Designing and Assessing Courses and Curricula

A PRACTICAL GUIDE

Third Edition

Robert M. Diamond

Designing and Assessing Courses and Curricula

A Practical Guide

THIRD EDITION

ROBERT M. DIAMOND



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The Present State of Higher Education: Some Perspectives

Despite some notable progress on the frontiers of reform since the 1960s and 1970s, higher education's core practices remain largely unchanged, rending the enterprise less than it should be in today's environment. Many of the items heading the agenda for change in 1970 continue today. Critics regularly question the learning exhibited by college graduates. Moreover, achievement gaps in higher education persist between students of lower and higher socio-economic status and across ethnic and racial groups. . . . Also, while everyone agrees that improving educational performance entails more concerted interactions with primary and secondary schools, the linkages between them remain weak.

-National Center for Postsecondary Improvement

Change is urgently needed. Even as college attendance is rising, the performance of too many students is faltering. Public policies have focused on getting students into a college, but not on what they are expected to accomplish once there. The result is that the college experience is a revolving door for millions of students, while the college years are poorly spent by many others.

-The Association of American Colleges and Universities

Student success in college cannot be documented—as it usually is—only in terms of enrollment, persistence, and degree attainment. These widely used metrics, while important, miss entirely the question of whether students who have placed their hopes for the future in higher education are actually achieving the kind of learning they need for a complex and volatile world . . .

> ---The National Leadership Council for Liberal Education & America's Promise

In a 2006 article I made the following observation: "Significant changes will never occur in any institution until the forces for change are greater in combination than the forces preserving the status quo." If not there yet, higher education is extremely close to that tipping point.

The years following the publication of the Second Edition of Designing and Assessing Courses and Curricula have not been good ones for American colleges and universities. Business and industry leaders increasingly call for graduates who can speak and write effectively, have high-quality interpersonal and creative thinking skills, have some understanding of the rest of the world, and can work effectively with individuals from different cultures and backgrounds. In addition, state and federal funding for higher education has either diminished or failed to keep up with need, and one of the major forces for innovation in colleges and universities for decades, the American Association for Higher Education, has folded. At the same time that the calls for major improvements in the quality of academic programs and for institutional accountability have risen in both quantity and intensity, major foundations long known for their support of colleges and universities shifted their funding priorities to other areas. While there may be some disagreement as to accuracy of some of the statistics used to support the need for reform (Attewell and Lavin, 2007), there is little disagreement both inside and outside of the academy that colleges and universities must pay greater attention to the quality of the education they provide to students.

These concerns about quality and accountability are not new they have been around for years. In the Preface to the 1998 edition was a quote from Roy Romer, then chair of a task force for the Education Commission of the United States: "For all its rich history, there are too many signs that higher education is not taking seriously its responsibility to maintain a strong commitment to undergraduate learning; to be accountable for products that are relevant, effective and of demonstrable quality; and to provide society with the full range of benefits from investments in research and public service" (Romer, 1995, p. 1). The demand for increased accountability articulated in the observations by Romer is directly related to one of the major recommendations of the 2006 Department of Education's Commission report on the Future of Higher Education. Ernest Boyer's observation that there is a "disturbing gap between colleges and the larger world" (1987, p. 6) is as true today as it was over twenty years ago.

Further complicating the challenges to colleges and universities are the significant changes that have taken place in our students over

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the last two decades. Our student population has not only grown substantially but has become more diverse in terms of age, gender, and cultural background. Today only 16 percent of the student population can be described as "traditional" (aged eighteen to twentytwo, attending college full-time, and living on campus), a growing percentage are the first generation in their family to attend college, and over fifty percent of all students are women (Smith, MacGregor, Matthews, and Gabelnick, 2004). In addition, many entering students are lacking in important prerequisites and effective study habits.

There are two other factors contributing to the pressure to change felt by those in leadership positions at American universities.

- *The impact of globalization.* William Tierney has identified five trends and challenges that globalization has created for higher education.
 - 1. Education no longer has any borders, students are able to take classes virtually anywhere in the world—in person or online.
 - 2. A college or university is less of a physical place today and more of an interaction that may occur anywhere, on the Internet or in any one of a number of emergent virtual realties.
 - 3. In a globalized world competition increases: students have more choices about the kind of institution they will attend and the kind of training they desire.
 - 4. Globalization has weakened the social welfare state and increased the importance of privatization. As state funding support has decreased, state institutions have been required to raise more and more money from private sources. As a result the difference between state and private institutions is becoming increasingly blurred.
 - 5. Colleges and universities are becoming more decentralized and decisions are being made closer to where the action takes place. State planning or centralized decision-making is taking a back-seat to entrepreneurial activity at the local level [2007, pp. 1–2].
- The significant role played by accreditation agencies in fostering change by requiring statements of learning outcomes and evidence that instructional goals are being met. As more and more political and professional leaders perceive accreditation as a major lever for change, there are increased pressures on the agencies and associations who determine criteria to focus on learning outcomes and institutional accountability. New demands for specificity, for academic quality, and for extensive documentation have taken accreditation from being an activity dealt with by small numbers of administrators to a process that will involve every faculty member and academic administrator.

Why Institutions Are So Hard to Change_

Although the pressures for change intensify and are no longer possible to ignore, the reactions to these pressures by many colleges and universities has been modest, to say the least. On many campuses, the rhetoric may have changed, but there have been few significant attempts to address the issues directly. Procedures, structures, and priorities have tended to remain constant. The reasons for this are many.

People usually find that it is far less risky to do nothing than to try to change and, in higher education, tradition is a most powerful force. Trustees and administrators often do not see their role as change agents, and many in these positions are selected on criteria that have little to do with leadership or their understanding of the forces now impacting higher education. With competition between institutions, programs, and faculty the norm, it is extremely difficult to get the cooperation that is required to successfully address institutionwide issues, and with faculty often more committed to their discipline or department than to the institution, this type of cooperation becomes even more difficult to attain. In addition, the reward and recognition system for individual units, faculty, and administrators usually tends to support the status quo. On most campuses there is simply no reward for participating in the activities that are desperately needed. For more on the forces resisting change, and actions that can be taken to overcome them, see "Changing Higher Education: Realistic Goal or Wishful Thinking?" (Diamond, 2006).

Not discussed in the article are three other factors that add to the challenges faced by anyone attempting to implement major reform at a college or university.

The impact of technology on teaching and learning. Technology significantly increases the instructional options available to faculty, but also has a negative impact on two other areas that rarely receive the attention they deserve: institutional budgets and the ways in which students study and learn. As institutions attempt to implement a wide range of administrative applications of technology and to provide students with the computer support that they demand, an increasing percentage of the total budget is devoted to supporting the purchase of equipment and the required maintenance and technical support. In a number of instances these monies have been generated by an increase in internal charges for a wide range of services that were at one time provided at no cost to individual units. In this approach, individual units are charged directly for a portion of the total costs to the institution. In periods of flat budgets, departments are then forced to redirect the funds that they have available

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to support faculty and the improvement of instruction. On a number of campuses one of the areas directly affected by these cuts has been the academic support center—at the very time that more faculty are requesting their assistance. The second area where technology has an impact is on the way students approach the entire learning experience. Faculty are reporting decreasing attendance in classes, more students multitasking during lectures, and difficulty in getting students to devote to their assignments the amount of effort and time required for quality work.

