

Technology and 21st Century Literacy Skills

GRADES K–12

GRADUATE CREDIT: 3 SEMESTER HOURS

Educators explore the skills that K–12 students need to succeed in the 21st century, while focusing on what it means to be literate in today's technology-rich world. While examining their own fluency with 21st century skills and literacies, educators learn how to cultivate those same skills in their students. Educators discover how different multimedia and Internet technologies can enhance learning, support collaborative problem-solving, and prepare students for a digital-information society. They also acquire strategies for effectively preparing students for the complex challenges related to reading, critical thinking, researching, and communicating in the 21st century.

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

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, educators 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.

TECHNOLOGY AND 21st CENTURY LITERACY SKILLS

METHODS OF ASSESSMENT

This course provides numerous opportunities to apply research-based concepts and theory to practical teaching situations. Assessment is conducted in the following ways:

- **Activities** are short assessments that help educators explore concepts and make connections between the content and their teaching practice. Some activities are ungraded but serve to prepare educators for other graded assignments. Any ungraded activities are clearly marked as such.
- **Dialogue Summaries** allow educators to share ideas about the course content with other teachers, then ask them to analyze and summarize the discussion, and then describe how their understanding of the topic has been enhanced or expanded.
- **Applications** assist educators in applying the theories, concepts, and strategies to their teaching practice.
- **Quizzes** provide educators with instant feedback on their understanding of the course material. There are three quizzes, each reviewing several sections of content.
- The **Final Reflection** requires educators to synthesize the content and reflect on their key learnings throughout the course.

COURSE FORMAT AND MATERIALS

Course texts, websites, 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.

This course is offered in an online format. Educators access the course content via an online classroom. The course textbook is shipped to educators, but the video programs and other resources are available within the online classroom. Educators are required to participate in virtual discussions with fellow educators via a discussion board. Assignments are submitted through the online classroom.

The online course includes:

→ Access to the online classroom for:

- Technology and 21st Century Literacy Skills

→ Access to the video programs in the online classroom as well as a backup DVD:

- Laureate Education, Inc. (Executive Producer). (2009). *Supporting information literacy and online inquiry in the classroom*. Baltimore: Executive Producer.

→ The course textbook:

- Eagleton, M.B., and Dobler, E. (2007). *Reading the web: Strategies for internet inquiry*. New York: Guilford Press.

→ Access to the other required readings

TECHNOLOGY AND 21st CENTURY LITERACY SKILLS

SYSTEM REQUIREMENTS FOR ONLINE COURSE FORMAT:

- Operating system for PC: Windows[®] XP, Windows Vista[®], or Windows[®] 7
- 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[®] 3.6 (also for Mac[®]: Apple[®] Safari[®] 4 or higher)
- Internet connection: Broadband (DSL, cable modem, or similar) required
- Software: Microsoft Word[®], Adobe[®] Flash[®] Player 7 or higher (free), Adobe[®] Acrobat[®] 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 Mozilla[®] Firefox[®] 3.6. It's free, and the download should take only a few minutes at www.mozilla.org.

Trademark Information

- Microsoft, Windows, Windows Vista, Internet Explorer, and Word are registered trademarks of Microsoft Corporation in the United States and/or other countries.
- Mac OS and Macintosh are trademarks of Apple Inc., registered in the United States and other countries.
- Mozilla and Firefox are registered trademarks of the Mozilla Foundation.
- Adobe, Flash, and Acrobat Reader are registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.

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 website, 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 a professor of teacher education and educational technology at Michigan State University, co-director of the Literacy Achievement Research Center, and coordinator of the Literacy Studies Program. He is co-lead editor of the *Journal of Literacy Research* and the author of numerous journal articles and book chapters. A former middle school teacher, his research interests focus on new literacies, adolescent literacy, and the history of literacy. Dr. Hartman is the recipient of the Albert J. Kingston award for service to the field of reading and literacy.

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, the National Education Computing Conference, the National Staff Development Council, and the International Reading Association. Dr. Armstrong is the author and co-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 a former elementary school teacher and reading specialist and is currently the Carol Lee Robertson Endowed Professor of Literacy Education at the University of Kentucky. Her research has examined the contexts in which children learn from text, particularly in terms of strategic processes and peer discussion environments. Her books include *Teaching Literacy in Third Grade* and *Teaching Strategic Reading Processes*. Her research has been published in journals such as *Reading Research Quarterly*, *The Journal of Literacy Research*, *Elementary School Journal*, and *Educational Psychologist*.

TECHNOLOGY AND 21st CENTURY LITERACY SKILLS

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.



ABOUT CANTER

Canter, a subsidiary of Laureate Education, Inc., is committed to serving the educational community with high-quality, 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 35 years later, has helped more than 300,000 educators address the most critical issues in education while advancing their careers.

FOR MORE INFORMATION

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

ABOUT OUR PARTNERSHIP

Canter offers its courses in partnership with Walden University, allowing you to benefit from Canter's quality curriculum in a self-paced format, while earning graduate credit from a leading accredited university.* The course curriculum is developed and designed by Canter in collaboration with national education experts, while graduate credit is granted through Walden University, which 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.

Walden University

The Richard W. Riley College of Education and Leadership at Walden University is a **National Council for Accreditation of Teacher Education (NCATE)**–accredited college dedicated to enhancing educator effectiveness. As a recognized standard of excellence in professional education for the preparation of teachers, administrators, and other pre-K–12 school professionals, NCATE accreditation ensures the college has met rigorous national standards set by the profession and members of the public.

The college, named for the former Secretary of the U.S. Department of Education, was identified by *U.S. News & World Report* as having the largest online graduate program in education by enrollment (May 2010). Walden students were awarded the fourth most TEACH Grants to students nationwide in 2010–2011, according to the U.S. Department of Education. The choice of more than 53,000 students and alumni, including more than 80 state teachers of the year, the college is also a proud partner of the National Education Association (NEA) Academy and a year-round sponsor of the National Association for the Education of Young Children (NAEYC).

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

*Prospective Washington state students are advised to contact the Office of the Superintendent of Public Instruction at 1-360-725-6275 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.

[†]It is each student's responsibility to check with his or her state/district and evaluate and understand any requirements related to the use of individual courses for any purpose.