

414 Longfellow Hall
13 Appian Way
Cambridge, MA 02138
(617) 495-3839 (voice)
(617) 495-9268 (fax)

CHRIS DEDE
Graduate School of Education
Harvard University
Chris_Dede@Harvard.edu
<https://chrisdede.com>
<https://www.gse.harvard.edu/faculty/christopher-dede>

Senior Research Fellow, Harvard Graduate School of Education

Chris Dede is a Senior Research Fellow at the Harvard Graduate School of Education and was for 22 years its Timothy E. Wirth Professor in Learning Technologies. His fields of scholarship include emerging technologies, policy, and leadership. His funded research includes grants from the National Science Foundation (NSF), the U.S. Department of Education's Institute of Education Sciences, and the Gates Foundation. From 2001-2004, he was Chair of the HGSE department of Teaching and Learning. In 2007, he was honored by Harvard University as an outstanding teacher, and in 2011 he was named a Fellow of the American Educational Research Association. From 2014-2015, he was a Visiting Expert at NSF, Directorate of Education and Human Resources. In 2021, he received a "Community Builder" award from the National Coalition for Technology in Education and Training (NCTET), and in 2023 he was named a Fellow of the Online Learning Consortium.

Chris has served as a member of the National Academy of Sciences Committee on Foundations of Educational and Psychological Assessment, a member of the U.S. Department of Education's Expert Panel on Technology, a Steering Committee member for the Second International Technology in Education Study, and a member of the 2010 National Educational Technology Plan Technical Working Group. In 2013 he co-convened a NSF workshop on new technology-based models of postsecondary learning, and in 2015 he led two NSF workshops on data-intensive research in the sciences, engineering, and education. In 2020 he co-founded the Silver Lining for Learning initiative (<https://silverliningforlearning.org>). He is currently an Advisor to the Alliance for the Future of Digital Learning, sponsored by the Mohammed bin Rashid Global Initiative (MBRGI). Also, Chris is a Co-Principal Investigator and Associate Director for Research of the NSF-funded National Artificial Intelligence Institute in Adult Learning and Online Education. He is the only person to twice receive the Association for Educational Communications and Technology (AECT) Distinguished Development Award. He is an Advisor to Mursion, Inc., Wonda.pro, and Ouraca.com

Chris has co-edited seven books in the last sixteen years: *Scaling Up Success: Lessons Learned from Technology-based Educational Improvement*; *Online Professional Development for Teachers: Emerging Models and Methods*; *Digital Teaching Platforms: Customizing Classroom Learning for Each Student*; *Teacher Learning in the Digital Age: Online Professional Development in STEM Education*; *Virtual, Augmented and Mixed Reality in Education*; *Education at Scale: Engineering Online Learning and Teaching*; *Learning engineering for online education: Theoretical contexts and design-based examples*; and *The 60-Year Curriculum: New Models for Lifelong Learning in the Digital Economy*.

Professional Experience

2022-present:	Senior Research Fellow, Harvard Graduate School of Education
2000-2022:	Timothy E. Wirth Professor in Learning Technologies, Harvard University
1991-2000:	Full Professor, George Mason University
1996-1997:	Senior Program Director, National Science Foundation (on leave from GMU)
1984-1990:	Visiting Scientist, Johnson Space Center, NASA
1984:	Visiting Scientist, Computer Science Lab, MIT (Sabbatical)
1979-80:	Policy Fellow, Office of the Director, National Institute of Education (via the Institute for Educational Leadership)
1974-81:	Full/Associate/Assistant Professor, University of Houston-Clear Lake
1972-74:	Assistant Professor, University of Massachusetts

Education	Ed.D.	University of Massachusetts, 1972 science education
	B.S.	California Institute of Technology, 1969 double major: chemistry and English

Representative Government Activities

National Academy of Sciences

invited Paper and Talk, Workshop on Games and Simulations in Science Education

co-chair, Committee on Enhancing Professional Development for Teachers: Potential Uses of Information Technology; Workshop on Online Teacher Professional Development

member, Committee on Psychological and Educational Foundations of Assessment

presenter, Workshop on the Roles of Information Technology in Improving Teaching and Learning in Undergraduate Science, Mathematics, Engineering, and Technology Education

Keynote, Board on Science Education Workshop on Information and Communications Technology Fluency

Organizing Committee and Panel Moderator, National Academy of Education Workshop on Big Data in Education

National Science Foundation

Visiting Expert providing strategic counsel and support

Invited presentation on postsecondary learning workshop, NSF

Organized and moderated two NSF-funded workshops for the Computing Research Association: *Towards Big Steps Fostered by Big Data Science*, and *Advancing Data-intensive Research in Education*

Co-Convener of NSF workshop on New, Technology-based Models of Higher Education

served for one year (on sabbatical) as Senior Program Director in the National Science Foundation's Directorate of Education and Human Resources. Responsible for initiating and directing \$25M funding program, "Research on Education, Policy, and Practice"

member, Committee of Visitors, CAREER program

participant, NSF Cyberlearning Workshop

speaker, NSF/EHR/REC Workshop on strategic planning for communication activities

participant, Computer Research Association Cyberlearning Workshop on Modeling, Simulation, and Gaming Technologies Applied to Learning

invited poster session, National Workshop on K-12 STEM Education (sponsored by NSF/NSA)

panelist, NSF Centers for Learning & Teaching Reverse Site Visit 05

Chair, Committee of Visitors, ISE program

Invited talks to NSF program officers on scalability of educational innovations and on the relationship of 21st century skills initiatives to STEM

Invited plenary talks to NSF ITEST Principal Investigators Meeting 09

Board of Advisors, CADRE DRK-12 Technical Support Project

U.S. Congress

testified to the Science Committee, U.S. House of Representatives, May, 2001

testified to the Congressional Web-based Education Commission, June, 2000

U.S. Department of Education

Technical Working Group, Evidence of Effectiveness Initiative

Briefing on Educational Technology, Secretary Duncan's Leadership Team

Technical Working Group, National Education Technology Plan 2009

Invited Panelist, US. Dept of Education Policy Briefing on Technology

Organizer, Workshop on Reinventing High Schools for the 21st Century

Member, Technology Expert Panel

Advisory Board, Designing a National Study of the Effectiveness of Educational Technology

Advisory Board, Ready to Learn Television program

U.S. Department of Defense

Expert Panelist on the comprehensive technology plan for the Department of Defense Education Activities

Invited Keynote, Educational Simulations and Serious Games Symposium, Defense Intelligence Analysis Center

U.S. Agency for International Development

Expert Panelist on designing and studying applications of educational technology for developing countries

Massachusetts State Government

Member, Task Force on 21st Century Skills

Testimony, Special Committee on Educational Technology

Representative Corporate Activities

ACTNext: Advisory Board

Mursion: Advisory Board

Macmillan: Advisory Board

Pearson: Efficacy Advisor

McGraw Hill Education: Advisor

Texas Instruments: Presenter at Roadshow events

Cognition: Advisory Board

Kirkland & Ellis: Expert witness in intellectual property case; our side won, other side's patent was invalidated

Wireless Generation: Consulting

The Capital Group: Invited briefing

Intel: External Research Advisory Committee

Qualcomm: Co-Chair Wireless EdTech Conference 2010, 2011, 2012, 2013; consultant

ETS: Standing Committee, NAEP Technology and Engineering Literacy Assessment

Lenovo: Advisory Board, Education Research Initiative

Sony: Invited presentation to Executive Advisory Board

Pearson: workshop on instructional design

Laureate: presenter, consultant

aal: Keynote, Users Conference

Mitre: Presenter, Interagency Distance Learning Advisory Council

Microsoft: Advisor for the U.S. Partners in Learning Mid-Tier Grant Program

Convener, Meeting on Student Privacy Issues related to Cloud Databases

Consultant

Dell: Speaker at Superintendents Forum

IBM: Consultant on New Models of Management Education;
Invited Talk at IBM Research Center: Education Group

Cap, Gemini, Ernst, & Young: Business Learning Forum "Future of Learning" RAVE

Representative Activities for Professional Associations, Foundations, Non-Profits, Schools

Member of the OECD 2030 Scientific Committee

Advisor to the Alliance for the Future of Digital Learning, sponsored by the Mohammed bin Rashid Global Initiative (MBRGI).

Member, IEEE X-Reality Working Group

Invited Speaker, Corporation for Public Broadcasting Board of Directors

Advisory Board, Massachusetts Personalized Learning Edtech (MAPLE)

Faculty Expert, Aspen Institute workshop on educational technology for Congressional staff

Advisor, Hewlett Packard Catalyst Projects

Invited Expert, Gates Foundation Workshop on Student Engagement and Non-Cognitive Skills Development

Advisory Board, Miami Science Museum NSF-funded projects

Research Advisor, Synergy ATE Project, University of Massachusetts—Boston

Invited Talk, Gates Foundation

Advisor, Hewlett Foundation

Research Advisor, ADA and UNED, Costa Rica

Research Advisor, the Friday Institute for Educational Innovation, North Carolina State University

Advisory Board, George Lucas Education Foundation

Juror, Brock International Prize in Education

Member, National Science Teachers Association e-Learning Panel

Board of Directors, Tech Boston Academy, Boston Public Schools

Co-Chair, National Technology Advisory Board, Milwaukee Public Schools

Education Advisory Board, the Partnership for 21st Century Skills

Advisor, Concord Consortium NSF-funded “Modeling Across the Curriculum” project

Advisor, North Carolina State University NSF-funded “Highly Interactive Fun Internet Virtual Environments in Science” project

Advisor, New Mexico State University ATE Project

Participant, Workshop on Emerging Educational Technologies, National Science Teachers Association

Advisory Board, PBS TeacherLine

Member, Association for Teacher Education Commission on Technology and the Future of Teacher Education

External Examiner for the University of Hong Kong's Program in Information Technology in Education

Policy Workshop Presenter, the Benton Foundation

Lead, State Policy Development Workshops, Council of Chief State School Officers

Member, International Education Association Steering Committee for the Second Information Technology in Education Study

Advisory Board, MSP-Net Project, TERC

Advisory Board, Optimizing Online Professional Development, EDC

Advisory Board, Technology—Education Connections (TEC) Series, Teachers College Press

Funded Research

Current Grants

Grotzer, T. (PI), and Dede, C. (Co-PI). *Next Level Lab: Applied Learning Sciences for Access, Innovation and Mastery (AIM)*. An initiative to enhance and extend workforce development, supported for the first year by Accenture for \$378,000.

City, E. (PI), and Dede, C., Gabrieli, J., Blatt, J., and Kim, J. (Co-PIs). *Reach Every Reader*. A five year initiative between Harvard and MIT to improve early childhood literacy. This five year project, begun in January, 2018, is supported by the Chan-Zuckerberg Initiative for \$30M.

Dede, C. (PI), and Kamarainen, A. (Co-PI). *Girl ARTS: Augmented Reality Targeting Science*. The ARTS project is aimed at the underrepresented population of girls in rural Maine and uses augmented reality to increase interest in and knowledge of STEM. This 3 year project was funded as a collaborating proposal with the University of Maryland in January 2018 for \$182,344.

Prior Funded Grants and Contracts as PI or Co-PI

National Science Foundation: to explore the power of immersive virtual environments to support computational thinking and ecosystem science learning in elementary grades.

National Science Foundation: building on a curriculum that fosters observational inquiry in virtual ecosystems, to add experiment-based inquiry as practiced in the ecosystems science field, through iterative cycles of experimentation, reflection, and revision.

Harvard Initiative on Teaching and Learning: to study how decision-making is taught across academic disciplines using experiential learning and personalized practice (2 grants in sequence)

National Science Foundation: to study how various forms of face-to-face and online professional development for the revised Advanced Placement Curricula correlate with student outcomes

Harvard Initiative on Teaching and Learning: to transform team-learning teaching cases in public health for online platforms (2 grants in sequence)

Harvard Initiative on Teaching and Learning: to use virtual reality narratives in foreign language pedagogy

Harvard Initiative on Teaching and Learning: to study the use of virtual machines to track creative writing assignments

National Science Foundation: to develop and study a set of learning experiences using mobile broadband devices (MBDs) to access virtual information and simulated experiences while immersed in real world ecosystems

National Science Foundation. To study the extent to which relationships between learners can be improved through transformed social interactions – an approach in which participants are endowed with capabilities for navigating their social world that humans do not normally possess.

National Science Foundation. Across a developmental span, to study the relationship between specific technology-based motivational activities (including a multi-user virtual environment) and student interest in STEM careers.

Institute of Education Sciences, U.S. Department of Education and Gates Foundation: to develop and study virtual performance assessments based on National Science Education Standards in middle school science.

Institute of Education Sciences, U.S. Department of Education: to develop a Multi-User Virtual Environment (MUVE)-based ecosystems science curriculum to determine how this may aid students in learning sophisticated science content and complex processes of causality.

Qualcomm: to study whether students using the EcoMUVE curriculum make further, complementary gains in motivation and learning by also using powerful mobile wireless devices to explore real ecosystems augmented with digital information and experiences

US Dept of Education: to develop and study augmented realities that help middle school students learn math and literacy by infusing virtual experiences into real world settings.

NSF: how to evolve a technology-based intervention for scalability — even into contexts in which some of its conditions for success are attenuated or lacking.

NSF: to study the types of insights gained by applying data mining and visualization approaches to three types of event-log datasets: intelligent tutoring system, multi-user virtual environments, and games

NSF: to conduct an invitational research conference, develop a research agenda, and publish a book on the evolution of models for online teacher professional development.

Harvard: to study sociosemantic networks for academic social tagging

Harvard: to study the use of handheld devices in college teaching

NSF: to examine the feasibility of developing a quantitative index that measures the relative scalability of an innovation.

Joyce Foundation: to study the extent to which guidance and mentoring of Milwaukee Public School (MPS) leaders, by experts at Harvard and EDC using Internet-2 based interactive media across distance, can complement site visits and face-to-face interaction.

NSF (2 grants): to study how shared virtual environments with digitized museum artifacts can aid the science learning of middle school students and can cast insights on situated learning and knowledge transfer

Atlantic Philanthropies: to implement and study virtual communities of practice in Harvard's Teacher Education Programs

Markle Foundation: to develop a business case study of Leapfrog, Inc., a company developing handheld learning devices

NSF: to study the potential of virtual reality for learning complex conceptual material in science

U. S. Department of Education: to develop immersive educational environments that aid learning-disabled secondary students to master science concepts and skills

Joyce Foundation: to aid the Milwaukee and Cleveland Public Schools with their technology planning, integration, and evaluation.

Office of Naval Research: to investigate the potential of virtual environment training for peacekeeping skills

NSF: to educate engineers about designing complex systems

NSF: to fund a series of interrelated presentations at the 1998 National Educational Computing Conference

NSF: to assess the potential of virtual reality for science education

Bell Atlantic Foundation: developing a regional consortium on distance education

NASA: to study the impact of advanced information technologies on knowledge creation, capture, transfer, and utilization.

NASA/Air Force: to design a tool for imaging mental models in virtual cognitive space.

Apple Education Foundation: to study microcomputers as a means for increasing the communications skills of disabled children.

Hogg Foundation: to assess the impact of home computers on family interaction patterns.

Research Presentations

Featured Speaker, Florida Educational Technology Conference 05

Keynote, PBS/USDoEd Conference on Kids and Digital Media, 05

Keynote, 1st Southeastern Regional Conference on Instructional Design and Technology

Plenary Panel, Consortium on School Networking National Conference, 05

Featured Speaker, National Science Teachers Association National Conference 05

Keynote, Tech Forum Regional Conference Midwest, 05

Three presentations, American Educational Research Association National Conference 05

Keynote, Manitoba Association for Distributed Learning and Training Conference, 05

Invited Address, Designing Learning Environments in the Digital Age, Harvard Design School

Keynote, Innovations in Online Learning Conference, 05

Invited Address, Council of Fellows, American Council on Education

Keynote, emPower Conference, University of North Texas

Invited Speaker, Celt National Education Summit 05

Keynote, Keystone Conference on Videoconferencing

Keynote, National Academy of Science Workshop on Information and Communications Technology Fluency

Luncheon Speaker, National School Boards Association 2005 National Conference on Technology and Learning

Keynote, NJEDGE.net 2005 Conference

Panel, AACTE National Conference 06

Keynote, Ohio Statewide Educational Technology Conference 06

Keynote, SUNY Learning Network Summit, 06

Invited Panel, Society for Information Technology in Teacher Education National Conference 06

Keynote, Illinois Statewide Educational Technology Conference 06

Keynote Panel, two Featured Speeches, and Workshop for Superintendents, Florida Educational Technology Conference 06

Keynote, IEEE Virtual Reality Conference 06

American Educational Research Association 06: 3 papers

Keynote, Indiana Higher Education Telecommunications System Conference 06
 Keynote, Massachusetts Enhancing Education through Technology Conference 06
 Panel, American Association of Museums 06
 Invited Speaker, Louisiana State University Conference on Technology in Higher Education 06
 Invited Speaker (2 talks), U.S. Department of Education Project Directors Meeting 06
 Keynote, Rensselaer Polytechnic Institute Colloquium on Teaching and Learning 06
 Keynote, Texas CoSN Chief Technology Officers Conference 06
 Keynote, Educause Summer Symposium for Higher Education Executives 06
 Keynote, Consortium for School Networking Texas K-12 Chief Technology Officer Clinic 06
 Keynote, Building Learning Communities Conference 06
 Invited Speech, Harvard Institute for Educational Management 06
 Keynote, Synergy Conference 06
 Keynote, Campus Technology Conference 06
 Invited Case Teaching, State Education Technology Directors Association Education Forum 06
 Invited Talk, 13th National Advanced Technology in Education Principal Investigators Meeting 06
 Invited Talk, University of Massachusetts Science Technology Education and Mathematics (STEM) Initiative 06
 Keynote, Third International Summit of Leadership in Education
 Plenary Address, SmartTech Global Education Technology Summit 06
 Helen DeVitt Jones Lecturer, Texas Tech University 06
 Invited Address, Council of Graduate Schools National Conference 06
 Keynote, Florida Educational Technology Conference 07
 Keynote, EDUCAUSE ELI Conference 07
 Keynote, University of Missouri Statewide Library Conference
 Keynote Panel, Symposium Panel, and Spotlight Talk, Consortium for School Networking Conference 07
 Keynote, Eighteenth International Conference on College Teaching and Learning
 Two symposium presentations, two paper presentations, a SIG keynote, and two discussant sessions at AERA 07
 Keynote, National University Telecommunications Network conference 07
 Keynote, ISTE-ETLO-SREB Online Learning Institute 07
 Spotlight Session and two Presentations, NECC 07
 Plenary Symposium and two Papers, CSCL 07
 Keynote, Learning Strategies Conference 07
 Plenary Panel, Campus Technology 2007
 Keynote and workshop, 2007 Conference on Distance Teaching and Learning
 Keynote, Columbian Ministry of Education Conference on Online Teaching
 Keynote, Educational Simulations and Serious Games Symposium, Defense Intelligence Analysis Center
 Keynote, 2007 MODSIM World Conference
 Plenary Panel, U.S. Chamber of Commerce Institute for a Competitive WorkForce 2007 Summit
 Panelist, NSF Advanced Technologies in Education Principal Investigators Conference 2007
 Invited Plenary, Educause 2007
 Panel, State Education Technology Directors Association Forum 2007
 Sarah Fine Institute Lectures, University of Pittsburgh, 2007