The increase in the number of part-time or adjunct faculty. One unintended outcome of the movement away from tenured faculty at colleges and universities is the impact this change has on the entire academic enterprise. Individuals in these positions, although often dedicated and talented, are usually not expected to serve as advisors to students or to participate in the course and curriculum design efforts that are so urgently needed. As a result, with nearly 50 percent of all faculty in these untenured or part-time positions, the remaining faculty find themselves asked to do more with little compensation and no additional support.

The dominance of the U.S. News & World Report rankings. The U.S. News rankings have been described as "the nation's *de facto* accountability system—evaluating colleges and universities on a common scale and creating strong incentives for institutions to do things that raise their ratings" (Carey, 2006, p. 1). Emphasizing three factors—fame, wealth, and exclusivity—this approach to the use of data has had a significant affect on the priorities of many institutional leaders, in that the quality of the education their institutions provide becomes less important than the percentage of applicants turned down or the money received in grants and donations.

Our challenges are complex, but we do have a solid base to build on. We know how to improve the quality of our teaching, how to help under-prepared students succeed, how to improve retention, and how to prepare our graduates to be more productive and successful citizens. There are projects in colleges and universities in the United States and throughout the world that have been successful in addressing all the issues and concerns being raised. Unfortunately, too few academic leaders or faculty know the research, and even fewer politicians have the political will to play their key role in changing the state and national priorities so that these issues can be successfully addressed. Until the faculty reward system is modified to strike a proper balance between teaching, research, and service, and until alumni and political leaders pay more attention to the quality of the education students receive than they do to the success of an institution's athletic teams and to national rankings, which have little to do with the actual effectiveness of an institution's academic program, little will change. Fortunately we may be reaching a point in the United States where the entire system of higher education will have no option but to change. The nation is getting close to demanding such change.

Designing and Assessing Courses and Curricula _

When taken together, these challenges present a clear call for imaginative planning, with faculty and administrators working together toward change. There is a need for academic programs to take full advantage of the abilities of faculty, of technological developments, and of creative new forms of teaching and learning. Although the various reports and studies call for changes in content and pedagogy, they do not describe how these changes might be made.

Institutions, departments, or faculty often recognize significant problems in the content and design of their curricula or courses, but their efforts to change are hampered by uncertainty about how to make orderly changes, where to begin, what outcomes to target, and what roles faculty, curriculum committees, and administrators should play. This book provides a model for change that answers these questions.

Attempts to change curricula are not new. Major projects in developing core curricula were undertaken in the 1920s and again in the 1940s. But each of these efforts foundered as it attempted to build in more flexibility and greater student choice. This trend was even more in evidence in the early 1970s, when requirements, structure, and sequence of programs and courses almost disappeared from many campuses. The key, as Joan Stark and Lisa Lattuca pointed out in their review of curriculum innovation, is "to find the balance that will provide choice while preserving culture, one that will provide exposure to alternative perspectives while avoiding fragmentation" (1997, pp. 354–355). No easy challenge.

Although the problems we face are significant, this is also an exciting time to be a faculty member at the many colleges and universities where increased attention is being paid to teaching and learning. These institutions are rethinking their goals and priorities, their curricula, and the way learning takes place. Numerous examples will be found throughout these pages. The promotion and tenure system is also beginning to undergo major transformation, and many of the disciplinary associations are actively facilitating the change by providing their members with creative new instructional materials and by expanding the scope of activities they consider scholarly.

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We also have available to us technological innovations that open up opportunities to significantly increase faculty access to course and curricular information as well as to improve the quality and scope of our students' learning experience.

Purpose of the Book_

Designing and Assessing Courses and Curricula responds to the questions of faculty and administrators who recognize a need for change but are unsure of how to reach their goals. The chapters focus on an approach that has been used at institutions with very different profiles—private and public, large and small—and with varying budgets. It offers a practical approach to systemic change and perhaps even more important, it is one of the few change models that focuses on the crucial relationship between courses and the curriculum of which they are a part. The book shows how to move from concept to actualization, from theory to practice. Case studies illustrate the model's adaptability to broad curricular change and to course and program design; it works with equal success in both areas.

In their study of the contextual influences on faculty as they design their courses, Stark and Lattuca observed that less than onethird of those teaching general education courses reported that books and articles on teaching and learning were an influence in their course planning (1997, pp. 224–225). To successfully revise a course or curriculum, you need up-to-date knowledge about learning and the various ways to facilitate it. Without this knowledge, efforts to improve student learning are unlikely to succeed.

As one of our goals is to direct you to more detailed information on topics of specific interest to you as you move through the design process, most chapters include an annotated additional resources section as well as resources discussed in the body of the material. When applicable, we have also identified those materials that are available over the Internet.

The process we will follow has remained constant over the years, but this book represents a major revision from the second edition. Based on feedback from previous users, the book has been totally restructured to make it easier to use. Many chapters have been shortened, with most case studies and resources being relocated in separate sections in the back of the book. This has permitted the case studies to be expanded and allows you to locate more easily the specific materials that will be of greatest use to you.

You will find new chapters on accreditation, distance learning, and teaching adult students, and many existing chapters have been significantly updated or rewritten. The chapters on diversity, technology, and selecting instructional options have been expanded, and several chapters from the second edition have been divided into separate chapters to provide you with more detailed information on specific topics.

Several factors make this model particularly relevant. Programs that have been developed using the model successfully meet the goals identified in the major reports on educational change, as well as the requirements of all the new accreditation standards (including clearly stated goals, learning outcomes, assessment, and continuous improvement). Compared with other approaches, this model is cost-effective, as it provides visible results in the shortest possible time.

Finally, and equally important, although this approach requires hard work, you will find it exciting, challenging, and rewarding, and administrators will remark on its efficiency and effectiveness.

Purposes and Audiences_

Many excellent books have been written about teaching and learning. But that is not the focus of this book. This is a practical, descriptive handbook for faculty and administrators involved in the improvement of teaching and learning. It provides you with an effective model for designing, implementing, and evaluating courses and curricula. It suggests design options that are available to help you meet the diverse needs of your students, and offers guidelines for those you invite to help you in the design process. Finally, it helps to move the focus of course design from content coverage to student learning, keeping in mind the role that the course has in meeting the overarching goals of the curricula.

Although based on sound theory, this book is not a theoretical discourse; rather, it is a practical guide for faculty and administrators, showing how to approach and implement the redesign of courses and curricula—the structures in which learning takes place.

The suggestions are derived from my own experience and that of many associates in various institutions and other creative faculty throughout the United States. Although many case studies are drawn from the records of Syracuse University's Center for Instructional Development, others are from large and small public and private colleges and universities that represent the broad spectrum of American higher education. The book shares the strategies that have worked well in making constructive, planned change of the sort higher education is presently challenged to initiate.

Overview of the Book

To assist you through the design, implementation, and assessment process the chapters of the book are divided into four distinct parts.

