

SPECIAL ISSUE

Historical and Contemporary Perspectives on Educational Evaluation

education policy analysis
archives

A peer-reviewed, independent,
open access, multilingual journal



Arizona State University

Volume 26 Number 45

April 16, 2018

ISSN 1068-2341

Introduction to the Special Issue: Historical and Contemporary Perspectives on Educational Evaluation

Lorin W. Anderson

University of South Carolina
United States

Maria de Ibarrola

Center for Research and Advanced Studies
Mexico



D. C. Phillips

Stanford University
United States

Citation: Anderson, L. W., de Ibarrola, M. & Phillips, D. C. (2018). Introduction to the special issue: Historical and contemporary perspectives on educational evaluation. *Education Policy Analysis Archives*, 26(42). <http://dx.doi.org/10.14507/epaa.26.3810> This article is part of the Special Issue, *Historical and Contemporary Perspectives on Educational Evaluation: Dialogues with the International Academy of Education*, guest edited by Lorin W. Anderson, Maria de Ibarrola, and D. C. Phillips.

Journal website: <http://epaa.asu.edu/ojs/>
Facebook: /EPAAA
Twitter: @epaa_aape

Manuscript received: 1/15/2018
Revisions received: 2/18/2018
Accepted: 2/18/2018

Abstract: Most special issues on evaluation focus on one form or type of evaluation (e.g., program evaluation, personnel evaluation, and, increasingly, educational system evaluation. This special issue is unique in that there are papers on system evaluation, program evaluation, teacher evaluation, and student evaluation. Some papers are primarily conceptual, others are empirical, and still others are a little of each. Some papers are more historical, some contemporary, and some a little of each. The authors represent four countries: Canada, Mexico, South Africa, and the United States, providing an international perspective on key issues. The final paper contains six recommendations concerning the future of educational evaluation based on an analysis of commonalities across the papers.

Keywords: curriculum evaluation; international evaluation; politics of evaluation; program evaluation; student evaluation; system evaluation; teacher evaluation

Introducción al número especial: Perspectivas históricas y contemporáneas sobre evaluación educativa

Resumen: La mayoría de los números especiales sobre evaluación se centra en una forma o tipo de evaluación (por ejemplo, evaluación del programa, evaluación del personal y, cada vez más, evaluación de los sistemas educativos. Esta edición especial es única porque hay artículos sobre evaluación de los sistemas, evaluación de programas, evaluación, y evaluación de los alumnos. Algunos trabajos son primariamente conceptuales, otros son empíricos, y otros todavía son un poco de cada uno. Algunos artículos son más históricos, algunos contemporáneos, y algunos un poco de cada uno. los autores representan cuatro países: Canadá, México, Sudáfrica y Estados Unidos, proporcionando una perspectiva internacional sobre cuestiones clave. El informe final contiene seis recomendaciones sobre el futuro de la evaluación educativa sobre la base de un análisis de similitudes entre los artículos.

Palabras-clave: evaluación curricular; evaluación internacional; política de evaluación; evaluación del programa; evaluación de los alumnos; evaluación del sistema; evaluación de profesores

Introdução à dossiê especial: Perspectivas históricas e contemporâneas sobre avaliação educacional

Resumo: A maioria das dossiês especiais sobre avaliação se concentra em uma forma ou tipo de avaliação (por exemplo, avaliação de programa, avaliação de pessoal e, cada vez mais, avaliação de sistemas educacionais. Essa edição especial é única porque há artigos sobre avaliação de sistemas, avaliação de programas, avaliação, e avaliação dos alunos. Alguns trabalhos são primariamente conceituais, outros são empíricos, e outros ainda são um pouco de cada um. Alguns artigos são mais históricos, alguns contemporâneos, e alguns um pouco de cada. Estes autores representam quatro países: Canadá, México, África do Sul, e Estados Unidos, proporcionando uma perspectiva internacional sobre questões-chave. O relatório final contém seis recomendações sobre o futuro da avaliação educacional com base em uma análise de semelhanças entre os artigos.

