Preface

Every educator, at the platonic level, wants to continuously improve both themselves and their students through the application of knowledge to both their work and that of the student. But in today’s world of education, a highly competitive environment created by extraordinary variety of educational sources and an acute need for more education to succeed in a knowledge economy, this ideal of continuous improvement becomes a vital competitive advantage, not only for the educator and their organization, but most importantly for the students themselves.

The twin concerns of providing a competitive advantage to both organizations and individuals corresponds roughly to the dual tasks of assessment and evaluation. Cases on assessment form the bulk of this collection, describing the methods and techniques employed and the analysis of these methods. These cases delve into the questions surrounding this issue, such as how to assess a course, how to implement these assessments, what factors should affect assessments, and which factors determine the success of the result. And how to measure and convey the results of these techniques is also explored through a series of cases involving evaluation. For students, this can be one of the most important issues and should be looked at carefully. How evaluation supports the aims of a course has a tremendous effect on individual students, making this last section of this casebook indispensable.

Section I, “Assessment,” begins with Kenneth Lightfoot and David Schwager’s chapter, “Alignment of Course Objectives and Assessment Items: A Case Study,” which examines how achieving close alignment between course objectives and course assessments should be an essential goal in the course design & revision process regardless of what mode of delivery is involved. By examining the revision of two courses (Western Civilization I & II) offered at Thomas Edison State College, the authors demonstrate how the application of sound instructional design principles to achieve this alignment resulted in the measurable improvement of student learning outcomes. The major issue examined in this study is how to achieve a close correlation between what a course states that a student should be able to do after
successful completion, what practice it offers them to achieve this proficiency, and how they are assessed to determine what level of proficiency they have attained.

Chapter 2, “A Case Study: Closing the Assessment Loop with Program and Institutional Data,” by Robert Elliott, brings to light three convergent themes while examining the effectiveness of the Teacher Education program assessment at the case institution. This study takes for granted that, first, a nationwide shortage of highly qualified teachers exists, and not enough people are becoming teachers, and second, that there are increasing demands for institutions to demonstrate a system of accountability through program assessment. Also, many teacher preparation programs are not accredited, and of the 1,300 teacher preparation programs that existed in 1999, only 38 percent were accredited through the National Council for the Accreditation of Teacher Education (NCATE). A thorough look at the data proves revealing in this case study.

Increasing student retention and graduation is one of the most difficult challenges facing Traditionally Black College and University (TBCUs). “A Framework for Examining Data and Taking Action to Increase Student Retention and Graduation” examines the type of data that is generally available and useful to issues of retention, and suggests a variety of possible actions that can be undertaken to address the findings and impact retention and graduation rates. The framework of IR data and possible actions to address problems revealed by data is based on the experiences at Large State A&M University. The issues revealed are common to many TBCUs, and it is hoped that this sharing of information will assist other TBCUs in addressing the important issues of retention and graduation rates.

The next chapter is “Collaboration in Student Assessment Research: Beyond Data Collection and Reporting.” Institutional Research (IR) professionals have diverse roles and responsibilities in universities across the country. The Office of Institutional Research (OIR) at Small State University has evolved from an Office of Planning and Analysis whose primary responsibility was for collecting and reporting descriptive statistics to an OIR with growing responsibilities for outcomes research. In this chapter, the authors describe the transition of the OIR to provide more support to outcomes research and program/project evaluation. A particular case related to the university’s Quality Enhancement Plan (QEP) and First Year Experience (FYE) efforts is described. For many universities, the primary and sometimes only outcome measure being assessed related to the First Year Experience is the Fall to Fall retention rate of students. At Small State University, faculty were interested in understanding more about how a particular FYE course and its learning community contributed to student success indicators beyond retention rates. Through collaboration between the OIR, the Associate Provost (AP), and the Associate Vice President for Learning Assessment (AVPLA), data regarding FYE courses and learning com-
munities was assessed. The findings supported the skills learned through the FYE course and learning communities are mechanisms through which at-risk students can improve overall GPA and retention. This collaboration between the OIR, the AP, and the AVPLA provided a foundation upon which focused studies of student characteristics and outcomes assessment can proceed in the future. A framework for organizing the work of institutional research and learning assessment is proposed.