Part 1: A Frame of Reference

The six chapters in this section are designed to lay the groundwork for the work that will follow. After an overview of the rationale behind the process and its many benefits, you will find in Chapter 2 an in-depth look at the changes that are under way in accreditation and the impact that these changes will have on institutions, programs, faculty, and administrators. In Chapter 3 you will find specific recommendations on some relatively easy actions you can take to keep yourself up-to-date on the newest research on teaching and learning and on issues impacting higher education. Because the work that you will do on courses and curricula has all the characteristics of true scholarship, Chapter 4 offers a discussion of faculty rewards and how this work can be more appropriately recognized in the tenure and promotion process. Chapter 5 introduces the specific steps in the model and discusses in more detail the characteristics that have made this approach so effective. Included is a discussion of the types of individuals you may want to get involved in your project and their respective roles. In Chapter 6 we describe an extremely effective technique that you may wish to use as you develop the design of your course or curriculum.

Part 2: The Process

This, the most structured section of the book, follows sequentially the model of course and curriculum design that we will be using. Each chapter will walk you through the process step-by-step. To save you a great deal of time and effort we have included a number of resources that you should find helpful. These range from checklists and lists of questions to numerous case studies from different fields of study. Because experience has shown us that one of the most common causes of failure is beginning a project that should never have been undertaken in the first place, Chapter 7 focuses on the questions you should ask even before you begin. Different guidelines are provided for projects focusing on a single course and for those designing an entire curriculum. The three chapters that follow discuss how to get a project under way, the significant and often overlooked interrelationship between goals, courses, and curricula, and collecting and using the data you will require to make quality design decisions. One of the strong points of the approach that we use is that the initial design step is to think in the "ideal." If you had the best possible program or course, what would it look like? Only after this stage is complete will you be able to determine how close you can come to the ideal when you consider resources, time, and so on. This two-stage process is described in Chapters 11 and 12. Chapter 13 addresses the basic issue of stating your learning goals in outcome terms and provides suggestions on how to craft clear statements in less stressful ways. The final chapters in this section focus on designing and implementing an assessment plan that meets your needs and those of your institution. After an overview of a number of assessment issues, the chapters focus first on curriculum projects and then on assessment in the context of an individual course. Included is some very important advice on what to consider when you are exploring the use of commercially prepared instruments and protocols.

Part 3: Designing, Implementing, and Assessing the Learning Experience

With an emphasis on the crucial interrelationship between courses and curricula, this section focuses more directly on designing and assessing the courses themselves. The seven chapters in this section are structured specifically to assist you in making the best possible instructional design decisions for your students. In the chapters on the research on teaching and learning, you will find the most recent and practical information on the various available approaches to teaching. Recognizing the changes that have taken place in students themselves, we have included chapters on meeting the needs of adult learners as well as those of a diverse student body. These topics are explored from two perspectives: from the perspective of a faculty member dealing with a class composed of men and women from diverse backgrounds and cultures; and from the perspective of higher education's goal to develop in our students the ability to work with and respect people with different perspectives and priorities. This section concludes with a chapter on developing a syllabus that provides your students with all the information that they need to be successful in your course.

Part 4: Your Next Steps

Chapter 23 addresses the final step in the design process, using the data you collect to revise your course or curriculum. We discuss the various uses for the information you collect—from establishing benchmarks to identifying areas where work still needs to be done. In the final chapter we review some of the major forces that will impact

higher education in the years ahead, review the characteristics of a quality curriculum, and conclude with some of the lessons we've learned along the way about successful innovation and change.

Some Important Suggestions_

Two very useful parts of the book are the Resources and Case Study sections. The items included in these sections have been carefully selected to help you through the design, implementation, and assessment process. They are practical and have the potential to significantly improve the quality of your final product. In addition, these examples should prove helpful to you long after the specific project you are working on has been completed. In some cases we've made the titles a little longer to provide you with a better ideas of what's included. In the Case Studies section, don't focus only on those courses that relate to your own discipline. In many instances the problems the faculty faced and the actions they took to resolve them relate to courses in almost any field of study. Taking a few minutes to scan these two sections before you get very far into the design process may prove to be an extremely good use of your time. This book is dedicated to the many faculty, administrators, and staff members at colleges and universities throughout the United States who care about the quality of teaching and learning, and to my wife, Dolores, who has supported me throughout my career. I couldn't have done it without her. First and foremost, I would like to thank the many talented and dedicated faculty and administrators whose work is represented in these pages, and extend my gratitude to my former colleagues at Syracuse University who played an active role in the development of many of the case studies and resources that we have included. I would also like to express my special thanks to Lion Gardiner, Wally Hannum, Roger Sell, and Trudy Banta for the outstanding new materials that they have contributed to these pages; to Martha Gaurdern and Julie Mills for their graphic assistance; to Ruth Corbett for her clerical support; and to Elizabeth Murphy, Lion Gardiner, and Roger Sell for their excellent advice that kept me on track as the manuscript progressed.

Robert M. Diamond St. Petersburg, Florida



Robert M. Diamond, 1930-2007

Bob Diamond was a bright star in the constellation of higher education improvement, and shed his powerful light on many key issues in the field. It is hard to believe that this tireless contributor and friend will no longer be with us in person, but his example will continue to inspire us, as his writing will continue to help our efforts to improve the vital work of higher education.

Although Bob's contributions to Jossey-Bass publications began before my own work with the Higher and Adult Education series, I had the good fortune to work with him on more than one book, and to benefit from his judgment as a reviewer and all-around source of good advice as well. Thus I was pleased but not surprised to receive numerous offers from Bob's colleagues letting me know that they would be glad to help complete this book. They all knew Bob's work was needed, and that the best way to honor their friend's memory was to help get his work out to those who need it. Thanks to all of you for that very fitting tribute to Bob's commitment and devotion to his work. I also want to extend special thanks to Bronwyn Adam for her kind assistance during the production process.

> David Brightman Senior Editor Higher and Adult Education



Artwork by Bob Diamond

Robert M. Diamond was president of the National Academy for Academic Leadership and emeritus professor at Syracuse University. At Syracuse he was research professor and director of the Institute for Change in Higher Education and, prior to this, assistant vice chancellor and director of the Center for Instructional Development. He received his Ph.D. and M.A. from New York University and his B.A. from Union College. Dr. Diamond held administrative and faculty positions at SUNY Fredonia, the University of Miami, and San Jose State University. A Senior Fulbright Lecturer in India, he was president of the Division for Instructional Development, Association for Educational Communication & Technology. He also was an affiliated scholar with the Center for the Advancement of Engineering Education at the National Academy of Engineering.

Dr. Diamond authored numerous articles and books, including Designing and Improving Courses and Curricula in Higher Education: A Systematic Approach; Instructional Development for Individualized Learning in Higher Education; and the chapter on "Instructional Design: The Systems Approach" for the International Encyclopedia of Education. Dr. Diamond also authored Aligning Faculty Rewards with Institutional Mission, Preparing for Promotion and Tenure and Annual Review, "What It Takes to Lead a Department" in The Chronicle of Higher Education, "Changing Higher Education: Realistic Goal or Wishful Thinking?" in Trusteeship, and The Disciplines Speak: Rewarding the Scholarly, Professional and Creative Work of Faculty and contributed to the Field Guide to Academic Leadership.

