

**Research Foundation**  
**Paper**

# EXPERT 21





# Research Foundations: Expert 21

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## INTRODUCTION

### The Situation

When today's students graduate from high school, they will take on the responsibilities of citizenship in a complex world that places more demand than ever on readers, writers, and thinkers. The emergence of new digital technologies in the late 20<sup>th</sup> and early 21<sup>st</sup> centuries provides access to an unprecedented amount of information, and presents new creative, ethical, and technological challenges. An increasingly globalized economy and culture bring new urgency to the systemic issues that interconnect us, requiring citizens of different nations to work together to generate innovative solutions. To keep up with these changes and meet these challenges—and to become intellectually engaged, socially responsible, and productive citizens—today's students must develop a broad base of interdisciplinary knowledge and proficient literacy and critical-thinking skills.

**Proficient reading and writing skills are essential to living in the 21<sup>st</sup> Century.**

—Considine, Horton, & Moorman, 2009

### The Students

Who are the youth who will inherit these responsibilities of citizenship? Today's students belong to the first generation to spend their entire lives in the 21<sup>st</sup> century, immersed in the World Wide Web and other digital technologies such as cell phones, instant messaging, and text messaging (Considine, Horton, & Moorman, 2009). They have been described as “digital natives” (Prensky, 2005/2006), navigating the ever-evolving world of information communication technologies (ICT) with fluency and ease. Today's students have access to more information than any previous generation (Considine et al., 2009). These students also are experienced in a range of everyday language and literacy practices—such as searching the Internet, reading and creating blogs, socializing in chat rooms, and exchanging information through interest group Web sites—that are often not included as part of the traditional literacy curriculum (Alvermann, 2001).

The prevalence of such literacy practices in adolescents' lives highlights the fact that proficient reading and writing skills are essential to living in the 21<sup>st</sup> Century (Considine et al., 2009). Unfortunately, national trends show that too many American students are not mastering the traditional literacy skills they need to succeed in school and life (Haynes, 2009; Southern Regional Education Board (SREB), 2009). According to the 2007 Nation's Report Card from the National Center for Education Statistics, just one-third of public school 4<sup>th</sup> graders and fewer than one-third of 8<sup>th</sup> graders read at or above grade level (Lee, Grigg, & Donahue, 2007). Nationwide, about one in three high school students drops out before graduating, and the percentages for urban schools are even higher (Swanson, 2008). Such trends show the United States falling behind its international peers. The Organization for Economic Co-operation and Development (OECD) reports that the U.S. slipped from having the highest high school completion rates of member nations in the early 1960s to being ranked eighteenth out of twenty-three OECD member nations with available data in 2005 (Kamil, 2009). And on a recent international assessment that compared fifteen-year-olds in different countries, U.S. students ranked fifteenth out of twenty-nine in reading literacy (Alliance for Excellent Education, 2009).

The literacy crisis is even more pronounced in certain segments of the U.S. population (Haynes, 2009). A recent report by Kirsch, Braun, Yamamoto, and Sum (2007) notes that “international surveys of student and adult populations indicate that while our average performance is no better than mediocre, our degree of inequality (the gap between our best and our least proficient) is among the highest in OECD countries” (p. 3). Statistics from the

National Assessment of Educational Progress (NAEP) show that there have been large and relatively stable black-white and Hispanic-white achievement gaps for decades; although these gaps have narrowed slightly since the 1970s, there have been no significant changes in either achievement gap among 9-, 13-, or 17-year-olds since 2004 (Kirsch et al., 2007; Rampey, Dion, & Donahue, 2009). Furthermore, higher-income children in the U.S. tend to have greater access to information, more experience with literacy resources and sophisticated vocabulary in the home, and greater exposure to learning experiences than economically disadvantaged children (Neuman & Celano, 2006). Consequently, more affluent children tend to more easily comprehend what they read and more readily acquire new knowledge, leading to a substantial socioeconomic “knowledge gap” that grows over the years in school. These early gaps are especially troubling in light of recent research showing that if students are not on target for college and career readiness when they enter high school, they are unlikely to reach readiness by the time they graduate (ACT, Inc., 2008).

How can schools and teachers best respond to the needs of these 21<sup>st</sup> Century students? The International Center for Leadership in Education provides a useful model for designing instruction to address these needs: the Rigor, Relevance, Relationship, and Reflection Framework (Daggett, 2005). This framework posits that students are most motivated to learn and best retain knowledge when presented with challenging work that requires higher-order thinking and is relevant to their lives (Daggett, 2005). Furthermore, the curriculum must incorporate regular opportunities for students to reflect on their learning and must be grounded in trusting relationships among students and teachers, as learning is optimized when students feel safe, secure, and respected (International Center for Leadership in Education, 2009). Thus, an effective 21<sup>st</sup> Century curriculum should provide rigorous literacy instruction, build knowledge networks, and develop reflective practices, through content that is relevant to students’ lives outside of school and through respectful, supportive relationships with teachers and peers. By providing rigorous and relevant instruction to build on the skills and knowledge that young adolescents already have, schools can help put today’s students on the path to academic, professional, and personal success.

### **The Solution**

In response to the needs described above, Scholastic has developed a curriculum that combines rigor, relevance, and reflection in a supportive instructional context: Expert 21. Expert 21 is a comprehensive English language arts transition program that teaches the reading, writing, and thinking necessary for college, career, and life in the 21<sup>st</sup> Century. Expert 21 is designed to accelerate students in grades 6–9 from Basic to Proficient and beyond, with three courses spanning a wide range of achievement levels in the classroom—from 650 to 1200 Lexiles®. Development of the program was informed by a team of expert researchers and practitioners, led by Dr. Jeffrey Wilhelm, a researcher and educator whose work focuses on inquiry, motivation, and engagement in reading instruction, and Dr. Bill Daggett, an expert on 21<sup>st</sup> Century skills instruction and creator of the Rigor, Relevance, Relationships, and Reflection Framework. The result is an engaging and challenging program that helps young adolescents gain proficiency in reading, writing, and 21<sup>st</sup> Century skills, build content-area knowledge, and explore real-world problems through high-interest literary and informational texts.

This report provides a detailed description of how Expert 21 prepares middle school and beginning high school students with the literacy expertise to thrive in the 21<sup>st</sup> Century. It shows how important findings from research studies and best practices in English language arts education have been translated into the instructional design and content of Expert 21.

**Students are most motivated to learn and retain knowledge when presented with challenging work.**

**—Daggett, 2005**

## EXPERT 21 INSTRUCTIONAL DESIGN

### **Building Students' Knowledge Base**

A central tenet of the Expert 21 program is that students cannot become deep readers and writers without a rich base of content-area knowledge and a genuine engagement with texts. Each of Expert 21's three course levels is organized into eight workshops that build knowledge through various kinds of inquiry: personal inquiry, content area inquiry, social inquiry, and global inquiry. Reflecting research that shows that different reading behaviors are needed to comprehend different text types (American Institutes for Research, 2008), the readings in each workshop are evenly divided between literary and informational texts. These informational and literary selections integrate the content areas with English language arts instruction that is aligned with nationally recognized standards describing the English competencies necessary for success in high school, college, and beyond (Achieve, Inc., 2009). Thus, Expert 21 is carefully designed to simultaneously build knowledge in English language arts, social studies, science, history, geography, and the arts.

### **"Arc of Inquiry" Design**

Expert 21's inquiry-based design draws students in and sets a purpose for reading by structuring each workshop around compelling Expert Questions, such as, "How do we protect our rights?" and "How are we changing the Earth?" As students follow the "Arc of Inquiry" in each workshop through high-interest, age-appropriate reading selections, writing for multiple purposes and audiences, and collaborative activities that help build critical thinking and 21<sup>st</sup> Century skills, they explore the overarching questions and build expertise. Repeated readings of texts (in whole-group, small-group, partner, and/or individual settings) allow for extended practice with comprehension strategies to build proficiency. Their new knowledge and skills are put to use in a culminating Expert Project that requires students to engage in an authentic problem-based, project-based, or design-based task. The program also includes a 21<sup>st</sup> Century ToolKit, consisting of 300 Expert Files (100 topics, three copies of each) that offer models of specific 21<sup>st</sup> Century skills, directions, and support to help students apply the skills in independent and small-group work.

### **Differentiated and Scaffolded Instruction**

Reflecting the realities of the country's middle and high school classrooms, Expert 21 is designed to meet the needs of all learners. Whole-group, small-group, and computer-based settings provide a variety of opportunities for teachers to assess students' needs and tailor instruction accordingly. Each Expert 21 workshop follows a "model, mentor, monitor" structure that moves from teacher-directed instruction, to teacher-mentored activities, to monitoring of independent application, thereby scaffolding new skills, strategies, and concepts for students so that they can experience success. Point-of-use support for differentiating lessons for different groups of students is embedded throughout the *Expert 21 Teacher's Edition*. These supports, aligned to Response to Intervention (RTI), include specific recommendations and resources for addressing the needs of English language learners, students in special education, and students at different levels of reading proficiency.