“Development and Evaluation of a Generic Re-Purposable e-Learning Object on Data Analysis,” describes the development of a re-purposable learning object for higher education. There is evidence of an increasingly diverse student population in UK higher education, where the sector is currently faced with re-positioning itself in order to meet the challenges of higher education in the 21st century. This has resulted in a new emphasis in education on supporting the learner, in collaboration with peers and tutors, through a lifetime of education, both within and outside the classroom. These factors, together with personal experience in teaching students data analysis have been instrumental in the formation, by the authors, of the conception of the Analyse This!!! learning object described in this case study. In June 2008 Analyse This!!! was successfully launched, and it is hoped that it will prove to be a useful resource for students and staff alike, across many different subject disciplines and across different institutions.

Recent evidence of the adoption of technologically mediated systems of knowledge management as part of the trend to accountability in the Institutions of Higher Education around the world has been widely disseminated in World Bank and UNESCO reports, and the effects of assessment driven accountability on preparation programs extensively debated in scholarly communities. Less scholarly attention has been paid to the institutional effects of the technology enhanced performance assessment evidentiary demands on university programs undergoing review by national accrediting bodies. The case, “Artifacts of Expansive Learning in Designing a Web-Based Performance Assessment System: Institutional Effects of the Emergent Evaluative State of Educational Leadership Preparation in the United States,” addresses the lack of scholarly attention by presenting a case study examining the institutional dynamics of accreditation review experienced by faculty in one department that offered graduate programs leading to certification for education leaders. Drawing from institutional analysis (Scott, 2008a, 2008b) a conceptual framework is established in a discussion of conditions of enactment of the regulative, normative and cognitive facets of the institutional dynamics evident in the implementation ecology of accountability systems. The case study analysis outlines four phases of development of the essential elements of a web-based assessment system, and describes the questions raised by faculty about performance evidence, the assessment of that evidence, and the nature of measures of program
outcome effectiveness. Classic theories of organizations fail to fully explain the concerns and questions that were raised by faculty. In contrast, Engeström’s (1999, 2001, 2008) theory of expansive learning grounded in Cultural Historical Activity Theory (CHAT) provides insights into faculty responses to questions raised by the criteria for program review established by the accrediting body. Artifacts of expansive learning evident in the development of a performance assessment system can be viewed as reflecting institutionalization of regulative, normative, and cognitive dimensions of the emergent evaluative state of leadership preparation around the world. Implications are suggested for understanding the development of information technology (IT) enhanced knowledge management systems (KMS).

“Authentic Assessment Contribution to Competence Based Education: Questions and Challenges,” explores a tool (the Learning Contract) to facilitate assessment authenticity as a way to promote student learning. It evaluates the use of the Learning Contract to increase student’s responsibility and commitment for their own learning, while at the same time facilitates its alignment with their professional practice, and contributes to the development of their life-long learning competencies.

The next case, “Heterogeneity Analysis in the University Context: A Proposal Based on Service Quality Perceptions,” by Maria Fuentes Blasco, Irene Gil Saura and Beatriz Moliner Velásquez, attempts to make an in-depth examination of the viability of student perceptions of service quality as segmentation criterion while also analyzing how such dimensions can be used to segment effectively the collective of students’ degrees using latent methodology.

“A Case Study Analysis of the Use of Online vs. Proctored Final Exams in Online Classes,” examines the results of an effort by a large regionally accredited institution to assure the integrity of its online final examination process. The question of whether the student outcomes achieved when administering an entirely online final exam are comparable to the outcomes achieved when administering proctored final exams for online (elearning) university classes is the primary focus of this study. The results of an analysis of over 100 online courses and 1800 students indicate that it is possible to establish processes and procedures that allow the results achieved by students on their final exam to be comparable irrespective of whether the final exam is proctored or is a fully online examination.

“Person-Centered Learning: An Investigation of Perceptions of Learners Utilizing the Person-Centered Model of Instruction,” argues that as the distance grows between the instructor and student within education, it becomes necessary to explore new ways of addressing the instruction that goes into distance education. In this case, the author describes a distance-based instructional model, the person-centered model of instruction, as well as a case study implementation of the person-centered model of instruction in a web-based course and discusses the differences in learn-
ing of two groups using the person-centered model of instruction and the other one participating in a constructivist learning experience.

The planning and elaboration of the Teaching-Learning Objects (T-LO) are gaining heightened importance in Brazil. Therefore, the authors of “A Framework to Analyze Teaching-Learning Objects (T-LO): A Case Study of a Didactic Module” look towards presenting the conceptual singularities of the T-LO; the Instructional Design (ID) processes and the importance of the Instructional Project (IP) elaboration to guarantee a meaningful potentiality of the T-LO. On the basis of the results of the research study, attention is being centred on the contribution of a framework (called the T-LO List), which is used to analyze how the T-LO developed, implemented, and evaluated in a specific context of a didactic module elaboration.