In 1989, Dr. Diamond received the Division of Instructional Development Association for Educational Communication and Technology Award for outstanding practice in Instructional Development and in 1997 was cited by the American Association for Higher Education for his leadership in innovation and change. The Center for Instructional Development was the recipient of the 1996 Theodore M. Hesburgh Award for Faculty Development to Enhance Undergraduate Learning.

Dr. Diamond coauthored the 1987 and the 1997 National Studies of Teaching Assistants, the 1992 National Study of Research Universities on the Balance Between Research and Undergraduate Teaching, and the 1997 study, Changing Priorities at Research Universities: 1991–1996. He was also responsible for the design and implementation of Syracuse University's award-winning high school–college transition program, Project Advance. He served as director of the National Project on Institutional Priorities and Faculty Rewards. He was a consultant to the Ohio Board of Regents and to colleges and universities and disciplinary associations in the United States and overseas.

Wallace Hannum is associate director of technology for the National Research Center on Rural Education Support and a member of the faculty of the School of Education at the University of North Carolina at Chapel Hill. Dr. Hannum teaches graduate-level courses on the use of technology in education, learning theories, and instructional design. Dr. Hannum's research focuses on instructional uses of technology, especially distance education. He created a statewide online program for professional development of teachers and routinely uses a variety of technologies in his teaching. Dr. Hannum has consulted on the use of technology for professional development with many organizations, both public and private. He has participated in the design and implementation of numerous technology-based programs and projects. He has created standards and guidelines for technology use as well as taught numerous workshops to enable organizations to make effective use of technology for instructional purposes. He has worked extensively on education projects in Africa, Asia, and Latin America. Dr. Hannum is author of five books and numerous articles on topics related to technology and instructional design.

G. Roger Sell is currently professor and director of the Academic Development Center at Missouri State University, a position he has held since 2002. Prior to that time, he was director of instructional development and evaluation at The Ohio State University (1980–1988), senior program director of the Center for Teaching Excellence also at Ohio State (1988–1993), and director of the Center for the Enhancement of Teaching at the University of Northern Iowa (1993–2002). Following the completion of his Ph.D. at the University of California-Santa Barbara in educational administration, he worked in the research and development of adult learning programs at the University of Mid-America and the National Center for Higher Education Management Systems. He has taught in undergraduate, graduate, and continuing professional education. Dr. Sell's most recent work focuses on student success, the scholarship of teaching and learning, the evaluation of teaching, and the assessment of student learning. He served as president of the Professional and Organizational Development Network in Higher Education in 2002 and over his career has been a consultant to dozens of colleges and universities in the United States and other countries.

PART ONE

A Frame of Reference

CHAPTER 1

A Learning-Centered Approach to Course and Curriculum Design

Too many Americans just aren't getting the education that they need—and deserve.

United States Department of Education, 2006, vii.

As a faculty member, you can undertake very few activities that will have a greater impact on students than your active involvement in the design of a course or curriculum. As a direct result of these efforts, learning can be facilitated, your students' attitudes toward their own abilities can be significantly enhanced and, if you're successful, students will leave better prepared for the challenges they will face after graduation. In addition, because major course and curriculum designs tend to remain in place for years after the project has been completed, your efforts will impact far more students than you may anticipate at first.

The Curriculum Is Not Always Equal to or More Than the Sum of Its Parts

A growing number of authors report that too many of our students simply do not receive the quality of education that society expects and that the country needs for the years ahead. The educational experience of our college students has been described as disjointed, unstructured, and often outdated. Courses often have little relationship to the curriculum that is in place and may overlook the critical skills that students need to acquire.

The observations identified in the Association of American Colleges and Universities' report, Integrity in the College Curriculum: A Report to the Academic Community (1985), are even more appropriate today than they were over twenty years ago: "As for what passes as a college curriculum, almost anything goes. We have reached a point at which we are more confident about the length of a college education than its content and purpose. Indeed, the major in most colleges is little more than a gathering of courses taken in one department, lacking structure and depth, as is often the case in the humanities and social sciences, or emphasizing content to the neglect of the essential style of inquiry on which the content is based, as is too frequently true in the natural and physical sciences." The report continued, "The curriculum has given way to a marketplace philosophy; it is a supermarket where students are shoppers and professors are merchants of learning. Fads and fashions, the demands of popularity and success, enter where wisdom and experience should prevail. Does it make sense for a college to offer a thousand courses to a student who will only take thirty-six?" (p. 2).

The research, too, suggests that in many cases college and university curricula do not produce the results we intend. Curricula that are not focused by clear statements of intended outcomes often permit naive students broad choices among courses resulting in markedly different outcomes from those originally imagined: by graduation most students have come to understand that their degrees have more to do with the successful accumulation of credits than with the purposeful pursuit of knowledge (Gardiner, 1996, p. 34). In his 2006 essay on the status of innovation in American colleges and universities, Ted Marchese, former vice president of the Association for Higher Education and editor of *Change* magazine, made the following observation:

What's at stake? Does this matter? Does it matter that university completion rates are 44 percent and slipping? That just 10 percent from the lowest economic quartile attain a degree? That figures released this past winter show huge chunks of our graduates who cannot comprehend a *New York Times* editorial or their own checkbook? That frustrated public officials edge closer and closer to imposing a standardized test of college outcomes? Does it matter that we look to our publics like an enterprise more eager for status and funding than self-inquiry and improvement? [2006].

Although his comments are certainly discomforting, they are accurate. Despite the efforts of many dedicated faculty and administrators and the support of numerous foundations, we are still not doing a particularly good job of educating our students. Too many of our graduates leave underprepared to be effective and productive citizens, and far too many students who enter college never graduate. As a result, America is losing out in many areas. Fewer and fewer citizens vote, we are perceived as an isolated country with little understanding of other cultures and of the world in general, and numerous other nations' educators are doing a far better job of developing in their citizens the competence that will be required in the years ahead.

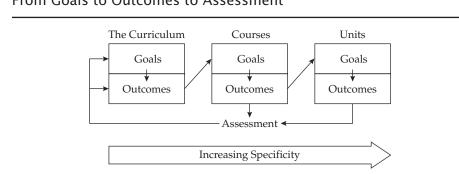
In the additional resources section at the end of this chapter you will find several publications that discuss in more detail the challenges that colleges and universities face.

In short, we have reached a point where we educators, in addition to becoming more efficient and effective, have to rethink at a basic level what we teach and how we teach. We must rethink our roles as faculty, how we can most effectively use the time and talents of our students, and how we can fully utilize the expanding capabilities of technology. The approach that we will use in this book is designed to help you do all of these things.

The Challenges of Curriculum and Course Design_

Designing a quality course or curriculum is always difficult, timeconsuming, and challenging. It requires thinking about the specific goals you have for your students, the demands of accreditation agencies, and about how you, as a teacher, can facilitate the learning process. This demanding task will force you to face issues that you may have avoided in the past, to test long-held assumptions with which you are very comfortable, and to investigate areas of research that may be unfamiliar to you. At times you may become tired and frustrated and wish to end the entire project. Just keep in mind how important this work is and press on. Despite the work involved most faculty who have used this model report that they found the process of design and implementation challenging, frequently exciting, and when completed, most rewarding.