Students can receive additional scaffolding of lesson content, explore each workshop in greater depth at their own pace, and research workshop-related topics through Expert Space, a comprehensive digital curriculum that includes more than 100 topics and 125,000 leveled articles aligned to the most commonly taught subjects in science and social studies. The technology in Expert 21 is Web-based, enabling students to access the program online in a media center, computer lab, or at home. The *Expert 21 Teacher's Edition* includes a detailed planner that integrates the online components into daily instruction.

## Expert 21 Instructional Model

The Expert 21 Instructional Model is designed to be flexible to fit into any existing English language arts schedule. There are three major elements to each day's session, described in the figure and table below:

1. Teacher-Led Exploration (30–45 minutes)
2. Small Group/Independent Work (15–30 minutes)
3. Whole Group Wrap Up (5–15 minutes)

**TEACHER-LED EXPLORATION AND INSTRUCTION**  
(30–45 min.)

- Model
- Mentor
- Monitor



**SMALL GROUP/ INDEPENDENT LEARNING**  
(15–30 min.)

- Differentiate
- Collaborate
- Communicate



**WRAP UP**  
(5–15 min.)

- Reflect
- Evaluate

## Major Instructional Components of Expert 21

	Teacher-Led Exploration and Instruction	Small Group/ Independent Learning	Wrap Up
Instructional Purpose	Model, Mentor, Monitor	Differentiate, Collaborate, Communicate	Reflect, Evaluate
Core Resources	<ul style="list-style-type: none"> <li>• Anchor Media</li> <li>• <i>21Book</i></li> <li>• Teacher's Edition</li> </ul>	<ul style="list-style-type: none"> <li>• <i>21Book</i></li> <li>• 21<sup>st</sup> Century ToolKit</li> <li>• Expert Space</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher's Edition</li> <li>• <i>21Book</i></li> </ul>
Assessment	<p><b>Ongoing Progress Monitoring</b></p> <ul style="list-style-type: none"> <li>• Informative Assessments</li> <li>• <i>21Book</i> Progress Tests</li> </ul> <p><b>21<sup>st</sup> Century Assessment</b></p> <ul style="list-style-type: none"> <li>• 21<sup>st</sup> Century Skills Pages</li> <li>• Writing Assignments</li> <li>• Expert Projects</li> </ul>	<p><b>End-of-Workshop Assessment</b></p> <ul style="list-style-type: none"> <li>• Strategy Checks</li> <li>• xSkills Tests</li> </ul> <p><b>Progress Monitor</b></p> <ul style="list-style-type: none"> <li>• Scholastic Reading Inventory (SRI)</li> </ul>	

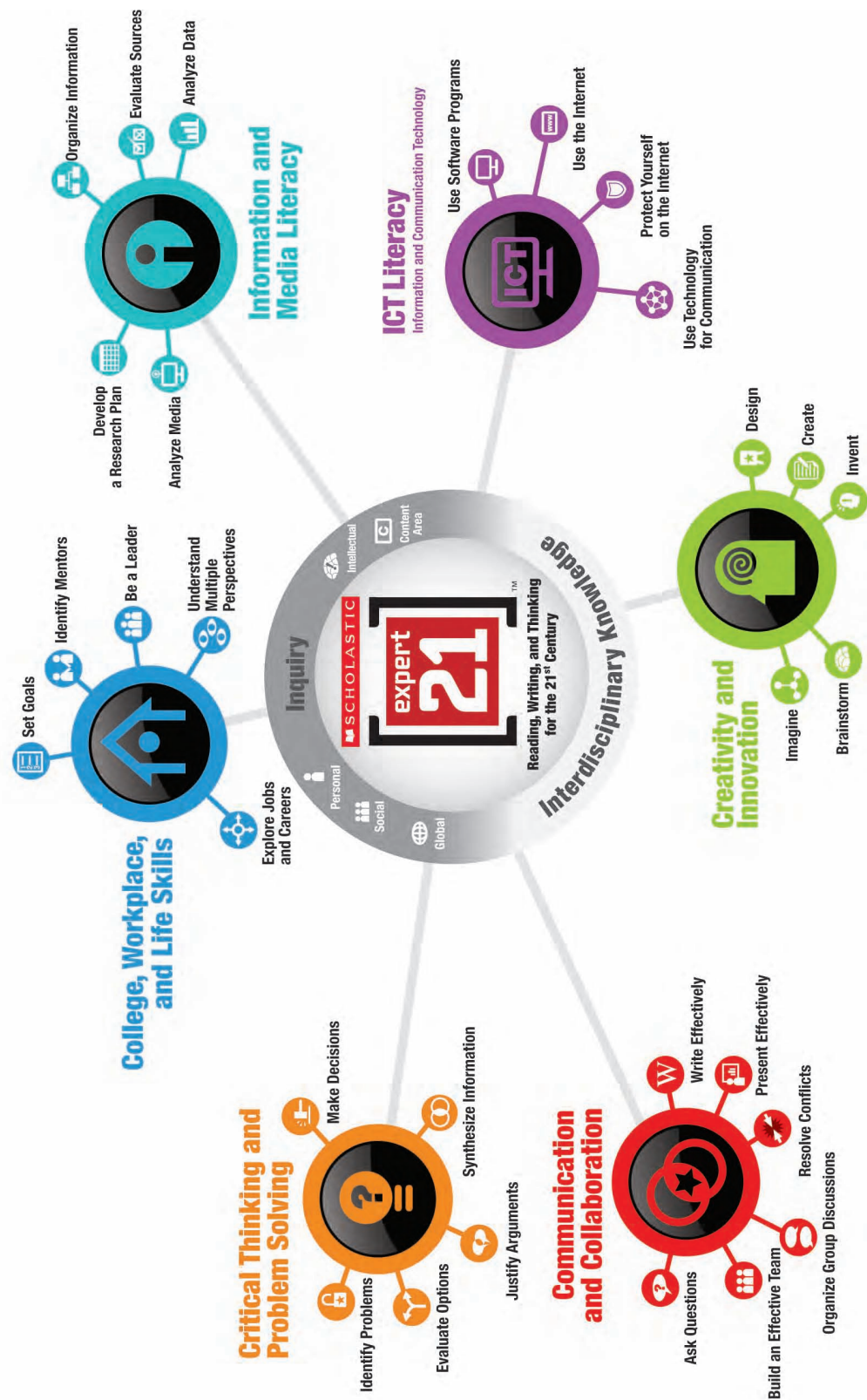
## ESSENTIAL 21<sup>ST</sup> CENTURY SKILLS AND KNOWLEDGE

Expert 21 is designed with the understanding that success in today’s information-based society requires a strong foundation of content-area knowledge and basic literacy skills, coupled with a comprehensive set of technical, cognitive, and interpersonal skills—summarized by the term “21<sup>st</sup> Century Skills.” Research and policy reports show that jobs requiring routine skills have increasingly shifted to other countries and to computer automation over the last several decades, while employers across the workforce are increasingly seeking employees with a college-level education and the ability to innovate and create (Gee, 2008; Kirsch et al., 2007; Murnane & Levy, 2004; New Commission on the Skills of the American Workforce, 2006). Furthermore, in their personal and civic lives, it is more important than ever that individuals have the ability to effectively access, analyze, evaluate, and utilize the vast amounts of information available to them (Considine et al., 2009; SREB, 2009). Expert 21 addresses these requirements for success in the 21<sup>st</sup> Century through instruction in 100 key 21<sup>st</sup> Century Skills, grouped into the following six categories (see 21<sup>st</sup> Century Learning Map, opposite page):

- ❑ Communication and Collaboration
- ❑ Creativity and Innovation
- ❑ Critical Thinking and Problem Solving
- ❑ Information and Media Literacy
- ❑ ICT Literacy (Information and Communication Technology)
- ❑ College, Workplace, and Life Skills

These categories encompass the wide range of skills commonly recognized as essential to professional and personal life in the 21<sup>st</sup> Century. As digital media makes it easier to interact and collaborate with others, both locally and around the globe, it is increasingly important for students to be able to cooperate with peers, communicate effectively to multiple audiences, and demonstrate global awareness and interpersonal understanding (Asia Society, 2009; International Society for Technology in Education, 2007; Gee, 2008). Cognitive and creative ability are in demand; because of the vast amounts of information available, evolving technologies, and the challenges of global competition, employers are looking to hire people who are innovative critical thinkers who can generate creative solutions to a wide array of problems (Alvermann, 2001; Partnership for 21<sup>st</sup> Century Skills, n.d.). Today’s students need the technical skills to successfully navigate information and communication technology (ICT) and the literacy skills to be effective communicators across all types of media (Gee, 2008). Furthermore, adolescent learners need to develop the self-direction, sense of responsibility, and initiative to chart a path for themselves in their careers and lives, and see their plans through.

