

COURSE SYLLABUS

Course: 21st Century Skills

Presenters: James Bellanca, Richard DuFour, Bill Ferriter, Douglas Fisher, Robin Fogarty, Nancy Frey, Ken Kay, Brian Pete, and Will Richardson; with a panel discussion featuring Angela Maiers, Meg Ormiston, Kipp Rogers, and Eric Sheninger

Credits: 3 Grad Credits

Required Reading: 21st Century Skills: Rethinking How Students Learn, Bellanca and Brandt, editors, Solution Tree Press, 2010.

Course Overview

With so much emphasis on content-based standards, and the high stakes testing that accompanies them, it's sometimes easy to miss the forest for the trees. In this course, nationally-known experts address the missing pieces – the 21st century skills students will need to survive and thrive in college, in careers, and as global citizens, now and in the very near future.

This course features personal interviews with change leaders in the areas that most impact 21st century education:

- Ken Kay presents the big picture and the work of the Partnership for 21st Century Skills
- James Bellanca compares "old school" traditions with what's needed now
- Douglas Fisher and Nancy Frey explain how, in technology, form follows function
- Richard DuFour describes the role of professional learning communities
- Robin Fogarty and Brian Pete lend a global perspective
- Bill Ferriter creates classroom environments that matter to kids
- Will Richardson explores the role of technology

The interviewees answer the intriguing questions that are commanding international attention, and highlight the activities of schools taking the lead on these issues. Their interviews are accompanied by a collection of essays that summarize their work.

A panel discussion provides practical tips for integrating technology and social media into the learning environment. And we visit a high school in New Jersey where digital devices are becoming an increasingly important part of the school day, with positive results.

Presenters' Bios

James Bellanca, MA, is founder and CEO of International Renewal Institute, Inc., and acting director of the Illinois Consortium for 21st Century Skills. He founded SkyLight Professional Development in 1982. As its president, he mentored more than twenty author-consultants as he led SkyLight in pioneering the use of strategic teaching in comprehensive professional development. Bellanca has coauthored more than twenty books that advocate the application of thinking and cooperating across the curriculum with the



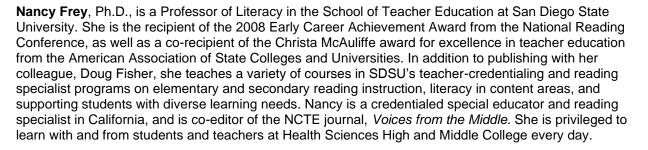
theme of "not just for the test, but for a lifetime of learning." A longtime proponent of 21st century skills, Bellanca's most recent publications include *Designing Professional Development for Change: A Guide for Improving Classroom Instruction, Enriched Learning Projects: A Practical Pathway to 21st Century Skills, Collaboration and Cooperation in 21st Century Schools, 200+ Active Learning Strategies and Projects for Engaging Students' Multiple Intelligences,* and *A Guide to Graphic Organizers: Helping Students Organize and Process Content for Deeper Learning.*

Richard DuFour, Ed. D., was a public school educator for thirty-four years, serving as a teacher, principal, and superintendent at Adlai Stevenson High School in Lincolnshire, Illinois. During his tenure, Stevenson became what the United States Department of Education (USDE) described as "the most recognized and celebrated school in America." Stevenson is one of three schools in the United States to win the USDE Blue Ribbon award on four occasions and one of the first comprehensive schools designated a New America High School by the USDE as a model of successful classroom reform. DuFour has written multiple books on the theory and practice of professional learning communities (PLCs) emphasizing the model used at Stevenson.

William M. Ferriter, M.S. in Ed., (@plugusin on Twitter) is a sixth-grade language arts and social studies teacher in a professional learning community (PLC) near Raleigh, North Carolina. A National Board Certified Teacher, Bill has designed professional development courses for educators nationwide. His trainings include how to use blogs, wikis, and podcasts in the classroom; the role of iTunes in teaching and learning; and the power of digital moviemaking. Bill has also developed schoolwide technology rubrics and surveys that identify student and staff digital proficiency at the building level. He is a founding member and senior fellow of the Teacher Leaders Network and has served as teacher in residence at the Center for Teaching Quality. He has been a Regional Teacher of the Year in North Carolina, and his blog, the Tempered Radical, earned Best Teacher Blog of 2008 from Edublogs. He is a contributing author to two assessment anthologies, *The Teacher as Assessment Leader* and *The Principal as Assessment Leader*. He is also coauthor of *Building a Professional Learning Community at Work*™ and *Teaching the iGeneration: 5 Easy Ways to Introduce Essential Skills with Web 2.0 Tools*.