Unfortunately, as important as these activities are, we faculty are seldom prepared to carry them out. Although you may have been fortunate enough to have participated in a strong, well-conceived program for teaching assistants, few faculty have had the opportunity to explore the process of course and curriculum design or to read the research that provides a solid base for these initiatives. This book is designed to help you go through the design, implementation, and evaluation processes. It will provide you with a practical, stepby-step approach supported by case studies, a review of the significant literature, and introduce you to materials that you should find extremely useful.





An Important Relationship

As you follow through the steps of designing or revising a course or curriculum, it is extremely important to keep in mind the important relationship between goals, outcomes, and assessment. It is a relationship that remains a constant whether you are focusing on a curriculum, a course, or a unit or element within a course.

- 1. The outcome statements that are produced for the curriculum will be the basis on which the primary goals of each course within that curriculum are determined.
- 2. The outcome statements that are produced at the course level will be the basis on which the primary goals of each unit or element within that course are determined.
- 3. As you move from the curriculum to the courses within it, and to the individual units or elements within each course, the goal and outcome statements become more specific.
- 4. The success of your effort will be determined by how well your students meet the criteria for success as defined in the outcome statements at the course and unit or course element level. (See Figure 1.1.)

Getting Assistance

Although curriculum development is always a team activity, course design often is not. In both instances, however, the process can be facilitated and the end result improved if others are involved. These may include specialists in assessment or technology, other faculty or experts in the community, and although often overlooked, the registrar. In addition, we have found that having someone from outside your content area serve as a facilitator can be extremely useful. This individual may be a faculty member from

another department or a staff member from the Academic Support Center on your campus. The facilitator, who has no vested content interest in the project, can help you explore options, ask key questions by challenging your assumptions, and get the important but often overlooked issues out in the open. Simply by not being in your discipline, facilitators can also put themselves in the position of your students and raise questions about assumptions and sequence. The importance of this role cannot be overstated. In Chapter 5 we discuss this function in some detail.

Course Design and the Delivery of Instruction_____

The best curriculum or course design in the world will be ineffective if we do not pay appropriate attention at the course level to how we teach and how students learn. Although faculty, employers, and governmental leaders agree that graduates need critical-thinking, complex problem-solving, communication, and interpersonal skills, research shows that the lecture is still the predominant method of instruction in U.S. higher education (Gardiner, 1996, pp. 38–39).

To ensure that students develop the higher-level competencies that you believe to be essential will require thinking about how you and your students spend time both inside and outside the classroom, what the responsibilities of your students should be, and how you will assess them during and at the end of courses, and at the conclusion of their total learning experience. It may also require rethinking your role as a faculty member. The chapters in this book on the design and delivery of instruction will describe the many options available to you, as well as the research on teaching and learning that can help inform your decisions.

Accountability_

A major problem that all institutions face is the perception of business and governmental leaders, and of the public at large, that we have enthusiastically avoided stating clearly what competencies graduates should have and that, as a result, colleges and universities have provided little evidence that they are successful at what they are expected to do. Unfortunately, these perceptions are not far from the truth. The public demands for assessment of programs and institutions have, for the most part, fallen on deaf ears, and as a result of this inattention, higher education in general receives increasingly less support from the public and private sectors. While tuition has increased significantly, the quality of our product has not. As governors and other public leaders have made extremely clear, this problem of accountability needs to be addressed if support is to increase.

This demand for more information on the quality of learning at colleges and universities has led to many of the changes that are under way in accreditation, and to the increased attention being paid to learning outcomes and assessment by numerous national associations and institutions (see Chapter 2). As a result, collecting data and reporting results must be major elements in the process of course and curriculum design and implementation. One of the underlying assumptions in the work you will be doing is that the instructional goals you develop, and the assessment of your students' success in reaching them, will be made public. Only this level of specificity can answer higher education's severest critics. For this reason, as we move along we will discuss in some detail the development and assessment of both broad instructional goals and specific learning outcomes.

Institutionwide Initiatives_

Recognizing both the need for quality information and the demands for increased institutional accountability, a growing number of colleges and universities have been developing a campuswide approach to assessment of the quality of their academic programs that can provide faculty and administrators with extremely useful information as they attempt to improve both courses and curricula. An early first step should be for you to find out what data already exists on your campus or is in the process of being collected.

The University of Indiana, Bloomington, and Monmouth University are two of the institutions that moved in this direction early on. One of the first major campuswide initiatives to develop a culture of assessment took place at Truman State University (formerly Northeast Missouri State University). In Case Study 1 you will find a detailed description of what actions were taken and the long-term impact of these initiatives. The case study clearly shows the importance of quality leadership and faculty involvement in the institutional process of change.

A Brief Introduction to the Model____

This book focuses on an approach that has been used successfully at institutions with very different profiles: private and public, large and small, and with varying budgets. It shows how to move from concept to actualization, from theory to practice. The model is designed to facilitate significant and long-lasting change. Case studies will illustrate the model's adaptability with examples ranging from major curricular redesign to developing individual courses and programs.

Benefits of This Approach:

- The model is easy to use, sequential, and cost-effective; it will save you both time and effort by significantly reducing the time needed for implementation.
- It can be used for the design or redesign of courses, curricula, workshops, and seminars in every subject area and in every instructional setting—traditional and nontraditional.
- The programs you develop will meet accreditation agencies' demands for clear statements of learning outcomes with an associated high-quality student assessment process.
- It is politically sensitive, protecting you from decisions by others that could jeopardize implementation.
- It will ensure that all important questions are asked and all options are explored before key decisions are made.

Several factors make this model particularly relevant. As the case studies illustrate, programs that have been developed using the model meet the goals identified in major reports on educational change. Faculty who have used the model, and the administrators to whom they report, have a sense of ownership of the courses and programs that are developed, ensuring that these programs and projects will become an integral part of the existing system and thus survive.

Since the model was first used in the mid-1960s, changes incorporated as a result of experience working with it, and comments from faculty and staff, have made it less complex and easier to use, reducing the time needed for implementation. Program assessment is a part of the process and places outcome measures of a course or curriculum within the context of national, state, and regional goals.

This approach has several additional characteristics that significantly affect its success. By using a person who is not a content expert to facilitate the design process, this model allows you and other faculty to focus on content and structure while ensuring that assumptions are questioned and alternatives are explored. The model also allows you to focus first on what an ideal program would look like, eliminating perceived limitations—many of which turn out to be more imagined than real. Furthermore, this approach is data driven, using information from a wide range of sources to help determine scope, content, effectiveness, and efficiency. Equally important, although this process requires hard work, faculty, as mentioned before, find it exciting, challenging, and rewarding, and administrators remark on its efficiency and effectiveness.

One additional benefit should be mentioned. In the process we will follow, specific approaches or solutions are not determined until goals are identified and all options are explored. All too often in education we find advocates of a particular approach starting with the answers before they have even identified the problems that need to be addressed.

The model follows a specific sequence that begins with an assessment of need and a statement of goals (moving from the general to the specific), which is followed by the design, implementation, assessment, and revision of your course or curriculum (Figure 1.2). This sequence assures a meshing of goals, instruction, and assessment.

Under an external mandate to assess the quality of their academic programs, departments, schools, colleges, and universities are finding that no matter where you begin in the process, you will need to go back to the statement of need before you can develop a statement of goals on which assessment must be based (Figure 1.3). For example, to assess your program you will first need to know where you are trying to go, and then, based on this information, you will need to develop an assessment program that can help determine whether you are successful.