# 21st Century Learning Map



## **Skills Instruction and Practice in Expert 21 Workshops**

Expert 21 incorporates 21<sup>st</sup> Century Skills practice throughout each workshop, grounded in content-rich text that builds knowledge. Twice per workshop, students are given direct instruction on a skill from one of the 21<sup>st</sup> Century Skill categories (see 21<sup>st</sup> Century Learning Map, page 7). These skills are tied to readings that students have already completed and are useful for the Expert Project that they will do at the end of the workshop. Direct instruction in these skills is also provided on cards in the 21<sup>st</sup> Century ToolKit, an easy-to-use student resource that offers students explicit models, directions, and support as they build independence with 21<sup>st</sup> Century skills. In the ToolKit, sets of color-coded cards in six 21<sup>st</sup> Century Skill categories enable students to work independently or in groups to complete a project or apply skills such as brainstorming, creating a wiki, doing a short analysis, or writing a résumé.

In addition to explicit instruction, 21<sup>st</sup> Century Skills are incorporated into activities throughout the workshop. Each reading selection offers 21<sup>st</sup> Century Classroom Options that tie the day's content and instructional activities to a specific 21<sup>st</sup> Century Skill. After-reading activities provide frequent opportunities for oral and written communication, collaboration with peers, and practice with workplace and technology skills related to the workshop topic. At the end of each workshop, students put into practice a host of skills, including critical thinking and problem solving, media literacy, and creativity and innovation, as they apply newly acquired knowledge in Expert Projects.

## **Expert Space Research and Study Skills**

Students can gain further practice with and instruction in 21<sup>st</sup> Century Skills in Expert Space, Expert 21's comprehensive digital curriculum. Providing students with thousands of leveled, scaffolded articles aligned to the most commonly taught subjects in science and social studies, Expert Space helps every student develop essential information literacy skills. When they use Expert Space to conduct research related to their Expert Projects, students can stay on track using planning and organizational tools that provide extensive scaffolding in academic discipline, ICT literacy, and research skills. Animated Skill Builder videos in Expert Space model best practices in 21<sup>st</sup> Century information literacy. For example, a video on online searches walks students through setting a purpose for the search, selecting appropriate search terms, and refining the search to be more efficient and better targeted. Other video topics include setting goals, note taking, citing sources, using outlines, organizing notes, and presenting. This digital curriculum provides students with interactive and scaffolded practice with critical 21<sup>st</sup> Century Skills in the context of content-area learning.

## **21<sup>st</sup> Century Knowledge**

While the skills described above are central to success in work and life in the 21<sup>st</sup> century, they are not content-independent; they are always based in concrete, "domain-specific" knowledge (Hirsch, 2007). A broad base of knowledge across different fields is not only essential for proficient reading and writing, but also for problem solving, creating, and innovating. In Expert 21, 21<sup>st</sup> Century Skills instruction is grounded in literary and informational texts that build students' understanding of key topics and themes in English language arts, social studies, science, history, geography, and the arts. This cross-disciplinary content helps ensure that students have the conceptual knowledge they need to meet the challenges of an ever-changing environment with agility and expertise.

## RESEARCH FOUNDATIONS

Expert 21 is informed by an extensive body of research on best practices for providing rigorous English language arts instruction in middle school. In the following section, for each curriculum and instructional element of the program listed below, relevant information from the research base and expert opinion is presented alongside descriptions of how these research foundations have been translated into the program design and curriculum.

### **Curriculum and Instructional Elements of Expert 21**

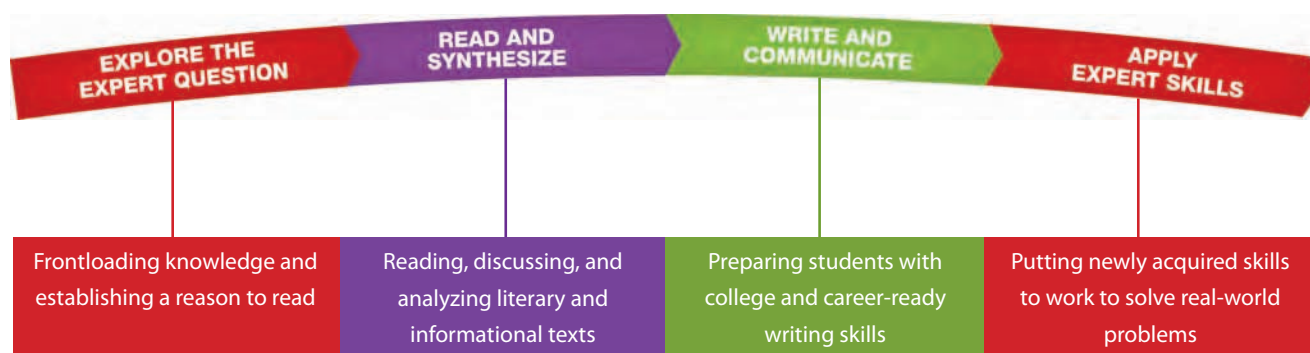
- ❑ The Arc of Inquiry
- ❑ Development of Knowledge Networks
- ❑ Reading Comprehension Instruction
- ❑ Vocabulary and Word Analysis Instruction
- ❑ Writing and Grammar Instruction
- ❑ Technology That Builds Content Knowledge and Executive Function
- ❑ Building Mental Models Through Anchored Instruction
- ❑ Universally Accessible, Differentiated Instruction
- ❑ Engagement and Motivation
- ❑ Teaching Support and Professional Development
- ❑ Comprehensive Assessment



## The Arc of Inquiry

### RESEARCH & EXPERT OPINION

- ◆ Wilhelm (2007) defines inquiry, on the unit level, as “the process of addressing problems expressed by guiding questions” (p.10). A guiding question sets a clear central purpose for students’ work and “connects students to real expertise as practiced in the world” (Wilhelm, 2007, p. 9).
- ◆ Research and expert opinion suggest that students benefit from engaging in authentic intellectual work, which requires “original application of knowledge and skills” in a process of “*construction of knowledge*, though the use of *disciplined inquiry*, to produce discourse, products, or performances that have *value beyond school*” (King, Newmann, & Carmichael, 2009, p. 44, italics in original; see also Newmann, Marks, & Gamoran, 1996). Research suggests that pedagogy leading to such authentic intellectual work results in improved complex thinking skills and engagement among students from diverse backgrounds—better preparing students for “the demands of the workplace, citizenship, and personal affairs” (King et al., 2009, p. 49; Newmann et al., 1996).
- ◆ Research and expert opinion suggest that having students read with a goal related to content learning increases their motivation, engagement, understanding, and retention (Boardman, Roberts, Vaughn, Wexler, Murray, & Kosanovich, 2008; Guthrie & Wigfield, 2000; Kamil, Borman, Dole, Kral, Salinger, & Torgesen, 2008).
- ◆ Data derived from neuroscientific brain research and extensive classroom observation show that “students who understand the goals of their schoolwork are more likely to stay focused, monitor themselves successfully, and derive satisfaction from their progress” (Rose, Meyer, Strangman, & Rappolt, 2002, p. 88). Learners of all ages are more motivated when they can see the usefulness of what they are learning (Bransford, Brown, & Cocking, 2003).



*Expert 21 Arc of Inquiry*

## EXPERT 21 DELIVERS

Each of the 24 workshops in Expert 21 follows a consistent pattern designed to lead students through an engaging “arc of inquiry” process. At the beginning of each workshop, students are introduced to an Expert Question that they will be exploring throughout the entire unit. These questions relate to four strands of inquiry that students pursue over the course of the year (two workshops per strand): personal inquiry, content-area inquiry, social inquiry, or global inquiry. Examples of inquiry questions include:

“How will I get ready for the career I want?” (Personal Inquiry)

“Do we care too much about winning?” (Intellectual Inquiry)

“How are we changing the Earth?” (Content Area Inquiry)

“How do we protect our rights?” (Social Inquiry)

The Expert Questions draw students into the workshop by posing complex issues that have relevance in students’ own lives, and that help prepare them for the responsibilities of global citizenship. The questions serve as an organizing structure for the inquiry, helping students set a purpose and context for reading that enhances comprehension and engagement as they read the related text selections.

Following the introduction of the Expert Question, each workshop proceeds through an arc of inquiry. The inquiry begins with the viewing of an anchor video that provides students with background information and shared knowledge about the workshop theme. Learning goals are reinforced as students preview the Expert Project that they will undertake at the end of the workshop, and explore Expert Space to further build background on the workshop theme. In addition, through the video and the *21Book Student Edition*, students are introduced to an expert who is knowledgeable about the subject of the workshop, allowing them to develop a concrete vision of the types of skills and knowledge they would need to pursue for a future career.