Keynote, League for Innovation in Community Colleges 2007
 Keynote and workshop, International Conference on Educational Technology 2007, Singapore
 Invited Spotlight Speaker, TIES 2007
 Two Spotlight Sessions, Florida Educational Technology Conference 08
 Two Plenary Panels, Consortium for School Networking 08
 Invited Address, Three Papers, and Two Discussant Roles at American Educational Research Association National Conference 08
 Keynote, Middle Tennessee State University Instructional Technology Conference 08
 Keynote, Synergy Thought Leaders Conference 08
 Keynote, University of Massachusetts System Instructional Technology Conference 08
 Three Spotlight Sessions and Two Panels, NECC 08
 Keynote and two workshops, Synergy Full Conference 08
 Two Spotlight Sessions, Innovative Learning Conference 08
 Presentation, AECT 08
 Panelist, State Educational Technology Directors Association 08
 Two panels, National Conference on Technology Innovation 08
 Two spotlight sessions, Florida Educational Technology Conference 09
 Invited Colloquium, Lehigh University
 Keynote and Plenary Talk, NSF ITEST PIs Meeting 09
 Panelist, Advanced Leadership Initiative, Harvard University
 Two invited speeches, Consortium for School Networking national conference 09
 4 presentations, 2 session chair, 2 session discussant, American Educational Research Association 09
 Presentation, Media in Transition Conference 09
 Keynote, Northeastern University Faculty Technology Conference 09
 Plenary Panel, Innovate-Educate New Mexico 09
 Invited Panelist, US. Dept of Education Policy Briefing on Technology
 Invited Panelist, American Enterprise Institute Symposium on Philadelphia's School of the Future
 Keynote, ISTE/BECTA/Kennesit EDUsummIT
 Two Spotlight sessions, one research paper, National Educational Computing Conference 09
 Presenter, Harvard Institute for Educational Management, 2009
 Keynote, Campus Technology Conference, 2009
 Invited Panelist, DoD Worldwide Military Education Symposium 09
 Keynote, National Conference on Online Teacher Professional Development, Costa Rica
 Keynote, Education Week Technology Conference New Jersey
 Invited Talk, National Research Council Workshop on Games and Simulations in Science Education
 Keynote and invited talks, EDGE Conference 09, Memorial University of Newfoundland
 Keynote, BECTA research conference 2009, Bristol England
 Keynote, Ubiquitous Learning 09
 Invited Address, Redefining Teacher Education for Digital Learners Summit
 Invited Panel, New England Association of Schools and Colleges
 Invited Panel, HigherEdTech Conference 10
 Keynote, Loyola University Technology in Education Conference
 Two Spotlight Sessions, Florida Educational Technology Conference 10

Keynote, Scholastic Summit on 21st Century Skills
 Keynote, National Association of State School Boards Conference on 21st Century Skills
 Invited Panelist, National Association for Research in Science Teaching Conference 2010
 Plenary Speech and Invited Symposium, Society for Information Technology in Teacher Education Conference 2010
 Keynote, Peterson Symposium 2010, International Baccalaureate Program
 Four presentations and four discussant sessions, AERA 2010
 Invited Talk, Pittsburgh Science of Learning Center
 Keynote, Lenovo Thinktank 2010
 Plenary Speech, Maine Big Ideas 1-1 Summit
 Keynote, Synergy Conference San Francisco
 Three presentations (one spotlight, one panel, one invited address) at ISTE 2010
 Keynote at the EDC Online Learning Institute 2010
 Visiting Scholar (Virtual), University of Phoenix
 Speaker, Leadership: An Evolving Vision Institute, Harvard
 Keynote, Emerging Technologies in Nursing Education Conference
 Invited Talk, Ecosystems Society of America
 Invited Talk, HGSE Institute for Educational Management
 Invited Talk, HGSE Leadership Institute for Academic Librarians
 Invited Talk, HGSE Future of Learning Institute
 Invited Talk, Research Symposium in Learning Technologies for Spanish and Latin-American Academics, Harvard University
 Keynote, New Hampshire Association of Special Education Administrators August Academy
 Plenary Panel, New England Board of Higher Education Conference 2010
 Virtual Keynote, United Kingdom VITAL Initiative
 Keynote, SolutionTree 21st Century Learning Summit
 Plenary Panel, Ecosystems Education Summit
 Invited Address, Drexel University
 Co-Host and Keynote, 2010 Wireless EdTech Conference
 Invited Talk, North Carolina E-Learning Board
 Keynote, Great Lakes 1-1 Conference
 Panel Discussant, Association for Public Policy Analysis and Management
 Presenter, Invitational Workshop on Research in Diagnostic Assessment, North Carolina State University
 Spotlight Session and Invited Panel, Florida Educational Technology Conference 2011
 Invited Talks, Conference on Cyberlearning Tools for STEM Education
 Two presentations, National Science Teachers Association 2011
 Two presentations, Consortium for School Networking 2011
 Invited Panelist, Public Sector Leaders Forum for Latin America 2011
 Four papers and one panel, AERA 2011
 Keynote, Association of Independent Maryland and DC Schools
 Keynote, Vermont Superintendents Conference 2011
 Policy Briefing, Rennie and PACE Centers, Washington DC
 Keynote, 7th Annual Innovations in eLearning Conference, George Mason University
 Invited Speech, Roundtable Session, Model Lesson, and Two Panels, International Society for Technology in Education National Conference 2011

Invited Address, Institute on Leadership—An Evolving Vision, Harvard Graduate School of Education

Keynote, ERDI Innovation Conference 2011

Invited Address, Institute for Educational Management, Harvard Graduate School of Education

Invited Address, Leadership Institute for Academic Librarians, Harvard Graduate School of Education

Keynote, Leading Innovation Conference, North Carolina State University

Invited Panelist, International Mobiles for Education for Development Symposium, USAID

Panel Presentation, Society for Research on Effective Education Fall 2011

Keynote, International Society for Design and Development in Education

Keynote, EC-TEL 2011 (Palermo, Italy)

Invited Address, Workshop on Information and Communications Technology and Public Policy, Harvard's Kennedy School of Government

Mary Blum Cohn Annual Lecture, University of New Hampshire

Webinar on Models for Scale, Hewlett Packard Catalyst Grants Advisory Board

Invited Talk, WestEd Board

Invited Talk, Association for Educational Communications and Technology 2011 national conference

Keynote, online 2011 Global Education conference

Invited Speech, 2011 Learning and the Brain conference, Boston, MA

Invited Speech, Brookings Institution, Washington DC

Featured Speech and Panel, TIES 2011, Minneapolis MN

Invited Panelist, Gates/MIT conference on Quality in Online Learning

Keynote, Association of Teacher Educators

Keynote, Educause Learning Initiative

Keynote 2012 EdTech Teacher Winter Conference

A plenary panel, an invited panel, and two regular panels at the Consortium for School Networking 2012 Conference

Keynote, 2012 Virtual Worlds Best Practices in Education conference (in Second Life)

Keynote, Virginia Community College System New Horizons Conference 2012

American Educational Research Association Conference 2012 three papers, one poster, four discussant roles

Keynote, Tech Forum Boston 12

Keynote, Johns Hopkins University Technology, Cognition, and Learning Summit 2012

Invited Talk, Invitational Research Symposium on Technology Enhanced Assessments, ETS

Keynote, Learning First Leadership Council

Invited Talk, Educational Testing Service

Invited Plenary, NSF DRK-12 Principal Investigator Conference 2012

Keynote, Immersive Education Conference 2012

One paper, one panel, and one invited talk, International Society for Computers in Education Conference 2012

Keynote, EDC/SREB/ISTE Online Learning Institute 2012

Invited Talk, Leadership—An Evolving Vision Institute 2012

Invited Talk, Institute for Educational Management 2012

Invited Talk, Future of Learning Institute 2012

Invited Talk, Leadership Institute for Academic Librarians 2012

Invited Talk, Defense Intelligence Agency
 Panel and Poster, USAID m-Education conference 2012
 Faculty, Aspen Institute Conference on Educational Technology
 Invited Talk, George W. Bush Foundation Conference on School Productivity
 Keynote (via videoconference), European Learning Industry Group
 Invited Talk, Educause Learning Initiative Online Fall Focus Session 2012
 Plenary Workshop, CoSN Teaming for Transformation Symposium, Mooresville, NC
 E. Bruce Street Lecture on mobile learning, University of North Texas
 Invited Speaker, NSF Math Science Partnerships PI Meeting 2013
 Invited Speaker, SXSW 2013
 Invited Talk on New Technology-based Models for Postsecondary Learning, NSF
 Chair of Symposium and two Discussant Roles, AERA 2013
 Invited Speech, North Carolina Nature Research Museum
 Invited Speech, 2013 Learning Analytics Summer Institute – Boston
 Invited Talk, Institute for Educational Management 2013
 Invited Talk, EDUCAUSE Workshop on Breakthrough Models 2013
 Invited Talk, EDCAUSE Sprint on New Models for Postsecondary Learning 2013
 Invited Talk, Leadership Institute for Academic Librarians 2013
 Invited Plenary, Future of Learning Institute 2013
 Working Group Leader, EDUsummIT Conference 2013
 Invited Panelist, Educational Testing Service Symposium on Science Assessment
 Invited Panelist, Brookings Institution Mobile Learning Symposium
 Three plenary speeches and two panels, Wireless EdTech Conference 2013
 Keynote, Ontario, Canada 21st Century Skills Symposium 2013
 Keynote, Illinois Conference on Scaling Up Student Success
 Invited Speaker, Transatlantic Science Conference 2013
 Keynote, Colleges of the Fenway Teaching/Learning Symposium 2013
 Invited Panelist, City of Hong Kong Educational Transformation Conference
 Invited Speech, Columbia University
 Invited Speaker, 2014 Technology Enabled Personalized Learning Summit
 Keynote, 2014 LearnLaunch Conference
 Keynote, 2014 ACM Learning@Scale conference
 Two Panels, SXSW 2014
 Two Panels, Consortium for School Networking 2014
 Discussant, Pearson Digital Oceans report, National Press Club
 Five presentation and discussant roles, AERA 2014
 Invited talk, Learning Environments for Tomorrow Institute, Harvard
 Invited talk, HarvardX
 Invited panelist, Global STEM Education conference 2014
 Invited panelist, Smithsonian Digital Directions webinar
 Invited Talk, Grantmakers for Education
 Plenary Speaker, EdVis 2014
 Keynote, Shanghai Open University Ubiquitous Learning Conference
 Speaker, IAP Research Symposium for Spanish and Latin American Academics
 Two poster sessions, International Conference on the Learning Sciences 2014
 Invited Talk on Cyberlearning, National Science Foundation

Invited Panelist, Learning Analytics Summer Institute 2014
 Speaker, Leadership—An Evolving Vision Institute, Harvard University 2014
 Workshop presentation, EDUCAUSE Breakthrough Models Institute 2014
 Speaker, Institute for Educational Management, Harvard University 2014
 Keynote, SACSCOC Institute on Quality Enhancement and Accreditation 2014
 Invited Speech and workshops, Kansas State University
 Keynote, Forum on Digital Media for STEM Learning
 Keynote, European Learning Industry Group (ELIG) 2014 Conference (London)
 Invited Talk, Science and Technology Center, University of Maryland
 Keynote and two workshops, 2014 Long Island Technology and Education Summit
 Keynote, 2014 Province of Ontario 21st Century Skills Round Table
 Keynote, European Conference on e-Learning (ECEL) 2014 (Copenhagen)
 Plenary Panelist Library IVIES + RTL 2014 conference
 Invited Webinar on Peer Learning, EDUCAUSE
 Invited talk, Boston Higher Education Innovation Council
 Keynote, Hong Kong Education City Conference 2014
 Invited Talk, University of Hong Kong Center on Information Technology in Education
 Webinar, California Academy of Sciences
 Host and Presenter, Computing Research Association Workshop on Big Data in the Sciences and Engineering: Implications for Education
 Invited Session, Cyberlearning 2015
 Invited Presenter, US DoEd STEM workshop
 Panel, CoSN 2015
 Five presentations AERA 2015
 Invited Webinar, Adobe Creativity Series
 Host and Presenter, Computing Research Association Workshop on Data-Intensive Research in Education
 Invited Panelist, Goldman Sachs/Harvard Global Education Conference 2015
 Symposium, International Society for Technology in Education conference 2015
 Speaker, Harvard University Institute on Leadership: An Evolving Vision 2015
 Speaker, Harvard University Institute for Educational Management 2015
 Keynote, New Hampshire Educational Technology Symposium 2015
 Panelist, MIT Scaling STEM Education Summit 2015
 Panelist and Workshop, European Learning Industry Group 2015 Conference (Berlin)
 Panelist, Corporation for Public Broadcasting Board Retreat 2015
 Invited Presenter, 2015 OECD/EC Global Education Industry Summit (Helsinki)
 Keynote, Smart Education Conference, Beijing Normal University
 Keynote, Workshop, Fireside Chat at Ontario, Canada 21st Century Skills Summit
 Invited Talk, IBM Research Center
 Keynote, Teaching for Tomorrow Workshop, Rennie Center for Educational Research and Policy
 Spotlight Session, Talk, and Panel at CoSN 2016
 Panel, Moderator, and Discussant at AERA 2016
 Invited Talk, Personalized Learning Summit 2016
 Presentation on Data-Intensive Research in Education, NSF DR K-12 PI Meeting 2016
 Invited Panelist, OECD Summit on the Digital Economy (Cancun, Mexico)

Poster and Panel sessions at ISTE 2016

Speaker at Harvard Graduate School Executive Education Institutes: Leadership—An Evolving Vision, Institute for Educational Management, Leadership Institute for Academic Librarians
Organizing Committee and Panel Moderator, National Academy of Education Workshop on Big Data in Education

Panel Presentation, IIT Leadership Conference 2016

Presidential session and poster session, AECT 2016

Keynote, SPARK conference 2016

Invited Address, Concordia College, Portland, Oregon

Keynote, ACT Summit 2016

Presentation, NYSCATE 2016

Keynote and paper presentation, Virtual Reality in Education: International Workshop at Harvard

Presentation and Poster, Future Education Technology Conference (FETC) 2017

Keynote and Featured Session, Ontario, Canada 21st Century Skills Summit

Harvard Graduate School of Education Scaling for Impact Institute 2017

Keynote, Virtual Worlds Best Practices in Education 2017 (in Second Life)

Keynote, New Hampshire STEM Summit

AERA 2017 one panel, one chair, one discussant

Invited talk on science education, Harvard Astrophysics Center

Panel, Global STEM Summit 2017

Keynote, Rensselaer Polytechnic Conference on Learning Analytics

Invited Talk, ARL-IIS Workshop on Team Learning and Taskwork 2017

Spotlight Session, International Society for Technology in Education Conference 2017

Four presentations, Distance Teaching and Learning Conference 2017

Invited Speaker, Corporation for Public Broadcasting Board of Directors

Invited Talk, Learning and the Brain Conference 2017

Speaker and Facilitator, Scaling for Impact Institute, Harvard Graduate School of Education

Keynote, SFERE-Provence 2018 Symposium, Marseille, France

Invited Talk, Data in Education SIG, AERA

Invited talk, Harvard Advanced Leadership Initiative Fellows 2018

Invited Panelist, 2018 Global STEM Summit

Co-Organizer and Presenter, Harvard's Invitational Workshop on the 60 Year Curriculum

Keynote, Appalachian Higher Education Network Conference 2018

Immersive Learning Faire, Leadership: An Evolving Vision, Harvard University

Presenter, Institute of Education Management, Harvard University

Invited Speaker, AI and Education Roundtable, Politico

Presenter, ACTNext Education Technology and Computational Psychometrics Symposium

University of Georgia Innovations in Teaching Conference

University of Ottawa (Canada) Artificial Intelligence Symposium

Invited Panel, iNACOL national conference

Keynote, Harvard School of Public Health/Harvard Initiative in Learning and Teaching Case Teaching Workshop

Invited Panelist, Harvard Advanced Leadership Initiative Fellows

Invited Panelist, Interservice/ Industry Training, Simulation and Education Conference

Plenary Address, NSF-funded Workshop on Scalable Advanced Learning Ecosystems (Georgia Tech)
 Keynote, IEEE International Conference of Semantic Computing 2019
 Invited Talk, Corporation for Public Broadcasting Advisory Council 2019
 Panelist, SXSWedu 2019
 Invited Panel, Association of Test Publishers conference 2019
 Workshop, Association for Continuing, Professional, & Online Education (UPCEA) conference 2019
 Keynote, NSF-funded Workshop on Digitally Mediated Team Learning, University of Central Florida
 Speaker, National Governors Association Summit on Future Workforce
 Invited Panelist, Global STEM Summit at Harvard University
 Plenary Speaker, IEEE Learning Engineering Conference 2019
 Invited Panelist, Future of Work Conference, UPCEA 2019
 Speaker, ISTE 2019
 Speaker, Serious Play Conference 2019
 Keynote Speaker, International Youth Innovation Design Competition 2019
 Poster session and Workshop, NSF STEM+C Principal Investigators Summit 2019
 Panel, XR in Learning Global Summit 2019
 Plenary Speech, Learning and the Brain Conference 2019
 Invited Panel, I/ITSEC conference 2019
 Keynote, IEEE AIVR conference 2019
 Keynote, Illuminate conference 2020
 Invited Panelist, Harvard Workshop on AI and Technology in Negotiation
 Panelist, Consortium for School Networking 2020
 Plenary Speech, iLRN conference 2020
 Invited Panelist, Republic of Letters conference 2020
 Keynote, TechHR India 2020
 Plenary Speech, iFEST 2020
 Invited Speaker, NSF Future of Work workshop
 Keynote, IEEE AI4i 2020
 Esperanza Webinar Rethink Higher Education September 2020
 Two invited panels at ASU-GSV 2020
 EdWeb webinar
 Panel, regional conference UPCEA NE 2020
 Plenary Session, Google's The Great Exchange Student Engagement Summit 2020
 Panel and Workshop, University of Houston—Clear Lake
 Panel, vI/ITSEC 2020
 Lead Speaker, Webinar on e-Learning in Higher Education, sponsored by Faith Bangladesh
 Keynote, Open University of Hong Kong faculty development workshop
 Invited Panel, national conference UPCEA 21
 Invited Talk, Future Workforce Conference February 2021
 Invited Talk, Council for Adult and Experiential Learning (CAEL) webinar 2021
 Invited Panelist, Bangladesh Daffodil University 2021
 Invited Panelist, Institute for Educational Leadership webinar on diversity 2021
 Invited Panelist, Central Asia NobelFest II

Invited Talk, Aprendocasa, Chile
 Invited Webinar, Arab Bureau of Education for the Gulf States
 Invited Panelist, Grantmakers for Education
 Moderator, ED Games Expo Fireside Chat
 Invited Panelist, LegalCon 2021
 Co-Presenter, NIH SciEd conference 2021
 Invited Panelist, High Tech High Touch (HTHT) Conference 2021
 Invited Panelist, Conference Board Committee on Economic Development webinar
 Invited Panelist, eMOOCs and Learning@Scale 2021
 Presentation, Connected Learning 2021
 Invited Panel, American Marketing Association
 Presenter, IFEST 2021
 Keynote, Thailand Cyber University International eLearning Conference 2021
 Invited Panel, CIRCLS 2021
 Invited Presentation, Minnesota Learning Commons
 Invited Panelist, Innovations in Undergraduate and Graduate Education 2021
 Invited Workshop, Council of Former State School Officers
 Keynote, Singapore University of Social Sciences
 Invited Colloquium, Work and Life Center, Georgia Tech
 Invited Panelist, Global Tech in eLearning Forum 2022
 Invited Talk, Educational Testing Service
 Keynote, 9th Educational Technology Summit (Turkey)
 Keynote, Distance Education and eLearning Summit (Malaysia)
 Keynote, International Conference hosted by Korean Society for Educational Technology
 Panel, 4th Kazakhstan EdTech Forum
 Corporation for Public Broadcasting-Public Broadcasting System Ready to Learn Advisory Board meeting
 WebXR Education Summit Panelist
 Plenary Speaker, IEEE ICICLE Learning Engineering Conference 2022
 Speaker, iFEST 2022
 Invited Panelist, Global Forum Latin America and the Caribbean 2022
 Presenter, 9th International Conference on Concept Mapping
 Keynote, Immersive Education Summit (Switzerland) 2022
 Keynote, AI and Education PALS UMass Workshop 2022
 Keynote, Hope Collaborative Summit 2022
 Keynote, Empowering Learners in AI 2022
 Invited Panelist, Global Tech in eLearning Forum 2023
 Workshop, Singapore University for Social Sciences
 Webinar, National Technological University, Singapore
 Presenter and Facilitator, HGSE Scaling for Impact Institute 2023
 Accenture/HGSE Workshop on Generative AI and the Evolution of Work
 Keynote, University of Florida Workshop on Artificial Intelligence in Education
 Chair, Division C Symposium, AERA 2023
 Canadian Association for University Continuing Education conference keynote 2023
 Education University of Hong Kong Metaverse conference keynote 2023
 AI x Education conference 2023 Plenary talk