Palavras-chave: avaliação curricular; avaliação internacional; política de avaliação; avaliação de programa; avaliação dos alunos; avaliação do sistema; avaliação de professores

Introduction to the Special Issue: Historical and Contemporary Perspectives on Educational Evaluation

Slightly more than 20 years ago, Michael Scriven (1996) wrote that “evaluation is a very young discipline – although it is a very old practice” (p. 395). Although there can be no doubt that educational evaluation in some form has been around for a long time, one can question whether evaluation is, in fact, a discipline. The *Oxford English Dictionary* defines a discipline as “a branch of learning or scholarly instruction.” Beyer & Lodahl (1976) have described disciplinary fields as providing the structure of knowledge in which faculty members are trained and socialized; in which they carry out tasks of teaching, research, and administration; and in which they produce research and educational output. Disciplinary worlds are considered separate and distinct cultures that exert varying influence on scholarly behaviors as well as on the structure of higher education.

Rather than evaluation being a discipline, I would suggest that evaluation may be better thought of as a collection of disciplines. Program evaluation, for example, is “separate and distinct” from teacher evaluation as evidenced by the fact that the references included in program evaluation reports are void of any references to teacher evaluation and *vice versa*. Similar statements can be made for student evaluation (e.g., both in terms of scores on standardized tests and of the assignment of grades or marks) and the evaluation of entire educational systems (e.g., state, nation). To further support the presence of “separate and distinct” disciplines within evaluation a cursory search of the table of contents of journals will produce special issues on program evaluation (Ross, 2010), system evaluation (Lenkeit & Caro, 2014), teacher evaluation (Harris & Herrington, 2015), and student evaluation (Erickson, Ysseldyke, Thurlow, & Elliott, 1998).

This special issue is unique in that there are papers on system evaluation, program evaluation, teacher evaluation, and student evaluation. Some papers are primarily conceptual, others are empirical, and still others are a little of each. Some papers are more historical, some contemporary, and some a little of each. The authors represent four countries: Canada, Mexico, South Africa, and the United States, providing an international perspective on key issues.

Each of the papers included in this special issue began as an oral presentation given at a conference held in Mexico City on September 1-2, 2016, sponsored by Mexico’s National Institute for the Evaluation of Education (INEE). The theme of the conference was “Key Issues in the Evaluation of Basic Education.” At the time of the conference, there was a great deal of upheaval in the educational system throughout Mexico, largely because of the enactment of a national education reform effort that impacted programs, students, and, particularly, teachers. In her paper, Maria de Ibarrola presents a comprehensive overview of the state of affairs at the time of the conference. Several of the other authors (particularly Richard Shavelson and Servaas van der Berg) refer to the Mexican situation in their papers. In a sense, the Mexican situation is the international situation in miniature, in stark relief. As a consequence, the lessons to be learned from the papers are widely applicable, and their relevance extends far beyond the Mexican context for which they were originally written.

In the first paper, which is intended as an introduction to the other papers, D. C. Philips provides a historical context for contemporary evaluations. Among the issues discussed are the role of the evaluator (that is, whether evaluators are to inform decision makers or make the decisions themselves), the major differences between formative and summative evaluations (and the pros and cons of each), and the importance of examining unintended consequences or effects of programs. He argues that there are many functions of evaluation and that the method used to conduct evaluations should be informed by, and consistent with, the intended function.

In the second paper, William Schubert argues that both curriculum and evaluation deal with matters of worth or value. Furthermore, what is judged to be worthy or valuable depends to a large extent on the curricular orientation of the person (or group) making the judgment. He describes five orientations to curriculum: Intellectual Traditionalist, Social Behaviorist, Experientialist, Critical Reconstructionist, and Postmodern Global Anti-Imperialist. Each offers a perspective worth considering by those who wish to improve curriculum and the ways in which curriculum (and learning) are evaluated.