After being introduced to the workshop topic and setting goals for the workshop, students continue their inquiry through a series of readings that include fiction and nonfiction selections related to the workshop theme. Each reading is accompanied by before-reading, during-reading, and after-reading comprehension and vocabulary supports. Structured opportunities for repeated readings of text, writing in response to readings, and small-group collaborative work help students gain proficiency with new skills and construct understanding related to the Expert Question. A formal writing lesson in each workshop provides students with the opportunity to further explore the Expert Question through writing and communication about the workshop theme.

The arc of inquiry concludes with opportunities for students to apply knowledge and practice new skills and strategies independently. First, a final Expert Reading allows students to put all they have learned into practice with minimal support and provides the teacher an opportunity to check students’ mastery of the lesson topics before the final assessment.

Next, students engage in an Expert Project that requires them to apply skills in an authentic, real-world context. The five types of Expert Projects—case study, debate, research, personal inquiry, and social action—harness aspects of different inquiry learning approaches, as students engage in tasks that may be project-based, problem-based, or design-based. Using the skills and knowledge they have acquired, students produce a variety of different kinds of texts, presentations, action plans, or other deliverables. In the process, students are motivated and genuinely challenged as they grapple with complex, open-ended problems with clear relevance to real life. As they engage in the same kinds of processes and dialogues that practitioners do, their learning is reinforced and their ability to apply new skills to novel real-world situations is strengthened.



## Development of Knowledge Networks

### RESEARCH & EXPERT OPINION

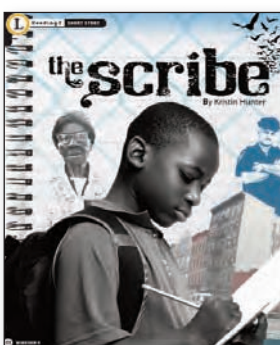
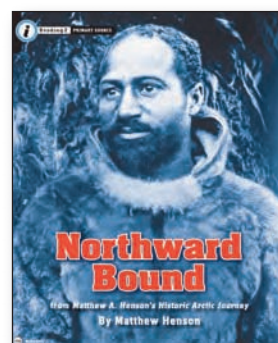
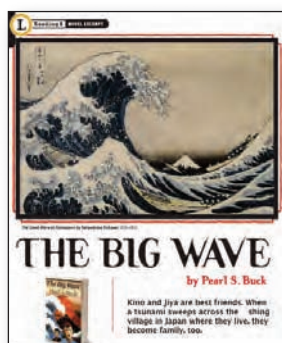
- ◆ Research has well established that a strong base in content background knowledge enhances students' reading comprehension (Alvermann, 2001; Hirsch, 2003; Pearson, Cervetti, & Tilson, 2008).
- ◆ World knowledge is particularly critical to understanding expository texts and assimilating the new information presented within those texts (Best, Floyd, & McNamara, 2008).
- ◆ “Situating literacy instruction in content areas is one way to build the kind of rich world knowledge that bears on comprehension. It also helps students develop extensive networks of generative, academic words” (Pearson et al., 2008, p. 105).
- ◆ Second-language acquisition increases with content-based language instruction, because students learn language best when there is an emphasis on relevant, meaningful content (Grabe & Stoller, 1997).
- ◆ Cognitive research shows that experts think in qualitatively different ways from novices, based on years of accumulated knowledge and experience. Students can start by understanding the processes that experts use to create knowledge in different disciplines (Willingham, 2009).

## EXPERT 21 DELIVERS

Expert 21 is designed to provide students with a robust foundation of knowledge that enhances their comprehension of content across subject areas and plants the seeds of future expertise. Using content area materials as a context for learning is also an effective way to build English language learners' literacy skills.

The compelling nonfiction readings and classic, well-loved literary selections in Expert 21 reflect themes that are relevant to students' lives and connect to what they are reading in social studies and the sciences. Through exposure to this wide range of information and key concepts in different disciplines, students develop a strong base of world knowledge that will be invaluable in school, career, and life.

As students build understanding of each workshop theme, they are introduced to what it means to develop expertise. At the beginning of each workshop, students read about an expert in a field related to the workshop topic, including information about the types of knowledge and skills that expert uses to do his or her job. The experts in the program span a wide range of careers and each expert profile is linked to the Department of Education's career clusters. Students are encouraged to use the 21<sup>st</sup> Century ToolKit and online resources to find out more about related careers. As students read about the paths these experts took and then apply their own knowledge to the Expert Project at the end of the workshop, they are encouraged to identify their own areas of expertise—to envision the possibilities that lie ahead and consider the skills and knowledge it will take to reach their goals.



*Expert 21's broad range of literary and informational texts help students build world knowledge.*



## Reading Comprehension Instruction

### RESEARCH & EXPERT OPINION

- ◆ Research shows that students benefit from explicit comprehension strategy instruction (Duke & Pearson, 2002; Gersten, Fuchs, Williams, & Baker, 2001; National Institute of Child Health and Human Development, 2000; Nokes & Dole, 2004; Pressley, 2000).
- ◆ Research shows that explicit instruction in comprehension strategies benefits students with learning disabilities (Gersten et al., 2001). Research-supported practices for LD students include instruction in story grammar for narrative texts (Gersten et al., 2001, citing 11 studies), and simultaneous use of multiple comprehension strategies for expository texts (Gersten et al., 2001, citing 16 studies).
- ◆ Research shows that English language learner newcomers need direct, explicit instruction to support their comprehension of challenging texts (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006).
- ◆ Research and expert opinion support the practice of scaffolding reading comprehension strategy instruction by “giving high support for students practicing new skills and then slowly decreasing that support to increase student ownership and self-sufficiency” (Biancarosa & Snow, 2006, p. 14; see also Duke & Pearson, 2002; NICHD, 2000; Nokes & Dole, 2004; Readence, Bean, & Baldwin, 2004).
- ◆ Research shows that building students’ metacognition and comprehension monitoring skills improves reading comprehension (Biancarosa & Snow, 2006; Duke & Pearson, 2002; NICHD, 2000; Nokes & Dole, 2004).
- ◆ Research and expert opinion support teaching students to understand and interpret narrative and expository text structures (Duke & Pearson, 2002; Gersten et al., 2001; Readence et al., 2004).
- ◆ Expert opinion supports having students practice using comprehension strategies with different kinds of texts, including texts from the content areas (Alvermann, 2001; Biancarosa & Snow, 2006; Duke & Pearson, 2002).

### EXPERT 21 DELIVERS

Expert 21 provides comprehensive, explicit instruction in reading comprehension and metacognitive strategies to prepare students to be proficient and thoughtful readers across the content areas. In the first half of the year, students receive direct instruction in nine comprehension strategies (two per workshop): identifying the main idea and details, understanding sequence, making inferences, drawing conclusions, recognizing fact and opinion, recognizing cause and effect, recognizing compare and contrast, recognizing problem and solution, and summarizing. Similarly, Expert 21 provides explicit instruction in seven metacognitive strategies: making inferences, predicting, clarifying, asking questions, summarizing, visualizing, and making connections. After being introduced, each comprehension or metacognitive strategy is systematically reviewed and practiced in combination with other strategies throughout the rest of the workshops.

Before reading, students receive explicit direct instruction of the target strategy, including definition, explanation, examples, and teacher modeling. Graphic organizers and interactive activities allow students to apply their understanding immediately on their own, and provide essential support for students with disabilities and many

## EXPERT 21 DELIVERS - continued

English language learners. When the class begins reading, teachers may employ a number of structured Strategic Reading routines, outlined in the Teacher's Edition, to ensure participation, model the use of comprehension strategies during reading, and provide students with the opportunity to practice strategies on their own. These Strategic Reading routines, including Modeled Reading, Choral Reading, Oral Cloze, Partner Reading, and Independent Reading, provide varying levels of support to the students as they read, allowing teachers to gradually guide students toward independence. The systematic, repeated practice and model-mentor-monitor approach allow students at all levels of proficiency to gradually gain confidence and take ownership of appropriate strategies during reading to deepen their comprehension.

The Expert 21 Literature Circles, or student book discussion groups, provide an additional setting for practicing reading strategies and enhancing engagement with books. Each workshop includes recommendations of three classic and award-winning novels, at three different reading levels, related to the workshop theme, along with detailed guidelines to help teachers facilitate small-group discussions about these books. The Literature Circles allow students to deepen their comprehension of the books they have read, strengthen oral language skills, and better prepare for writing tasks as they organize and develop their thoughts orally. English language learners can particularly benefit from this structured practice speaking and listening to peers. Furthermore, these circles can be highly motivating to students because they provide the opportunity to read high-quality literature appropriate for their reading levels, to share thoughts and feelings about books, and to listen to and respond to diverse ideas raised by others.

