## Online Assessment, Measurement and Evaluation Emerging Practices

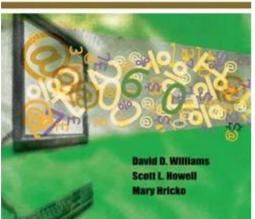
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## INTRODUCTION

Online assessment, measurement and evaluation have emerged as a new domain challenging process of education and educators in the twenty-first century.



As the improvements in online technologies have provided new tools, the vision of traditional methodologies and principles used in assessment, measurement and evaluation has also been challenged.

There is a crucial need to make clarify the concepts, issues and systems involved in this new challenging domain of assessment, measurement and evaluation.

In this sense, this book provides coherent point of view to the online assessment, measurement and evaluation

## ABOUT ONLINE ASSESSMENT MEASUREMENT AND EVALUATION.

With the emergence of online assessment, measurement and evaluation, various problems, concepts and approaches have emerged as a challenge for all stakeholders such as administrators, instructors, students. In this sense, this book outlines not only evaluation standards of feasibility, property, utility and accuracy which is thought as the ambiguities underlining online assessment, measurement and evaluation by stakeholders but also usage of established evaluation principles to employ new tools in evaluation system.

## **ORGANIZATION OF SECTIONS**

This edited book was published by Information Science Publishing. The book has nineteen chapters divided into five sections. Except the first section involving introductory chapter, chapters involved in the sections are grouped around approaches the authors took to collect evaluation data. In this sense, web surveys, student feedback, tests and combinations are the names of the section groping the chapters. In addition to section of authors' biography contributing the book and an index, there is a preface in which the

concepts related with measurement and evaluation are briefly described and chapters of the book are shortly introduced.

Besides three editors, thirty-nine authors have contributed to the book. These authors have different backgrounds and institutions. The authors represent a variety of universities and private companies. Most of them have strong professional backgrounds, which help them address the issues both from theoretical and practical perspectives. Contributions of authors having different backgrounds and institutions enable the book to have very comprehensive spectrum and this makes the book attractive practically for those executing various kind of activities on the net.

In chapter one - Measurement and Assessment Supporting Evaluation in Online Settings - David D. Williams of Brigham Young University outlines a framework for interpreting online measurement and assessment as components of evaluation as an introduction to the other chapters.

In chapter two - The Context and Culture of the Web as a Research Environment - Paula B. Doherty of Peninsula College explores problems and how to resolve them when using self-administered surveys on Web and she notes the openness of web culture.

In chapter three - Computer-Adaptive Online Exit Surveys: Conceptual and Methodological Issues - Najmuddin Shaik of the University of Illinois at Urbana-Champaign outlines the conceptual and methodological issues surrounding computer adaptive online exit surveys, and discusses the design, development and administration of the survey questionnaire.

In chapter four - Quality standards for Web-Based Learning: The Demand-Driven Learning Model Krista Breithaupt of the American Institute for CPAs and Colla J. MacDonald of the University of Ottawa discuss the theoretical framework that led to the development of a new e-learning model, termed the Demand-Driven Learning Model (DDLM) and describes the development of a survey that can be used to determine the quality of e-learning programs.

In chapter five - Online Course-Ratings: The Current State of the Art - Susan J. Clark of Brigham Young University, Christian M. Reiner of Purdue University, and Trav D. Johnson of Brigham Young University outlines some of the most salient advantages and challenges of online student evaluations of teaching within the context of how they relate to The Personal Evaluation Standards set forth by Joint Committee on Standards for Educational Evaluation (JCSEE, 1998).

In chapter six - Case Study: Developing a University-Wide Distance Education Evaluation Program at the University of Florida - Christopher D. Sessums, Tracy A. Irani. Ricky Telg, and T. Grady Roberts of the University of Florida explore the web-based surveys to gather student evaluations. To enhance quality, faculty and students satisfaction, and learning outcomes an academic working group comprising University of Florida faculty members proposed a project to develop a valid, reliable course evaluation tool for distance education courses and programs. The chapter examines the results of the project.

In chapter seven - Online Program Assessment: A Case Study of the University of Illinois at Urbana-Champaign Experience - Faye L. Lesht, Rae-Anne Montague, Vaughn J. Page, Najmuddin Shaik, and Linda C. Smith of the University of Illinois at Urbana-Champaign report on a university wide initiative to evaluate off-campus graduate programs using online surveys in comparison with postal surveys. Through the case study this chapter lends insight to ways online assessment can facilitate a holistic approach to the evaluation of distance education programs.