In the third paper, Richard J. Shavelson presents three general questions that drive evaluation: (1) Descriptive, that is, “What’s happening?” (2) Causal, that is, “Is there a systematic effect?” and (3) Process or mechanism, that is, “Why or how is this happening?” Depending on the type of question, formative evaluation, summative evaluation, or some combination may be appropriate. In designing evaluations, it is important to pay attention to politics and measurement models and methods. Measurement matters should be addressed after the key questions have been determined. He includes several concrete examples to show how assumptions and misperceptions can upend or change the outcomes of evaluations.

In the fourth paper, Lorin W. Anderson relies on both historical and contemporary research and writing to address five questions: (1) Why do we grade students? (2) What do grades mean? (3) How reliable are students’ grades? (4) How valid are students’ grades? and (5) What are the consequences of grading students? The results of his analysis suggest that we grade students for various reasons; the meaning of grades is largely context- and person-specific; individual grades lack reliability whereas cumulative grades are reasonably reliable; the validity of individual grades is difficult to determine, but the validity of cumulative grades is quite strong; and grades have an impact (both positive and negative) on a variety of student affective characteristics (e.g., self-esteem).

In the fifth paper, Servaas van der Berg argues for the importance of international evaluations in improving educational systems, particularly in developing countries. International evaluations have consistently shown that socioeconomic status has a systematic influence on educational outcomes and, also, that social gradients vary across and within countries. The need, therefore, is not for “league tables,” but for data that allow countries to judge the appropriateness of their policies and strategies in an international context. Efficient and targeted application of resources and policies to improve education in developing countries requires information on system performance, inequalities, progress and stagnation. International evaluations should be expanded to more countries, should be better anchored and comparable, and should be demystified.

In the sixth paper, Kadriye Ercikan, Mustafa Asil & Raman Gover discuss the extent and impact of the “digital divide” in education in general and on standardized tests in particular. A social context relevant to learning and assessment in the digital age is the large differences in access to and competence in technology among students. As a consequence, access and competency in relation to technology become critical contexts for evaluations that rely on digitally-based assessments. The authors examine the digital divide among students from different segments of society and discuss strategies for minimizing the effects of the digital divide on students’ scores on standardized tests as well as on the interpretation of those scores.

In the seventh paper, Sylvia Schmelkes describes several projects conducted under the auspices of the Mexican National Institute for the Evaluation of Education (INEE). These projects address the problems of evaluating indigenous children and teachers as well as the educational policies and programs that pertain to them. Four separate projects are described, including efforts to reduce the cultural and linguistic bias in standardized tests, means of evaluating the indigenous language competence of teaching candidates, and the design of a qualitative instrument for

evaluating teacher performance. The projects described are but a starting point toward improving evaluation and resolving conflicts and dilemmas that are likely to be faced in the future.

In the eighth paper, Maria de Ibarrola details the enactment of National Educational Reform legislation and its implementation over time. Her analysis describes the (1) aims and intentions of the Reform, (2) the problems in its implementation, (3) the opposition of a radical wing of the National Union of Educational Workers, and (4) the social turmoil this confrontation has caused. She provides a theoretical basis for a systematic analysis of educational reform, one that includes an understanding of the political nature of the reforms, the distinction between design and implementation, and the use of a variety of constructs to provide a solid analytic framework.

In the ninth paper, David C. Berliner discusses the inadequacies of two common methods of evaluating teachers: standardized achievement test data and classroom observation systems. Both have serious flaws: the former primarily with validity, the latter primary with reliability. The flaws of each are sufficiently serious so that neither should be used as the primary grounds for rewarding, punishing, or firing teachers. He discusses two alternatives that show some promise: duties-based teacher evaluation, and performance measures. Although these alternatives have much to recommend them, like all methods of personnel evaluation, reliability and validity issues remain problematic.

The last paper by Lorin W. Anderson is intended to summarize key points made in the previous nine papers. Based on his cross-paper analysis, he offers six recommendations, ranging from the need to be aware of political, societal, cultural, and economic factors affecting evaluation studies, to the importance of flexibility in the implementation of evaluation studies (to take into consideration unintended events or intended alterations), to the importance of ensuring that the results of the evaluation are interpreted properly and well understood.