Readings in each Expert 21 workshop are evenly divided between literary and informational texts, with direct instruction in the different strategies necessary for navigating and comprehending these different text types. Before literary selections, which include literature, poetry, and plays, Literary Analysis lessons introduce students to key literary terms and concepts, such as plot, setting, theme, and imagery. Nonfiction selections, including science and social studies features, magazine articles, interviews, and Web sites, are preceded by Navigating Text lessons that introduce students to key characteristics of particular nonfiction text formats. Students also learn common patterns of organization of nonfiction texts (e.g., cause and effect, compare and contrast, proposition and support) and practice skills, such as identifying the author's purpose and using text features to aid comprehension.

During reading, annotations in the sidebar of the reading selections direct students to apply their Literary Analysis or Navigating Text strategies in context while interacting with the text. These explicit scaffolds for comprehension can be particularly useful for students with reading disabilities and English language learners. After students have read a group of readings, they are guided in examining the relevant literary or nonfiction concept by comparing and analyzing its use across multiple selections. Two curriculum-embedded 21Book Progress Tests in each workshop help teachers assess students' understanding of the readings and application of the target skills and strategies. A comprehensive assessment at the end of each workshop, the xSkills test, assesses the reading comprehension, vocabulary, and writing skills and strategies that the students learned. In all, Expert 21's systematic, scaffolded reading instruction guides students to appreciate and enjoy literature and to be adept consumers of informational texts both inside and outside of school.



## Vocabulary and Word Analysis Instruction

### RESEARCH & EXPERT OPINION

- ◆ Research shows there is a strong and apparently reciprocal relationship between vocabulary knowledge and reading comprehension, although the precise causal nature of the relationship is not understood (Baumann, Kame'enui, & Ash, 2003; Duke & Pearson, 2002; Gersten et al., 2001; NICHD, 2000; Peterson, Caverly, Nicholson, O'Neal, & Cusenbary, 2000; Pressley, 2000).
- ◆ Research suggests and experts recommend wide reading as a way to build students' vocabulary knowledge (Baumann et al., 2003; Pressley, 2000). Wide reading is particularly important for English language learners, who benefit from learning word meanings in context rather than as separate lists of words (Au, 1993).
- ◆ Research supports and experts recommend direct instruction of important individual words, in context and with practical application, as a way to build students' vocabulary knowledge (Baumann et al., 2003; Beck, McKeown, & Kucan, 2002; Gersten & Baker, 2001; Gersten et al., 2001; NICHD, 2000).
- ◆ More specifically, research supports and experts recommend direct instruction of important content-area words, in context and with practical application, as a way to build students' vocabulary knowledge and strengthen their comprehension of content-area texts (Baumann et al., 2003; Blachowicz & Fisher, 2000; Gersten & Baker, 2001; Readence et al., 2004).
- ◆ Additionally, experts recommend direct instruction in vocabulary that is useful across multiple content domains, in context and with practical application, as a way to build students' vocabulary knowledge and strengthen their comprehension (Beck et al., 2002; Gee, 2008).
- ◆ Research shows that knowledge of both conversational and academic vocabulary is a particularly important predictor of reading achievement for English language learners (Francis et al., 2006). In particular, instruction in using cognates to determine word meaning can be very beneficial to ELL students (Blachowicz, Fisher, Ogle, & Watts-Taffe, 2006; Calderón, 2007; Lehr, Osborn, & Hiebert, 2003).
- ◆ Experts recommend instruction in word learning strategies (e.g., contextual and morphemic analysis) as a way to build students' vocabulary knowledge (Baumann et al., 2003; Duke & Pearson, 2002; Kieffer & Lesaux, 2007).

## EXPERT 21 DELIVERS

Expert 21 provides a systematic approach to vocabulary instruction that builds students' vocabulary knowledge through direct instruction and gives students tools to learn new words on their own. Vocabulary instruction is grounded contextually in the wide variety of vocabulary-rich literary and nonfiction texts included at each course level. The literary selections, including short stories, novel excerpts, plays, and poetry, build students' consciousness of how words can be used to create mood, express characterization, and capture images. Students learn how to use words to express their own thoughts and feelings through creative writing assignments. Nonfiction texts, such as magazine articles, interviews, and Web sites, include academic language that students will encounter across the curriculum, as well as content-area words specific to science, social studies, literature, and the arts. Students practice using new vocabulary through writing lessons that focus on the same topics and forms as the readings.

Direct instruction of important individual words occurs before each Expert 21 reading selection. This pre-reading vocabulary lesson introduces students to selected target words, including: “Expert” words that relate to the essential question and workshop theme; academic words that students will encounter across content areas and will need in order to comprehend and participate in academic discourse; content area words that are critical to comprehension and communication in particular academic disciplines; and selection words that are key to understanding the particular reading selection. Each target word is taught using a predictable and powerful vocabulary routine. Point-of-use supports are included in the Teacher's Edition to help teachers make critical vocabulary instruction accessible to English language learners—for example, by using English-Spanish cognates to review root words for Spanish-speaking students.

During the reading, the target words are reviewed through instruction focusing on their meaning within the context of the selection. After reading, target words are assessed through the Word Challenge, which asks students to apply word meanings in a variety of activities that require deeper thinking and understanding.

When working in Expert Space, students can look up any word in an article in an embedded dictionary, providing essential vocabulary support for struggling readers and many English language learners.

In order to teach students to make meaning of unfamiliar words on their own, each Expert 21 workshop also provides direct instruction in two word analysis strategies. Before reading, students learn how to discern word meaning using specific tools, such as context clues, affixes, word families, roots, synonyms, and antonyms. Then, as they read, they are guided to apply the strategy to words encountered in the selection. After reading, the strategy is reviewed and practiced. The explicit instruction in morphological word parts and word families extends students' word knowledge and can be particularly useful to students with reading disabilities, as well as English language learners.



## Writing and Grammar Instruction

### RESEARCH & EXPERT OPINION

- ◆ Culham (2003) posits that using analytic assessments of writing allows students and teachers to “develop a shared understanding of what ‘good’ looks like, use a common vocabulary to describe qualities of writing, and practice assessing with consistency and accuracy” (p. 13).
- ◆ Research and expert opinion suggest that student writing improves when students are taught to attend to specific scales and/or writing characteristics in their own writing (e.g., ideas, organization, voice, sentence fluency, word choice, and conventions) (Arter, Spandel, Culham, & Pollard, 1994; Hillocks, 1987; Graham & Perin, 2007; Pritchard & Honeycutt, 2007).
- ◆ Research and expert opinion indicate that student writing improves when students are explicitly taught steps in the writing process, such as planning, revising, and editing, along with strategies for carrying out these steps (Biancarosa & Snow, 2006; Gersten & Baker, 2001; Graham, 2006; Graham & Perin, 2007).
- ◆ Expert opinion supports providing students with instruction and practice in writing for a variety of purposes (Graham & Perin, 2007; National Council of Teachers of English and the International Reading Association, 1996). According to the Writing Framework for the 2011 National Assessment of Educational Progress (NAEP), “Throughout K–12 and higher education, as well as in the workplace, most required writing falls under the broad categories of . . . [writing] to persuade, to explain, and to convey experience” (ACT, 2007, p. 11).
- ◆ For English language learners, structured approaches to teaching writing have been found to be more effective than approaches without structure or scaffolds (Shanahan & Beck, 2006). In addition, teaching grammar and vocabulary as it is used in specific genres prepares English language learners to succeed with academic writing tasks (Schleppegrell, 1998).
- ◆ Global grammar errors, such as use of sentence fragments and incorrect verb tense, are serious errors that affect meaning and make students’ writing difficult to interpret. Through recursive grammar instruction focused on common global errors, students can learn and internalize the rules to avoid these errors (Kinsella, 2002).

## EXPERT 21 DELIVERS

Writing instruction in Expert 21 creates a solid foundation for success in writing on demand and constructed response writing tasks, as well as real-world applications such as multimedia presentations and Web pages. Each workshop includes a writing lesson related to the topic and Expert Question. These writing lessons instruct students in the three communicative purposes: expository, persuasive, and narrative. Students practice writing cause-and-effect, analytical, compare-and-contrast, problem-and-solution, persuasive opinion, and persuasive essays. They also learn to write personal narratives, fictional narratives, science fiction stories, and research papers. Sentence frames, graphic organizers, and other scaffolds for writing provide valuable supports for students with learning disabilities and many English language learners.

Each writing lesson scaffolds students in the steps of the writing process. Students are introduced to the elements of the particular writing form along with a model, and then they proceed through the steps of planning, drafting, revising, editing, and presenting their compositions.