Doug Fisher, Ph.D.—whose awards include the Innovation Award from the Academy of Educational Publishers, the Elva Knight Research Award from the International Reading Association, and the Farmer Award for Excellent in Writing from the National Council of Teachers of English, among many others—is a professor of Educational Leadership at San Diego State University. In addition to teaching on the college and high school levels, Fisher has been a co-director at the Center for the Advancement of Reading and policy fellow at the National Association of State Boards of Education. Fisher is the author of numerous articles (many with colleague Nancy Frey) for such publications as *Principal Leadership, Educational Leadership*, and *Journal of Adolescent & Adult Literacy.* He is also author, co-author, and/or editor of multiple books, including, with Nancy Frey, *Teaching Students to Read Like Detectives: Comprehending, Analyzing, and Discussing Text* (Solution Tree), *The Purposeful Classroom: How to Structure Lessons with Learning Goals in Mind* (ASCD), and *Common Core English Language Arts in a PLC at Work*[™] (Solution Tree), and, with D. Lapp, *Handbook of Research on Teaching the English Language Arts* (Taylor & Francis). He has also participated in plentiful funded projects all relevant to education and literacy.

Robin Fogarty, Ph.D., is president of Robin Fogarty and Associates, Ltd., a Chicago-based educational consulting and publishing company. A leading proponent of the thoughtful classroom, Fogarty has trained educators throughout the world in curriculum, instruction, and assessment strategies. She has taught at all levels, from kindergarten to college, served as an administrator, and consulted with state departments and ministries of education across the globe. She is the author of numerous articles and books.



Ken Kay, JD, has spent the past twenty-five years bringing together the education, business, and policy communities to improve U.S. competitiveness. He is president of the Partnership for 21st Century Skills, the nation's leading advocacy organization focused on infusing 21st century skills into education and preparing every child to succeed in the new global economy. He also serves as the CEO and cofounder of e-Luminate Group, an education consulting firm. Throughout his career, Ken has been a major voice and premier coalition builder on competitiveness issues in education and industry – particularly policies and practices that support innovation and technology leadership. An executive director of the CEO Forum on Education and Technology, he led the development of the StaR Chart (School Technology & Readiness Guide), used by schools across the country to make better use of technology in the K-12 classrooms. A lawyer and nationally recognized coalition builder, Kay has also facilitated initiatives by universities and technology leaders to advance research and development policy and by computer industry CEOs to advance U.S. trade and technology policy.

Angela Maiers, M.Ed., is an award-winning educator, speaker, consultant, and professional trainer known for her work in literacy, leadership, and global communications. An active blogger and social media evangelist, she's deeply committed to helping learners understand the transformational power of technology. As owner and lead consultant at Maiers Educational Services, she uses her passion for literacy and technology to discover creative ways to assist schools and organizations in meeting their learning and productivity goals. She has spent 22 years working in elementary, middle, and university settings as a classroom teacher, reading specialist, coach, special programs facilitator, and university professor. She is the author of a number of books on education, most recently, *Classroom Habitudes: Teaching Habits and Attitudes for 21st Century Learning* (2012).

Meg Ormiston, M. Ed., is a highly active presenter, keynote speaker, and writer. She is the author of *Creating a Digital-Rich Classroom: Teaching and Learning in a Web 2.0 World, Conquering Infoclutter: Timesaving Technology Solutions for Teachers*, and, with Mark Standley, *Digital Storytelling with PowerPoint*. Ormiston has also been a classroom teacher, curriculum coach, website developer, grant writer, consultant, and a founding member of the Educational Foundation for Excellence. Her research focuses on how curriculum can be delivered through visual images, simulations, and multimedia, coupled with real-time assessment to check for comprehension.

Brian Pete, MA, is cofounder of Robin Fogarty and Associates. He comes from a family of educators – college professors, school superintendents, teachers, and teachers of teachers – and has a rich background in professional development. Pete has observed and recorded classroom teachers and professional experts in schools throughout the world. Pete is the author of numerous educational videos.