Whether online edutainment gaming can enhance intelligence, student learning, or scholastic performance remains hotly debated in education research circles. “Enhancing Intelligence, English and Math Competencies in the Classroom via e@Leader Integrated Online Edutainment Gaming and Assessment,” is a case written about a solution that the authors developed both in response to this academic issue, and in order to address a number of educational policy questions asked of the authors by several government organizations. The solution is the online e@Leader edutainment gaming platform. Their e@Leader program is the first comprehensive ‘learning by gaming’ system to also be designed according to the findings of advanced machine learning and cognitive developmental neuroscience research. In 2008, the first empirical evidence was generated with its use, and together with its built-in assessment system, integrated into the school curriculum. Beyond this existence proof of concept, and practical program application for educational use, results of beta-testing with the e@Leader system across primary schools in two countries support the claim for tutored online educational gaming in enhancing intelligence, active student learning, and scholastic performances in English and math.

“Balanced Assessment of Flexible e-learning vs. Face-to-Face Campus Delivery Courses at an Australian University,” case highlights the values in using formal methodologies to gain an objective balanced perspective of actual practice and objectively measure whether flexible e-learning was at least as effective as campus delivery mode. It not only provides some ideas and benchmarks for competitive higher education but also explores the viability of Australian higher education model from international perspective.

“Blended Assessment Methods in Online Educational Programs in Turkey: Issues and Strategies,” presents an analysis of eleven online educational programs of different universities in Turkey regarding their assessment methods with several aspects. The results in the paper shows that online quizzes and tests, assignments, individual and group projects, participation to the discussions, proctored face-to-
face midterm and final exams are major blended assessment methods used in the online programs.

“Meta-Analysis as a Tool for Assessing University-Wide Student Learning Outcomes,” examines the efficacy of using meta-analysis techniques for the assessment of a university core course requirement that a university delivers through many courses, across several colleges of the university. Meta-analysis is a set of techniques for combining the results of many studies in order to understand the effects of a treatment as it is applied to an entire field. While this technique has been used as a research literature review technique, we believe that meta-analysis procedures can bring both robust and orderly assessment of program effectiveness across courses that meeting a single learning objective, even though the courses themselves may come from divergent fields. Meta-analysis has the advantage of all assessments not needing to be the same because the researcher converts the results of each assessment to a common statistic, an effect size. In a program evaluation context, this means that professors can use their own embedded classroom assessments as their contribution to a university-wide assessment. An institutional researcher could also combine these for a general assessment of student learning. Additionally, because the embedded assessment is a natural part of the class, it is unobtrusive to instruction in the class and invisible to students.

Assessment of student learning outcomes at institutions of higher learning has become a strategic initiative as accountability discussions continue to stir within the academic environment. “Developing an Assessment Plan for the Arts and Sciences Division of a Comprehensive Community College,” looks at the various aspects of developing, implementing, and evaluating an assessment plan for the Arts and Sciences division of a comprehensive community college. Discussions include how to instill an “assessment” focus within an institution, the importance of identifying appropriate leadership and establishing assessment committees, how to get faculty buy in, how to develop an assessment plan, how to utilize technology for data collection and analysis, and how to continuously improve assessment activities, are all explored. The institution of discussion has completed the first two years of its four-year assessment process. The case study reflects on the first two years of the process.

“Objective-Oriented Assessment in Desire2Learn for Quality Matters,” is a report on using a course management system Desire2Learn® to facilitate the implementation of the quality assurance standards recommended by Quality Matters. After a brief introduction to the Quality Matters standards, the chapter describes how the Desire2Learn learning environment can be structured to build an interconnected framework to promote objective-oriented, criterion-referenced, dynamic assessment. A pilot study was conducted to explore how learning activities can be assessed in alignment with measurable learning objectives, with reference to criterion-based
rubrics. The chapter discusses issues found through the study and lessons learned in using the competency structure of Desire2Learn to enforce objective-oriented assessment.

“Web-Based Instructions: An Assessment of Preparedness of Conventional Universities in Saudi Arabia,” is a case based in Saudi Arabia that investigates the factors that affect faculty decisions in the conventional universities either to participate or not to participate in Web-based instruction (WBI). For this, factors such as incentives and barriers to WBI, faculty attitudes, and participants’ demographic information were explored. The study was aimed at determining the attitudes of the faculty members at three Saudi Arabian universities towards WBI in an effort to describe the current status of WBI in the Saudi higher education system.