IEEE ICICLE Learning Engineering conference 2023 workshop on motivation
 Keynote George Mason University IM-TECH conference 2023
 Roundtable Panelist, New England Association of Schools and Colleges
 Webinar, Contact North 2023
 Panel, Common Sense Media
 Panel, Empowering Learners in AI 2023
 Panel, NSF SAIL conference 2023
 Panelist, Webinar on AI in Higher Education, Tsinghua University
 Keynote, Gandaki University Nepal
 Panel, HGSE AI in Education 2024
 Talk, Harvard XR 2024
 Plenary Panel, Harvard China Education Symposium 2024
 Keynote Northeastern University
 Keynote, UNC Greensboro
 Symposium on AI, AERA 2024
 World Economic Forum, Education Global Learning Network panel 2024
 Webinar for African Development Bank on Learning Portals for Adult Capacity Building
 Keynote, Learning Ideas Conference 2024
 Keynote, Learning@Scale Conference 2024
 Keynote, Commonwealth of Massachusetts Honors Program
 Keynote, National Technological University of Singapore, AI for Education Conference 2024
 Keynote, Peking University, AIED Forum 2024
 Keynote, HMH Summit
 Keynote, Microsoft Summit
 Chair of two sessions, AERA 2025
 Keynote, VI International Education Forum: Learning Engineering, Turkish Education Association
 Panel, Saudi Arabia National eLearning Center
 Workshop, Immersive Learning Research Network (iLRN) 2025 conference
 OpenAI Seminar series webinar, UK Open University

Professional Development Presentations

Keynote, Academic Technology Conference, Lesley University
 Invited Address, Harvard Institute for Independent School Leaders, 05
 Invited Address, Friday Institute, North Carolina State University
 Presenter, Harvard University International Education Workshop 05
 Presenter, Harvard University Institute for Educational Management 05
 Invited Address, Microsoft U.S. Partners in Learning Mid-Tier Grantees Workshop 05
 Keynote and Workshop, Teaching Academy, New Mexico State University
 Invited Panelist, Colorado Association of School Executives
 Invited Speech (videoconference), Iowa State Department of Education
 Invited Speaker, Deloitte and Harvard's Learning Innovations Laboratory Co-Sponsored Workshop on Millennials
 New Hampshire State Department of Education Technology Mini-Grants Conference 06
 Invited Address, EDUCAUSE Web Symposium, May 06

Invited Talk, Wireless Generation, Inc.
 Invited Address, Massachusetts Association of School Business Officers
 Invited Address, Educause Web Symposium, November 06
 Workshop, Association of Delaware Valley Independent Schools
 Invited Talk and Workshops, Indiana State University
 Invited Talk at Forum, Boston Museum of Science
 Invited Address and Workshops, St. Louis University
 Keynote, Conference on Children and Gaming, Southern New Hampshire University
 Invited Talks, Arizona State University
 Keynote, Leadership Conference, TetraData Corporation
 Invited “BrainGain” Address, Harvard Business School
 Connecticut Cooperative Educational Services Distinguished Leadership Lecturer
 Keynote, Coppin State 3rd Annual Conference on Information Technology in Teaching and Learning
 Workshop, National Institute for Staff and Organizational Development (NISOD)
 Keynote, 21st Century Learning Communities Conference, University of Louisville
 Invited Presentation, U.S. State Department sponsored visit of representatives from Indonesia Ministry of Education
 Invited Talk, Association of American Publishers
 Workshop, NY BOCES Technology Leadership Institute 07
 Invited Speech, Princeton University
 Workshops, Springside School, Philadelphia
 Keynote, E-Learning for Educators 07
 Author’s Lunch and Invited Talk, Massachusetts Association for Supervision and Curriculum Development
 Workshop, Association of Independent Schools of New England
 Keynote, Community College of Allegheny County Professional Development Day
 Keynote, Detroit Digital Learning Initiative Community Conference
 Workshop, Needham, MA Public Schools
 Keynote, aal Users Conference
 Invited Talk, CLIR Symposium on Scholarly Methods in the Humanities, Brown University
 Keynote, Maine IL Public Schools
 Invited Talk, Leadership Initiative in Science Education, Chemical Heritage Foundation
 Invited Talk, Bishops School, San Diego
 Keynote, Instructional Technology Conference 08, Clark County NV Schools
 Keynote, NY OCMBOCES Annual Conference 08
 Keynote, 6th Faculty of the Future Conference, Bucks County Community College
 Invited Presentation, University of Massachusetts—Amherst Marathon
 Speaker, Institute for Educational Management and Leadership: An Evolving Vision Summer Institutes at HGSE 08
 Panelist, Campus Technology Executive Leadership Institute 08
 Keynote, ABEL Conference, York University, Toronto
 Plenary Speaker, 1:1 Leadership Conference, North Carolina State University
 Keynote, Manchester Community College
 Presentation, Boston Public Schools Leadership Development Council
 Workshops, University of Oklahoma

Workshop, Montgomery County Intermediate Unit, PA
 Invited Talks, Framingham State University 08 and 09
 Invited Talk, Kaput Center for Research and Innovation in Mathematics Education, UMass
 Dartmouth
 Keynote, LITRE Conference, North Carolina State University
 Keynote for Workshop on Mobile Devices in Research and Teaching, Harvard Libraries
 Workshop, Bethlehem PA Schools
 Invited Talk, Derek Bok Center for Teaching and Learning, Harvard University
 Invited Talk, North Carolina New Schools Project Leadership Conference 09
 Invited Presentation, Chilean University Team, LASPAU
 Workshop, Needham Public Schools
 Invited Address, Harvard Provost's Technology Conference 09
 Webinar, Classroom 2.0 Future of Education series
 Keynote, Nevada Association of School Administrators
 Turning Technologies Gaming Workshop, Orlando, Florida
 Keynote, Faculty Technology Conference, Austin Peay University
 Invited Videoconference to CESAs #1 and #6, Wisconsin
 Invited Webinar, Discovery Educational Network
 Invited Talk, Superintendents' Roundtable, Harvard
 Invited Talk, Leadership Institute for Superintendents, Harvard
 Invited Talk, Universidad Diego Portales, LASPAU-Harvard
 NSF ITEST Program Webinar and Panel on Scaling Up
 Invited Speech, Ubiquitous Learning Institute, University of Illinois Champaign-Urbana
 Invited Speech, Lexington Public Schools
 Invited Speech, University of Baltimore
 Invited Speech, Excelsior College
 Workshop, The Education TEC Cooperative
 Keynote, University of Alabama System Scholars Conference
 Keynote, New Hampshire Summit on Redefining Educator Development
 Workshop, Chappaqua Public Schools, New York
 Talk, Discovery Educational Network 2010
 Invited Talk, Punahoe Independent School, Hawaii
 Plenary Panel, Sylvan Learning Conference 2010
 Talk, Houghton Mifflin Workshop
 Workshop, Bethune-Cookman University
 Invited Speech, USNY Technology Policy and Practices Council
 Keynote, Verizon Foundation Principal Investigators Meeting
 Invited Talk, Gates Foundation
 Invited Talk, Shriver Center, University of Massachusetts
 Workshop, Northern Westchester BOCES
 Invited Talk, Center for Innovative Teaching and Learning, George Washington University
 Panelist, Many Voices One Goal Conference, Raleigh NC
 Invited Talk, Tufts University STEM Series
 Invited Webinar on Mobile Learning, USAID
 Workshop, Region 10 Educational Service Center, Dallas, Texas
 Panelist, Critical Issues and Strategies for Leaders of Modern Universities in Brazil, LASPAU

Keynote, Faculty Technology Day, Suffolk University
 Webinar, U.S. Dept. of Education Office of Special Education
 Keynote, CITE Conference 2011, Chesterfield VA Public Schools
 Two Webinars on immersive learning for EdWeb
 Webinar, Intel External Research Partners
 Opening Address, Princeton NJ Regional Schools
 Invited Talk, EDCO Policy Forum
 Invited Talk, Raise Your Hand Texas 2012
 Panelist, Harvard Business School 2012 Social Enterprise Conference
 Plenary Speech, Scholastic Conference on Cognitive Science, Technology, and Teaching
 Workshop, Special Education Directors, Wested
 Keynote, Southern Alberta Institute of Technology Faculty Showcase
 Workshop, International Academic Program Research Symposium (Chile, Spain, Mexico)
 Invited Speaker, NAEP Governing Board Event on 2009 Science Outcomes
 Invited Speaker, Webinar, Connected Teaching Event 2012
 Invited Talk (in Second Life), International Society for Technology in Education SIG-Virtual Environments
 Workshops and Talks, The Bishops School (La Jolla, California)
 Invited Talk, Howard Hughes Medical Institute Education Group, MIT
 Webinar on Scaling Up Success, CoSN-MacArthur Participatory Learning Initiative
 Invited Speaker, Cambridge, MA STEM Inclusion Roundtable
 Workshop, Southern Westchester BOCES
 Keynote, Faculty Development Workshop, University of New Haven
 Keynote, Lexia Learning conference on personalization
 Workshop, Massachusetts Association of School Business Officers
 Invited Talk (virtual), Cooperative Educational Service Center #1, Wisconsin
 Panel Moderator, Harvard Igniting Innovation Conference 2014
 Invited Panelist, Harvard College in Asia Program
 Invited Panelist, Harvard Venture Partners
 Invited Talk, Summit Analytics
 Invited Panelist, Harvard Advanced Leadership Initiative Think Tank 2015
 Keynote, US Naval War College Faculty Cloister 2015
 Invited Briefing, Hewlett Foundation Board Retreat 2015
 Invited Briefing, USNY Technology Policy and Practice Council
 Keynote, ECPI University
 Invited Talk, Friday Institute, North Carolina State University
 Invited Panelist, MIT China Innovation and Entrepreneurship Forum
 Invited Presenter, Committee on Children, Connecticut State Legislature
 Invited Presenter, Chappaqua Public Schools
 Panelist, Harvard Innovation Lab Symposium on VR and AR 2016
 Workshops for Principals and Superintendents, Conseil des écoles catholiques du Centre-Est, Ottawa, Canada
 Workshop for Open Pediatrics, Boston Children's Hospital
 Panel, Harvard South Asia ConnectED conference
 Panel, Harvard Bangladesh Development Conference
 Workshops for K-12 Chinese students, US China Cultural Exchange Foundation

Invited talk, Harvard GSE Innovations and Ventures in Education
 Keynote, Health Care Education 2.0, Harvard Macy Institute
 Keynote and workshops, Lamar University
 Workshops for Principals and teachers, Conseil des écoles catholiques du Centre-Est, Ottawa, Canada
 Invited talk, Harvard University Franklin Fellowship Program
 Invited Talk, University of North Carolina School of Education
 Invited Talk, North Carolina State University Friday Institute
 Invited Talk, Middlesex Community College, Lowell, Massachusetts
 Invited Panelist, Boston VR Meetup
 Judge, HIVE Pitch Competition 2018, Harvard Innovation Lab
 Workshop, Eight Schools Association
 Invited Keynote, Needham Public Schools
 Workshops on Leadership, CECCE School Board, Ottawa, Canada
 Invited Talk, North Carolina State University Friday Institute
 Invited talk, Harvard University Franklin Fellowship Program
 Webinar, Greater Texas Foundation
 Invited Talk, UMass Lowell School of Engineering
 Panel, Harvard Advanced Leadership Initiative Final Symposium 2019
 Talk and workshops, Rollins College
 Invited talk, Boston VR Meetup
 Invited Talk, Harvard Club of Bangalore
 Invited Panelist, ETHRWorld Future Skills Conference
 Invited Panelist, Boston Higher Education Meetup
 Workshop, Garden City School District, New York
 Invited Talk, HGSE China Education student group
 Two Invited Talks, HGSE TIE Diversity Inclusion Equity group
 Invited Speaker, DePaul University School of Continuing Education
 Plenary Speaker Future FocusED 2023, Beaver County Day School
 Harrisburg University workshop 2023
 Purdue University 2023
 Thayer Academy workshop on AI 2023, 2024
 Southern Westchester BOCES on AI 2023
 Real Colegio Complutense Harvard University
 Center for Astrophysics Harvard University
 China Europe International Business School
 STTAR (India) workshop on AI in Teaching and Learning
 HGSE AI and Education: Stories from the Global South
 Keynote, Grayson College Faculty Learning Day
 Keynote and Panel, Harvard China 16th Educational Symposium
 Keynote, UKZN South Africa
 Keynote, Northeastern University
 Keynote, University of New Hampshire
 Keynote, Thayer Academy
 Webinar, Wonda.com
 Podcast, ecnológico de Monterrey Guijosa

Administrative Responsibilities

From July, 2001 to June, 2004, Chair of Learning & Teaching Area, Harvard Graduate School of Education.

From November 1996 to October, 1997, Senior Program Director, National Science Foundation

From January, 1993 to September, 1995, Director of Federal Relations & Strategic Alliances, GMU.

From January, 1991 to January, 1994, Director, Center for Interactive Educational Technology, GMU

Initiated and directed graduate programs in science education, futures research, and educational technology at the University of Houston—Clear Lake.

- Awards**
- 2024: *Quandary* was selected from more than 1,900 submissions to receive a \$300,000 “[Tools Award](#)” in the “Preparing for the 21st Century World” track.
 - 2024: awarded the title of Scholar by the Immersive Learning Research Network
 - 2023: awarded the title of Fellow in the Online Learning Consortium
 - 2023: Association for Educational Communications and Technology Annual Achievement Award: For Accomplishments Advancing the ECT Field.
 - 2022: Association for Educational Communications and Technology Distinguished Development Award
 - 2022: Association for Educational Communications and Technology Outstanding Digital Learning Artifact Award
 - 2022: Outstanding Contribution to Workplace & Industry Training Award at the iLRN 2022 International Conference
 - 2021: “Community Builder” award from the National Coalition for Technology in Education and Training (NCTET)
 - 2017: Named as one of “the top 25 edtech innovations and innovators of the past 25 years” by the Consortium for School Networking
 - 2017: Outstanding Contributions to Research in Immersive Learning Award, AERA
 - 2016: Center for Digital Education Award in “Top 30 Technologists, Transformers, and Trailblazers”
 - 2015 Best Paper Award, AERA SIG Applied Research in Immersive Environments for Learning
 - Noted by Tech and Learning journal in 2013 as one of the most “influential people affecting the advancement of technology in education”
 - 2012 Award from Association of Teacher Educators for “outstanding leadership and dedication to the education profession.”

2012 International Conference on Interpersonal Relationships in Education Best Poster Award

2012 National Environmental Education Week Green STEM Innovators Award

2011 Association for Educational Communications and Technology Distinguished Development Award

2011 Association for Educational Communications and Technology Immersive Learning Award, Interactive Category

Outstanding Paper Award, Ed-Media 2011 (authors Code, Clarke-Midura, Zap, & Dede)

2011 Fellow of the American Educational Research Association

Special Achievement Award, Society for Information Technology in Teacher Education, 2010

Certificate of Special Recognition, Consortium for School Networking, 2009

The Friday Medal, North Carolina State University, 2009

Honored by Harvard University as an Outstanding Teacher, 2007

National Service Award, National University Telecommunications Network, 2007

AERA Outstanding Reviewer, 2003, 2008

COSN "Making It Happen" Award, 2003

Chancellor's Award for Outstanding Service, UHCL, 1985

Educational Policy Fellow, Institute for Educational Leadership, 1979

University-wide Outstanding Teaching Award, UHCL, 1975

Danforth Fellow, 1969-72

Named as one of top twelve graduating chemists by the American Chemical Society, 1969

Courses Taught	T518	Next Generation Design: Methods and Heuristics
	T-502	Learning Media that Bridge Distance and Time
	T511J	Effectively Implementing Learning Technologies to Address Global and Local Challenges
	T511K	Transforming Education through Emerging Technologies
	T-561	Emerging Educational Technologies
	S-475	Practicum in Design-based Research
	T-505	Leadership in Educational Technology Policy
	T-545	Engagement and Learning: Technologies that Invite and Immerse
	T510T	Engagement and Learning: Technologies that Invite and Immerse (half course)
	517	Immersive Learning: Virtual, Augmented, and Mixed Realities

Service (current)	2024-present	The Harvard Undergraduate Research Journal Review Board
	2021-present	Journal of Technology, Mind, and Behavior Editorial Board
	2013-present	MITx Press Editorial Board
	2010-present	ETR&D Research Consulting Editor
	2009-present	Editorial Board, Educational Researcher
	2003-present	Technology Education Connections Advisory Board, Teachers College Press
	2001-present	Editorial Review Board, Journal of Technology in Teacher Education
	2001-present	Editorial Board, International Journal of Science Education
	2000-present	International Journal of Educational Technology Advisory Board
	2000-present	Journal of Science Education and Technology Advisory Board
	1998-present	Review Board, Journal of Learning Sciences

Memberships American Educational Research Association
 Consortium for School Networking
 International Society of Learning Sciences

Publications

Edited Volumes

- Dede, C. & Richards, J. (Eds.). (2020). The 60-Year Curriculum: New Models for Lifelong Learning in the Global Digital Economy. New York, NY: Routledge.
- Dede, C., Richards, J., & Saxberg, B. (Eds.). (2019). Learning engineering for online education: Theoretical contexts and design-based examples. New York: Routledge.
- Liu, D., Dede, C., Huang, R., & Richards, J. (Eds.). (2017). Virtual reality, augmented reality, and mixed reality in education. Hong Kong: Springer.
- Dede, C., Eisenkraft, A., Frumin, K., & Hartley, A. (Eds.). (2016). Teacher learning in the digital age: Online professional development in STEM education. Cambridge, MA: Harvard Education Press. (also published in Chinese by the Science Press, 2018)
- Dede, C., & Richards, J. (Eds.). (2012). Digital teaching platforms: Customizing classroom learning for each student. New York: Teacher's College Press.
- Dede, C., (Ed). (2006). Online Professional Development for Teachers: Emerging Models and Methods. Cambridge, MA, Harvard Education Press.
- Dede, C., Honan, J., & Peters, L., (Eds). (2005). Scaling Up Success: Lessons Learned from Technology-Based Educational Improvement. New York: Jossey-Bass.
- Dede, C., Ed. (1998). Learning with Technology (1998 ASCD Yearbook). Alexandria, VA: Association for Supervision and Curriculum Development.