Those responsible for assessment initiatives are reporting a number of common problems that we will address as we move through the design process.

Figure 1.2. Basic Design Sequence

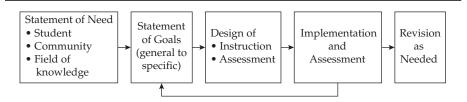


Figure 1.3. Assessment Sequence

An assessment program	requires	a statement of goals	which requires	an analysis of needs	which then facilitates	the design of an assessment protocol.
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- Statements of outcomes do not exist for many curricula and many courses.
- When outcome statements do exist, there is often a gap between stated performance goals and assessment (assessment tends to focus on recall and recognition, whereas more important and complex goals are never assessed).
- When outcome statements do exist, there is often a gap between stated goals and what is taught.
- When outcome statements do exist, they often focus on content rather than on critical thinking and learning skills.

In other words, in course and curriculum design it is best to resist the pressure that many of us feel to discuss assessment before we have agreed on the goals for the program or course we will be reviewing. Obviously, we need to identify goals before we can have a meaningful conversation about assessment, or about content and structure. Furthermore, when the focus is on assessment, we often feel threatened, which can undermine the sense of common purpose that any such effort needs. By starting with a consideration of how to facilitate effective learning, we will establish a rapport among everyone involved that makes for a successful team effort. This process reduces stress because it helps us get where we want to go in far less time and with significantly less of the frustration that is common in course and curriculum efforts.

The Question of Time _____

One question that always comes up is, "How long is this process going to take?" Our goal is to help you design and implement the best possible course or program in the shortest time possible. Under ideal circumstances with maximum support, we've been able to design a course during the spring semester, produce the new materials needed in summer (using a small grant to pay for summer employment of the faculty) and implement the new course in the fall. However, this time line is the exception rather than the rule. There will always be surprises and delays and in many cases you will be doing this in addition to your full-time teaching assignment. So be conservative and give yourself additional time.

For curriculum projects, a year or more of design work is not unusual. However, with a quality facilitator, teams can often meet formally once a week and accomplish a great deal of work. Because most new or redesigned curricula will require several levels of approval—by department, school, and institution—additional delays can be anticipated. Keep in mind, however, that once the overall curriculum design is completed, work can begin on individual courses even before formal approval is obtained. In most instances, when a total curriculum is involved, some courses will be able to be utilized with very few, if any, major changes. In more than one instance we began offering an important new curriculum before completing the design of the courses that were to follow.

In the chapters that follow we will discuss how a systematic approach ensures the most efficient use of your time and effort and that of your colleagues as you work together to improve your program.

Additional Resources

Lederman, D. "Fixing Higher Ed, Legislator-Style." *Inside Higher Ed*, Nov. 28, 2006. Available at http://www.insidehighered.com/ news/2006/11/28/ncsl.

This excellent review of the 2006 National Conference of State Legislators includes background and major recommendations, and places it in a national context. Focuses on the role of state legislators in helping to address the issues faced by colleges and universities. Includes links to other important reports.

Marchese, T. J. "Whatever Happened to Undergraduate Reform?" *Carnegie Perspectives*, *No.* 26, Stanford, Calif., 2006. Available at http://ctll.stanford.edu/tomprof/index.shtml.

An excellent overview of over two decades of innovations in higher education. Well worth the time.

National Academy of Engineering. *The Engineer of 2020: Visions of Engineering in the New Century.* Washington, D.C.: National Academies Press, 2004.

This small volume by the National Academy of Engineering is must reading for anyone in the sciences and engineering. It not only addresses the challenges being faced by schools and colleges of engineering in the United States but describes, in some detail, the competencies that will be required by engineers in the future. Has implications for faculty and administrators in all the arts and sciences.

Newman, F., Couturier, L., and Scurry, J. *The Future of Higher Education: Rhetoric, Reality, and the Risks of Market.* San Francisco: Jossey-Bass, 2004.

Discusses the changes that will occur in higher education in the years ahead, the forces behind them, and the ways in which colleges and universities will need to respond.

Project Kaleidoscope. *Recommendations for Urgent Action: Transforming America's Scientific and Technological Infrastructure.* Project Kaleidoscope. Washington, D.C., 2006.

> Reviews the recommendations (and the rationale behind them) of nearly twenty recent reports addressing America's capacity as a world leader in addressing societal problems through scientific and technological innovation. Must reading for anyone involved in the design of courses and curricula in business, engineering, and science.

Schemo, D. J. "At 2-Year Colleges, Students Eager but Unready." *The New York Times*, Sept. 2, 2006. Available at www.nytimes.com/2006/09/02college.html.

> Discusses the challenges being faced by community colleges as they attempt to provide support to under-prepared students. Raises major questions concerning the K–12/Higher Ed interface and describes the challenges faced by both students and institutions when remediation is not addressed.

CHAPTER 2

The Expanding Role of Faculty in Accreditation and Accountability

One of the principal means of providing accountability is accreditation, the most critical part of quality assurance in higher education. Like higher education itself, accreditation is a complex, heterogeneous system that involves regional, national, and specialized accrediting agencies, all of which have different roles and missions. The particular strength of accreditation is its independence from both government and the institutions it accredits. All accreditors now make student learning outcomes a central component in the accreditation reviews, and this will continue. But we must expand our efforts to ensure the public that accreditation is a strong, meaningful assurance of academic quality.

"Addressing the Challenges Facing American Undergraduate Education: A Letter to Our Members," 2006

Institutions and academic programs have been externally reviewed by accreditation agencies, state offices, and professorial associations for some time. However, although under the radar of most faculty, the changes that are now taking place—in the questions being asked and in the criteria being used to judge quality—have the potential to be the most significant force toward change to impact higher education in the last fifty years. Keep in mind that accreditation and most program reviews are the certification that your institution or program meets the requirements for academic excellence, curriculum, faculty, and so on. Without accreditation, recognized degrees cannot be awarded, state and federal support is unavailable, and degrees earned by your students will not be accepted by most other institutions or recognized by potential employers. For many years, most of us thought of these reviews as something that came about every five years or so, had little to do with us personally, was handled by a small group of administrators located somewhere in the deans' offices and central administration, and rarely required any major activity on our part. Although changes have been slow in coming, and the discussions regarding the role of the government are often contentious, there is little question that in the future, faculty will play a much more central role in the preparation of their institution's response. These changes will directly impact our teaching, how we evaluate our students, and our responsibilities as faculty and administrators.

External reviews of an institution or individual programs occur regularly, but the changes in requirements are not only significant in the scope of the questions that must be addressed but in the much faster pace at which these changes are occurring. In years past, an institution could simply dust off its previous documents, make a few modest modifications, and be finished, but this is simply no longer possible.

Although individual reviewing offices revise their criteria and standards independently, the major changes are generally consistent and, in almost every instance, becoming far more demanding and increasingly detailed. More significantly, most of the major revisions focus on academic programs and will, as a result, require a great deal of time and effort on your part and on the part of the entire academic community. It is, therefore, imperative that you begin planning today for the documentation that you will be required to provide tomorrow.