Will Richardson, MA, is known internationally for his work helping educators and students understand and implement instructional technologies – and, more specifically, the tools of the read/write Web – into schools, classrooms, and communities. A former public school teacher for twenty-two years, Richardson's



own blog (Weblogg-ed.com) is a leading resource for the creation and implementation of the Web 2.0 technologies on the K-12 level. Richardson is a leading voice for re-envisioning learning and teaching in the context of the fundamental changes these new technologies are bringing to all aspects of life. His critically acclaimed, best-selling book *Blogs, Wikis, Podcasts, and Other Powerful Web Tools for the Classroom* (2010), now in its third edition, has sold more than fifty thousand copies.

Kipp D. Rogers, Ph.D., is directory of secondary instruction for York County Schools in Virginia. With nearly 20 years of experience in education, Dr. Rogers has classroom teaching and instructional leadership experience at all levels in urban and suburban schools. He is the author of *Mobile Learning Devices*, in which he proposes that when used within appropriate guidelines, and with attention to instructional goals, mobile learning devices such as cell phones and laptops are powerful, cost-effective learning tools that can increase student engagement dramatically, allowing students to learn anytime, anywhere.

Eric Sheninger, M.Ed., is a school principal in New Milford, NJ. He is extremely interested in the utilization of social media/networking to develop a brand presence in education, and he has worked collaboratively with stakeholders to transform the teaching and learning culture of his school in a way that benefits and maximizes the potential of students. Sheninger has received EdTech Digest's EdTech Leadership Award (2013), NASSP's Digital Principal Award(2012), Leaning Forward's Excellence in Professional Practice Award (2012), and PDK's Emerging Leader Ward (2012), among others. His blog, A Principal's Reflections, has won numerous awards. He is the co-author of *Communicating and Connecting With Social Media (Essentials for Principals)*, with Bill Ferriter and Jason T. Ramsden.

Course Objectives

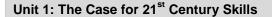
After completing this course, educators will know:

- The importance of specific instruction in and assessment of 21st century skills
- Historical factors contributing to traditional models of education, and explain why those models need to change
- The role of professional learning communities in implementing 21st century skills

Student Learning Outcomes

After completing this course, educators will be able to:

- Identify 21st century skills
- Articulate the role of technology in meeting the needs of 21st century learners
- Identify characteristics of educational environments that support 21st century learning
- Evaluate their current educational settings in terms of instruction in 21st century skills
- Evaluate their current educational settings in terms of assessment of 21st century skills
- Prioritize areas in need of improvement, and develop a plan for implementing a top-priority change
- Access resources to launch their plans



Nationally-known educators weigh in on the importance of preparing students for college, careers, and global citizenship. Jim Ballanca provides historical perspective on the traditional model of education, and explains why that model fails to produce 21st century outcomes. Ken Kay describes the work of the Partnership for 21st Century Skills, and enumerates the changes needed to equip today's students for the future.

Text: 21st Century Skills: Rethinking How Students Learn, Preface, Foreward (Ken Kay), Introduction (James Bellanca and Ron Brandt), and Chapter 3: Comparing Frameworks for 21st Century Skills (Chris Dede)

Student Learning Outcomes

After completing this unit, educators will be able to:

- Describe the importance of specific instruction in and assessment of 21st century skills
- Identify historical factors contributing to traditional models of education, and explain why those models need to change

Unit 2: 21st Century Skills

Ken Kay explains why today's marketplace demands skills like critical thinking and problem solving. Doug Fisher and Nancy Frey explore the need to "master tools that have not been invented yet."

Student Learning Outcomes

After completing this unit, educators will be able to:

• Identify 21st century skills

Text: 21st Century Skills: Rethinking How Students Learn, Chapter 9: Cooperative Learning and Conflict Resolution: Essential 21st Century Skills (David W. Johnson and Roger T. Johnson)

Unit 3: 21st Century Classrooms

Robin Fogarty and Brian Pete bring an international perspective to the discussion, describing their work as consultants to the Singapore Ministry of Education. Long an international leader on standardized tests, Singapore shares the struggle to move to a broader vision of education.

Text: 21st Century Skills: Rethinking How Students Learn, Chapter 5: The Singapore Vision: "Teach Less, Learn More" (Robin Fogarty and Brian M. Pete) and Chapter 7: Designing New Learning Environments to Support 21st Century Skills (Bob Pearlman)

Student Learning Outcomes

After completing this unit, educators will be able to:

• Identify characteristics of educational environments that support 21st century learning

Unit 4: The Promise of Technology

Doug Fisher, Nancy Frey, and Rick Dufour weigh in on the role of technology in the 21st-Century school. Ed tech experts Will Richardson and Bill Ferriter describe tools for learning and the need to create networks of co-learners.

