

Technology and 21st Century Literacy Skills

GRADES K-12

This course is designed for K-12 classroom teachers, lead teachers, content-area teachers, curriculum coordinators/developers, special educators, instructional coaches, and department chairs.

This course explores the skills that K-12 students will need to succeed in the 21st century, with emphasis on what it means to be literate in today's technology-rich world. While examining your own fluency with 21st-century skills and literacies, you will learn how to cultivate them in your students. You will explore how different multimedia and Internet technologies can enhance learning, support collaborative problem-solving, and prepare your students for a digital information society. You will learn strategies for effectively preparing your students for the complex challenges related to reading, critical thinking, researching, and communicating in the 21st century.

COURSE TOPICS

- The Importance of 21st Century Skills
- A Look at Today's Students and Technology
- 21st Century Literacies
- Learning Through Inquiry-Based Projects
- Asking Essential Questions
- Searching the Internet
- Critical Evaluation
- Synthesizing
- Visual Literacy
- Project Completion
- Multimodal Communication
- Assessing Inquiry-Based Projects
- Global Collaboration
- Internet Safety and Ethical Use

COURSE OUTCOMES

By the end of the course, participants will:

- Explain differences in technology exposure, utilization, and skill among the students in their classrooms and summarize the results
- Describe differences in the learning styles and needs of students today in light of technological advances
- Explore how to meet the learning needs of students with millennial and neo-millennial learning styles
- Conduct an inquiry-based project by following these steps: identifying and narrowing a topic, composing essential questions, conducting an Internet search, evaluating resources, synthesizing information, and producing a final product
- Reflect on the usefulness of social bookmarking tools for themselves and their students
- Analyze how to guide their students in searching the Internet
- Describe the specific skills that are needed to evaluate Internet content
- Understand visual literacy and adapt a lesson from their content area to teach visual literacy skills
- Describe how students can use technology tools to demonstrate learning
- Develop a plan for implementing an Internet-based project with their students
- Analyze how to balance the assessment of content-area knowledge and 21st century skills when assessing inquiry-based projects
- Identify and describe an Internet-based collaborative project suitable for their students
- Critique their school's or district's Internet usage policy
- Develop guidelines for teaching students about ethical usage of technology

METHODS OF ASSESSMENT

The course contains some or all of following types of learning assessments:

→ **Discussions and Dialogues**

Participants engage in discussions that stimulate professional dialogue about the content presented. These discussions require participants to make connections among key ideas and synthesize their learning through thoughtful written responses.

→ **Applications**

Application assignments require participants to personalize course content and plan how they will apply the theories, concepts, and strategies in their teaching practice.

→ **Content Review Questions or Quizzes**

Content review questions are short-answer questions that provide the opportunity for participants to demonstrate their ability to synthesize the course content in the readings and media presentations.

→ **Reflection Paper**

A reflection paper requires participants to reflect on their learning throughout the course and respond from a more global perspective.

COURSE FORMAT AND MATERIALS

This course is offered in an online format. Participants access the course content through an online learning management system. Teachers are required to participate in virtual discussions via a discussion board with fellow educators with whom they interact. Course texts, Web sites, and journal articles help facilitate learning and transfer theory into practice. Video programs feature interviews with nationally recognized education experts. Classroom scenes provide a view into the classrooms of master teachers who demonstrate the strategies taught in the course. The online course includes:

→ Access to online course: Technology and 21st Century Literacy Skills

→ Video streamed to the participants' desktops, with the following shipped to the participant:

- DVD: Laureate Education, Inc. (Executive Producer). (2009). *Supporting Information Literacy and Online Inquiry in the Classroom*. Baltimore: Executive Producer.

→ The following course textbook shipped to participants:

- Eagleton, M.B., & Dobler, E. (2007). *Reading the Web: Strategies for Internet Inquiry*. New York: The Guilford Press.