Throughout, instruction in the characteristics or traits of effective writing is presented through models, practice, and self and peer assessment. Each writing lesson focuses on two of the following writing traits: ideas, organization, voice, sentence fluency, word choice, conventions, and presentation. After creating their compositions, students use scoring guides to review their own and their peers' work and evaluate their use of the writing traits, and then revise and reassess as appropriate. This explicit, systematic approach helps students learn the elements of good writing and builds their metacognitive understanding of the choices they make in communicating their ideas.

Students gain effective control of the conventions of written English when they are given frequent opportunities to explore them in their own writing, rather than in isolated exercises. Each writing lesson in Expert 21 includes grammar and usage lessons in the editing stage of the writing process. The Teacher's Edition provides explicit guidance on how to differentiate writing and grammar instruction for English language learners and students with different levels of writing proficiency.

In addition to the formal writing lesson, writing is incorporated into everyday activities in Expert 21. For example, students write to draw connections before reading between their personal experience and the reading selection, write responses in journals after reading, and use writing to analyze, synthesize, evaluate, and compare and contrast selections after each reading cluster. On 21<sup>st</sup> Century Skills pages, students use writing to present information, to think creatively, and to evaluate media, while in the Strategy Check, students synthesize the knowledge and skills they have learned in a final response to the Expert Question.

Students also create a wide variety of written products in the course of the Expert Projects, usually in the context of providing critical information to a specific audience. Expert Project writing experiences include transcripts, Web pages, proposals, advertisements, debates, multimedia presentations, and public service announcements.

The 21<sup>st</sup> Century tools included with Expert Space provide students with further support for building academic discipline around writing. A personalized calendar helps them schedule the key deliverables required for completing a research paper, and animated skill briefs teach outline creation, note taking, citations, and more.



## Technology That Builds Content Knowledge and Executive Function

### RESEARCH & EXPERT OPINION

- ◆ To build content area knowledge and expertise, students need supports to access both content and meaning (Rose, et al., 2002). Digital learning materials are valuable for addressing individual learners' needs because they can offer supportive features such as read alouds, alternative texts to match different instructional levels, and strategy prompts and vocabulary links embedded within the text (Proctor, Dalton, & Grisham, 2007; Rose et al., 2002).
- ◆ Executive function is defined as the organization of “subprocesses” that include setting goals, planning, organizing and prioritizing materials, managing time, being cognitively flexible, self-monitoring, and self-reflecting (Meltzer, 2007).
- ◆ To conduct projects effectively and efficiently, students require project support to help them develop time management/executive function skills, organizational skills, and study skills (Leu, 2000). Most students—but especially those with disabilities—need help in learning how to plan, organize, and express ideas (De La Paz, 1997; Gersten & Baker, 2001; Quenneville, 2001; Stein, Dixon, & Barnard, 2001; Troia & Graham, 2002).
- ◆ Extensive research across diverse groups of students and domains has shown that systematically teaching effective executive function strategies helps all students, particularly students with learning disabilities (Harris & Graham, 1992; Meltzer, 1993; Palincsar, Winn, David, Snyder, & Stevens, 1993; Pressley, Goodchild, Fleet, Zajchowski, & Evans, 1989).
- ◆ One effective strategy for gathering and organizing information and citing sources is note taking; however, numerous researchers have found that students of all ages are poor note takers (e.g., Boyle, 2001; Garcia-Mila & Andersen, 2007; Guinee & Eagleton, 2006; Hughes & Suritsky, 1993; Robinson et al., 2006).
- ◆ The need for support with note taking is likely to be even more pronounced in students with identified learning disabilities (LD), who, research shows, have difficulty “discriminating between important and not-so-important information ... organizing information in a meaningful way, and recording the information fluently and legibly” (Hughes & Suritsky, 1993).

## EXPERT 21 DELIVERS

Expert 21 helps students deepen their content knowledge online, develop nonfiction research and writing skills, and strengthen executive function through Expert Space, a powerful online digital curriculum and toolkit. Expert Space includes over 125,000 articles and 100,000 vetted Web sites, aligned to the most commonly taught subjects in science and social studies.

Students can use Expert Space to extend their exploration of Expert Questions through longer assignments and projects, gather resources related to the Expert Projects, and further build knowledge about a wide variety of topics. As they conduct research in Expert Space, students gain valuable practice with reading nonfiction, evaluating and analyzing sources, organizing information, and writing research reports. To ensure that all students can access the content, each Expert Space article is written at three reading levels, and multiple comprehension supports are available, including a read-aloud feature, an embedded dictionary, and an anchor video to help students build background knowledge about the topic. Students can access Expert Space from school or home, ensuring that they can find information, build skills, and complete assignments wherever there is an Internet connection.

Each student is provided with an individualized menu of interactive organizational tools to support them in developing these research skills and executive functions. For example, a personal calendar and assignment planning tool prompts students to set goals and track their progress while providing realistic benchmarks for success. Each time they log in, students receive an automatic status update and a “what’s next” prompt that supports them in developing time-management skills. As they do research, students can save relevant articles, Web links, note cards, and other work to a personal digital locker, helping them manage information and develop critical organizational skills. In addition, students can access animated “skill builder” videos that model skills such as evaluating online sources, note taking, and citing sources. By using these Expert Space tools as they conduct research online, students can develop the planning, organizational, and research skills they need to manage the wealth of information available to them, and to set and achieve their goals in work and in life.

*Expert Space includes tools to help develop students' organizational and planning skills.*



## **Building Mental Models Through Anchored Instruction**

### RESEARCH & EXPERT OPINION

- ◆ Background, or prior, knowledge is one of the critical factors underlying reading proficiency (Torgesen, Houston, Rissman, Decker, Roberts, Vaughn, Wexler, Francis, Rivera, & Lesaux, 2007). Prior knowledge of a subject enhances reading comprehension because it helps the reader understand vocabulary, tie ideas in the text together, clarify details, and fill in logical gaps (Willingham, 2009).
- ◆ Building background knowledge facilitates knowledge acquisition, because people construct new knowledge and understanding based on their existing knowledge (Bransford et al., 2003; Willingham, 2009).
- ◆ Anchored instruction provides a situation or realistic context that allows students to solve problems by using prior knowledge or applying newly learned skills and concepts (Moore, Rieth, & Ebeling, 1993). It has also been found to be highly motivating to students (Brown, Collins, & Duguid, 1989).
- ◆ With videos, students process information through both visual and auditory channels, aiding memory and retrieval (Metiri Group, 2008; Heo, 2007). Video-based anchored instruction improves student motivation (Heo, 2007), comprehension, and achievement (Heo, 2007; Rose, Hasselbring, Stahl, & Zabala, 2005; Strangman, Hall, & Meyer, 2003).
- ◆ Research demonstrates that dynamic images and sound are especially helpful for students with learning disabilities and other students with limited background knowledge (Hasselbring & Glaser, 2000). “Video provides learning disabled students with an authentic base of experience in abstract domains. Multiple representations of video information make abstract information more concrete to these students” (Heo, 2007).
- ◆ Research shows that English language learners’ reading comprehension improves when teachers activate and draw upon students’ background knowledge in relation to the text (Saunders, O’Brien, Lennon, & McLean, 1998; Schifni, 1994; Ulanoff & Pucci, 1999).

## EXPERT 21 DELIVERS

Each Expert 21 workshop anchors instruction at the outset with the Expert Question, which establishes a relevant, meaningful reason to read. The question helps students understand why they are reading before they engage with the texts, and it grounds the inquiry in real-world issues.

Students then watch an anchor video that provides an introduction to the expert and a preview of the workshop readings. These videos provide students with important background information and help them build mental models to aid comprehension as they read. The *21Book* guides students in setting a purpose for viewing the Anchor Media, and teacher questions help students draw connections among the Anchor Media, the workshop reading selections, and expert applications in real life.

After viewing the media, students complete an opinionaire to reinforce background knowledge before beginning to read. The students revise their opinionaires at the end of the workshop, helping them to recognize and solidify their learning. Students who need additional time to build background knowledge and draw connections with the reading, such as students with learning disabilities and some English language learners, can view the Anchor Media again at their own pace in Expert Space.

21


Expert Knowledge

## Does the thrill of adventure outweigh the risks?

Adventure, beauty, and a desire to test themselves drive adventurers on their quests. This workshop celebrates some great explorers and the adventures they've taken.

**▶ Anchor Your Knowledge**

Watch the Anchor Media, "Extreme Explorers," and meet Jimmy Chin, a photographer who risks his life to bring pictures of adventurers back home.



**⊙ Opinionaire**

Before this workshop, put a checkmark to the left of each statement in the chart below that you agree with. Then, come back **after** the workshop. Put a check next to the statements you still agree with.