The recommendations offered in the closing chapter bring us back to the question of whether evaluation is, in fact, a discipline. If there are, in fact, “common threads” across the various forms and targets of evaluation, a positive answer to the question would seem justified. On the other hand, if the differences in theory and practice are so great as to make it virtually impossible to find “common ground,” then the answer quite likely is negative. After reading the papers in this special issue, we will leave it to the reader to decide.

Acknowledgements

The collection of articles included in this special issue will be published as a Spanish-language book, *Temas clave de la evaluación de la educación básica. Diálogos y debates*, coordinated by María de Ibarrola. Each article is accompanied by an extensive commentary written by a prestigious Mexican educational researcher (10 commentaries). The book is published by Fondo de Cultura Económica and Mexico's National Institute for Educational Evaluation (INEE) and will be available in April 2018:

Ibarrola, María de (Coord.) *Temas clave en la evaluación de la educación básica. Diálogos y debates*, Fondo de Cultura Económica e Instituto Nacional para la Evaluación de la Educación, Ciudad de México, 2018 (Col. Educación y Pedagogía).

References

- Beyer, J. M., & Lodahl, T. M. (1976). A comparative study of patterns of influence in United States and English universities. *Administrative Science Quarterly*, 21, 104–129.
<https://doi.org/10.2307/2391882>
- Erickson, R., Ysseldyke, J., Thurlow, M., & Elliott, J. (1998). Inclusive assessments and accountability systems. *Teaching Exceptional Children*, 31(2) (Special Issue).
<https://doi.org/10.1177/004005999803100201>
- Harris, D. N., & Herrington, C. D. (2015). The use of teacher value-added measures in schools: New evidence, unanswered questions, and future prospects. *Educational Researcher*, 44(2) (Special Issue). <https://doi.org/10.3102/0013189X15576142>
- Lenkeit, J., & Caro, D. H. (2014). Performance status and change – measuring education system effectiveness with data from PISA 2000–2009. *Educational Research and Evaluation*, 20(2) (Special Issue). <https://doi.org/10.1080/13803611.2014.891462>
- Ross, M. E. (2010). Designing and using program evaluation as a tool for reform, *Journal of Research on Leadership Education*, 5(12) (Special Issue). <https://doi.org/10.1177/194277511000501207>
- Scriven, M. (1996). The theory behind practical evaluation. *Evaluation*, 2(4), 393-404.
<https://doi.org/10.1177/135638909600200403>

About the Authors/Guest Editors

Lorin W. Anderson

University of South Carolina (Emeritus)

anderson.lorinw@gmail.com

Lorin W. Anderson is a Carolina Distinguished Professor Emeritus at the University of South Carolina, where he served on the faculty from August, 1973, until his retirement in August, 2006. During his tenure at the University he taught graduate courses in research design, classroom assessment, curriculum studies, and teacher effectiveness. He received his Ph. D. in Measurement, Evaluation, and Statistical Analysis from the University of Chicago, where he was a student of Benjamin S. Bloom. He holds a master's degree from the University of Minnesota and a bachelor's degree from Macalester College. Professor Anderson has authored and/or edited eighteen books and has had 40 journal articles published. His most recognized and impactful works are *Increasing Teacher Effectiveness, Second Edition*, published by UNESCO in 2004, and *A Taxonomy of Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*, published by Pearson in 2001. He is a co-founder of the Center of Excellence for Preparing Teachers of Children of Poverty, which is celebrating its 14th anniversary this year. In addition, he has established a scholarship program for first-generation college students who plan to become teachers.