→ Articles provided in the online classroom

SYSTEM REQUIREMENTS FOR THE ONLINE COURSE:

- Operating system for PC: Windows® XP or Windows Vista®
- Operating system for Mac®: OS X or higher
- Processor: 1 GHz, 32/64 bit or higher
- Memory: Minimum 512 MB of RAM; 1 GB recommended
- Browser: Microsoft Internet Explorer® 6.0 or higher; Firefox® 2.0 or higher
- Internet connection: Broadband (DSL, cable modem, or similar) required
- Software: Microsoft® Word, Adobe® Flash® Player 7 or higher (free), Adobe® Reader® version 8 or higher (free)
- Monitor resolution: 1280 x 800 pixels or higher

Note: If you are using a Macintosh®, please be sure to download the latest version of Firefox® from Mozilla®. It's free and the download should take only a few minutes at <http://www.mozilla.com/en-US/firefox/firefox.html>.

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EDUCATION EXPERTS

David Warlick

David Warlick, a 30-year educator, has been a classroom teacher, district administrator, and staff consultant with the North Carolina Department of Public Instruction. For the past 10 years, Mr. Warlick has operated The Landmark Project, a consulting and innovations firm in Raleigh, N.C. His Web site, Landmarks for Schools, receives more than a half-million visits a day, with some of the most popular teacher tools available on the Internet. He is also the author of three books on instructional technology and 21st-century literacy, and has spoken before audiences throughout the United States, Canada, Europe, Asia, the Middle East, and South America.

Douglas K. Hartman, Ph.D.

Dr. Douglas Hartman is professor of literacy and technology at Michigan State University. A former middle school teacher, he now does research on the new literacies of the Internet, adolescent literacy, and the history of literacy. At MSU, Dr. Hartman has faculty appointments in the departments of teacher education and of counseling, educational psychology & special education. He serves as co-director of the Literacy Achievement Research Center. Dr. Hartman is also senior editor of the *Journal of Literacy Research*.

Sara Armstrong, Ph.D.

Dr. Sara Armstrong has been an educator for nearly 30 years, and has spoken at numerous conferences, including Computer-Using Educators (CUE), National Education Computing Conference (NECC), National Staff Development Council (NSDC), and the International Reading Association (IRA). Dr. Armstrong is the author of a number of books, including *NetSavvy: Information Literacy in the Communications Age* (co-author, The NetSavvy Group, 1998), and is the editor of *Edutopia: Success Stories for Learning in the Digital Age* (The George Lucas Educational Foundation and Jossey-Bass, 2002).

Janice Almasi, Ph.D.

Dr. Janice Almasi is the Carol Lee Robertson Endowed Professor of Literacy Education at the University of Kentucky, where she teaches courses in research and theory in literacy. She earned her Ph.D. and M.Ed. in reading education from the University of Maryland and her B.S. in elementary education from Edinboro University of Pennsylvania. Before becoming a university educator, Dr. Almasi was an elementary classroom teacher and a reading specialist in Maryland.

Chris Dede, Ph.D.

Dr. Chris Dede is the Timothy E. Wirth Professor of Learning Technologies at Harvard's Graduate School of Education. Dr. Dede's fundamental interest is the expanded human capabilities for knowledge creation, sharing, and mastery that emerging technologies enable. His research covers emerging technologies for learning, infusing technology into large-scale educational improvement initiatives, policy formulation and analysis, and leadership in educational innovation. Dr. Dede also is active in policy initiatives, including creating a widely used State Policy Framework for Assessing Educational Technology Implementation, and studying the potential of developing a scalability index for educational innovations.

David Thornburg, Ph.D.

Dr. David Thornburg is an award-winning author, researcher, and speaker who has been called "the premier futurist in education." He is the director of the Thornburg Center for Professional Development. Through his live presentations, articles, and PBS Internet broadcasts, he reaches hundreds of thousands of educators worldwide each year. Dr. Thornburg is the author of numerous articles and books, including *Brainstorms and Lightning Bolts*, *Campfires in Cyberspace*, and *Putting the Web to Work*.