WORKSHOP GOALS

To gain expert knowledge about explorers, you will

- study **informational texts** about the achievements of famous explorers.
- read **literature** about some great classic adventures.
- learn important **skills** and **strategies** to help you understand what you read.
- develop **21<sup>st</sup> Century Skills** to understand how to **analyze errors** and **analyze risk**.
- write a **compare-and-contrast essay** about explorers.
- do an **Expert Project** to analyze what went wrong during an expedition.

BEFORE Workshop	TOPIC: <b>Exploring</b>	AFTER Workshop
<input type="checkbox"/>	You must push yourself to the limit to learn who you really are.	<input type="checkbox"/>
<input type="checkbox"/>	The thrill of adventure is worth any risk.	<input type="checkbox"/>
<input type="checkbox"/>	No matter how many times you fail, you should always try again.	<input type="checkbox"/>
<input type="checkbox"/>	The limits you set for yourself are only in your mind.	<input type="checkbox"/>
<input type="checkbox"/>	Surviving harsh environments is more of a mental challenge than a physical one.	<input type="checkbox"/>
<input type="checkbox"/>	The most beautiful places in the world are the hardest ones to get to.	<input type="checkbox"/>
<input type="checkbox"/>	When something goes wrong during an expedition, it usually couldn't have been prevented.	<input type="checkbox"/>
<input type="checkbox"/>	Any accident can be avoided with good planning.	<input type="checkbox"/>
<input type="checkbox"/>	There's not much left of this planet that really needs exploring.	<input type="checkbox"/>

*Anchor activities build and activate background knowledge before reading.*



## Universally Accessible, Differentiated Instruction

### RESEARCH & EXPERT OPINION

- ◆ Universal Design for Learning (UDL) is a set of principles that make learning universally accessible by creating flexible goals, methods, materials, and assessments to accommodate all learners' differences, including learning disabilities, physical challenges, and sensory impairment. Instructional materials designed with UDL principles increase student access to the curriculum by providing:
  - ❑ Multiple means of content representation, to provide students a variety of ways to learn;
  - ❑ Multiple means of expressing learned content, to offer students alternatives to show what they know;
  - ❑ Multiple means of engagement with content, to motivate and challenge students appropriately (Rose et al., 2002).
- ◆ UDL improves access to and participation in the general education curriculum for all students, including those with learning disabilities (Hitchcock & Stahl, 2003; National Joint Committee on Learning Disabilities, 2008).
- ◆ Differentiated instruction aims to optimize learning opportunities and outcomes for all students by tailoring instruction to meet their current level of knowledge and prerequisite skills (Bickel, 1998; Bos & Vaughn, 2002; Simmons, Kame'enui, Coyne, & Chard, 2002). Differentiating instruction can maximize growth for students (Boardman et al., 2008; Bos & Vaughn, 2002; Drapeau, 2004; Simmons et al., 2002), including struggling readers (Biancarosa & Snow, 2004; Duffy, 2008; Torgesen, Houston, & Rissman, 2007; Vaughn & Denton, 2008).
- ◆ Using differentiated instruction is important in middle school because students at this age arrive with different learning abilities and different preparation for learning (Torgesen & Miller, 2009).
- ◆ In inclusive classrooms, special needs students require differentiated group and individualized teaching (Duffy, 2008; Kauffman, Landrum, Mock, Sayeski, & Sayeski, 2005; Vaughn & Denton, 2008).
- ◆ Scaffolded instruction helps older students with learning disabilities become independent learners (National Joint Committee on Learning Disabilities, 2008; Kame'enui, Carnine, Dixon, Simmons, & Coyne, 2002; Vaughn & Denton, 2008).

## EXPERT 21 DELIVERS

Expert 21 materials are designed to reflect the principles of Universal Design for Learning, ensuring equal access for all students. Multiple means of content representation are provided through video and audio experiences, graphics and images that accompany readings, and online and paper-based texts. Students are allowed multiple means of expressing what they have learned, including whole- and small-group discussion, journal writing, graphic organizers, written compositions, Expert Projects, and both digital and hard copy assessments. Expert 21 instruction also engages students in multiple ways, through technology and through whole-group, small-group, and individual activities. The Expert Questions that emphasize personal, social, global, and content area literacy, and the wide variety of high-interest, age-appropriate fiction and nonfiction readings, appeal to learners with varying interests, backgrounds, and reading levels.

Expert 21 includes extensive embedded support for differentiating instruction to address individual students' needs. Throughout each workshop, the Teacher's Edition provides explicit guidance for teachers in differentiating and scaffolding instruction for Response to Intervention Tiers 1, 2, and 3, English language learners, students in special education, and advanced learners. Literature Circle options provide suggestions of novels with similar themes but different reading levels to allow students with varying reading levels to engage in discussion. Teachers are also directed to the Scholastic Achievement Manager (SAM) for additional resources for differentiating instruction.

Expert Space provides additional differentiated support and scaffolding to help every student be successful. All major *21Book* readings are available on Expert Space for students to read again at their own pace, with the support of a Read-Aloud feature or highlighted text feature if they need it. Each anchor video is also available to be watched again online. When students do research in Expert Space, every xSpace includes another anchor video that helps students build background knowledge before reading. Every Expert Space article is leveled according to the Lexile® framework to help match students to text they can comprehend. Articles within each xSpace are presented on three reading levels so that all students can study the same topic using the same resource. Many Expert Space articles are available in Spanish, and an embedded dictionary allows students to build vocabulary by looking up any word in an article.

The Center for Applied Special Technology (CAST) reviewed Expert Space and verified that it aligns with the principles of Universal Design for Learning.

The diagram illustrates three tiers of support, each represented by a triangle with levels 1, 2, and 3. Below each tier is a text box describing a strategy:

- Tier 1 (Green Triangle):** **Use Marked Text** Remind students to refer to any text markings made while reading selections in order in the graphic organizer.
- Tier 2 (Yellow Triangle):** **Understand the Graphic Organizer** Have students circle the word of the directions. *Example: the selections contain many interesting details. To complete the diagram, I'll need to choose one story that best describes the risks of exploring.*
- Tier 3 (Red Triangle):** **Unlock the Prompt** Suggest that students create a chart that lists the pros and cons of high-risk exploration. Have them use the chart to write their response.

Below the Tier 3 text box is a table:

High-Risk Exploration	
Pros	Cons
exciting	dangerous

To the right of the tiers is a box labeled **ELL** (English Language Learner) with the following text:

**Model Academic Language** Provide sentence frames to encourage students to use academic language in their **CRITICAL THINKING** answers.

*In my opinion, \_\_\_\_\_.*

*I find this adventurer to be the best choice because \_\_\_\_\_.*

*These details support my opinion that \_\_\_\_\_.*

*Point-of-Use Guidance in Teacher's Edition for Differentiating Instruction*



## Engagement and Motivation

### RESEARCH & EXPERT OPINION

- ◆ Torgesen et al. (2007b) identify engagement and motivation as one of the critical factors underlying reading proficiency.
- ◆ Research has demonstrated that motivation is a strong predictor of reading comprehension in students with learning disabilities (Heo, 2007; Sideridis, Mouzaki, Simos, & Protopapas, 2006).
- ◆ Students gain academic confidence and increased motivation when they experience daily academic success (Pressley, Gaskins, Solic, & Collins, 2006).
- ◆ Setting clear goals and expectations increases motivation by encouraging student involvement in and responsibility for their own learning (Ames, 1992).
- ◆ Creating technology environments that heighten students' motivation to become independent readers and writers can increase their sense of competency (Kamil, Intrator, & Kim, 2000).
- ◆ When students relate what they are reading to their personal experiences, they become better connected with the characters and content of the materials they read and, therefore, are more motivated to read (Center for Research on Education, Diversity & Excellence, 1999).
- ◆ Inquiry-based learning can increase student engagement. "Guiding questions provide 'curricular coherence' (Applebee et al., 2000) because all work relates to a clear central purpose, makes students active participants in disciplinary conversations, and suggests meaningful activities, writing, and culminating projects" (Wilhelm, 2007, p. 9).

## EXPERT 21 DELIVERS

Expert 21 is designed to engage young adolescent learners by establishing a reason to read from the outset. The Expert Questions provoke students' curiosity and motivate them to find out more. The Anchor Media and pre-reading activities build students' background knowledge so that they can more easily access the content and feel successful when they begin to read. The different literary and nonfiction genres represented in the Expert 21 reading selections—including news articles, science and social studies features, biographies, fiction, poetry, and plays—appeal to a wide range of interests and learning styles. Students can recognize themselves in the multicultural readings that reflect ethnic, cultural, and linguistic diversity and focus on topics relevant to their lives.

The experts introduced at the beginning of each workshop provide inspiring models of people who are engaged in work relevant to the skills and content taught in the workshop. Each expert is also linked to the U.S. Department of Education's career clusters. Career connections such as these, integrated throughout each workshop, help students see how classroom learning can be applied in the real world, reflect a wide variety of student interests, and motivate students to set and pursue their own career goals.