The Questions Accreditors Ask_

Although there are differences in the specific requirements of the various reviewing bodies, there are a number of commonalities among them. The wording may vary, as may the specific materials that an institution will be asked to provide; however, the basic questions asked of the academic side of the institution are fairly consistent.

- Does the institution have a clearly defined academic mission and vision?
- Are the educational goals of each academic program consistent with the stated priorities of the institution?
- Are procedures in place to evaluate the extent to which these goals are being achieved?
- Are procedures in place to evaluate educational effectiveness?

- Does the evaluation of academic programs and individual courses include the gathering and analyzing of both quantitative and qualitative data to demonstrate student achievement?
- Is student achievement in a course or program determined by how well that student meets the specific instructional goals (outcomes) that have been identified?
- Is each curriculum designed in such a manner that every student has the opportunity to reach the specific level of achievement that has been identified?
- Can the institution demonstrate that that all graduates are capable in the basic core competencies that have been identified (reading, writing, oral communications, mathematics, statistics, interpersonal skills, problem solving, computer skills, and so on)?

In short, more than ever before, the review process is focusing on (1) clearly stated learning outcomes; (2) the quality of teaching and learning; (3) the evaluation process; and (4) institutional accountability.

Most significantly, the process we use will assist you in designing courses and curricula that will meet, and often exceed, these newer and more detailed requirements.

Timing_

For years accreditation was, for most institutions, a once-everyten-years occurrence. In the last few years, however, the expanding number of for-profit institutions and the huge growth in off-campus and nontraditional courses have, along with a growing number of complaints about poor quality programs, prompted reviewing bodies to pay far greater attention to quality assurance than ever before. One result of these pressures has been the demand for increasing the frequency of reviews. Recognizing that institutions are faced with numerous reviews and that faculty and staff resources are limited, the various reviewing offices tend to work more closely with one another to ensure that, whenever possible, they request the same basic information and define quality the same way. As cooperation has not been the case in the past and some "turf wars" can be expected, these changes will be gradual. However, they are coming. Along with modifications in specific requirements, we are beginning to see changes in the timing cycle as agencies move toward a continuous improvement process where

reviews are scheduled more frequently or, in some cases, as part of an annual process.

The Structure of Accreditation_

As you work on the design of a course or curriculum you will be directly impacted by the reviewing criteria established by at least two and possibly three different offices or associations, which include:

• *The Regional Associations.* The United States is divided into six basic regions, each with its own set of criteria and procedures: the Middle States Association Commission on Higher Education, the New England Association of Colleges and Schools Commission on Institutions of Higher Education, the North Central Association of Colleges and Schools, the Higher Learning Commission, the Northwest Commission on Colleges and Universities, the Southern Association of Colleges and Schools, and the Western Association of Schools and Colleges. These are voluntary, nongovernmental agencies that are unique to the United States. In most countries the maintenance of educational standards is a governmental function.

• State Departments of Education or Boards of Regents. As there are major structural differences among the states, it will be important for you to determine which specific state agency accredits your own institution or program. For example, Departments of Education in some states accredit only public institutions, but in others the Boards of Regents will accredit both public and private colleges and universities.

• *Professional or Specialized Accreditation Associations.* These agencies accredit discipline- and field-specific programs such as architecture, business, engineering, nursing, law, medicine, and physical therapy. Most cover both undergraduate and graduate degrees. It should also be mentioned that a number of health care-related programs in community and junior colleges receive their professional approval through professional boards where the standards are often designed following the criteria established by the appropriate national professional accrediting association.

• *National Accreditation Agencies.* These agencies most commonly accredit proprietary institutions or nonprofit educational entities associated with museums.

• *Institutional Accreditation Agencies.* These agencies accredit single-mission institutions such as theology, art and design, and music.

For most of us, the regional and state accreditation agencies will provide the guidelines to follow. However, if you teach in a professional or specialized program, the discipline-specific association will give you a detailed description of the minimum skills and knowledge required of all graduates. In a number of these fields a formal examination of your graduates is also required.

The office of the chief academic officer at your institution should know which accreditation standards will be appropriate for you and should have copies of their guidelines available. One of your initial steps *before* you get under way with any course or curriculum program design is to get your hands on the most recent set of guidelines for the accreditation offices that your department and programs must satisfy. As guidelines are changing rather rapidly, make sure you have the most recent version. Most are available on the agency association's Web sites. Pay particular attention to:

- Their specific requirements regarding learning outcomes and assessment
- The programs and resources available to assist you in both areas; many agencies have exceptionally solid support programs and materials on both topics designed specifically for faculty members

Summary_

Changes in criteria and standards are the way of life in accreditation, but some of the more important trends will continue regardless of the results of the ongoing negotiations between the for-profit and nonprofit institutions, the Department of Education, and the voluntary regional and state accrediting agencies.

- Institutions will increasingly be held accountable for the learning of their students.
- Institutions will be required to identify the knowledge and skills required of all students receiving a degree and to determine in advance the level of student performance that will be acceptable.
- To meet these goals there will be increased pressure on academic programs to state, in measurable terms, the academic goals of their students and to track their success in meeting these standards.
- There will be increased pressure on academic programs to ensure that the curricula they offer provide all students with the opportunity to reach the established goals.
- Faculty will have the primary responsibility of ensuring that these mandated requirements are met.

• Finally, it can be anticipated that the requirements will not only be modified on a continual basis but, if the present trend continues, each change will be more specific in requirements than the one that preceded it.

You can anticipate that, sooner or later, the end product of the work you do in course or curriculum design will be required to address the specific demands of accreditation. Dealing with these standards now as you move through the design, implementation, and evaluation process will, in the long run, save you and your academic department a great deal of time and effort. You'll be glad you did.

Resources_

In the Resources section you will find a number of representative statements and guidelines from different accrediting groups. You will note that as you move from regional to state to disciplinaryspecific accrediting agencies the statements tend to become far more specific as to what is required. As noted previously, many of these agencies also offer excellent workshops, programs, and written materials designed to assist you in preparing for a review. One example, from the North Central Association, is also included.

- Resource A: Achieving Educational Objectives: Teaching and Learning (Western Association of Schools and Colleges)
- Resource B: Student Learning, Assessment, and Accreditation (The Higher Learning Commission of the North Central Association)
- Resource C: The Proposal Templates (Ohio Board of Regents)
- Resource D: Criteria for Accrediting Engineering Programs (Accreditation Board for Engineering and Technology)
- Resource E: Providing Institutional Support (The Academy for Assessment of Student Learning of the Higher Learning Commission of the North Central Association)

CHAPTER 3

Staying Informed

Although the model that we use to design, evaluate, and revise courses and curriculum, and the questions that you should ask, have remained generally constant over the last twenty years or so, the same cannot be said for the research on teaching and learning, the field of assessment, the instructional options available to you, and the knowledge, skills, interests, and demographics of your students. One of the greatest challenges you face as a faculty member or administrator will be in keeping up-to-date so that the teaching-related decisions you make are (1) based on the latest research on teaching and learning, (2) take full advantage of the resources and options that are available to you, and (3) are sensitive to important issues that impact your program, your discipline, and your institution.