Hall Davidson

Hall Davidson has taught middle and high school English, mathematics, Spanish, and bilingual mathematics. He left the classroom to teach math on television in Los Angeles on an Emmy-winning program, and spent 20 years at PBS stations teaching and leading staff developments in person and on-air. While producing television series on education and technology, he led a media consortium serving 17 districts and 200,000 students. He frequently contributes articles to national educational publications. With a team he founded Kitzu.org, a resource of free online kits to encourage project-based learning with media. He joined Discovery Education in 2005, where he blogs, creates webinars, and works in educational partnerships as a director of the Discovery Educator Network, connecting thousands of teachers nationwide.



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ABOUT CANTER

Canter, a subsidiary of Laureate Education, Inc., is committed to serving the educational community with graduate-level courses that blend research-based theory with practical strategies. Canter began with one groundbreaking guide on managing behavior in the classroom and, more than 30 years later, has helped more than 260,000 educators address the most critical issues in education through proven programs delivered through distance learning.

FOR MORE INFORMATION

For more information regarding Canter graduate-level courses, visit www.Canter.net or call 1-800-669-9011.

ABOUT ACCREDITED UNIVERSITY PARTNERS

Canter offers its courses in partnership with highly-respected institutions, allowing you to benefit from Canter's quality curriculum in a self-paced format, while earning graduate credit from a leading accredited university. Course curriculum is developed and designed by Canter in collaboration with national education experts, while graduate credit is granted through a partnering university that assesses student work. Credit may be applicable for certification renewal and/or salary advancement.* Course credit may be transferable with prior approval from the university providing your advanced degree or planned program.

The selection of a partner university is dependent on the state in which the teacher works. Some courses are not available through all partner universities.

Walden University

Walden University is accredited by The Higher Learning Commission and a member of the North Central Association, www.ncahlc.org; 1-312-263-0456. Canter and Walden University are both subsidiaries of Laureate Education, Inc.†

Andrews University

Andrews University is accredited by The Higher Learning Commission and a member of the North Central Association, www.ncahlc.org; 1-312-263-0456. The teacher preparation and school-service personnel programs are accredited by the National Council for Accreditation of Teacher Education (NCATE), www.ncate.org; 1-202-466-7496.

Cardinal Stritch University

Cardinal Stritch University is accredited by The Higher Learning Commission and is a member of the North Central Association, www.ncahlc.org; 1-312-263-0456. Stritch's College of Education is also accredited by the National Council for Accreditation of Teacher Education (NCATE), www.ncate.org; 1-202-466-7496.

Indiana Wesleyan University

Indiana Wesleyan University is accredited by The Higher Learning Commission and a member of the North Central Association, www.ncahlc.org; 1-312-263-0456. IWU's education unit is accredited by the National Council for Accreditation of Teacher Education (NCATE), www.ncate.org; 1-202-466-7496.

Marygrove College

Marygrove College is accredited by The Higher Learning Commission and a member of the North Central Association, www.ncahlc.org; 1-312-263-0456.

Olivet Nazarene University

Olivet Nazarene University is accredited by The Higher Learning Commission and a member of the North Central Association, www.ncahlc.org; 1-312-263-0456. ONU's School of Education is accredited by the National Council for Accreditation of Teacher Education (NCATE), www.ncate.org; 1-202-466-7496.

University of New England

The University of New England is accredited by the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges, (NEASC), 209 Burlington Rd., Bedford, MA 01730; www.neasc.org; 1-781-271-0022.

*Check with your state/district for requirements.

†Prospective Washington state students are advised to contact the Office of the Superintendent of Public Instruction at 1-360-725-6320 or prof.educ@k12.wa.us to determine whether Walden's programs in the field of education are approved for teacher certification or endorsements in Washington State. Additionally, teachers are advised to contact their individual school district as to whether this program may qualify for salary advancement.