Articles and Book Chapters

- Cao, L., Etemadi, A., Wheeler, M., & Dede, C. (2025). Keeping the “glass box” transparent: Comparing expert and AI-generated ratings and feedback in stealth assessment for judgement-focused negotiation simulations. *Journal of Research on Technology in Education*, 1–23. <https://doi.org/10.1080/15391523.2025.2568526>
- Lee, J. C. -K., Dede, C., Wang, M. & Li, X. (2025). Building trust in AI through dialogues with Chinese ethics: Toward ethical partnerships in education, *IEEE Transactions on Learning Technologies*, 18, 833-841. <https://doi.org/10.1109/TLT.2025.3604616>.
- Wang, M., Dede, C., Grotzer, T.A. et al. Understanding and managing the complexities in situated learning in immersive virtual environments. *Education Tech Research Dev* (2025). <https://doi.org/10.1007/s11423-025-10519-5>
- Rahimi, S., Dede, C., Esmaeiligoujar, S., & Babae, M. (in press). Augmenting human creativity with responsible and ethical use of generative AI. In M. Worwood & J. C. Kaufman (Eds.), *Generative artificial intelligence and creativity: Possibilities, precautions, and perspectives*. Academic Press.
- Dede, C. (2024). External strategies for improving national education systems: policies and implementation practices by which The Digital School is achieving scale. *Rivista di Digital Politics* (2/2024), 319-342, <https://doi.org/10.53227/115057>
- Chen, J., Wang, M., Grotzer, T. A., & Dede, C. (2024). Analysing students' concept mapping style and its association with task performance in computer-based inquiry learning. *Journal of Computer Assisted Learning*, 40(4), 1727-1744. <https://doi.org/10.1111/jcal.12984>
- Goel, A., Dede, C., Garn, M., & Ou, C. (2024). AI-ALOE: AI for reskilling, upskilling, and workforce development. *AI Magazine* 45: 77–82. <https://onlinelibrary.wiley.com/doi/10.1002/aaai.12157>
- Bondie, R., Mancenido, Z., Adams, H., Dede, C. (2024). Exploring Data Visualization in Mixed Reality Simulations to Measure Teacher Responsiveness. In: Bourguet, ML., Krüger, J.M., Pedrosa, D., Dengel, A., Peña-Rios, A., Richter, J. (eds) *Immersive Learning Research Network. iLRN 2023*, pp. 173-181. Communications in Computer and Information Science, vol 1904. Springer, Cham.
- Shane, M., & Bressler, M., D., & Reilly, J., & McGivney, E., & Grotzer, A., T., & Dede, C. (2023). Toward a framework for robust design-based research. *Educational Innovations and Emerging Technologies*, 3(3), 1-7. <https://doi.org/10.35745/eiet2023v03.03.0001>
- Bondie, R., & Dede, C. (2023). What we want versus what we have: Transforming teacher performance analytics to personalize professional development. In P.D. Moskal, C.D. Dziuban, & A Picciano (Eds.), *Data Analytics and Adaptive Learning, Research Perspectives*, pp. 23-37. New York, NY: Taylor & Francis/Routledge.
- Dede, C., & Lidwell, W. (2023). Developing a next-generation model for massive digital learning. *Education Sciences* 13, no. 8: 845. <https://doi.org/10.3390/educsci13080845>
- Bondie, R., Zushko, A., Wiseman, E. Dede, C., & Rich, D. (2023). Can differentiated and personalized mixed reality simulations transform teacher learning? *Technology Mind Behavior* doi.org/10.1037/tmb0000098
- Metcalf, S., Dede, C., Jeon, S., & Reilly, J.M. (2022). Fostering Systemic and Evidentiary thinking in Elementary learners: Concept Mapping of Causal Relationships in Ecosystems. In A. Canas, P. Reiska, & J. Vanhear (Eds.), *Concept mapping: Improving learning and*

- understanding* (Proceedings of the 9th International Conference on Concept Mapping), 106-115. Tallin, Estonia: Concept Mapping Academy.
- Dieterle, E., Dede, D., & Walker, M. (2022). The cyclical ethical effects of using artificial intelligence in education. *AI & Society* DOI: [10.1007/s00146-022-01497-w](https://doi.org/10.1007/s00146-022-01497-w)
- Leech, K.A., Wheat, D., Rowe, M., Blatt J., & Dede, C. (2022). "Literacy is everywhere!": Using digital technology to broaden how parents view the home literacy environment *Applied Developmental Science*, DOI: [10.1080/10888691.2022.2125392](https://doi.org/10.1080/10888691.2022.2125392)
- Dede, C. (2022). The Coming Sea-Change in Teacher Education. *Journal of Technology and Teacher Education*, 30(2), 117-125. Waynesville, NC USA: Society for Information Technology & Teacher Education. <https://www.learntechlib.org/primary/p/221170/>.
- Radu, I., Dede, C., Wang, J., Nie, G., Bhola, K., & Scuzzarella, M. (2022). Using virtual environments to reveal teacher bias towards students' socioeconomic status. *2022 8th International Conference of the Immersive Learning Research Network (iLRN)*, pp. 1-8. doi: [10.23919/iLRN55037.2022.9815955](https://doi.org/10.23919/iLRN55037.2022.9815955)
- Dede, C., Zhao, Y., Mishra, P., and Bonk. C. (2021). The Silver Lining for Learning webcasts as a bottom-up driver of global educational innovation. *Rivista di Digital Politics* 1(3), 523-542. doi: [10.53227/103803](https://doi.org/10.53227/103803)
- Chen, J., Chen, M., Dede, C., & Grotzer, T. (2021). Analyzing student thinking reflected in self-constructed concept maps and its influence on inquiry task performance. *Instructional Science*, 49, 287-312.
- Dieterle, E., Holland, B., & Dede, C. (2021). The cyclical effects of ethical decisions involving big data and digital learning platforms. In E.B. Mandinach & E.S. Gummer (Eds.), *The ethical use of data in education: Promoting responsible policies and practices*, pp. 198-215. New York, NY: Teachers College Press.
- Dede, C., & McGivney, E. (2021). Lifelong learning for careers that don't yet exist. In S. Jagannathan (Ed.), *Educational Technologies for Sustainable Development: How Upskilling, Data Analysis, and Digital Innovations Foster Lifelong Learning*, pp. 36-44. New York: Taylor & Francis.
- Dede, C. (2021). Supporting unlearning to enable upskilling. In J. Wingard & C. Farrugia, *The Great Skills Gap: Optimizing Talent for the Future of Work*, pp. 79-84. Menlo Park, CA: Stanford University Press.
- Radu, I., Dede, C., Seyam, M. R., Feng, T., & Chung, M. (2021). Using 360-Video virtual reality to influence caregiver emotions and behaviors for childhood literacy. *International Journal of Gaming and Computer-Mediated Simulations (IJGCMS)*, 13(1), 12-33. doi: [10.4018/IJGCMS.20210101.0a2](https://doi.org/10.4018/IJGCMS.20210101.0a2)
- Bondie, R., & Dede, C. (2021). Redefining and Transforming Field Experiences in Teacher Preparation through Personalized Mixed-Reality Simulations. In R.E. Ferdig & K.E. Pytash (Eds.), *What teacher educators should have learned from 2020*, pp. 229-242. Association for the Advancement of Computing in Education (AACE). <https://www.learntechlib.org/p/219088/>.
- Bondie, R., Macenido, Z., & Dede, C. (2021). Interaction principles for digital puppeteering to promote teacher learning. *Journal of Research in Teacher Education*, 53(1), 107-123. DOI: 10.1080/15391523.2020.1823284
- Dinnar, S., Dede, C., Johnson, E., Straub, C., & Korjus, K. (2021). Artificial intelligence and technology in teaching negotiation. *Negotiation Journal*, 37(1), 65-82. <https://doi.org/10.1111/nej.12351>

- Metcalf, S.J., Reilly, J.M., Jeon, S., Wang, A., Pyers, A., Brennan, K. & Dede, C. (2021). Assessing computational thinking through the lenses of functionality and computational fluency, *Computer Science Education* 31(2), 199-223, DOI: [10.1080/08993408.2020.1866932](https://doi.org/10.1080/08993408.2020.1866932)
- Mills N., Courtney M., Dede C., Dessen A., & Gant R. (2020). Culture and vision in virtual reality narratives. *Foreign Language Annals* 53(4), 733-760.
<https://doi.org/10.1111/flan.12494>
- Jeon, S., Metcalf, S., Dickes, A. & Dede, C. (2020). Elementary teacher perspectives on a blended computational modeling and ecosystem science curriculum. In D. Schmidt-Crawford (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2020* (pp. 46-55). Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE).
- Richards, J., & Dede, C. (2020). The 60 year curriculum: A strategic response to a crisis. *EDUCAUSE Review* 55(4), 24-38.
- Dede, C. (2020). Necessity is the parent of transformation: Universal, blended, personalized, lifelong learning. *School Administrator* 77(7), 26-29.
- Fischer, C., Fishman, B., Levy, A., Eisenkraft, A., Dede, C., Lawrenz, F., Jia, Y., Kook, J., Frumin, K., & McCoy, A. (2020). When do students in low-SES schools perform better-than-expected on a high-stakes test? Analyzing school, teacher, teaching, and professional development characteristics. *Urban Education*, 55(8-9), 1280-1314. <https://doi.org/10.1177/0042085916668953>
- Fischer, C., Foster, B., McCoy, A., Lawrenz, F., Dede, C., Eisenkraft, A., Fishman, B., Frumin, K., & Levy, A. (in press). Identifying levers related to student performance on high-stakes science exams: Examining school, teaching, teacher, and professional development characteristics. *Teachers College Record*, 122(2).
- Gibson, E.B., Kipp, M., Dede, C., Gooding, H.C., Phelps-Coco, A., Lin, K., Levinson, J.A., & Austin, S.B. (2020). Delivering case method teaching through online platforms: Adapting active learning techniques and maximizing learner engagement. *Educational Designer* 4(13)
- Dede, C. (2020). Reconceptualizing higher education and lifelong learning in the era of the synergistic digital economy. In C. Dede & J. Richards (Eds.), *The 60-Year Curriculum: New Models for Lifelong Learning in the Digital Economy*, pp. 1-24. New York, NY: Routledge.
- Reilly, J.M., McGivney, E., Dede, C., & Grotzer, T. (2020). Assessing science identity exploration in immersive virtual environments: A mixed methods approach, *The Journal of Experimental Education*, DOI: 10.1080/00220973.2020.1712313
- McCoy, A., Levy, A., Frumin, K., Lawrenz, F., Dede, C., Eisenkraft, A., Fischer, C., Fishman, B., & Foster, B. (2020). From the inside out: Teacher responses to the AP curriculum redesign. *Journal of Science Teacher Education*, 31(2), 208-225.
<https://doi.org/10.1080/1046560X.2019.1685630>
- Wolbrink, T., von Schaik, S.M., (30 other authors), Dede, C., & Burns, J. P. (2019). Online learning and residents' acquisition of mechanical ventilation knowledge: Sequencing matters. *Critical Care Medicine* DOI: 10.1097/CCM.0000000000004071
- Reilly, J. & Dede, C. (2019). Stealth Assessment via Deep Learning in an Open-Ended Virtual Environment. In *Proceedings of the 12th International Conference on Educational Data Mining*, 643 – 646.
- Reilly, J. & Dede, C. (2019). Augmented Reality in Education. In A. Zhang & D. Cristol (Eds.), *Handbook of Mobile Teaching and Learning* (pp. 1337 – 1351). Singapore: Springer.
- Reilly, J. & Dede, C. (2019). Differences in Student Trajectories via Filtered Time Series Analysis in an Immersive Virtual World. In *Proceedings of the 9th International Conference on Learning Analytics & Knowledge* (pp. 130 – 134). New York, NY: ACM.

- Dede, C., Grotzer, T., Kamarainen, A., & Metcalf, S. (2019). Designing immersive authentic simulations that enhance motivation and learning: EcoLearn. In R. Feldman (Ed.), *Learning science: Theory, research, practice*, pp. 229-259. New York: McGraw Hill.
- Metcalf, S. J., Chen, J. A., Kamarainen, A. M., Frumin, K. M., Vickrey, T. L., Grotzer, T. A., & Dede, C. J. (2019). Transitions in Student Motivation During a MUVE-Based Ecosystem Science Curriculum: An Evaluation of the Novelty Effect. In K. Becnel (Ed.), *Emerging Technologies in Virtual Learning Environments* (pp. 96-115). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-7987-8.ch005
- Metcalf, S., Dickes, A., Brennan, K., & Dede, C. (2019, August). Design of an Agent-Based Visual Programming Tool for Elementary Ecosystem Science Learning. In *Proceedings of ACM International Computing Education Research conference (ICER'19)*, August 12-14, 2019, Toronto, ON, Canada. ACM, New York, NY, USA.
- Dickes, A.C., Kamarainen, A., Metcalf, S.J., Gun-Yildiz, S., Brennan, K., Grotzer, T., & Dede, C. (2019). Scaffolding ecosystems science practice by blending immersive environments and computational modeling. *British Journal of Educational Technology*, 50(5), 2181-2202. (DOI) - 10.1111/bjet.12806
- Dede, C. (2019). Improving efficiency and effectiveness through learning engineering. In C. Dede, J. Richards, & B. Saxberg, (Eds.). (2019). Learning engineering for online education: Theoretical contexts and design-based examples, pp.1-14. New York: Routledge.
- Richards, J., Dede, C., & Saxberg, B. (2019). Developing a research agenda to bridge the present to an aspirational future. In C. Dede, J. Richards, & B. Saxberg, (Eds.). (2019). Learning engineering for online education: Theoretical contexts and design-based examples, pp. 213-225. New York: Routledge.
- Dede, C., Grotzer, T., Kamarainen, A., Metcalf, S.J., Olney, A.M., Rus, V., Sottolare, R.A., & Wang, M. (2018). Graphical supports for collaboration: Constructing shared mental models. In R. Sottolare, A. Graesser, X. Hu, and A. Sinatra (Eds.), *Design Recommendations for Intelligent Tutoring Systems: Volume 6 - Team Task Work*, pp. 33-44. Orlando, FL: U.S. Army Research Laboratory. <https://www.gifttutoring.org/documents/137>
- Metcalf, S.J., Reilly, J.M., Kamarainen, A.M., King, J., Grotzer, T.A., & Dede, C. (2018). Supports for deeper learning of inquiry-based ecosystem science in virtual environments: Comparing virtual and physical concept mapping. *Computers in Human Behavior*, 87 (October), 459-469.
- Reilly, J. and Dede, C. (2018). Dynamic feedback as automated scaffolding to support learners and teachers in guided authentic scientific inquiry settings. Paper presented at the 11th International Conference on Educational Data Mining. Buffalo, NY (not published).
- Chen, J. A., Star, J. R., Dede, C., & Shane Tutwiler, M. (2018). Technology-rich activities: One type does not motivate all. *Contemporary Educational Psychology*, 54, 153–170. <https://doi.org/10.1016/j.cedpsych.2018.06.011>
- Chen, J., Wang, M., Grotzer, T., & Dede, C. (2018). Using a three-dimensional thinking graph to support inquiry learning. *Journal of Research in Science Teaching*, 55, (9), 1239-1263. doi.org/10.1002/tea.21450
- Kamarainen, A.M., Thompson, M.M., Metcalf, S.J., Grotzer, T.A., Tutwiler, M.S., Dede, C. (2018, June). Prompting Connections between Content and Context: Blending Immersive Virtual Environments and Augmented Reality for Environmental Science Learning. In Beck, D., Allison, C., Morgado, L., Pirker, J., Khosmood, F., Richter, J., & Gütl, C. (Eds.). (2018). *Immersive Learning Research Network: Fourth International*

- Conference, iLRN 2018, Missoula, Montana, June 24–29, 2018. Proceedings (Vol. 840)*, pp. 36–54, Springer.
- Fischer, C., Fishman, B., Dede, C., Eisenkraft, E., Foster, B., Frumin, K., Lawrenz, F., Levy, A., & McCoy, A. (2018). Investigating relationships between school context, teacher professional development, teaching practices, and student achievement in response to a nationwide science reform. *Teaching and Teacher Education*, 72, 107-121.
<https://doi.org/10.1016/j.tate.2018.02.011>
- Frumin, K., Dede, C., Fischer, C., Foster, B., Lawrenz, F., Eisenkraft, A., Fishman, B., Levy, A.J. & McCoy, A. (2018) Adapting to large-scale changes in Advanced Placement Biology, Chemistry, and Physics: the impact of online teacher communities, *International Journal of Science Education*, 40:4, 397-420, DOI:[10.1080/09500693.2018.1424962](https://doi.org/10.1080/09500693.2018.1424962)
- Metcalf, S., Kamarainen, A., Torres, E., Grotzer, T., & Dede, C. (2018). EcoMUVE: A case study on the affordances of MUVES in ecosystems science education. In J. Qian (Ed.), *Integrating multi-user virtual environments in modern classrooms*, pp. 1-25. New York, NY: IGI Global.
- Dede, C. (2017). Interview with Chris Dede *and* Emerging technologies and the history of distance learning. In J. Ebersole & W. Patrick (Eds.), *Learning at the speed of light: How online education got to now* (pp. 134-148). New York: Excelsior College Press.
- Chen, J., Wang, M., Dede, C., & Grotzer, T. (2017). Design of a three-dimensional cognitive mapping approach to support inquiry learning. *Educational Technology and Society*, 20(4), 191-204.
- Dede, C., Jacobson, J., & Richards, J. (2017). Introduction: Virtual, augmented, and mixed realities in education. In D. Liu, C. Dede, R. Huang, & J. Richards, (Eds.). Virtual reality, augmented reality, and mixed reality in education, pp. 1-18. Hong Kong: Springer.
- Dede, C., Grotzer, T., Kamarainen, A., & Metcalf, S. (2017). Virtual reality as an immersive medium for authentic simulations. In D. Liu, C. Dede, R. Huang, & J. Richards, (Eds.). Virtual reality, augmented reality, and mixed reality in education, pp. 133-156. Hong Kong: Springer.
- Dede, C., & Richards, J. (2017). Conclusion: Strategic planning for R&D on immersive learning. In D. Liu, C. Dede, R. Huang, & J. Richards, (Eds.). Virtual reality, augmented reality, and mixed reality in education, pp. 237-244. Hong Kong: Springer.
- Dede, C., Grotzer, T., Kamarainen, A., & Metcalf, S. (2017). EcoXPT: Designing for deeper learning through experimentation in an immersive virtual ecosystem. *Educational Technology & Society*, 20(4), 166–178.
- Chao, T., Chen, J., Star, J. R., & Dede, C. (2016). Using Digital Resources for Motivation and Engagement in Learning Mathematics: Reflections from Teachers and Students. *Digital Experiences in Mathematics Education*. doi.org/10.1007/s40751-016-0024-6
- Fischer, C., Frumin, K., Dede, C., Fishman, B., Eisenkraft, A., Jia, Y., Kook, J., Levy, A., Lawrenz, F., & McCoy, A. (2016). Non-users, lurkers, and posters in the online AP Teacher Community: Comparing characteristics determining online engagement. In L.-J. Thoms, & R. Girwidz (Eds.), *Selected Papers from the 20th International Conference on Multimedia in Physics Teaching and Learning* (pp. 109-117). Mulhouse, France: European Physical Society.
- Kamarainen, A., Metcalf, S., Grotzer, T.A., Brimhall, C., & Dede, C. (2016). Atom tracker: Designing a mobile augmented reality experience. *International Journal of Designs for Learning*, 7(2), 111-130.

- Dede, C., Ho, A., & Mitros, P. (2016) Big Data analysis in higher education: Promises and pitfalls. *EDUCAUSE Review*, 51, 5 (September/October 2016), 22-34.
- Dede, C. (2016). Social media and challenges to traditional educational models. In C. Greenhow, J. Sonnevend, and C. Agur (Eds.), *Education and Social Media: Toward a Digital Future*, pp. 95-112. Cambridge, MA: MIT Press.
- Dede, C., & Eisenkraft, A. (2016). Introduction: The evolution of online and blended teacher learning and professional development. In Dede, C., Eisenkraft, A., Frumin, K., & Hartley, A. (Eds.). (2016). *Teacher learning in the digital age: Online professional development in STEM education*. Cambridge, MA: Harvard Education Press.
- Frumin, K., & Dede, C. (2016). The importance of moderators. In Dede, C., Eisenkraft, A., Frumin, K., & Hartley, A. (Eds.). (2016). *Teacher learning in the digital age: Online professional development in STEM education*. Cambridge, MA: Harvard Education Press.
- Dede, C., & Eisenkraft, A. (2016). Conclusion: Insights and next steps. In Dede, C., Eisenkraft, A., Frumin, K., & Hartley, A. (Eds.). (2016). *Teacher learning in the digital age: Online professional development in STEM education*. Cambridge, MA: Harvard Education Press.
- Metcalf, S., Kamarainen, A., Cooke, C., Turkay, S., Grotzer, T., & Dede, C. (2016). Teacher perceptions of the practicality and effectiveness of immersive ecological simulations. In Cheney, A.W. & Terry, K.P. (Eds.). *Utilizing Virtual and Personal Learning Environments for Optimal Learning*, pp. 22-45. Hershey, PA: IGI Global.
- Fishman, B., & Dede, C. (2016). Teaching and technology: New tools for new times. In D. Gitomer & C. Bell (Eds.), *Handbook of Research on Teaching, 5th Edition (American Educational Research Association)*, pp. 1269-1334. New York, NY: Springer.
- Dede, C. (2016). Next steps for “Big Data” in education: Utilizing data-intensive research. *Educational Technology LVI*(2): 37-42.
- Chen, J.A., Tutwiler, M.S. Metcalf, S.J., Kamarainen, A., Grotzer, T., & Dede, C. (2016). A multi-user virtual environment to support students’ self-efficacy and interest in science: A latent growth model analysis. *Learning and Instruction* 41, 11-22
- Dearing, J.W., Dede, C., Boisvert, D., Carrese, J., Clement, L., Craft, E., Gardner, P., Hyder, J., Johnson, E., McNeel, D., Phiri, J., & Pleil, M. (2015). How educational innovators apply diffusion and scale concepts. In Chee-Kit Looi & Laik-Woon Teh, *Sustaining and Scaling Educational Innovations*, pp. 81-104. New York: Springer.
- Dede, C., Editor. (2015). *Data-intensive research in education: Current work and next steps*. Arlington, VA: Computing Research Association.
<https://cra.org/wp-content/uploads/2015/10/CRAEducationReport2015.pdf>
- Star, J.R., Chen, J., & Dede, C. (2015). Applying motivation theory to the design of game-based learning environments. In J. Torbeyns et al. (eds.), *Describing and Studying Domain-Specific Serious Games*, pp. 83-92. NY, NY: Springer.
- Gehlbach, H., Marietta, G., King, A.M., Karutz, C., Bailenson, J.N., & Dede, C. (2015). Many ways to walk a mile in another's moccasins: Type of social perspective taking and its effect on negotiation outcomes. *Computers in Human Behavior*, 52 (November, Issue C), 523-53.
- Star, J. R., Chen, J. A., Taylor, M. W., Durkin, K., Dede, C., & Chao, T. (2015). Evaluating game-based learning environments for enhancing motivation in mathematics. In J. Torbeyns, E. Lehtinen, & J. Elen (Eds.), *Describing and studying domain-specific serious games* (pp. 209-230). Cham, Switzerland: Springer International Publishing AG.
- Grotzer, T.A., Powell, M.M., Derbiszewska, K.M., Courter, C.J., Kamarainen, A.M., Metcalf, S. J., & Dede, C.J. (2015). Turning transfer inside out: The affordances of virtual worlds and