Student Learning Outcomes

After completing this unit, educators will be able to:

• Articulate the role of technology in meeting the needs of 21st century learners

Text: 21st Century Skills: Rethinking How Students Learn, Chapter 10: Preparing Students for Mastery of 21st Century Skills (Douglas Fisher and Nancy Frey), Chapter 11: Innovation Through Technology (Cheryl Lemke), Chapter 12: Technology Rich, Information Poor (Alan November), Chapter 13: Navigating Social Networks as Learning Tools (Will Richardson)

Unit 5: The Role of Assessment

Ken Kay explains the need to teach 21st-Century skills with intent and purpose.

Student Learning Outcomes

After completing this unit, educators will be able to:

• Evaluate their current educational settings in terms of assessment of 21st century skills

Unit 6: Professional Learning Communities

The master of professional learning communities, Rick DuFour, explains how collaborative teams can put 21st century skills into practice in their schools. Jim Bellanca describes the process as it's playing out at Manor New Tech High School (TX).



Text: 21st Century Skills: Rethinking How Students Learn, Chapter 4: The Role of Professional Learning Communities (Richard DuFour and Rebecca DuFour)

Student Learning Outcomes

After completing this unit, educators will be able to:

• Describe the role of professional learning communities in implementing 21st century skills

Unit 7: Getting Started

A lively panel of educators provides practical tips on using social media in school, then describes the ideal school of the future.

We visit New Milford High (NJ) classrooms to see how they're adopting 21st century strategies.

Text: 21st Century Skills: Rethinking How Students Learn, Chapter 7: An Implementation Framework to Support 21st Century Skills (Jay McTighe and Elliott Seif) and Chapter 8: Problem-Based Learning: The Foundation for 21st Century Skills (John Barell)

Student Learning Outcomes

After completing this unit, educators will be able to:

- Evaluate their current educational settings in terms of instruction in 21st century skills
- Prioritize areas in need of improvement, and develop a plan for implementing a top-priority change
- Access resources to launch their plans

Methods of Instruction

- Videos (presentations consisting of lecture, interviews, and classroom footage)
- Text (units based on required reading)
- Reflection questions (open-ended questions at intervals throughout the video presentations where participants are asked to reflect on the course content, their own practice, and their intentions for their practice)
- Quizzes (selected-response quizzes to assess understanding of the video presentations and eBook content)
- Discussion forum (prompts after each unit that engage participants in online dialogue with their cohorts)
- Midterm (a project intended to get teachers to begin to develop their practice by putting to work in the classroom what they have learned)

• Final (a project that enables educators to reflect on their practice and assess their students' work through the lens of what they have learned)

Plagiarism Policy

KDS recognizes plagiarism as a serious academic offense. Plagiarism is the passing off of someone else's work as one's own and includes failing to cite sources for others' ideas, copying material from books or the Internet (including lesson plans and rubrics), and handing in work written by someone other than the participant. Plagiarism will result in a failing grade and may have additional consequences. For more information about plagiarism and guidelines for appropriate citation, consult plagiarism.org.

Percentage of Course Credit

- Reflection questions 25%
- Quizzes 15%
- Midterm 25%
- Final 35%

In order to complete the requirements of the course, the participant must complete all course work (e.g., reflections, quizzes, and any midterm and/or final), including watching all videos and participating in all discussion forums. We do not award partial credit.

Grading Policy

A: 3.4 – 4.0 B: 2.7 – 3.3 C: 2.0 – 2.6 F: < 2.0

Reflection/Quiz Rubric

| Activity [| Distinguished (4) | Proficient (3) | Basic (2) | Unsatisfactory (1) |
|---|---|---|---|---|
| Quizzes 90 | 0-100% | 80-89% | 70-79% | 69% or below |
| pro an ex co Pa res pe me rel | earticipant has rovided rich detail nd supporting xamples from the ourse content. earticipant has made esponses to prompts ersonally heaningful and elevant to his or her eaching practice. | Participant has included appropriate content from the course content. Participant has made thoughtful comments in direct response to the prompts. | Participant has included little that indicates consideration and comprehension of course content. Participant has answered most questions directly but some too briefly. | Participant has included little to no content indicating consideration and comprehension of course content. Participant has not addressed the specific questions posed. Participant has not responded to all reflection questions. Participant has copied from the course transcript without synthesis or |