Maria de Ibarrola

Center for Research and Advanced Studies

mdeibarrola@gmail.com

Maria de Ibarrola is a Professor and high-ranking National Researcher in Mexico, where since 1977 she has been a faculty-member in the Department of Educational Research at the Center for Research and Advanced Studies. Her undergraduate training was in sociology at the National Autonomous University of Mexico, and she also holds a master's degree in sociology from the University of Montreal (Canada) and a doctorate from the Center for Research and Advanced Studies in Mexico. At the Center she leads a research program in the politics, institutions and actors

that shape the relations between education and work; and with the agreement of her Center and the National Union of Educational Workers, for the years 1989-1998 she served as General Director of the Union's Foundation for the improvement of teachers' culture and training. Maria has served as President of the Mexican Council of Educational Research, and as an adviser to UNESCO and various regional and national bodies. She has published more than 50 research papers, 35 book chapters, and 20 books; and she is a Past-President of the International Academy of Education.

D. C. Phillips

Stanford University

d.c.phillips@gmail.com

D. C. Phillips was born, educated, and began his professional life in Australia; he holds a B.Sc., B.Ed., M. Ed., and Ph.D. from the University of Melbourne. After teaching in high schools and at Monash University, he moved to Stanford University in the USA in 1974, where for a period he served as Associate Dean and later as Interim Dean of the School of Education, and where he is currently Professor Emeritus of Education and Philosophy. He is a philosopher of education and of social science, and has taught courses and also has published widely on the philosophers of science Popper, Kuhn and Lakatos; on philosophical issues in educational research and in program evaluation; on John Dewey and William James; and on social and psychological constructivism. For several years at Stanford he directed the Evaluation Training Program, and he also chaired a national Task Force representing eleven prominent Schools of Education that had received Spencer Foundation grants to make innovations to their doctoral-level research training programs. He is a Fellow of the IAE, and a member of the U.S. National Academy of Education, and has been a Fellow at the Center for Advanced Study in the Behavioral Sciences. Among his most recent publications are the *Encyclopedia of Educational Theory and Philosophy* (Sage; editor) and *A Companion to John Dewey's "Democracy and Education"* (University of Chicago Press).

SPECIAL ISSUE
Historical and Contemporary Perspectives on Educational Evaluation

education policy analysis archives

Volume 26 Number 45

April 16, 2018

ISSN 1068-2341



Readers are free to copy, display, and distribute this article, as long as the work is attributed to the author(s) and **Education Policy Analysis Archives**, it is distributed for non-commercial purposes only, and no alteration or transformation is made in the work. More details of this Creative Commons license are available at <http://creativecommons.org/licenses/by-nc-sa/3.0/>. All other uses must be approved by the author(s) or **EPAA**. **EPAA** is published by the Mary Lou Fulton Institute and Graduate School of Education at Arizona State University. Articles are indexed in CIRC (Clasificación Integrada de Revistas Científicas, Spain), DIALNET (Spain), [Directory of Open Access Journals](#), EBSCO Education Research Complete, ERIC, Education Full Text (H.W. Wilson), QUALIS A2 (Brazil), SCImago Journal Rank; SCOPUS, Socolar (China).

Please send errata notes to Audrey Amrein-Beardsley at Audrey.beardsley@asu.edu

Join **EPAA's Facebook community** at <https://www.facebook.com/EPAAAPE> and **Twitter feed** @epaa_aape.

education policy analysis archives
editorial board

Lead Editor: **Audrey Amrein-Beardsley** (Arizona State University)

Editor Consultor: **Gustavo E. Fischman** (Arizona State University)

Associate Editors: **David Carlson, Lauren Harris, Eugene Judson, Mirka Koro-Ljungberg, Scott Marley, Iveta Silova, Maria Teresa Tatto** (Arizona State University)