- mobile devices in real world contexts for teaching about causality across time and distance in ecosystems. *Technology Knowledge Learning* 20: 43-69
- Kamarainen, A., Metcalf, S., Grotzer, T., & Dede, C. (2015). Exploring ecosystems from the inside: How immersion in a multi-user virtual environment supports epistemologically grounded modeling practices in ecosystem science instruction. *Journal of Science Education and Technology*, 24(2), 148-167.
- Metcalf, S., Chen, J., Kamarainen, A., Frumin, K., Vickrey, T., Grotzer, T., & Dede, C. (2014). Shifts in Student Motivation during Usage of a Multi-User Virtual Environment for Ecosystem Science. *International Journal of Virtual and Personal Learning Environments (IJVPLE)*, 5(4), 1-16.
- Star, J.R., Chen, J.A., Taylor, M.W., Durkin, K., Dede, C., & Chao, T. (2014). Studying technology-based strategies for enhancing motivation in mathematics. *International Journal of STEM Education*, 1:7, 1-19.
- Dede, C. (2014). *The role of digital technologies in deeper learning*. New York, NY: Jobs for the Future. <http://www.jff.org/publications/role-digital-technologies-deeper-learning>
- Kafai, Y.B., & Dede, C. (2014). Learning in virtual worlds. In K. Sawyer (Ed.), Cambridge Handbook of the Learning Sciences, Second Edition, pp. 522-542. New York, NY: Cambridge University Press.
- Dede, C. (2014). The future of digital learning in higher education. *Open Education Research*, 20(4), 9-18.
- Sabelli, N., & Dede, C. (2013). Empowering design-based implementation research: The need for infrastructure. In B. J. Fishman, W.R. Penuel, A-R Allen, & B.H. Cheng (Eds.), Design-based implementation research: Theories, methods, and exemplars (National Society for the Study of Education, Volume 112, Issue 2), pp. 464-480. NY, NY: Teachers College, Columbia.
- Dede, C. (2013). Commentary one: Open education – disrupting the classroom. In L. Squires and A. Meisner, Advances in Digital Education and Lifelong Learning: Volume 1, pp. 173-185. London, England: Emerald Press.
- Metcalf, S., Kamarainen, A., Grotzer, T., & Dede, C. (2013). Teacher perceptions of the practicality and effectiveness of immersive ecological simulations as classroom curricula. *International Journal of Virtual and Personal Learning Environments*, 4(3), 66-77.
- Code, J., Clarke-Midura, J., Zap, N., & Dede, C. (2013). The utility of using immersive virtual environments for the assessment of science inquiry learning. *Journal of Interactive Learning Research*, 24(4), 371-396
- Dede, C. (2013). Connecting the dots: New technology-based models of postsecondary learning. *EDUCAUSE Review*, 48(5), 33-52.
- Voogt, J., Erstad, O., Dede, C., and Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the 21st century. *Journal of Computer Assisted Learning*, 29(5), 403-413.
- Dunleavy, M., and Dede, C. (2013). Augmented reality teaching and learning. In J.M. Spector, M.D Merrill, J. Elen, & M.J. Bishop (Eds.), The Handbook of Research on Educational Communications and Technology (4th ed.), pp. 735-745. New York: Springer.
- Dede, C., Grotzer, T., Kamarainen, A., Metcalf, S., & Tutwiler, M.S. (2013). EcoMobile: Blending virtual and augmented realities for learning ecosystems science and complex causality. *Journal of Immersive Education* 1(1) <http://jied.org/1/1/2/>

- Dawley, L., & Dede, C. (2013). Situated learning in virtual worlds and immersive simulations. In J.M. Spector, M.D Merrill, J. Elen, & M.J. Bishop (Eds.), The Handbook of Research on Educational Communications and Technology (4th ed.), pp. 723-734. New York: Springer.
- Dede, C. (2013) Opportunities and Challenges in Embedding Diagnostic Assessments into Immersive Interfaces. *Educational Designer*, 2(6), 1-22.
Retrieved from: <http://www.educationaldesigner.org/ed/volume2/issue6/article21/>
- Working Group on Postsecondary Learning. (2013). *New technology-based models for postsecondary learning: Conceptual frameworks and research agendas*. Washington, DC: Computing Research Association.
<http://cra.org/resources/research-issues/>
- Grotzer, T., Kamarainen, A., Tutwiler, M.S., Metcalf, S., & Dede, C. (2013). Learning to reason about ecosystems dynamics over time: The challenges of an event-based causal focus. *Bioscience* 63(4), 288-296.
- Dede, C. (2013). Reaching scale beyond a school-level innovation. *School Administrator*, 70(4), 33-37.
- Kamarainen, A.M., Metcalf, S., Grotzer, T., Browne, A., Mazzuca, D., Tutwiler, M.S., & Dede, C. (2013) EcoMOBILE: Integrating augmented reality and probeware with environmental education field trips, *Computers & Education*, Available online 14 March 2013, ISSN 0360-1315, 10.1016/j.compedu.2013.02.018.
- Chen, J., Zap, N., & Dede, C. (2012). Using Virtual Environments to Motivate Students to Pursue STEM Careers: An Expectancy-Value Model. In S. D'Agustino (Ed.), Immersive Environments, Augmented Realities and Virtual Worlds: Assessing Future Trends in Education, pp. 42-56. Hershey, PA: IGI Press.
- Tran, C., Chen, J., Warschauer, M., Conley, A., & Dede, C. (2012). Applying motivation theories to the design of educational technology. In C. Martin, A. Ochsner, & K. Squire (Eds.), Proceedings of the Games, Learning, and Society Conference: Vol. 2 (pp. 291-297). Pittsburgh, PA: ETC Press.
- Clarke-Midura, J., Mayrath, M., & Dede, C. (2012). Thinking outside the bubble: Virtual performance assessments for measuring complex learning. In M. Mayrath, J. Clarke-Midura, & D. H. Robinson (Eds.), Technology-based assessments for 21st century skills: Theoretical and practical implications from modern research, pp. 125-148. Charlotte, NC: Information Age Publishing.
- Richards, J., & Dede, C. (2012) Introduction: Opportunities and Challenges of Digital Teaching Platforms. In C. Dede & J. Richards (Eds.), Digital teaching platforms: Customizing classroom learning for each student pp. 1-6. New York: Teacher's College Press.
- Dede, C. (2012). Customization in Immersive Learning Environments: Implications for Digital Teaching Platforms. In C. Dede & J. Richards (Eds.), Digital teaching platforms: Customizing classroom learning for each student pp. 119-133. New York: Teacher's College Press.
- Dede, C., & Richards, J. (2012). Synthesis: Next Steps in the Evolution of Digital Teaching Platforms. In C. Dede & J. Richards (Eds.), Digital teaching platforms: Customizing classroom learning for each student pp. 201-208. New York: Teacher's College Press.
- Code, J., Clarke-Midura, J., Zap, N. & Dede, C. (2012). Virtual performance assessment for serious games and virtual worlds. In H. Wang (Ed.), Interactivity in E-Learning: Cases and Frameworks, pp. 230-252. New York, NY: IGI Publishing.

- Clarke-Midura, J., Code, J., Zap, N. & Dede, C. (2012). Assessing science inquiry in the classroom: A case study of the virtual assessment project. In L. Lennex & K. Nettleton (Eds.), Cases on Inquiry through Instructional Technology in Math and Science: Systemic Approaches, pp. 138-164. New York, NY: IGI Publishing.
- Dede, C. (2011). Emerging technologies, ubiquitous learning, and educational transformation. In C. D. Kloos, D. Gillet, R. M. C. Garcia, F. Wild, & M. Wolpers, Towards Ubiquitous Learning (Proceedings of the 6th European Conference on Technology-Enhanced Learning), pp 1-8. New York: Springer.
- O'Shea, P., Dede, C., & Cherian, M. (2011). The results of formatively evaluating an augmented reality curriculum based on modified design principles. *International Journal of Gaming and Computer-mediated Simulations* 3, 2 (April-June), 57-66.
- Clarke-Midura, J., Dede, C., & Norton, J. (2011). Next generation assessments for measuring complex learning in science. In The Road Ahead for State Assessments, pp. 27-40. Cambridge MA: Rennie Center for Education and Public Policy.
<http://renniecenter.issuelab.org/research>
- Dede, C. (2011). Developing a research agenda for educational games and simulations. In S. Tobias & J. D. Fletcher (Eds.), Computer games and Instruction (pp. 233-250). Hershey, PA: Information Age Publishers.
- Dede, C. (2011). Reconceptualizing technology integration to meet the challenges of educational transformation. *Journal of Curriculum and Instruction* 5, 1 (May), pp. 4-16
- Metcalf, S., Kamarainen, A., Tutwiler, M.S., Grotzer, T., & Dede, C. (2011). Ecosystem science learning via multi-user virtual environments. *International Journal of Gaming and Computer-Mediated Simulations*, 3, 1, (January-March), 86-90.
- Dede, C. (2010). Reflections on the Draft National Educational Technology Plan 2010: Foundations for Transformation. *Educational Technology* 50, 6 (November-December), 18-22.
- Dede, C. (2010). Comparing Frameworks for 21st Century Skills. In J. Bellanca & R. Brandt, Eds, 21st Century Skills, pp. 51-76. Bloomington, IN: Solution Tree Press.
- Dede, C. (2010). Technological supports for acquiring 21st century skills. In E. Baker, B. McGaw, & P. Peterson (Eds.), International Encyclopedia of Education, 3rd Edition, 158-166. Oxford, England: Elsevier.
- Clarke, J., and Dede, C. (2010). Assessment, technology, and change. *Journal of Research on Technology in Education*, Vol. 42 (3), 309–328.
- Bjerede, M., Atkins, K., & Dede, C. (2010). Ubiquitous mobile technologies and the transformation of schooling. *Educational Technology* 50, 2, 3-7.
- Ketelhut, D. J., Nelson, B. C., Clarke, J. E., & Dede, C. (2010). A multi-user virtual environment for building and assessing higher order inquiry skills in science. *British Journal of Educational Technology* 41(1), 56-68.
- Clarke, J., & Dede, C. (2009). Design for scalability: A case study of the River City curriculum. *Journal of Science Education and Technology* 18(4), 353-365.
- Dede, C., & Barab, S. (2009). Emerging technologies for learning science: A time of rapid advances. *Journal of Science Education and Technology* 18(4), 301-304.
- Kayler, M., Sprague, D., & Dede, C. (2009). Online gaming: Building bridges that enhance cultural understandings. In C Vrasidas (Ed.), ICT for Education, Development, and Social Justice, pp. 183-200. Charlotte, NC: Information Age Publishing.

- Dede, C. (2009) The Role of Information and Communications Technologies in the Evolution of Graduate Education. In D. Denecke (Ed.), Graduate Education in 2020: What Does the Future Hold?, pp. 80-124. Washington, DC: Council of Graduate Schools.
- Dunleavy, M., Dede, C., & Mitchell, R. (2009). Affordances and Limitations of Immersive Participatory Augmented Reality Simulations for Teaching and Learning. *Journal of Science Education and Technology* 18, 1 (February), 7-22.
- Dede, C. (2009). Technologies that Facilitate Generating Knowledge and Possibly Wisdom: A Response to "Web 2.0 and Classroom Research." *Educational Researcher* 38(4), 260-263.
- Dede, C., Ketelhut, D.J., Whitehouse, P., Breit, L., & McCloskey, E. (2009). A research agenda for online teacher professional development. *Journal of Teacher Education* 60, 1, 8-19.
- Clarke, J., & Dede, C. (2009). Robust designs for scalability. In L. Moller, J. B. Huett, & D. M. Harvey (Eds.), Learning and instructional technologies for the 21st century: Visions of the future, pp. 27-48. New York: Springer.
- Dede, C. (2009). Immersive interfaces for engagement and learning. *Science*, 323(5910), 66-69.
- O'Shea, P., Mitchell, R., Johnston, C., & Dede, C. (2009). Lessons learned about designing augmented realities. *International Journal of Gaming and Computer-Mediated Simulations* 1, 1 (Jan – March), 1-15.
- Dede, C. (2008). Theoretical Perspectives Influencing the Use of Information Technology in Teaching and Learning. In J. Voogt and G. Knezek, Eds., International Handbook of Information Technology in Primary and Secondary Education, pp. 43-62. New York: Springer.
- Clarke, J., Dede, C., & Dieterle, E. (2008). Emerging Technologies for Collaborative, Mediated, Immersive Learning. In J. Voogt & G. Knezek (Eds.), The International Handbook of Technology in Primary and Secondary Education, pp. 901-910. New York: Springer-Verlag
- Dede, C. (2008). Cyberinfrastructure and the Evolution of Higher Education. Educause Center for Applied Research Research Bulletin, Issue 18. Boulder, CO: ECAR.
- Dede, C. (2008). Learning via Smart Objects, Intelligent Contexts, and Ubiquitous Computing. *Educational Technology* 48 (2), 3-4, 16.
- Moody, L., & Dede, C. (2008). Models of Data-Based Decision Making: A Case Study of the Milwaukee Public Schools. In E.B. Mandinach & M. Honey (Eds.), Data-Driven School Improvement: Linking Data and Learning, pp.233-254. New York: Teachers College Press.
- Dede, C. (2007). Reinventing the Role of Information and Communications Technologies in Education. In L. Smolin, K. Lawless, & N. Burbules (Eds.), Information and Communication Technologies: Considerations of Current Practice for Teachers and Teacher Educators [NSSE Yearbook 2007 (106:2)], pp. 11-38. Malden, MA: Blackwell Publishing.
- Ketelhut, D., Dede, C., Clarke, J., Nelson, B., & Bowman, C. (2007). Studying Situated Learning in a Multi-User Virtual Environment. In E. Baker, J. Dickieson, W. Wulfec, & H. O'Neil (Eds.), Assessment of Problem Solving Using Simulations, pp. 37-58. Mahweh, NJ: Erlbaum.
- Nelson, B., Ketelhut, D. J., Clarke, J., Dieterle, E., Dede, C., & Erlandson, B. (2007). Robust Design Strategies for Scaling Educational Innovations: The River City MUVE Case Study. In B.E. Shelton & D.A. Wiley, The Design and Use of Simulation Computer Games in Education, pp. 219-242. Rotterdam, The Netherlands: Sense Press.
- Clarke, J., & Dede, C. (2007) MUVEs as a powerful means to study situated learning. In C. A. Chinn, G. Erkens, & S. Putambekar (Eds.), The 2007 Computer-Supported Collaborative Learning (CSCL) Conference 2007, 141-144. New Brunswick, NJ: International Society for the Learning Sciences.

- Dede, C., Dieterle, E., Clarke, J., Ketelhut, D., & Nelson, B. (2007). Media-based learning styles. In M. Moore (Ed.), Handbook of Distance Education, pp. 239-252. Mahwah, NJ: Erlbaum.
- Barab, S., and Dede, C. (2007). Games and Immersive Participatory Simulations in Science Education: An Emerging Type of Curricula. *Journal of Science Education and Technology* 16, 1, 1-3.
- Dieterle, E., Dede, C., & Schrier, K. (2007). "Neomillennial" learning styles propagated by wireless handheld devices. In M. Lytras & A. Naeve (Eds.), Ubiquitous and pervasive knowledge and learning management: Semantics, social networking and new media to their full potential, pp. 35-66. Hershey, PA: Idea Group, Inc.
- Dieterle, E., & Dede, C. (2006). Building University Faculty and Student Capacity to use Wireless Handheld Devices for Learning. In M. van't Hooft (Ed.), Ubiquitous Computing: Invisible Technology, Visible Impact, pp. 303-328. Mahwah, NJ: Erlbaum.
- Spicer, D.E., & Dede, C. (2006). Collaborative Design of Online Professional Development: Building the Milwaukee Professional Support Portal. *Journal of Technology and Teacher Education*. 14, 4, 679-700.
- Dede, C. (2006). Introduction. In C. Dede (Ed.), Online Professional Development for Teachers: Emerging Models and Methods, pp 1-11. Cambridge, MA, Harvard Education Press.
- Whitehouse, P.L, Breit, L.A., McCloskey, E.M., Ketelhut, D. J., & Dede, C. (2006). An Overview of Current Findings from Empirical Research on Online Teacher Professional Development. In C. Dede (Ed.), Online Professional Development for Teachers: Emerging Models and Methods, pp 13-30. Cambridge, MA, Harvard Education Press.
- Holland, I.E., Dede, C., & Onarheim, K. (2006). Processes Supporting the Regional Evolution of Effective Professional Development: Milwaukee's Initiation of a Professional Support Portal. In C. Dede (Ed.), Online Professional Development for Teachers: Emerging Models and Methods, pp 213-236. Cambridge, MA, Harvard Education Press.
- Ketelhut, D.J., McCloskey, E.M., Dede, C., Breit, L.A., & Whitehouse, P.L. (2006). Core Tensions in the Evolution of Online Teacher Professional Development. In C. Dede (Ed.), Online Professional Development for Teachers: Emerging Models and Methods, pp 237-264. Cambridge, MA, Harvard Education Press.
- Clarke, J., Dede, C., Ketelhut, D. J., & Nelson, B. (2006) A Design-based Research Strategy to Promote Scalability for Educational Innovations. *Educational Technology* 46, 3 (May-June), 27-36.
- Dede, C. (2006). Scaling Up: Evolving Innovations beyond Ideal Settings to Challenging Contexts of Practice. In R.K. Sawyer (Ed.), Cambridge Handbook of the Learning Sciences, pp. 551-566. Cambridge, England: Cambridge University Press.
- Ketelhut, D.J., Whitehouse, P., Dede, C., & Brown-L'Bahy, T. (2005). Designing Distributed Learning Experiences: An Overview. In C. Howard, J. Boettcher, L. Justice, K. Schenk, P. L. Rogers, and G. A. Berg (Eds.), Encyclopedia of Distance Learning, pp. 518-524. Hershey, PA: Information Science Publishing.
- Dede, C. (2005). Planning for NeoMillennial Learning Styles. *EDUCAUSE Quarterly* 28, 1, 7-12.
- Dede, C. (2005). Planning for "Neomillennial" Learning Styles: Implications for Investments in Technology and Faculty. In J. Oblinger and D. Oblinger (Eds.), Educating the Net Generation, pp. 226-247. Boulder, CO: EDUCAUSE Publishers.
<http://www.educause.edu/educatingthenetgen/>

- Dede, C., & Nelson, R. (2005). Technology as Proteus: Digital Infrastructures that Empower Scaling Up. In C. Dede, J. Honan, & L. Peters (Eds.), Scaling Up Success: Lessons Learned from Technology-Based Educational Improvement, pp. 110-132. New York: Jossey-Bass.
- Dede, C., & Honan, J. (2005). Scaling Up Success: A Synthesis of Themes and Insights. In C. Dede, J. Honan, & L. Peters (Eds.), Scaling Up Success: Lessons Learned from Technology-Based Educational Improvement, pp. 227-239. New York: Jossey-Bass.
- Dede, C. (2005). Why design-based research is both important and difficult. *Educational Technology* 45, 1 (January-February), 5-8.
- Nelson, B., Ketelhut, D., Clarke, J., Bowman, C., & Dede, C. (2005). Design-Based Research Strategies for Developing a Scientific Inquiry Curriculum in a Multi-User Virtual Environment. *Educational Technology* 45, 1 (January-February), 21-28.
- Dede, C. (2005). An Intellectual Journey from Distance Education to Distributed Learning. In G. Kearsley (Ed.), Online Learning: Personal Reflections on the Transformation of Education, pp. 66-72. New Jersey: Educational Technology Press.
- Dede, C. (2004). Enabling Distributed Learning Communities via Emerging Technologies. (Part One – September, Part Two, October). *THE Journal* 32, 2, 12-22 and *THE Journal* 32, 3, 16-26. <http://www.thejournal.com/magazine/vault/A4963.cfm> and <http://www.thejournal.com/magazine/vault/A5027.cfm>. Also published as Dede, C. (2004). Enabling Distributed-Learning Communities via Emerging Technologies. Proceedings of the 2004 Conference of the Society for Information Technology in Teacher Education (SITE), pp. 3-12. Charlottesville, VA: American Association for Computers in Education.
- Dede, C., Nelson, B., Ketelhut, D., Clarke, J., & Bowman, C. (2004). Design-Based Research Strategies for Studying Situated Learning in a Multi-User Virtual Environment. Proceedings of the 2004 International Conference on Learning Sciences, pp. 158-165. Mahwah, NJ: Lawrence Erlbaum.
- Dede, C., Brown-L'Bahy, T., Ketelhut, D., & Whitehouse, P. (2004). Distance Learning (Virtual Learning). In H. Bidgoli, Ed., The Internet Encyclopedia, pp. 549-560. New York: Wiley.
- Dede, C. (2004). If Design-Based Research is the Answer, What is the Question? *Journal of the Learning Sciences*, 13, 1, 105-114.
- Dede, C. (2004). Making Educational Technology Work: State Policies in the North Central Region. *NCREL Policy Issues* Volume 15 (January), 1-11. <http://www.ncrel.org/policy/pubs/issues.htm>
- Applegate, L., Dede, C., & Saltrick, S. (2004). Learning from Leapfrog: Creating Educational and Business Value (9-804-062). Cambridge, MA: Harvard Business School Case Studies.
- Buckley, B.C., Gobert, J.D., Kindfield, A.C.H., Horwitz, P., Tinker, R.F., Gerlits, B., Wilensky, U., Dede, C., & Willett, J. (2004). Model-based teaching and learning with BioLogica: What do they learn? How do they learn? How do we know? *Journal of Science Education and Technology* 13, 1, 23-41.
- Dede, C., Nelson, R., & Eddy-Spicer, D. (2003). High Tech Support for New Teacher Retention in Urban Schools. Proceedings of the 2003 National Educational Computing Conference. Eugene, OR: International Society for Technology in Education, 181-193.
- Dede, C. (2003). No Cliché Left Behind: Why Education Policy is not like the Movies. *Educational Technology* 43, 2 (March-April), 5-10.
- Dede, C., Ketelhut, D., & Ruess, K. (2002). Motivation, Usability, and Learning Outcomes in a Prototype Museum-based Multi-User Virtual Environment. In P. Bell, R. Stevens, & T. Satwiciz (Eds.), Keeping Learning Complex: The Proceedings of the Fifth International Conference of the Learning Sciences (ICLS). Mahwah, NJ: Erlbaum.