Midterm

Create a PowerPoint presentation (and accompanying script) or a series of documents to share the following information with your staff or colleagues:

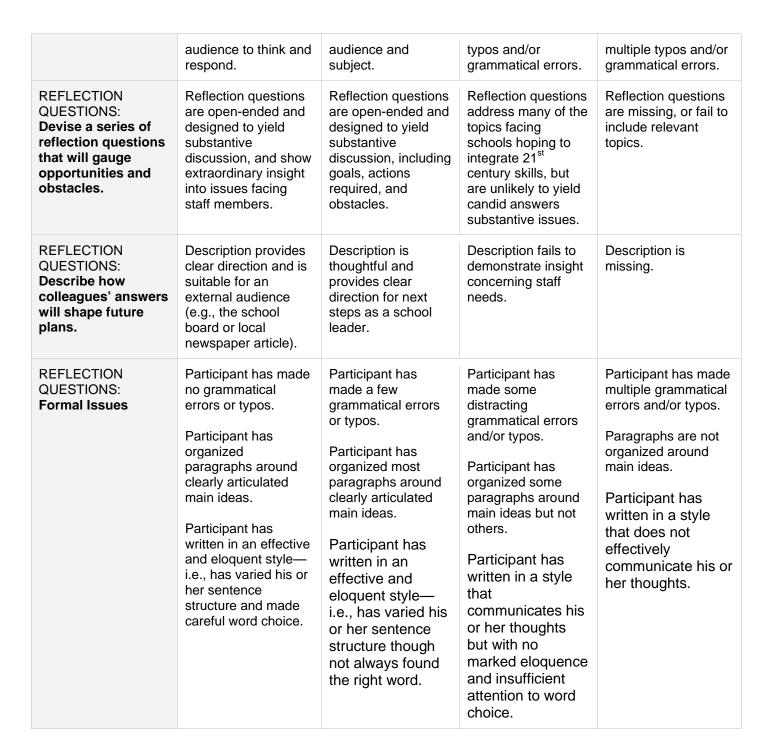
- Provide a brief history of education in the United States as it relates to expected educational outcomes. Compare requirements of an agricultural economy, and a manufacturing economy, with what's needed today.
- List and describe key educational shifts that the demands of the 21st century will require.
- Identify and describe three 21st century skills (not technology-related).
- Identify and describe three 21st century skills particular to technology use.
- Describe how the learning environment might be different in a 21st century school.

Devise a series of reflection questions for discussion following your presentation. These should gauge opportunities and obstacles particular to your school or district. Describe how your colleagues' answers will shape future plans regarding the teaching and learning of 21st century skills.

Midterm Rubric

a d

| Step | Distinguished (4) | Proficient (3) | Basic (2) | Unsatisfactory (1) |
|---|---|---|---|---|
| PRESENTATION: Provide a brief history of the mission of education in the U.S. | Participant has described previous goals of education and their influence on school operation, drawing on (and citing) resources beyond those mentioned in the course. | Participant describes goals of education during the agricultural and manufacturing eras, and how those influenced the way schools operate. | Participant has included some elements of educational history. Description of the expected outcomes incomplete. | Educational history and outcomes are missing or historically incorrect. |
| PRESENTATION: Explain key educational shifts required by the demands of the 21 st century | Participant makes a compelling case for key educational shifts, and provides specific and memorable examples. | Participant makes a compelling case for key educational shifts. | Several key educational shifts are identified. | Educational shifts are not included, or are misidentified. |
| PRESENTATION: Three 21 st century skills are described | Skills are described and specific examples are provided. | Participant describes in detail the Learning and Innovation Skills found on page xv. | Skills are described, but important details are missing. | Skills are missing or incorrectly described. |
| PRESENTATION: Three technology skills are described | Skills are described and specific examples are provided. | Participant describes in detail the Information, Media, and Technology Skills found on page xv. | Skills are described, but important details are missing. | Skills are missing or incorrectly described. |
| PRESENTATION: Describe a 21 st century learning environment | Participant fully describes the characteristics of a 21 st century learning environment, including illustrations, and explains changes needed. | Participant fully describes the characteristics of a 21 st century learning environment and explains changes needed. | Participant explains several characteristics of a 21 st century learning environment. | Participant displays little or no understanding of a 21 st century learning environment. |
| PRESENTATION: Formal Issues | Presentation format is clear and inviting, compels the | Presentation format is clear and inviting, appropriate to the | Organization of presentation is unclear, includes | Presentation is scattered or incomplete. Includes |



Final

For your final, you will consider each of the skills listed in the Partnership for 21st Century Skills Framework (below), assess what's currently being done (in your classroom, school, or district), and describe improvements needed. You will then choose one skill (or group of skills) and develop a longterm (one semester or more) plan for implementation.