In chapter eight - Cybercoaching: An Emerging Model of Personalized Online Assessment - Ni Chang and Naomi Jeffery Petersen of the School of Education, Indiana University

South Bend introduces the cybercoaching, an emerging model of online formative assessment. Authors explore the use of online e-mail and word processing to share teacher critique and coaching with university students regarding their writings and they illustrate use of teaching evaluation model from their own instructional experiences.

In chapter nine - Testing the Validity of the Post and Vote Model of Web-Based Peer Assessment - Bruce L. Mann of Memorial University, St. John's, Canada describe an approach he has developed to encourage university student to summatively evaluate other students' work using web-based peer assessment process. The chapter reviews the theoretical bases for the model and shares results of the validation process.

In chapter ten - Online Assessment in a Teacher Education Program - Charles W. Peters and Patricia Ann Kenney of the University of Michigan describe how they have incorporated constructivist view of learning into their approach to online assessment. The context of their discussion is within an accelerated teacher education program at graduate level for pre-service teachers. At the heart of the authors assessment is an attempt to capture through the use of online techniques how their pre-service teachers are progressing toward becoming effective teachers through engagement in authentic situations.

In chapter eleven - Variations in Adaptive Testing and Their On-Line Leverage Points - Roy Levy of the University of Maryland, John T. Behrens of Cisco Systems, Inc., San Jose, California, and Robert J. Mislevy of the University of Maryland propose a taxonomy that differentiates assessments along three dimensions: (1) observation status, (2) claim status and (3) locus of control. In detailing taxonomy, they point out ways in which online assessment enables or enhances these feature and highlight the inferential roles that adaptivity can play assessment.

In chapter twelve - Using Messick's Framework to Validate Assessment Tasks in Online Environments: A Course in Writing Effectively for UNHCR - Valerie Ruhe of the University of Maine and Bruno D. Zumbo of the University of British Columbia argue that various forms of technology make old views of validity and assessment outmoded and they discuss evolving conceptions of validity and shows how Messick's (1989) framework is an improvement over traditional conceptions.

In chapter thirteen - Online Assessment and Instruction Using Learning Maps: A Glimpse into the Future - Jim Lee, Sylvia Tidwell-Scheuring, and Karen Barton of CTB/McGraw-Hill focus on potential of online assessment to accelerate learning via effective links to instruction. They examine notions of item adaptive testing, learning maps for instruction prescription and the validation of tests to enhance formative and summative evaluation of student understanding and associated instruction designed to help them through technology.

In chapter fourteen - Authentic Assessment Online: A Practical and Theoretical Challenge in Higher Education - Smita Mathur of the University of South Florida and Terry Murray of the State University of New York at New Paltz address the issue of authentic assessment in an online, asynchronous educational environment.

In chapter fifteen - Performance Testing: Validity Issues and Design Considerations for Online Testing - James B. Olsen of Alpine Media Corporation reviews the theoretical literature and builds on the premise that validation of tests should enhance the evaluation of learning progress systems and students' learning.

In chapter sixteen - Assessment and College Progress: Capacity Building through Formative and Summative Program Evaluation - Jennifer K. Holtz and Barbara Radner of DePaul University School for New Learning clarify opportunities that colleges have to build teaching and assessment capacity.

In chapter seventeen - Evaluating Content-Management Systems for Online Learning Programs - Deborah L. Schnipke of Virtual Psychometrics, LLC, Kirk Becker of University of Illinois and Promissor, and Jim Masters of University of North Carolina at Greensboro and Promissor discuss the types of options that are available in content-management systems and provide guidance about how to evaluate whether different content management systems will meet an organization's test development and delivery needs.

In chapter eighteen - Learning by Doing: Four Years of Online Assessment In Engineering Education Research - John C. Wise, Sang Ha Lee, and Sarah E. Rzasa of Pennsylvania State University describe the experiences of a team of researchers in the college of Engineering at Penn State who have spent the past several years using the internet to collect student data. They present and reflect upon lessons learned through four study examples they engaged in at Penn State using different online tools

In chapter nineteen - The Role of Assessment and Evaluation in Context: Pedagogical Alignment, Constraints, and Affordances in Online Courses - Julia M. Matuga of Bowling Green State University expresses that the purpose her chapter is to facilitate discussions regarding the contextualization of assessment and evaluation within the online educational environment.