- Dede, C., Whitehouse, P., & Brown-L'Bahy, T. (2002) Designing and Studying Learning Experiences that Use Multiple Interactive Media to Bridge Distance and Time. In C. Vrasidas & G. Glass (Eds.), Current Perspectives on Applied Information Technologies. Vol. 1: Distance Education, pp. 1-30. Greenwich, CN: Information Age Press.
- Dede, C. (2001). Enhancing State and Local Policy Making about Educational Technologies. In N. Dickard, Ed., Great Expectations: The E-Rate at Five. Washington, DC: The Benton Foundation.
- Dede, C., Salzman, M., Loftin, R.B., & Ash, K. (2000). Using virtual reality technology to convey abstract scientific concepts. In M.J. Jacobson & R.B. Kozma (Eds), Innovations in Science and Mathematics Education: Advanced Designs for Technologies of Learning. (pp. 361-414). Mahwah, NJ: Lawrence Erlbaum.
- Dede, C. (2000). Emerging Influences of Information Technology on School Curriculum. *Journal of Curriculum Studies* 32, 2, 281-303.
- Dede, C. (2000). Emerging Technologies and Distributed Learning in Higher Education. In D. Hanna (Ed.), Higher Education in an Era of Digital Competition: Choices and Challenges, pp. 71-92. New York: Atwood.
- Chen, J., Dede, C., Fu, X., & Yang, Y. (1999). Distributed Interactive Learning Environments. In Proceedings of the Third IEEE International Workshop on Distributed Interactive Simulation and Real Time Applications, pp. 49-56, University of Maryland, College Park MD, October 24-28, 1999
- Dede, C., Salzman, M., Loftin, B., and Sprague, D. (1999). Multisensory Immersion as a Modeling Environment for Learning Complex Scientific Concepts. In W. Feurzeig and N. Roberts, (Eds.), Computer modeling and simulation in science education, pp.282-319. New York: Springer-Verlag.
- Salzman, M.C., Dede, C., Loftin, R.B., and Chen. J. (1999). A model for understanding how virtual reality aids complex conceptual learning. *Presence: Teleoperators and Virtual Environments* 8 (3), 293-316.
- Salzman, M., Dede, C., & Loftin, B. (1999). Virtual reality's frames of reference: A visualization technique for mastering abstract information spaces. Proceedings of CHI '99, pp. 489-495.
- Sprague, D., and Dede, C. (1999). Constructivism in the Classroom. *Leading and Learning with Technology* 27, 1, 6-9, 16-17.
- Dede, C. (1999). The Multiple Media Difference. *Technos* 8, 1, 16-18.
- Salzman, M., Dede, C., & Loftin, B. (1998). Using virtual reality's frames of reference in mastering abstract information. Proceedings of the Third International Conference on Learning Sciences, pp. 249-255. Charlottesville, VA: Association for the Advancement of Computers in Education.
- Dede, C. (1998). Evaluating the Effectiveness of Technology Initiatives. *The High School Magazine* 6, 1 (September), 16-20.
- Salzman, M., Dede, C., Loftin, B., and Sprague, D. (1997). Assessing Virtual Reality's Potential for Teaching Abstract Science. Proceedings of the Human Factors and Ergonomics Society 41st Annual Meeting (pp. 1208-1212). New York: Association for Computing Machinery.
- Dede, C. (1997). Rethinking How to Invest in Educational Technology. *Educational Leadership* 55, 3 (November), 12-16.
- Dede, C. 1996. Emerging Technologies and Distributed Learning. *American Journal of Distance Education* 10, 2, 4-36.

- Dede, C., Salzman, M., and Loftin, B. 1996. MaxwellWorld: Learning Complex Scientific Concepts via Immersion in Virtual Reality. Proceedings of the 2nd International Conference on Learning Sciences (pp. 22-29). Charlottesville, VA: Association for the Advancement of Computers in Education.
- Dede, C., Salzman, M., and Loftin, B. 1996. The Development of a Virtual World for Learning Newtonian Mechanics. In P. Brusilovsky, P. Kommers, and N Streitz, Eds., Multimedia, Hypermedia, and Virtual Reality: Models, Systems, and Applications (pp. 87-106). Berlin: Springer.
- Salzman, M., Dede, C., and Loftin, B. 1996. Learning Science Through Immersive Virtual Realities. Proceedings of the 1996 IMAGE Conference (pp. 127-131). Chandler, AZ: The Image Society.
- Dede, C., Salzman, M., and Loftin, B. 1996. ScienceSpace: Research on Using Virtual Reality to Improve Science Education. In P. Carlson and F. Makedon (Eds), Proceedings of the 1996 ED-MEDIA Conference (pp. 172-177). Charlottesville, VA: Association for the Advancement of Computers in Education.
- Salzman, M., Dede, C., McGlynn, D., & Loftin, R.B. 1996. ScienceSpace: Lessons for Designing Immersive Virtual Realities. Proceedings of CHI 96 (pp. 89-90). New York: Association for Computing Machinery.
- Dede, C. 1996. Emerging Technologies in Distance Education for Business. *Journal of Education for Business* 71, 4, 197-204.
- Dede, C., Salzman, M., and Loftin, B. 1996. ScienceSpace: Virtual Realities for Learning Complex and Abstract Scientific Concepts. Proceedings of IEEE Virtual Reality Annual International Symposium 1996 (pp. 246-253). New York: IEEE Press.
- Dede, C. 1996. Distance Learning --> Distributed Learning: Making the Transformation. *Learning and Leading with Educational Technology* 23, 7, 25-30.
- Dede, C. 1995. Emerging Educational Trends and Their Impact on the Youth Cohort in 2010. In R. Phillips & M. Thurman, Future Soldiers and the Quality Imperative: The Army 2010 Conference, pp. 159-202. Fort Knox, KY: U.S. Army Recruiting Command.
- Dede, C., and Fontana, L. 1995. Reconceptualizing Distance Learning in Science Education. *Speculations in Science and Technology* 18, 4 (December), 252-264.
- Salzman, M., Dede, C., & Loftin, R.B. 1995. Usability and Learning in Educational Virtual Realities. Proceedings of the Human Factors and Ergonomics Society 1995 Annual Meeting (pp. 486-490). New York: Association for Computing Machinery.
- Dede, C., and Fontana, L. 1995. Transforming Health Education via New Media. In L. Harris, Ed., Health and the Media (pp. 163-184). Hillsboro, NJ: Lawrence Erlbaum.
- Dede, C. 1995. Artificial Realities, Virtual Communities, and Intelligent Artifacts: Implications for Engineering Education. In J.R. Bourne, A. Broderson, and M. Dawant, Eds., The Influence of Technology on Engineering Education (pp. 36-65). Boca Raton, FL: CRC Press.
- Dede, C. 1995. The Evolution of Constructivist Learning Environments: Immersion in Distributed, Virtual Worlds. *Educational Technology* 35, 5 (September-October), 46-52.
- Salzman, M., Dede, C., and Loftin, B. 1995. Learner Centered Design of Sensorily Immersive Microworlds Using a Virtual Reality Interface. In J. Greer, Ed., Proceedings of the Seventh International Conference on Artificial Intelligence and Education (pp. 554-564). Charlottesville, VA: Association for the Advancement of Computers in Education.
- Dede, C., and Olsen, R. 1994. 21st Century Learning and Health Care in the Home. *Futures Research Quarterly* 11, 2 (Summer), 41-55.

- Dede, C., Loftin, B., Salzman, M., Calhoun, C., Hoblit, J., and Regian, W. 1994. The Design of Artificial Realities to Improve Learning Newtonian Mechanics. In P. Brusilovsky, Ed., Proceedings of the East-West International Conference on Multimedia, Hypermedia, and Virtual Reality (pp. 34-41). Moscow, Russia: International Centre for Scientific and Technical Information.
- Dede, C. 1993. Beyond Distributed Multimedia: A Virtual Forum for Learning. *ED Journal* 7, 8 (September), 14-18.
- Fontana, L., Dede, C., White, C., and Cates, W. 1993. Multimedia: Gateway to Higher-order Thinking Skills. 1993 Proceedings of Selected Research Paper Presentations, Association for Educational Communications and Technology (pp. 351-364). Arlington, VA: Association for Educational Communications and Technology.
- Dede, C. Evolving from Multimedia to Virtual Reality. H. Maurer, Ed., Educational Multimedia and Hypermedia Annual, 1993 (pp. 123-130). Charlottesville, VA: Association for the Advancement of Computing in Education.
- Dede, C. Leadership Without Followers. G. Kearsley & W. Lynch, Eds. Educational Technology: Leadership Perspectives (pp. 19-28). Englewood Cliffs, NJ: Educational Technology Publications, 1993. (an abbreviated version was published in *The Computing Teacher* 20, 6 (March, 1993), 9-11).
- Dede, C. Potential Uses of Telecommunications to Empower Implementation of the NCTM Mathematics Standards. In C.M. Firestone & C.H. Clark, Eds., Telecommunications as a Tool for Educational Reform. Queenstown, MD: Aspen Institute Program on Communications and Society, 1992.
- Dede, C. Education in the 21st Century. *Annals of the American Academy for Political and Social Science* 522 (July, 1992), 104-115.
- Dede, C. The Future of Multimedia: Bridging to Virtual Worlds. *Educational Technology* 32, 5 (May, 1992), 54-60.
- Dede, C. Designing a Tool for Imaging Mental Models Underlying Training. Proceedings of the International Conference on the Learning Sciences 1991. Charlottesville, VA: Association for the Advancement of Computing in Education, 1991.
- Dede, C., & Palumbo, D. Implications of Hypermedia for Cognition and Communication. *Impact Assessment Bulletin* 9, 1-2 (Summer, 1991), 15-28.
- Dede, C. What's Next: The Future of Technology and Science Teaching. *Science Scope* 14, 6 (March, 1991), Special Supplement pages 39-44.
- Dede, C. Emerging Technologies: Impacts on Distance Learning. *Annals of the American Academy for Political and Social Science* 514 (March, 1991), 146-158.
- Dede, C. Imaging Technology's Role in Restructuring for Learning. K. Sheingold & M.S. Tucker (Eds.), Restructuring for Learning with Technology. New York: Center for Technology in Education, Bank Street College of Education and National Center on Education and the Economy, 1990.
- Dede, C. The Evolution of Distance Learning. *Journal of Research on Computing in Education* 22, 3 (Spring, 1990), 247-264.
- Dede, C. Futures Research and Strategic Planning in Teacher Education. R. Houston (Ed.), Handbook of Research on Teacher Education (pp. 83-97). New York: Macmillan, 1990.
- Dede, C. Information Overload, the Knowledge-Added Economy, and Continuing Professional Education. R. Cervero & J. Azzaretto (Eds.), Visions for the Future of Continuing Professional Education (pp. 133-160). Athens, Georgia: University of Georgia, 1990.

- Dede, C. The Evaluative Imaging of Mental Models: Visual Representations of Complexity. Proceedings of the 1989 American Institute of Aeronautics and Astronautics Computers in Aerospace VII Conference (pp. 433-438). Washington, DC: AIAA.
- Dede, C. The Evolution of Information Technology: Implications for Curriculum. *Educational Leadership* 47, 1 (September, 1989), 23-26.
- Dede, C. Planning Guidelines for Utilizing Emerging Instructional Technologies. *Educational Technology* 29, 4 (April, 1989), 7-12.
- Dede, C. The Probable Evolution of Artificial Intelligence Based Educational Devices. *Technological Forecasting and Social Change* 34 (1988), 115-133.
- Dede, C., & Swigger, K. The Evolution of Instructional Design Principles for Intelligent Computer-Assisted Instruction. *Journal of Instructional Design* 11, 1 (1988), 15-22.
- Dede, C. The Role of Hypermedia in Transforming Information into Knowledge. Proceedings of the 1988 National Educational Computing Conference (pp.95-102). Eugene, Oregon: International Society for Technology in Education.
- Dede, C. Artificial Intelligence Applications to High Technology Training. *Educational Communications and Technology Journal* 35, 3 (Fall, 1987), 163-181.
- Dede, C. Empowering Environments, Hypermedia, and Microworlds. *The Computing Teacher* 15, 3 (November, 1987), 20-26.
- Dede, C., & Freiberg, J. The Long Term Evolution of Effective Schools. *The Educational Forum* 51, 1 (1986), 65-80.
- Dede, C. The Implications of Emerging Technologies for the Value-Oriented Curriculum. *Momentum* 17, 3 (1986), 42-45.
- Dede, C. Review and Synthesis of Recent Research in Intelligent Computer-Assisted Instruction. *International Journal of Man-Machine Studies* 24 (1986), 329-353.
- Dede, C. Assessing the Potential of Educational Information Utilities. *Library Hi Tech* 3, 4 (1985), 115-119.
- Dede, C. New Information Technologies, the Knowledge-Based Economy, and Education. *Educational Media International* 15, 2 (1985), 2-9.
- Dede, C. The Future of School Libraries. *School Library Media Quarterly* 13, 1 (1985), 18-22.
- Dede, C. Public Education about the Law: A Look into the Future. C. White & Norm Gross (Eds.), The Bulwark of Freedom: Public Education about the Law. Chicago, IL: American Bar Association, 1985.
- Dede, C., & Gottlieb, D. The Long Term Influence of Home Microcomputers on Family/School Relationships. *Futurics* 9, 1 (1985), 10-18.
- Kierstead, F., & Dede, C. Eight Barriers to Understanding the Future. *Journal of Business Forecasting* 3, 4 (Winter 1984-85), 20-32.
- Dede, C., & Adams, A. Looking into the Future. *PTA Today* 9, 7 (May, 1984), 4-7.
- Dede, C. Computers: Impact on Families. *Forum* (January, 1984), 20-21.
- Dede, C. The Likely Evolution of Computer Use in the Schools. *Educational Leadership* 41, 1 (September, 1983), 22-25.
- Dede, C. Future Challenges for Science and Mathematics Education. *School Science and Mathematics* 83, 5 (May-June, 1983), 411-420.
- Dede, C., & Wagner, P. Disciplinary Paradigm Shifts: A New Frontier for Futures Researchers. *World Future Society Bulletin* 17, 2 (March-April, 1983), 25-29.
- Dede, C. The Reshaping of Adult, Career, and Vocational Education by the Emerging Communications Technologies. N. Singer (Ed.), Communications Technologies: Their

- Effects on Adult, Continuing, & Vocational Education. Columbus, OH: National Center for Research in Vocational Education, 1983.
- Dede, C., Bowman, J., & Kierstead, F. Communications Technologies and Education: The Coming Transformation. H. Didsbury (Ed.), Communications and the Future. Washington, DC: World Future Society, 1982.
- Dede, C. Educational, Social, and Ethical Implications of Technological Innovation. *Programmed Learning and Educational Technology* 18, 4 (November, 1981): 204-213.
- Dede, C., & Bowman, J. Two Views of Educational Technology in the Future. *Journal of Thought* 16, 3 (Fall, 1981), 111-118.
- Dede, C., & Brown, B. Human Services in the Eighties. *IGPA Quarterly* 83 (Fall, 1981), 9-22.
- Dede, C. The Influence of Instructional Technology on Education: Certainties and Possibilities. Technology and Education: Policy, Implementation, Evaluation. Washington, DC: Institute for Educational Leadership, 1981.
- Dede, C. Education and the Economy in the 1980s. *Theory into Practice* 20, 4 (Autumn, 1981), 245-249 (reprinted in another journal).
- Dede, C., & Allen, D. Education in the 21st Century. *Phi Delta Kappan* 62, 5 (January, 1981), 362-67.
- Dede, C. The Need for a New Federal Role in the 1980s. B. Miller (Ed.), The Federal Role in Education. Washington, DC: Institute for Educational Leadership, 1981.
- Dede, C., & McMeekin, R. American Education in the 1980s. *Comparative Education* 16, 3 (October, 1980), 225-236.
- Dede, C., Bowman, J., & Kierstead, F. Education in the '80s: An Appraisal. F. Feather (Ed.), Through the '80s: Thinking Globally, Acting Locally. Washington, DC: World Future Society, 1980.
- Dede, C. Introduction (and two reprinted articles). L. Jennings & Sally Cornish (Eds.), Education and the Future. Washington, DC: World Future Society, 1980.
- Dede, C. Educational Technology: The Next Ten Years. *Instructional Innovator* 25, 3 (March, 1980), 17-24.
- Dede, C. The Next Ten Years in Education. Needs of Elementary and Secondary Education in the 1980s. Washington, DC: Committee on Education and Labor, U.S. House of Representatives, 1980.
- Dede, C. Technology, Ethics, and the Future. *Houston Engineer* 37, 12 (December, 1979), 19-20.
- Dede, C. Ten Agendas for the Future of Education. *Futurics* 3, 2 (Spring, 1979), 117-126.
- Dede, C. Education as a Means of Scientific Progress within a Steady State Society. The Steady State Society. Berlin, West Germany: Institut fur Zukumstfragen, 1978.
- Bowman, J., Kierstead, F., & Dede, C. Educational Futures: A Reconstructionist Approach. *World Future Society Bulletin* 11, 6 (1978), 14-25.
- Dede, C. The Future of Technology. R. Fowles (Ed.), Handbook of Futures Research. Westport, CT: Greenwood Press, 1978.
- Bowman, J., & Dede, C. Futures in the Present. *Southwestern Journal of Social Education* 8, 1 (1977), 39-44.
- Dede, C. Futures Research and Its Implications for the Philosophy of Education. Proceedings of the Southwest Philosophy of Education Society, Vol. 27 (1977), 166-171.
- Dede, C. The Coming Emergence of Education as a Major Force in Conscious Social Change. *Journal of Thought* 10, 14 (1975), 303-309.