Your instructional role: ______ Grade level: _____

- 1. For each skill, please answer each of the four questions in the chart below as it applies to your classroom, school, or district. Is the skill addressed in the standards? is it explicitly taught? Is it assessed? Are interventions in place for students who don't master the skill?
- 2. Based on your yes/no answers, rate yourself (classroom, school, or district) on your instruction of this skill, with a 1 meaning "don't currently address this" and a 4 meaning "distinguished." Please use the notes column to explain your answers.

| Learning and Innovation Skills | Addressed in Standards? | Explicitly taught? | Assessed? | Interventions in place? | Rating | Notes |
|--|-------------------------|--------------------|-----------|-------------------------|--------|-------|
| Creativity and Innovation | | | | | | |
| Critical Thinking and Problem Solving | | | | | | |
| Communication and Collaboration | | | | | | |
| Information, Media and Technology Skills | Addressed in standards? | Explicitly taught? | Assessed? | Interventions in place? | Rating | Notes |
| Information Literacy | | | | | | |
| Media Literacy | | | | | | |
| ICT (Information, Communications & Technology) | | | | | | |
| Life and Career Skills | Addressed in standards? | Explicitly taught? | Assessed? | Interventions in place? | Rating | Notes |
| Flexibility and Adaptability | | | | | | |
| Initiative and Self- Direction | | | | | | |
| Social and Cross- Cultural Skills | | | | | | |



| Productivity and Accountability | | | |
|------------------------------------|--|--|--|
| Leadership and Responsibility | | | |

Choose one skill or group of skills (e.g., Life and Career Skills) on which to focus your improvement efforts. Then, create a detailed description of what you would do over the course of one semester (or more) to implement an improvement plan based on the criteria below. Make sure to include resources, timelines, and any supporting documents needed to make your case to district stakeholders. (Note: please provide appropriate citations for work other than your own.)

For your improvement plan, please do the following:

- 1. Create a list of at least 3 standards that describe what your students should know or be able to do.
- 2. In what class or classes will these standards be taught?
- 3. What materials will be used?
- 4. What physical adaptations to the environment, if any, will be needed?
- 5. What staff members will be involved?
- 6. What professional development will be needed?

7. How will you measure student mastery? (For guidelines concerning one type of assessment, please see the example of project-based outcomes of page 192 of your text.)

8. What interventions will you put in place for students who don't master the standard(s) you've identified?



Final Rubric

| Step | Distinguished (4) | Proficient (3) | Basic (2) | Unsatisfactory (1) |
|--|---|---|--|--|
| Chart | Questions answered Rating provided Notes show an extraordinary amount of depth and insight. | Questions answered Rating provided Notes justify the rating given. | Questions answered Rating provided Some notes show only a superficial consideration of the topic. | Chart is incomplete. |
| Standards | A clear hierarchy of outcomes is provided. | At least 3 standards identify clear outcomes appropriate to the skill area. | One or more outcomes are unclear. | Standards are missing. |
| Timeline | A detailed timeline realistically reflects staff needs. | A timeline is provided for professional development and implementation of instruction. | Some elements of the timeline are unrealistic. | A timeline is not provided. |
| Classes | Classes are identified and indicate a school-wide, long- term commitment. | Classes provide a reasonable match for skills identified, and indicate an appropriate long- term commitment. | Classes are identified but suggest a superficial commitment (e.g., 8 th -grade unit on Internet research). | Classes in which skills will be taught are not identified. |
| Instructional Materials/ Resources | Resources are spelled out so clearly that the initiative could be launched tomorrow. | Appropriate student and staff development resources have been identified. | Resources are included, but not all are the appropriate fit. | Resources are few in number or missing. |
| Staffing | A complete hierarchy of instructional support has been provided. | Staff members – both teachers and support staff (e.g., IT) – have been identified. | Some staff members are identified. | No staff members are identified. |
| Professional Development | Plan includes detailed and specific | Plan includes workable | Professional development | No professional development is |