Cristina Alfaro San Diego State University

Gary Anderson New York University

Michael W. Apple University of Wisconsin, Madison

Jeff Bale OISE, University of Toronto, Canada

Aaron Bevanot SUNY Albany

David C. Berliner Arizona State University

Henry Braun Boston College

Casey Cobb University of Connecticut

Arnold Danzig San Jose State University

Linda Darling-Hammond Stanford University

Elizabeth H. DeBray University of Georgia

Chad d'Entremont Rennie Center for Education Research & Policy

John Diamond University of Wisconsin, Madison

Matthew Di Carlo Albert Shanker Institute

Sherman Dorn Arizona State University

Michael J. Dumas University of California, Berkeley

Kathy Escamilla University of Colorado, Boulder

Yariv Feniger Ben-Gurion University of the Negev

Melissa Lynn Freeman Adams State College

Rachael Gabriel University of Connecticut

Amy Garrett Dikkers University of North Carolina, Wilmington

Gene V Glass Arizona State University

Ronald Glass University of California, Santa Cruz

Jacob P. K. Gross University of Louisville

Eric M. Haas WestEd

Julian Vasquez Heilig California State University, Sacramento

Kimberly Kappler Hewitt University of North Carolina Greensboro

Aimee Howley Ohio University

Steve Klees University of Maryland
Jaekyung Lee SUNY Buffalo

Jessica Nina Lester Indiana University

Amanda E. Lewis University of Illinois, Chicago

Chad R. Lochmiller Indiana University

Christopher Lubienski Indiana University

Sarah Lubienski Indiana University

William J. Mathis University of Colorado, Boulder

Michele S. Moses University of Colorado, Boulder

Julianne Moss Deakin University, Australia

Sharon Nichols University of Texas, San Antonio

Eric Parsons University of Missouri-Columbia

Amanda U. Potterton University of Kentucky

Susan L. Robertson Bristol University

Gloria M. Rodriguez University of California, Davis

R. Anthony Rolle University of Houston

A. G. Rud Washington State University

Patricia Sánchez University of University of Texas, San Antonio

Janelle Scott University of California, Berkeley

Jack Schneider College of the Holy Cross

Noah Sobe Loyola University

Nelly P. Stromquist University of Maryland

Benjamin Superfine University of Illinois, Chicago

Adai Tefera Virginia Commonwealth University

Tina Trujillo University of California, Berkeley

Federico R. Waitoller University of Illinois, Chicago

Larisa Warhol University of Connecticut

John Weathers University of Colorado, Colorado Springs

Kevin Welner University of Colorado, Boulder

Terrence G. Wiley Center for Applied Linguistics

John Willinsky Stanford University

Jennifer R. Wolgemuth University of South Florida

Kyo Yamashiro Claremont Graduate University

archivos analíticos de políticas educativas
consejo editorial

Editor Consultor: **Gustavo E. Fischman** (Arizona State University)

Editores Asociados: **Armando Alcántara Santuario** (Universidad Nacional Autónoma de México), **Jason Beech**, (Universidad de San Andrés), **Angelica Buendía**, (Metropolitan Autonomous University), **Ezequiel Gomez Caride**, (Pontificia Universidad Católica Argentina), **Antonio Luzon**, (Universidad de Granada), **José Luis Ramírez**, Universidad de Sonora)

Claudio Almonacid

Universidad Metropolitana de Ciencias de la Educación, Chile

Miguel Ángel Arias Ortega

Universidad Autónoma de la Ciudad de México

Xavier Besalú Costa

Universitat de Girona, España

Xavier Bonal Sarro Universidad Autónoma de Barcelona, España

Antonio Bolívar Boitia

Universidad de Granada, España

José Joaquín Brunner Universidad Diego Portales, Chile

Damián Canales Sánchez

Instituto Nacional para la Evaluación de la Educación, México

Gabriela de la Cruz Flores

Universidad Nacional Autónoma de México

Marco Antonio Delgado Fuentes

Universidad Iberoamericana, México

Inés Dussel, DIE-CINVESTAV, México

Pedro Flores Crespo Universidad Iberoamericana, México

Ana María García de Fanelli

Centro de Estudios de Estado y Sociedad (CEDES) CONICET, Argentina

Juan Carlos González Faraco

Universidad de Huelva, España

María Clemente Linuesa

Universidad de Salamanca, España

Jaume Martínez Bonafé

Universitat de València, España

Alejandro Márquez Jiménez

Instituto de Investigaciones sobre la Universidad y la Educación, UNAM, México

María Guadalupe Olivier Tellez, Universidad Pedagógica Nacional, México

Miguel Pereyra Universidad de Granada, España

Mónica Pini Universidad Nacional de San Martín, Argentina

Omar Orlando Pulido Chaves

Instituto para la Investigación Educativa y el Desarrollo Pedagógico (IDEP)