- Dede, C. Futures Research and the Secondary Science Curriculum. *The Science Teacher* 41, 7 (1974), 30-32.
- Dede, C., & Kauffman, D. The Role of Futures Research in Education. D. Allen (Ed.), Controversies in Education. Philadelphia, PA: W.B. Saunders & Co., 1974.
- Hardin, J., & Dede, C. Discrimination Against Women in Science Education. *The Science Teacher* 40, 9 (1973), 18-21.
- Dede, C. Productive Alternatives to Jencks. *Massachusetts Educational Forum* 1, 2 (1973), 37-41.
- Dede, C., & Hardin, J. Elitism in Science Education. *Journal of Chemical Education* 50, 9 (1973), 583-85.
- Peakes, A., Burnim, P., Cherniak, M., & Dede, C. Teaching About the Future. *Instructor* 83, 1 (1973), 65-67.
- Dede, C. Futures Research and the Structure of Knowledge. *Massachusetts Educational Forum* 1, 1 (1973), 3-5.
- Dede, C., & Hardin, J. Reforms, Revisions, Reexaminations: Secondary Science Education Since World War II. *Science Education* 57, 4 (1973), 485-491.
- Dede, C., & Hoagland, K. Alternative Futures in Which Formal Education Plays a Major Role in Cultural Change. A. Harkins & M. Maruyama (Eds.), Third Annual Cultural Futuristics Symposium: American Anthropological Association. Minneapolis, MN: Office of Applied Social Science and the Future, University of Minnesota, 1972.
- Dede, C. Future Studies and Education. *World Future Society Bulletin* 4, 5 (1971), 1-6.
- Dede, C. The Importance of Futures Research for Teachers. *Trend* 7, 1 (1971), 8-10.
- DeMore, W., & Dede, C. Pressure Dependence of Carbon Trioxide Formation in the Gas Phase Reaction of O (1D) with Carbon Dioxide. *Journal of Physical Chemistry* 74 (1970): 2621-2625.

Commissioned Studies

- Century, J., Dede, C., Taylor, J., Brooks, J., Han, D., Scher, L., Tutwiler, S. (2024). *Component-based research in education: Emerging ideas, possibilities, and next steps*. University of Chicago: NSF-funded Working Meeting on Component-based Research.
<https://osf.io/preprints/edarxiv/vs3qw>
- Cao, L., & Dede, C. (2023). *Navigating A World of Generative AI: Suggestions for Educators*. The Next Level Lab at Harvard Graduate School of Education. President and Fellows of Harvard College: Cambridge, MA. <https://nextlevellab.gse.harvard.edu/publications/>
- Dede, C. Etemadi, A., & Forshaw, T. (2021). *Intelligence augmentation: Upskilling humans to complement AI*. The Next Level Lab at the Harvard Graduate School of Education. President and Fellows of Harvard College: Cambridge, MA.
<https://nextlevellab.gse.harvard.edu/publications/>
- Dede, C. & Etemadi, A. (2021). *Why dispositions matter for the workforce in turbulent, uncertain times*. The Next Level Lab at the Harvard Graduate School of Education. President and Fellows of Harvard College: Cambridge, MA.
<https://nextlevellab.gse.harvard.edu/publications/>
- Dede, C. (2018). *Digital game-based learning in the global south*. Quezon City, Phillipines: Digital Learning for Development.
<http://dl4d.org/portfolio-items/digital-game-based-learning-for-the-global-south/>

- Richards, J., & Dede, C. (2018). *Modular curriculum*. Columbus, OH: MHEducation
- Richards, J., & Dede, C. (2018). *Open Architecture*. Columbus, OH: MHEducation
- Dede, C., & Richards, J. (2018). *Diagnostic and differentiated assessment*. Columbus, OH: MHEducation.
- Dede, C., & Frumin, K. (2016). *Conceptual/Research Synthesis for Ontario's Technology and Learning Fund Report*. Toronto, Canada: Province of Ontario Ministry of Education.
http://www.ontariodirectors.ca/CODE-TLF/docs/tel/Research_Synthesis-Nov_2016-EN-Final-AODA.PDF
http://www.ontariodirectors.ca/CODE-TLF/docs/tel/Research_Synthesis-Nov_10_2016-FR-finale-AODA.PDF
- Dede, C. (2016). *The role of digital learning in Asia's educational future*. Singapore: The Head Foundation.
http://www.headfoundation.org/papers/2016_4_The_Role_of_Digital_Learning_in_Asia%E2%80%99s_Educational_Future.pdf
- Baker, A., Dede, D., & Evans, J. (2015). *Mobile frontiers in higher education*. San Diego, CA: Qualcomm. <https://www.qualcomm.com/documents/mobile-frontiers-higher-education>
- Baker, A., Dede, C., & Evans, J. (2014). *The eight essentials for mobile learning success in education*. San Diego, CA: Qualcomm.
<https://www.qualcomm.com/media/documents/files/the-8-essentials-for-mobile-learning-success-in-education.pdf>
- Dede, C. (2012). *Opportunities and challenges for educational transformation via learning technologies*. Dallas, TX: George W. Bush Institute.
- Dede, C. (2012). *Interweaving assessments into immersive authentic simulations: Design strategies for diagnostic and instructional insights* (Commissioned White Paper for the ETS Invitational Research Symposium on Technology Enhanced Assessments). Princeton, NJ: Educational Testing Service. <http://www.ets.org/Media/Research/pdf/session4-dede-paper-tea2012.pdf>
- Dede, C., & Evans, J. *The Evolution of Mobile Learning: Insights from the 2011 Wireless EdTech Conference*. San Diego, CA: Qualcomm, September, 2012.
http://www.wirelessedtech.com/sites/default/files/Wireless%20Edtech%20Research%20Paper%202011_092512.pdf
- Dede, C., & Bjerde, M. *Mobile Learning for the 21st Century: Insights from the 2010 Wireless EdTech Conference*. San Diego, CA: Qualcomm, February, 2011.
<http://wirelessedtech.com/sites/default/files/Wireless%20EdTech%20Research%20Paper%20Final%20March%202011.pdf>
- Dede, C. *Learning Context: Gaming, Simulation, and Science Learning in the Classroom*. Commissioned Paper for the National Research Council Workshop on Games and Simulations in Science Education. Washington, DC: NRC, September, 2009
- Dede, C. *Determining, Developing, and Assessing the Skills of North Carolina's Future-Ready Students*. Friday Institute White Paper Series, Number 2 (May, 2009).
www.fi.ncsu.edu/whitepapers
- Dede, C. *Technology-based and Distance Learning Strategies. The Condition of Education in Rural Schools*. Washington, DC: Center for Rural Education, U. S. Department of Education, 2006.

- Dede, C., Ketelhut, D.J., Whitehouse, P., Breit, L., & McCloskey, E. A Research Agenda for Online Teacher Professional Development. Cambridge, MA: Harvard Graduate School of Education, 2006.
- Dede, C., Breit, L., Ketelhut, D.J., McCloskey, E., & Whitehouse, P. An Overview of Current Findings from Empirical Research on Online Teacher Professional Development. Cambridge, MA: Harvard Graduate School of Education, 2005.
http://gseweb.harvard.edu/~uk/otpd/final_research_overview.pdf
- Dede, C., Korte, S., Nelson, R., Valdez, G., & Ward, D. Transforming Education for the 21st Century: An Economic Imperative. Chicago, IL: Learning Point Associates, 2005.
<http://www.learningpt.org/tech/transforming.htm>
- Dede, C. Design for Defenestration: A Strategy for Scaling Up Promising Research-based Innovations. Chicago, IL: NORC, 2004.
- Dede, C. Enabling Distributed-Learning Communities for Educators via Emerging Technologies. National Commission on Teaching and America's Future, 2003.
- Dede, C. Analysis of States' Educational Technology Policies in light of the Federal No Child Left Behind Legislation. North Central Regional Educational Laboratory, 2003.
- Dede, C. Implications of Emerging Information Technologies for States' Education Policies. (twenty-one pages). Council of Chief State School Officers, 2000.
- Dede, C. The Role of Emerging Technologies for Knowledge Mobilization, Dissemination, and Use in Education (eleven pages). U.S. Dept. of Education, 1999.
- Dede, C. Virtual Communities of Learners (five pages). National Governors' Association, 1999.
- Dede, C. Future Visions of Information Technology in Mathematics Education (twelve pages). National Council of Teachers of Mathematics, 1998.
- Dede, C., Editor. Futures: Images of Educational Technology in the Next Millennium (eight pages). Florida Educational Technology Conference, 1998.
- Sprague, D., Maher, M., Salzman, M., Stevenson, T., Dede, C., and Pate-Allen, N. Recognizing Facial Expressions in an Immersive Virtual Environment (forty pages). Fairfax, VA: George Mason University, 1997.
- Dede, C. The Evolution of Learning Devices: Smart Objects, Information Infrastructures, and Shared Synthetic Environments (fifteen pages). Washington, DC: U.S. Department of Education (<http://www.ed.gov/Technology/Futures>), 1996.
- Dede, C. and Lewis, M. Assessment of Emerging Educational Technologies That Might Assist and Enhance School-to-Work Transitions (one hundred pages). Washington, DC: National Technical Information Service, 1995.
- Dede, C. The Technologies Driving the National Information Infrastructure: Policy Implications for Distance Education (seventy-three pages). Los Alamitos, CA: Southwest Regional Educational Laboratory, 1994.
- Dede, C. Artificial Realities, Virtual Communities, and Knowbots (fifteen pages). Commissioned by NASA/U.S. Air Force for ICAT Conference. Fairfax, VA: ISSE TR-92-101, School of Information Technology & Engineering, George Mason University, 1992.
- Dede, C. A Futurist View of the Year 2000: Its Implications for HBCUs (ten pages). Washington, DC: White House Initiative on Historically Black Colleges and Universities, 1991.
- Dede, C. and Jayaram, G. Designing a Training Tool for Imaging Mental Models (eighty pages). Brooks Air Force, Texas: U.S. Air Force Human Resources Laboratory, 1990.

- Dede, C. The Evolution of Distance Learning: Technology-Mediated Interactive Learning (twenty pages). Washington, DC: Office of Technology Assessment, U.S. Congress, 1989.
- Dede, C. Technological Trends Shaping the Future of Teacher Education. In Future Societal Trends: Implications for Teacher Education in the Twenty-First Century, pp. 9-32. Madison, Wisconsin: University of Wisconsin System, 1989.
- Dede, C., Sullivan, T., and Scace, J. Factors Shaping the Evolution of Electronic Documentation Systems (one hundred thirty pages). Houston, TX: Research Institute for Computing and Information Systems, University of Houston—Clear Lake, 1988.
- Back, K., Dede, C., Fama, P., & Markley, M. Education Planning for Economic Development (three volumes). Austin, TX: Coordinating Board, Texas College and University System, 1988.
- Dede, C. Implementation of Artificial Intelligence in Education: Two Scenarios. (twenty pages, with supplementary group discussion). Austin, TX: University of Texas, 1987.
- Dede, C. The Impact of Information Technologies on Higher Education over the Next Decade (ninety pages, proprietary). Stamford, CT: GTE Service Corporation, 1986.
- Dede, C. Emerging Trends and Developments in U.S. Higher Education (thirty page Appendix for a study on the future of U. Miss. at Meridian). Meridian, Mississippi: Phil Hardin Foundation, 1986.
- Dede, C. An Alternative Paradigm for Space Station Training Based on Artificial Intelligence (fifteen pages). Houston, TX: NASA-Johnson Space Center, 1985.
- Dede, C. Artificial Intelligence Applications to High Technology Training at NASA (forty pages). Houston, TX: NASA-Johnson Space Center, 1985.
- Dede, C., Zodiates, P., and Thompson, C. Artificial Intelligence and Education (one hundred thirty pages). Cambridge, MA: Harvard Educational Technology Center, 1985.
- Dede, C. A Fifteen Year Forecast of Information Technology Usage in Education (twenty-five pages). Washington, DC: Urban Institute, 1985.
- Dede, C., Bishop, P., & Lamkin, C. Challenges and Opportunities in the Future of Instructional Television (thirty pages with bibliography). Houston, TX: Gulf Region Educational Television Affiliates, 1984.
- Dede, C., & Gottlieb, D. The Social Role of the Personal Computer: Implications for Familial Mental Health (sixty pages). Houston, TX: Hogg Foundation, 1984.
- Dede, C. The Economics of Computer Courseware Development (twenty-five pages). Bloomington, IN: Agency for Instructional Television, 1983.
- Dede, C. The Evolution of the Content of General Education Over the Next Two Decades (sixty pages). Paris, France: UNESCO, 1983.
- Dede, C., & Senter, J. The Potential of Information Technology to Enhance Instruction at the Proposed Woodlands Campus (sixty pages). Houston, TX: University of Houston System Office, 1982.
- Dede, C. Emerging Trends and Developments in Education: Implications for State Policy (thirty pages). Denver, CO: Education Commission of the States, 1981.
- Dede, C. Potential Clients for Educational Services Delivered by Information Technology (one hundred seventy pages). Washington, DC: Office of Technology Assessment, U.S. Congress, 1981.
- Dede, C. Higher Education in Texas: Issues in the '80s (thirty-five pages). Austin, TX: Coordinating Board, Texas College and University System, 1981.

- Kierstead, F., Bowman, J., & Dede, C. (Eds.). Educational Futures: Sourcebook I. Washington, DC: World Future Society, 1979.
- Bowman, J., Kierstead, F., Dede, C., & Pulliam, J. The Far Side of the Future. Washington, DC: World Future Society, 1978.

Conversations, Book Reviews and Other Non-Refereed Publications and Talks

- Etemadi, A., Tassis, A., Wheeler, M., & Dede, C. (2025) Illustrative AI-based Resources for Learning to Negotiate. Next Level Lab: Harvard Graduate School of Education.
<https://nextlevellab.gse.harvard.edu/learning-modules/negotiation-ai-project/>
- Dede, C. (2025) The future belongs to adaptive expertise. (TSIA podcast)
<https://open.spotify.com/episode/1RWdMN3RPcEfur1LKOR98U>
- Dede, C. (2025) Rethinking lifelong learning and innovation. (EduTrends podcast)
<https://open.spotify.com/episode/63uhqLRnyJ9sFuKnZNu6AL?si=ecb279158507416b>
- Dede, C. (2025) AI Competencies for Educators: Evolving from Literacy into Responsible Practice. National eLearning Center: Saudi Arabia.
<https://www.youtube.com/watch?v=2RaiD76NqV4>
- Dede, C., Etemadi, A., & Metcalf, S. (2025) Immersive simulations for skill learning: An interactive workshop. In Economou, D., Lazou, C., MacDowell, P., Pedrosa, D., Beck, D., Mystakidis, S., Smith-Nunes, G., Peña-Rios, A. & Richter, J. (Eds.) (2025). Immersive Learning Research Network. Practitioner Proceedings of 11th International Conference, iLRN 2025, Online & Chicago, Illinois, USA, June 15-19, 2025 (in person) & June 16-18, 2025 (Online), pp. 176-179. Immersive Learning Research Network. ISBN 979-8-9929916-0-4
<https://publications.immersivelrn.org/index.php/practitioner/article/view/443/269>
- Dede, C. (2024). Guest editorial on intelligence augmentation: The owl of Athena. *IEEE Transactions on Learning Technologies*, vol. 17, pp. 2154-2155.
<https://ieeexplore.ieee.org/document/10726640>
- Dede, C. (2024). An AI-enabled model for massive hybrid learning. *IAU Horizons*, Vol. 29, No. 1, pp 33-34.
- Dede, C., & McCool, D. (2024). AI won't take your job if you know about IA. (Blogpost)
<https://www.gse.harvard.edu/ideas/news/24/02/ai-wont-take-your-job-if-you-know-about-ia>
- Dede, C. (2023). What is Academic Integrity in the Era of Generative Artificial Intelligence? (Blogpost) <https://silverliningforlearning.org/what-is-academic-integrity-in-the-era-of-generative-artificial-intelligence/>
- Dede, C. (2023) AI in Higher Ed: Impacts and Interpretations. Interview with Starlink Professional Development for Higher Education.
https://www.youtube.com/playlist?list=PLSY_ygI6_Ts-wAygBsTdEpnrIFjUmoXDg
- Dede, C. (2023). Who does the thinking: The role of generative AI in higher education. International Association of Universities. https://www.youtube.com/watch?v=gE_GKsdTPAs
- Dede, C. (2023). AI and Dyslexia. Landmark School: AI+LD Edchat.
<https://www.youtube.com/watch?v=gsnz1uGoTTg>
- Dede, C. (2023). Personalized learning, AI, and the future of education. U. Kansas Center for Innovation, Design, and Digital Learning Research-Practice Brief: <https://ciddl.org/mixed-reality-simulations-personalized-learning-ai-and-the-future-of-education-with-dr-chris-dede-2/>
- Dede, C. (2023). In Conversation with Chris Dede: The Role of Classic AI and Generative AI in EdTech and Workforce Development. <https://owlvc.com/insights-chris-dede.php>

- Dede, C. (2023). Educating in a world of artificial intelligence. Harvard EdCast: <https://www.gse.harvard.edu/news/23/02/harvard-edcast-educating-world-artificial-intelligence>
- Dede, C. (2023). Foreword. In J. Goodell and J. Kolodner, (Eds.), *Learning Engineering Toolkit*. New York, NY: Routledge.
- Lidwell, W., & Dede, C. (2022). The new abnormal and the inevitable transition to remote learning. *ElementsEd* Vol 1, 8-25. <https://press.avenues.org/wp-content/uploads/2022/11/ElementsEd-Issue-01.pdf>
- Dede, C. (2022). Helping students attain skills that cannot be taught (op-ed). Menlo Park, CA: Postsecondary Teaching with Technology Collaborative. <https://postseccollab.org/helping-students-attain-skills-that-cannot-be-taught/>
- Dede, C., & Etemadi, A. (2022). Skills are not enough: Developing workers' dispositions to succeed in an uncertain, disruptive world *Evollution* (3/24/2022) https://evollution.com/revenue-streams/professional_development/skills-are-not-enough-developing-workers-dispositions-to-succeed-in-an-uncertain-disruptive-world/
- Etemadi, A., & Dede, C. (2021, December 8). Preparing Students to Augment Artificial Intelligence rather than be Replaced by Machine Learning. *Teaching Times*. <https://www.teachingtimes.com/preparing-students-to-augment-artificial-intelligence-rather-than-be-replaced-by-machine-learning/>
- Dede, C., and Sievers, K. (2020) Op-Ed: Get credentials to get ahead. No college degree required. *Barrons* (December 1). <https://www.barrons.com/articles/get-credentials-to-get-ahead-no-college-degree-required-51606844855>
- Dede, C. (2020). Commentary: CTL challenges and actions – Returning the focus to high quality education. In N. Naffi (Ed.), *Disruption in and by centers for teaching and learning during the COVID-19 pandemic*, pp. 135-137. Quebec: University of Laval. <https://observatoire-ia.ulaval.ca/en/whitepaper-leading-the-future-of-higher-ed/>
- Dede, C. (2020). The erosion of high-stakes summative tests: Adding a new compass. (Blog) <https://www.linkedin.com/pulse/erosion-high-stakes-summative-tests-adding-new-compass-andr%C3%A9-a-rupp>
- Dede, C. (2020). Advising your children about learning in the era of the new abnormal. (Blog) <https://silverliningforlearning.org/advising-your-children-about-learning-in-the-era-of-new-abnormal/>
- Dede, C., & Richards, J. (2020). Preparing students for a lifelong disruptive future: The 60 Year Curriculum. *Evollution* May 19, 2020 https://evollution.com/revenue-streams/extending_lifelong_learning/preparing-students-for-a-lifelong-disruptive-future-the-60-year-curriculum/
- Dede, C. (2020). Remote learning and stone soup. (Blog). <https://learningpolicyinstitute.org/blog/remote-learning-and-stone-soup>
- Dede, C. (2020). Necessity is the father of transformation. (Blog). <https://silverliningforlearning.org/necessity-is-the-father-of-transformation/>
- Dede, C. (2018). The 60 Year Curriculum: Developing new educational models to support the agile labor market. *Evollution* October 19, 2018 https://evollution.com/revenue-streams/professional_development/the-60-year-curriculum-developing-new-educational-models-to-serve-the-agile-labor-market/

