LAAP) program. The grant focused on developing both online educational leadership as well as library media coursework. The BATE-Library Media portion of the grant was approved for continued development through August 2006, became very successful, and is now self-supporting. It serves a national audience. She is recognized nationally for work in distance learning, securing grants, and intellectual property. Her articles, workshops, and book focus on copyright and intellectual property issues as they affect online education.

Russell Poulin is the associate director of the Western Cooperative for Educational Telecommunications (WCET), a membership-based cooperative dedicated to advancing the effective use of technology in higher education (www.wcet.info) and a unit of the Western Interstate Commission for Higher Education (WICHE). He organizes the information-sharing activities among WCET's members and directs EduTools.info, which provides independent reviews of educational software and courses. He also co-directs the Northwest Educational Outreach Network, which uses distance education to expand the reach of programs not available in every WICHE state. He also heads the Technology Costing Methodology project, consults on distance education planning projects, and serves on the editorial board of *Innovate*.



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