José Luis Ramírez Romero

Universidad Autónoma de Sonora, México

Paula Razquin Universidad de San Andrés, Argentina

José Ignacio Rivas Flores

Universidad de Málaga, España

Miriam Rodríguez Vargas

Universidad Autónoma de Tamaulipas, México

José Gregorio Rodríguez

Universidad Nacional de Colombia, Colombia

Mario Rueda Beltrán Instituto de Investigaciones sobre la Universidad y la Educación, UNAM, México

José Luis San Fabián Maroto

Universidad de Oviedo, España

Jurjo Torres Santomé, Universidad de la Coruña, España

Yengny Marisol Silva Laya

Universidad Iberoamericana, México

Ernesto Treviño Ronzón

Universidad Veracruzana, México

Ernesto Treviño Villarreal

Universidad Diego Portales Santiago, Chile

Antoni Verger Planells

Universidad Autónoma de Barcelona, España

Catalina Wainerman

Universidad de San Andrés, Argentina

Juan Carlos Yáñez Velazco

Universidad de Colima, México

arquivos analíticos de políticas educativas conselho editorial

Editor Consultor: **Gustavo E. Fischman** (Arizona State University)

Editoras Associadas: **Kaizo Iwakami Beltrao**, (Brazilian School of Public and Private Management - EBAPE/FGV, Brazil), **Geovana Mendonça Lunardi Mendes** (Universidade do Estado de Santa Catarina), **Gilberto José Miranda**, (Universidade Federal de Uberlândia, Brazil), **Marcia Pletsch, Sandra Regina Sales** (Universidade Federal Rural do Rio de Janeiro)

Almerindo Afonso

Universidade do Minho
Portugal

Alexandre Fernandez Vaz

Universidade Federal de Santa
Catarina, Brasil

José Augusto Pacheco

Universidade do Minho, Portugal

Rosanna Maria Barros Sá

Universidade do Algarve
Portugal

Regina Célia Linhares Hostins

Universidade do Vale do Itajaí,
Brasil

Jane Paiva

Universidade do Estado do Rio de
Janeiro, Brasil

Maria Helena Bonilla

Universidade Federal da Bahia
Brasil

Alfredo Macedo Gomes

Universidade Federal de Pernambuco
Brasil

Paulo Alberto Santos Vieira

Universidade do Estado de Mato
Grosso, Brasil

Rosa Maria Bueno Fischer

Universidade Federal do Rio Grande
do Sul, Brasil

Jefferson Mainardes

Universidade Estadual de Ponta
Grossa, Brasil

Fabiany de Cássia Tavares Silva

Universidade Federal do Mato
Grosso do Sul, Brasil

Alice Casimiro Lopes

Universidade do Estado do Rio de
Janeiro, Brasil

Jader Janer Moreira Lopes

Universidade Federal Fluminense e
Universidade Federal de Juiz de Fora,
Brasil

António Teodoro

Universidade Lusófona
Portugal

Suzana Feldens Schwertner

Centro Universitário Univates
Brasil

Debora Nunes

Universidade Federal do Rio Grande
do Norte, Brasil

Lílian do Valle

Universidade do Estado do Rio de
Janeiro, Brasil

Flávia Miller Naethe Motta

Universidade Federal Rural do Rio de
Janeiro, Brasil

Alda Junqueira Marin

Pontifícia Universidade Católica de
São Paulo, Brasil

Alfredo Veiga-Neto

Universidade Federal do Rio Grande
do Sul, Brasil

Dalila Andrade Oliveira

Universidade Federal de Minas
Gerais, Brasil