- Dede, C. (2017). Foreword: Next-Generation learning in school. In J. Cibulka & B. Cooper (Eds.), *Technology in the classroom: How it can transform teaching and student learning*, pp. vii-ix. New York: Rowan/Littlefield.
- Dede, C. (2017). Students should be prepared to reinvent themselves: What will the job market look like in 2030? *Education Week*, December 11, 2017.
<https://www.edweek.org/ew/articles/2017/12/13/students-must-be-prepared-to-reinvent-themselves.html?cmp=eml-enl-eu-news1&M=58307760&U=120311>
- Dede, C. (2016). Designing an educational innovation to reach scale: Five critical concepts. *EvoIllution* (February 9, 2016) http://evollution.com/managing-institution/operations_efficiency/designing-an-educational-innovation-to-achieve-scale-five-critical-concepts/
- Dede, C. (2016). Foreword. In S. Gregory, M.J.W. Lee, B. Dalgarno, & B. Tynan (Eds.), *Learning in virtual worlds: Research and applications*, pp. xv-xviii. Athabasca, Canada: Athabasca University Press.
- Dede, C. (2015). Foreword. In C-K Looi & L-W Teh (Eds.), *Sustaining and scaling educational innovations*, pp. ix-x. New York, NY: Springer.
- Dede, C. (2015). Foreword. In Y. Rosen, S. Ferrara, & M. Mosharraf (Eds.), *Handbook of research on technology tools for real-world skill development*, pp. xxx-xxxii. Hershey, PA: IGI Global.
- Dede, C. (2015). 21st century students crave deeper learning. *EdTech Magazine* (Blog) June 25, 2015.
<http://www.edtechmagazine.com/k12/article/2015/06/21st-century-students-crave-deeper-learning>
- Dede, C. (2014) Unlearning: The key component of professional development for technology-enhanced transformation. *Ed Week* (blog) October 26, 2014:
http://blogs.edweek.org/edweek/leadership_360/2014/10/unlearning_key_dimension_of_professional_development_for_technology-enhanced_transformation.html
- Dede, C. (2014). Experiences and trends of educational innovations supported by information technology. *Open Education Research*, 20(4), 4-8.
- Dede, C., & Frumin, K. (2014). Unlearning and mirroring: Transforming instruction. *Ed Week* (blog) July 20, 2014.
http://blogs.edweek.org/edweek/learning_deeply/2014/07/unlearning_and_mirroring_transforming_instruction.html
- Dede, C., Mishra, P., & Voogt, J. (2013). *Advancing computational thinking in 21st century learning*. EDUSummIT 2013.
- Dede, C. (2013). The role of tablets in lifewide learning. New York, NY: Amplify.
<http://www.amplify.com/viewpoints/role-of-tablets-in-lifewide-learning>
- Dede, C. (2013). Foreword. In G. Rappolt-Schlichtmann, S.G. Daley, & L. T. Rose (Eds.), *A Research Reader in Universal Design for Learning*, pp. vii-viii. Cambridge, MA: Harvard Education Press.
- Dede, C. (2012). How Virtual Worlds Help Real Learners. *Spark Salon*
<http://spark.qualcomm.com/salon/how-virtual-worlds-help-real-learners>
- Blatt, J., & Dede, C. (2012). Mobile devices, lifewide learning, and the joy gap. *Lifewide Magazine* 2 (Spring), 14-16.
- Dede, C. (2012). Are digital textbooks the new “horseless carriage?” (blog post for Belfer Center for Science and Public Affairs, Harvard Kennedy School of Public Policy)
<http://www.technologyandpolicy.org/2012/02/06/are-digital-textbooks-the-new-horseless-carriage/>

- Dede, C. (2012). Between promised benefits and proven effectiveness: Intermediate measures of quality (blog post for U.S. Dept. of Education Technical Working Group on Evidence of Effectiveness. <http://ctl1.sri.com/evidframe/?p=831>
- Dede, C. (2012). 21st century education requires distributed support for learning. *Educational Technology and Change* <http://etcjournal.com/2012/01/07/21st-century-education-requires-distributed-support-for-learning>
- Dede, C. (2012). Give students mobile devices to maximize their learning time. *Education Nation Blogs* <http://www.educationnation.com/index.cfm?objectid=A8DF23BA-37C0-11E1-B607000C296BA163>
- Dede, C. (2011). Foreword for M. Warschauer, *Learning in the Cloud*, pp. vii-viii. New York: Teachers College Press.
- Atkins, D., Bennett, J., Brown, J.S., Dede, C., Fishman, B., Means, B., Pea, R., Thille, C., & Williams, B. (2011). Response to the articles on the Draft 2010 National Educational Technology Plan. *eLearning and Digital Media* 8(2), 170-174.
- Dede, C. (2011) Foreword. In N. Law, A. Yuen, R. Fox, *Educational Innovations beyond Technology: Nurturing Leadership and Establishing Learning Organizations* (pp. v-vi). New York: Springer.
- Dede, C. (2011). Foreword: Reshaping the role of technology in education. T. Gray & H. Silver-Paculla (Eds.), *Breakthrough in learning and teaching: How educational and assistive technologies are driving innovation*, pp. 1-3. New York: Springer.
- Dede, C. (2010). Commentary: Transforming schooling via the 2010 National Educational Technology Plan. *Teachers College Record*. Date Published: June 02, 2010 <http://www.tcrecord.org> ID Number: 15998, Date Accessed: 6/5/2010 1:11:52 PM
- Dede, C. (2010). Book review: *Ubiquitous learning*. *Teachers College Record*, Date Published: June 03, 2010 <http://www.tcrecord.org> ID Number: 16002, Date Accessed: 6/5/2010 1:14:52 PM
- Dede, C. (2010). Foreword. In C. Stewart, C. Schifter, & M. Selverian (Eds.), *Teaching and learning with technology: Beyond constructivism*, pp. xvii-xix. New York: Routledge.
- Dede, C. (2010). Foreword. In R. Van Eck (Ed.), *Interdisciplinary models and tools for serious games*, pp. xiv-xvi. Hershey, PA: IGI Books.
- Dede, C. (2010). Interview: Knowledge management for 2010 means actually transferring knowledge. *NCSU CIMS Technology Management Report* (Spring), 10-13.
- Dede, C., & Knox, A. (2010). How to scale school success. *Edutopia* 2/17/2010. <http://www.edutopia.org/scale-processes-replication-strategy>
- Dede, C. (2010). A balanced visionary perspective on school transformation (Review of Collins & Halverson, *Rethinking Education in the Age of Technology*). *Educational Technology* 50, 2, 52-53.
- Dede, C., & Crow, T. (2010). Learning no matter where you are (Interview). *Journal of the National Staff Development Council* 31,1, 10-17.
- Metcalf, S. J., Clarke, J. & Dede, C. (2009) Virtual Worlds for Education: River City and EcoMUVE. Media In Transition International Conference, MIT, April 24-26, 2009, Cambridge, MA
- Dede, C. (2009). Reinvent School. *The School Administrator* 8, 4 (January), 50-51.
- Dede, C. (2008). A Seismic Shift in Epistemology. *EDUCAUSE Review*, vol. 43, no. 3, 80-81 (May/June 2008)

- Dede, C. (2007). Introduction: A Sea Change in Thinking, Knowing, Learning, and Teaching. The ECAR Study of Undergraduate Students and Information Technology, 2007. Boulder, Colorado: Educause.
- Dede, C. (2007). Guest Column: Shedding More Heat than Light. *The School Administrator* 8, 64, 44-46.
- Dede, C. (2007). Foreword: The Evolution of Videoconferencing. In Newman, D. L., Falco, J., Silverman, S., & Barbanell, P. Videoconferencing in K-12 Instruction: Best Practices and Trends, pp. xiv-xv.. Hershey, PA: IDEA Group
- Dede, C. (2007) Rethinking Education in the Early Years of the 21st Century. *On Cue* 17(2), 1.-2, 22-26.
- Dede, C., Rockman, S., & Knox, A. (2007). Lessons Learned from Studying How Innovations Can Achieve Scale. *Threshold* 5, 1, 4-10.
- Dede, C. (2007). Exploring the Process of Scaling Up. *Threshold* 5, 1, 16.
- Dede, C., Fulton, K., King, L. M., Dziko, T. M., & Zola, J. (2007). Scalability: A Threshold Forum. *Threshold* 5, 1, 18-21.
- Dede, C. (2006). Virtual Reality of Learning. *Interactive Educator* 2, 1(Spring) 40-41.
- Dede, C. (2006). Designing and Studying the Next Generation of Games and Simulations. In D. Gibson, C., Aldrich, & M. Prensky, Games and Simulations in Online Learning. Hershey, PA: IDEA Press.
- Dede, C. (2005). Commentary: The growing utilization of design-based research. *Contemporary Issues in Technology and Teacher Education*, 5 (3/4), 345-348.
Available: <http://www.citejournal.org/articles/v5i3seminal1.pdf>
- Dede, C. (2005). Teaching Expert Thinking. *Connection* XX, 2(Fall), 37.
- Ketelhut, D., Clarke, J., Dede, C., Nelson, B., & Bowman, C. (2005). Extending Library Services Through Emerging Interactive Media. *Knowledge Quest* 34, 1, 29-32.
- Dede, C. (2005). The Need for New Strategies of Education Reform. *Harvard ED Magazine* Winter 2004-2005, Vol. XLVIII, No. 2, 28-29.
- Dede, C. (2004). Foreword. In C. Vrasidas & G. Glass (Eds.), Online Professional Development for Teachers. Greenwich, CN: Information Age Press
- Morrison, J. and Dede, C. 2004. The Future of Learning Technologies: An Interview with Chris Dede. *Innovate*, October/November 2004.
<http://www.innovateonline.info/index.php?view=article&id=1>.
- Dede, C., and Palombo, M. (2004). Virtual Worlds for Learning. *Threshold* (Summer, 2004), 16-20. <http://www.ciconline.org/AboutCIC/Publications/threshold.htm>
- Dede, C. (2003). Foreword. In R. Kozma (Ed.), Technology, Innovation, and Educational Change: A Global Perspective. Eugene, OR: International Society for Technology in Education.
- Dede, C. (2003). Multi-User Virtual Environments. *EDUCAUSE New Horizons* 4, 3 (May) , 2-4.
- Ketelhut, D., and Dede, C. (2003). Of Cars and Computers: Breakthrough Thinking in Education. *MASCD Perspectives* (June, 2003), 16-20.
- Dede, C. (2002). Foreword. In A. Zucker & R. Kozma (Eds.), The Virtual High School: Teaching Generation V, pp. vii-xi. New York: Teachers College Press.
- Dede, C. (2002). A Comparative Analysis of the Roles of Message, Medium, and Communicative Method in Empowering Learning. *Journal of Computer Assisted Learning* 16. 4, 498-99.

- Dede, C. (2002). Vignettes about the Future of Learning Technologies. 2020 Visions: Transforming Education and Training through Advanced Technologies, pp. 18-25. Washington, DC: U.S. Department of Commerce.
<http://www.ta.doc.gov/reports/TechPolicy/2020Visions.pdf>
- Dede, C. (2002). Augmented Reality through Ubiquitous Computing. *Learning & Leading with Technology*, 29, 8, 13.
- Dede, C. (2002). Effective Use of Learning Technologies. *Education Connection* (Spring), 6-12.
- Dede, C. (2001). The U.S. Department of Education's Response to the Congressional Web-based Education Commission Report. *Education, Communication, & Information* 1, 2, 234-235.
- Dede, C. (2001). Emerging Information Technologies for Learning. *Leaders of Learning* (May), 9-16.
- Dede, C. (2001). Creating Research Centers to Enhance the Effective Use of Learning Technologies. (Testimony to the Research Subcommittee, Science Committee, U.S. House of Representatives, May 10th, 2001).
<http://www.house.gov/science/research/reshearings.htm>
- Dede, C. (2001). Commentary: Children and Computer Technology. *The Future of Children* 10, 2 (Fall/Winter), 178-180.
- Dede, C. (2000). Implications of Emerging Information Technologies for Education Policies. (Testimony to the Congressional Web-based Education Commission, June 26th, 2000).
<http://www.hpcnet.org/upload/wbec/Dedetest.pdf>
- Dede, C. (2000). A New Century Demands New Ways of Learning. In D. Gordon (Ed.), The Digital Classroom: How Technology is Changing the Way We Teach and Learn (pp. 171-174). Cambridge, MA: Harvard Education Letter
- Dede, C. (1999). Conceptual Framework for Information Technology in International Development. Policy Roundtable Series: Higher Education Uses of Internet Technologies – New Applications for International Development. Washington, DC: Association Liaison Office for University Cooperation in Development.
- Dede, C. (1999). Examining How States Can Improve the Effectiveness of Educational Technology Initiatives. In Investing, Assessing, and Communicating Results of Learning Technologies (pp. 39-46). Washington, DC: Council of Chief State School Officers.
- Dede, C., and Kremer, A. (1999). Increasing Students' Participation via Multiple Interactive Media. *Inventio* 1, 1 (http://www.doiit.gmu.edu/Archives/feb98/dede_1.htm)
- Dede, C. 1998. Much Heat, Little Light: A Response to Larry Cuban's 'High-Tech Schools and Low-Tech Teaching.' *The Journal of Computing in Teacher Education* 14, 3, 22-23.
- Loftin, B., Brooks, F., and Dede, C. 1998. Virtual Reality in Education: Promise and Reality. Proceedings of the IEEE 1998 Virtual Reality Annual International Symposium (Atlanta, Georgia), 208.
- Dede, C. 1998. Casting a Wider Net: Investing in Distributed Learning. *Multimedia Schools* 5, 2 (March/April), 10-14.
- Dede, C. 1997. Distributed Learning: How New Technologies Promise a Richer Educational Experience. *Connection* 22, 2 (Summer), 12-16.
- Dede, C. 1995. Testimony to the U.S. Congress House of Representatives Joint Hearing on Educational Technology in the 21st Century (Number 23, Serial 104-37). Washington, DC: USGPO.
- Dede, C. Educational Technologies. 1995. Encyclopedia of the Future (pp. 219-220). New York: Macmillan.

- Dede, C. Summary of Invited Address at the 1995 National Educational Computing Conference. *SIGTC Connection* 12, 1/2, 4-6.
- O'Neil, J. 1995. Technology in Schools: A Conversation with Chris Dede. *Educational Leadership* 53, 2 (October), 6-12.
- Dede, C., Loftin, B., and Salzman, M. 1995. NewtonWorld: An Artificial Reality for Physics Education. *Proceedings of the National Educational Computing Conference, 1995* (pp. 78-79). Eugene, OR: International Society for Technology in Education.
- Dede, C. The Future of Education and Training. *National Security Industrial Association News* 45, 1 (Winter, 1995), 3.
- Dede, C. 1995. Professional Development: New Media, New Messages. *The Reporter* (Georgia Chapter of the Association for Supervision and Curriculum Development), Fall 1994/Winter 1995, 22-24.
- Dede, C. 1994. Beyond the Information Superhighway. *Linkages* 2, 2 (Spring/Summer), 1-2.
- Dede, C. Immersion in Artificial Realities for Education. *Proceedings of the National Educational Computing Conference, 1994* (pp. 184-185). Eugene, OR: International Society for Technology in Education.
- Dede, C. The Potential of Virtual Reality Technology to Improve Science Education. *Proceedings of the National Educational Computing Conference, 1994* (pp. 322). Eugene, OR: International Society for Technology in Education.
- Dede, C. Empowering Restructuring Via Technology. *Doubts and Certainties* 8, 5 (May/June, 1994). Washington, DC: National Center for Innovation, National Education Association, pp. 1-4).
- Dede, C. A Snapshot of the Future: Using Technology Tomorrow to Teach Mathematics and Science. *University of North Carolina Mathematics and Science Education Network Newsletter* (Winter, 1994, pp. 1, 8-9).
- Dede, C. New Technologies That Empower Learning-By-Doing Across Distance. *Education SATLINK* (January, 1994), 10-11.
- Dede, C., and Newman, D. Differentiating Between Intelligent Tutoring Systems and Intelligent Agents. *Journal of Artificial Intelligence in Education* 4, 4 (1993), 305-307.
- Dede, C., Fontana, L., and White, C. Multimedia, Constructivism, and Higher-order Thinking Skills. H. Maurer, Ed., *Educational Multimedia and Hypermedia Annual, 1993*. Charlottesville, VA: Association for the Advancement of Computing in Education, 631.
- Dede, C., Fontana, L., and White, C. Developing Higher-order Thinking Skills via Multimedia. *Proceedings of the 10th International Conference on Technology and Education*. Cambridge, MA: ICTE, 1993, 376-378.
- Dede, C. Home, Computers in the. *Macmillan Encyclopedia of Computers* (pp. 1114-1116). New York: Macmillan, 1992..
- Dede, C. Making the Most of Multimedia. *Electronic School* (September, 1992). Washington, DC: National School Boards Association, 13-15.
- Dede, C. Book Review: *Cyberspace: First Steps*. *Educational Technology* 32, 7 (July, 1992), 59-60.
- Dede, C. Book Review: *The New Communications Technologies*. *Educational Technology* 30, 11 (November, 1990), 60.
- Dede, C. Software Review: The Geometry Proof Tutor. *Educational Technology* 30, 9 (September, 1990), 60-61.

- Dede, C. Commentary: Technology and Transformation. *The School Administrator*. Special Issue: Connecting Our Students to the Future (Computer Technology Report, 1990), 39-40.
- Dede, C. Commentary: How Educators Can Shape Emerging Developments in Instructional Technology. *Electronic Learning* 9, 4 (January, 1990), 8-9.
- Dede, C. Workplace 2005. *Authorware* 2, 1 (October, 1989), 6-11.
- Dede, C. A Review of Information and the Future. *World Futures* 27 (1989), 83-85.
- Dede, C. A Review of "The Good News and the Bad News." *The School Administrator* 46, 2 (February, 1989), 13.
- Dede, C. New Technologies and Education. D. Unwin & R. McAleese (Eds.), Encyclopedia of Educational Media Communications and Technology (pp. 412-422), Second Edition. Westport, CT: Greenwood Press, 1988.
- Dede, C. Artificial Intelligence and Education: A Review. *Educational Technology* 28, 10 (October, 1988), 51-52.
- Dede, C. Three Essential Goals for Educators. *CUE Newsletter* 6, 7 (May, 1984), 4.
- Dede, C. A Feast for Intellectual Omnivores: A Review of Future Survey Annual 1982-83. *Futures* 15, 5 (October, 1983), 419-420.
- Dede, C. Right Reasoning, Wrong Solution: A Response to 'The Financial Need for Change'. *Educational Leadership* 40, 5 (Feb. 1983), 9.
- Dede, C. Playing with Dynamite: A Review of Changing Images of Man. *Futures* 14, 6 (December, 1982), 568-569.
- Dede, C. NewsNotes on the Future of Education. *Educational Leadership* 38, 3 (December, 1980), 271-272; 38, 5 (February, 1981), 430-431; 39, 1 (October, 1981), 75; 39, 3 (December, 1981), 239-240; 39, 8 (May, 1982), 625-626.
- Dede, C. Incorporating Future-Oriented Perspective and Skills in the School Work. Malmö, Sweden: Department of Educational and Psychological Research, University of Lund, 1981.
- Dede, C. Summer Reading in Educational Futures. *Educational Leadership* 37, 8 (May, 1980), 678.
- Dede, C. A Review of Future Trends in Education Policy. *Futures* 12, 2 (April, 1980), 155-157.
- Dede, C. Godel, Escher, Bach: A Futurist's Review. *Education Tomorrow* 5, 2 (April, 1980), 1-3.
- Dede, C. A Review of Science and Society. *Futurics* 3, 4 (Fall, 1979), 387-388.
- Dede, C. More Money Now: A Return to the Golden Years. *Review of Education* 4, 2 (1978): 117-126.
- Dede, C. Forecasting or Speculating. *Review of Education* 2, 4 (1976), 408-413.
- Dede, C., & Wegmann, R. The Future of Education in Houston. Houston 2001: A Livable City? Houston, TX: Houston Committee for the Humanities and Public Policy, 1978.
- Dede, C. Challenges in the Future of Urban Education (Career Opportunities Program Memoranda Series). Amherst, Massachusetts: Center for Urban Education, University of Massachusetts, 1974.

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