Assessing the effectiveness of academic programs is a critical element of institutional research. “The Birth of a Survey: Developing an Assessment of Preservice Teachers’ Diversity Awareness,” discusses the changing demographics in the United States which compel measurement of the effectiveness of academic programs to address issues of diversity. At a large public university in the Southwestern U.S., a team of researchers constructed a diversity awareness survey as part of its institutional research. This survey was created in response to several factors: (1) results from a university-wide survey of graduating seniors regarding attitudes toward diversity were alarming; (2) the College of Education was undergoing NCATE accreditation review, and assessment had become part of institutionalized procedures in the college; (3) the Curriculum and Instruction department chair requested it; (4) the teacher certification program was guided by a mission to prepare teachers to be effective in diverse classrooms. This process appeared simple at first, but proved to be a lengthy, complex series of steps on a not-so-linear path. After three years, we are just now reaching a point where we believe the survey validity is strong and the questions need no further revision.

The second section, “Evaluation,” begins with “A Study of the Relationship between Freshman Composition and Student Performance in Intensive Writing Courses,” which details a study conducted to ascertain the relationship between students’ performance in Composition/Rhetoric I (ENGL1301) and their performance in intensive writing courses for the purpose of determining whether or not ENGL1301 should be required as a prerequisite to all courses that involve intensive writing. Data related to course-taking patterns and performance in ENGL1301 and six intensive writing courses were extracted from Suburban Community College student information system for students who enrolled in the intensive writing courses during fall and spring semesters 2007-2008. The data were analyzed using multinomial logistic regression. The study produced three primary findings. (1) Better performance in ENGL1301 decreased the odds that students would experience
negative outcomes (withdrawal and grades of D or F) in intensive writing courses. (2) In most instances, students who were not college ready were more likely than other students to experience negative outcomes in intensive writing courses. (3) Taking ENGL1301 before, after, or concurrently with the intensive writing courses had little relationship with student performance in intensive writing courses.

“Addressing Online Student Learning Environments and Socialization Through Developmental Research,” looks at the online learners in the course to distinguish whether interactivity and an online community was established. This case study also considers the shift that took place in the learners’ focus from simply participating in an online course to reframing their understanding of the course content and whether this holistic approach reflects both the students’ and instructor’s learning objectives and anticipated outcomes. Design, development and implementation of online learning environments have predominated distance education research over the past fifteen years. Since 2006, dynamic communities of learning have begun to emerge that encompass a more expansive learning environment, addressing the needs of adult learners and their sociocultural environments as well as content materials. This study employs developmental research to examine online learners engaged within a dynamic learning community and provides detailed feedback on the strengths and potential weaknesses of the online course employed in the study.

“Learning Patterns of Learner’s Interaction in the Learning Management Systems: A Comparative Study of China and Malaysia,” examines the understanding, expectation and experience of learners from China and Malaysia based on vital aspects of learning in the web-based environment which are reflected in the learning patterns and behavior of online learners. It also highlights the influence of national culture towards learners’ interaction as displayed in their online learning activities.

Information and Communication Technologies (ICT) are regarded as a major contributor to the transforming of distance learning. The researcher assumed that education practitioners in developing countries like Lesotho, have limited, or no access at all to ICT for supporting instruction, since they still rely heavily on print and tutor/learner meetings as their distance mode of course delivery. The study described in “Distance Education and ICT-Supported Learning in Lesotho: Issues and Evidence,” assessed the feasibility of introducing ICT-mediated education for tutors and learners on a Distance Education Programme in Lesotho. The paper specifically focused on issues relating to the place of ICT in teaching and learning at a distance, ICT policy initiatives and challenges of infrastructure, human resource capacity, and cost as they affect provision of, and access to computer-mediated learning. Interventions critical to alleviating the situation are also discussed. Policy-makers and distance education practitioners require this type of feedback to be able to effect meaningful improvements in ODL programmes.
The authors of “‘De-Coupling Groups in Space and Time’: Evaluating New Forms of Social Dialogue for Learning,” invite us to think with them about “...the potential learning value of a particular technology (affordances)...” not solely in terms of how the technology functions but also in terms of the user’s imagination and creativity. While the chapter uses Voice Thread as a discussion application, it concentrates on pedagogical affordances of technology. Drawing upon undergraduate and postgraduate students in continuing professional development in education, this chapter reports on the students’ experience of online communication, what facilitates discussion online. The chapter points us toward thinking about what students do with technology.