To assist you in keeping informed we will, in the chapters that follow, highlight the best resources and information that are now available. As new materials and resources are always becoming available, in this chapter we will discuss a number of actions that you can take on your own to keep up-to-date on most recent developments in higher education that directly relate to course and curriculum design. Many of these are free and all are direct and to the point. We will also suggest a small number of basic publications that you should have available in your own office to serve as a primary resources in key areas.

In addition, you should always follow the programs and publications of the appropriate disciplinary, accrediting, and professional academic associations in your academic area.

Free and Highly Recommended: General.

There are two multitopic national newsletters that you should follow regularly. The time you will need to scan them for significant information is brief but the potential benefits can be substantial. • Inside Higher Ed

Inside Higher Ed is a daily, electronic newsletter that focuses on the latest news in higher education. Not every topic will be of interest to you, but the reports are well written and objective. Both the reports and essays include direct links to all major citations and to other related reports on the subject and are usually followed by comments from other readers that are sometimes heated and often interesting. Some of the topics are related to teaching and assessment and others will be of interest to you personally. To enroll, visit their Web site: http://insidehighered.com.

Tomorrow's Professor

This weekly newsletter, sponsored by the Stanford University Center for Teaching and Learning, provides you with chapters, major segments, or entire essays from the latest books, reports, and studies that focus on teaching and learning. The staff does an excellent job of identifying what faculty will find most useful; it's a great way to see what's available, and the material provides you with a sense of the focus and writing style of books you might be interested in purchasing. A list of past postings is available at http://ctl/ stanford.edu/tomprof/postings.html. To subscribe go to: http:// mailman.stanford.edu/mailman/listinfo/tomorrows-professor.

The following Web sites contain a range of materials that could be useful to you as you move through the design, implementation, and evaluation of a course or curriculum.

 Carnegie Perspectives (http://carnegiefoundation.org/ perspectives/index)

This monthly publication from the Carnegie Foundation for the Advancement of Teaching includes essays focused on educational issues that relate directly to teaching and learning. The above link to their archives is the best place to start.

• National Academy for Academic Leadership (http://the nationalacademy.org)

This Web site, which is updated regularly, contains separate sections devoted to resources in such areas as teaching and learning, assessment, technology, course and curriculum design, leadership and change, and faculty rewards.

• Educational Research Information Clearinghouse (www .eric.ed.gov/ERICWebPortal?home.portal)

This federally supported site contains most of the recent research on teaching, learning, and assessment. It covers all levels of education, and the easy-to-use retrieval systems will get you to the topics you are looking for rather quickly. The more specific you are in selecting your key search words, the better your results will be.

Free and Recommended: Specific Subjects _____

The following recommended Web sites are from national projects and centers and are devoted to a single topic or initiative. Additional specialized sites will be noted in a number of chapters.

Assessment

 Internet Resources for Higher Education Outcomes Assessment (www2.acs.ncsu.edu/UPA/assmt/resource.htm#gen)

This site contains links to a comprehensive array of international assessment resources, including discussion lists; accrediting agencies; glossaries; the Bloom Taxonomy; journals; assessment rubrics; survey data; assessment pages of individual colleges, universities, and organizations, including their assessment handbooks; student assessment and evaluation of courses and faculty members; and assessment in student affairs.

• Internet Resources for Institutional Research (http://airweb. org/links/)

Sponsored by the Association for Institutional Research, this site provides institutional researchers with useful resources. In addition to numerous assessment links, the site also has links relating to administration, data, publications, government, institutional research, quality improvement, student affairs, teaching and research, and technology.

Teaching and Learning

• The Scholarship of Teaching and Learning in Higher Education (http://carnegiefoundation.org/elibrary/docs/bibliography)

Sponsored by the Carnegie Foundation for the Advancement of Teaching, this excellent bibliography offers annotated links to numerous case studies and projects in various disciplines at many institutions. While on the foundation site, check their most recent publications.

• The National Survey of Student Engagement (www.nsse .iub.edu)

This Web site from the Institute for Effective Educational Practice provides detailed information on the survey and on the lessons learned from the information collected. Also includes links to a number of useful tools.

Technology

Innovate (http://innovateonline.info)

An open-access, bimonthly, peer-reviewed online periodical, this source focuses on the creative use of technology to improve teaching. As an added feature, each article includes an interactive "webcast" which allows you to connect with the author and other readers to discuss the material. The site also includes a direct link to other articles on related topics.

• The TLT Group (www.tltgroup.org)

The TLT Group is an extremely active, high-quality site focusing on the use of technology in higher education. Originally established under a grant to the American Association of Higher Education this group provides you with the opportunity to be as actively involved as you would like.

Items to Have on Your Bookshelf.

Every faculty member has, in his or her office, a least one bookshelf devoted to favorite and most often used publications in the discipline. We suggest that you add to it a small but important section devoted to teaching, learning, and assessment.

You may already have such a collection, but there are a few publications that we suggest you have available as your begin your work on course and curriculum design. As many of these titles have multiple editions, make sure you are ordering the most recent.

Association of American Colleges and Universities. *College Learning for the New Global Century.* Washington, D.C.: Association of American Colleges and Universities, 2007.

This report from the National Leadership Council for Liberal Education and America's Promise is relevant to every faculty member. Directly addressing the essential aims, learning outcomes, and principles for a quality twenty-first century education, the report is loaded with examples and quality references, and is available at www.aacu.org.

Diamond, R. M. *Preparing for Promotion, Tenure, and Annual Review: A Faculty Guide.* (2nd ed.) San Francisco: Anker/Jossey-Bass, 2004.

The questions to ask, the information you should provide. Inexpensive but extremely useful. Includes numerous examples of how to document scholarly activity in a number of situations.

Gardiner, L. F. *Redesigning Higher Education: Producing Dramatic Gains in Student Learning ASHE Higher Education Report, 23*(7). San Francisco: Jossey-Bass. 1996.

Still the best publication for a quick overview of the most important research on teaching and learning.

Grunert-O'Brien, J., Millis, B., and Cohen, M. *The Course Syllabus: A Learning Centered Approach.* (2nd ed.) San Francisco: Jossey-Bass, 2008.

How to improve learning by providing students with quality information. What to include with numerous examples.

McKeachie, W., and Svinicki, M. *McKeachie's Teaching Tips: Strategies, Research and Theory for College and University Teaching.* (12th ed.) Boston: Houghton Mifflin, 2006.

> Practical chapters on just about every topic on teaching you might hope to find. Each chapter includes excellent references for additional information. A great place to start.

Palomba, C. A., and Banta, T. W. *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education.* San Francisco: Jossey-Bass, 1999.

Provides an excellent introduction to the process of assessment and to the various approaches and their applications.

Publisher Mailing Lists_____

There are two primary publishers that focus on teaching, learning, and assessment and other topics relevant to higher education faculty and administrators. To keep up with the newest publications, we suggest that you get on their mailing lists. Your campus library and academic support center library will most likely include most of their publications in their collections.

Jossey-Bass, a Wiley imprint (www.josseybass.com). Jossey-Bass has recently purchased Anker Publishing, another major source of higher education materials. All Anker materials are available through this Web site.

Stylus Publishing (http://styluspub.com). In addition to their books, the series *Effective Practices for Academic Leader* regularly includes issues on such topics as assessment, technology, and scholarship.