As students progress through the arc of inquiry, specific instructional routines are used throughout Expert 21 to teach reading, writing, vocabulary, and critical thinking, and to encourage engagement and collaboration. For example, the Think (Write)-Pair-Share engagement routine is a flexible strategy that creates a classroom of active, engaged, and motivated learners by facilitating reflective discussion and peer interaction. Other examples include routines for partner reading, peer feedback in writing, idea wave for engagement, and the jigsaw approach to collaborative work. These routines provide students with a familiar and predictable structure for learning and interacting with peers, which can help them feel successful. These structures can be particularly important to building the confidence and encouraging participation of students with learning disabilities and English language learners.

In order to ensure that students of all proficiency levels have the support they need to experience success, each workshop follows a “model, mentor, monitor” structure that moves from teacher-directed instruction, to teacher-mentored activities, to monitoring of independent activities. Additionally, the readings across course levels have been constructed to move from highly scaffolded texts to independent reading, so that students sustain motivation as they are carefully guided toward independent success.



## Teaching Support and Professional Development

### RESEARCH & EXPERT OPINION

- ◆ “[S]uccessful inquiry-based approaches require planning and well-thought-out approaches to collaboration, classroom interaction, and assessment” (Barron & Darling-Hammond, 2008, p. 55).
- ◆ Ongoing professional development is central to an effective Response to Intervention approach in order to help educators use data and best practices to maximize the learning of all students (Duffy, 2008).
- ◆ Professional development is pivotal for creating informed learning environments for older students with learning disabilities, for providing quality instruction, and for developing the expertise that schools need (National Joint Committee on Learning Disabilities, 2008).
- ◆ Establishing trusting, respectful relationships with students is a critical part of creating an effective learning environment (International Center for Leadership in Education, 2009).
- ◆ Although struggling readers tend to become more disengaged from literacy in middle school, context is very important to adolescent readers. When they feel a sense of belonging and support from peers and teachers, struggling middle school readers may show increased engagement with and enthusiasm for reading (Guthrie & Wigfield, 2000).
- ◆ “To develop a curriculum that is relevant to this generation, educators need to acknowledge and respect the skill, attitudes, and knowledge that students bring with them to school and build on those to ensure success in the academic disciplines” (Considine et al., 2009, p. 479).

## EXPERT 21 DELIVERS

Expert 21 recognizes that as demands on students are changing, so too are the demands on teachers. The 21<sup>st</sup> Century classroom is a dynamic, challenging, and engaging environment in which the teacher plays the role of instructor, mentor, guide, and facilitator. Inquiry-based learning invites a relationship-centered approach to teaching that includes dynamic direct instruction, increased whole-group discussion and debate, small-group collaborative work, and one-on-one consultation. Meanwhile, to comply with Response to Intervention efforts and federal reporting regulations, teachers must meet the challenge of differentiating instruction for students with varying instructional needs, closely monitor their achievement, administer regular assessments, and be held accountable for students' progress. Expert 21 is designed to provide teachers with the support and professional development they need to deliver the dynamic, differentiated, direct literacy instruction that their students require to be successful in the 21<sup>st</sup> Century.

Through the Expert 21 Teacher's Edition, Professional Development Guide, Implementation Guide, and 21<sup>st</sup> Century ToolKit Teaching Guide, teachers can find extensive support for creating a rigorous, collaborative, and responsive classroom environment. Expert 21's instructional model allows teachers to develop positive relationships with students and closely observe individual strengths and weaknesses as they engage with students in whole- and small-group exploration of topics important to students' lives.

During lessons, the Teacher's Edition provides point-of-use support for differentiating instruction and supporting students' small-group work. Differentiated Support pages in the Teacher's Edition and the 21<sup>st</sup> Century ToolKit Guide offer detailed lessons that can help the teacher further extend learning and reinforce specific skills and concepts for students who need it. Informative assessments and scoring guides embedded throughout each workshop provide teachers with rich progress-monitoring data to inform instruction.

Automated reporting from a Web-based management system, the Scholastic Achievement Manager (SAM) supports teachers in differentiating instruction, monitoring progress, and implementing a Response to Intervention approach. For example, the Summary Skills Report aggregates skill mastery at the classroom level, providing teachers with valuable information about how to group students and indicating skills that require extra emphasis during both whole- and small-group time. Reports are linked to over 500 additional resources in SAM for differentiating instruction.





Expert 21 provides comprehensive professional development resources for teachers. The Professional Development Guide includes research-based information and step-by-step instructions related to instructional routines, literature circles, Expert Space, and assessment and reporting. Scholastic also offers start-up training for teachers, including sessions in Expert 21 instruction, assessment, using the Web-based technology, and managing a 21<sup>st</sup> Century classroom. Follow-up training is also available, with seminars in differentiating instruction, inquiry-based learning, using Expert Space, and managing the instructional model.



## Comprehensive Assessment

### RESEARCH & EXPERT OPINION

- ◆ Regular assessment and progress monitoring are vital to documenting student growth and informing instruction (Fisher & Ivey, 2006; National Joint Committee on Learning Disabilities, 2008; Stecker, Fuchs, & Fuchs, 2005; Torgesen, 2002).
- ◆ Close progress monitoring such as Response to Intervention (RTI) can potentially result in fewer students incorrectly identified as having learning disabilities when they may be struggling due to other reasons (Cortiella, 2005; Duffy, 2008).
- ◆ Data from assessment of adolescents with possible learning disabilities should provide a clear profile of students' strengths, weaknesses, and literacy needs, and should result in prescriptions for specific targeted instruction (National Joint Committee on Learning Disabilities, 2008; Vaughn & Denton, 2008).
- ◆ Effective classroom instruction for English language learners begins with systematic assessment of students' strengths and needs (Francis et al., 2006).
- ◆ When students are informed of the incremental gains they are making, they better understand and acquire a sense of ownership over their own academic growth (Hupert & Heinze, 2006).

WHEN	BEGINNING OF THE YEAR	DURING EACH WORKSHOP	END OF WORKSHOP	MID-YEAR	END OF YEAR
WHY	<b>Baseline Assessment</b> Suggested placement for Expert Space reading levels; baseline assessment for progress monitoring	<b>Ongoing Progress Monitoring</b> Assess ongoing acquisition of skills taught in Expert 21 and diagnose strengths/weaknesses to inform differentiation	<b>End-of-Workshop Assessment</b> Measure progress and mastery of Expert 21 curriculum	<b>Progress Monitor</b> Use baseline assessment to measure reading growth	<b>Progress Monitor</b> Use baseline assessment to measure reading growth
WHAT		<b>Informative Assessment</b> <ul style="list-style-type: none"> <li>✓ Comprehension</li> <li>✓ Literary Analysis</li> <li>✓ Navigating Text</li> <li>✓ Vocabulary/Word Analysis</li> <li>✓ Fluency</li> <li>✓ Grammar</li> <li>✓ 21 Book Progress Tests</li> </ul> <b>21<sup>st</sup> Century Assessment</b> <ul style="list-style-type: none"> <li>✓ Performance Evaluation: 21<sup>st</sup> Century Skills</li> <li>✓ Portfolio Evaluation: Writing Assignment</li> </ul>	<b>Online Assessment</b>   <b>Workshop Wrap-Up</b> <ul style="list-style-type: none"> <li>✓ Strategy Check</li> </ul> <b>21<sup>st</sup> Century Assessment</b> <ul style="list-style-type: none"> <li>✓ Project Evaluation: Expert Projects</li> </ul>		

*A Comprehensive Suite of Assessment Tools*

## EXPERT 21 DELIVERS

At the beginning of the school year, Expert 21 teachers administer the Scholastic Reading Inventory (SRI), a scientifically based and validated online assessment that uses reading passages and accompanying questions to determine a student's Lexile® score or reading level. SRI results are used to determine students' baseline Lexile reading levels and to match students to the appropriate Literature Circle and Expert Space reading level. The SRI is administered again at mid-year to determine students' reading progress. At the end of the year, teachers administer the SRI again to determine overall reading growth.

The *Expert 21 Teacher's Edition* includes several Informative Assessments throughout each workshop to help teachers diagnose students' strengths and weaknesses and aid teachers in differentiating instruction. These stopping points guide teachers in informally assessing comprehension, literary analysis, navigating text, vocabulary, word analysis, fluency, grammar, and punctuation. In addition to using classroom observations, teachers diagnose students' strengths and weaknesses by regularly reviewing their text markings and written responses in the *21Book*. As they progress through a workshop, teachers can record results on the 21Book Grading Chart, available on the Scholastic Achievement Manager (SAM). In addition, two curriculum-embedded 21Book Progress Tests per workshop help teachers assess students' understanding of the readings and application of key skills and strategies. Once sufficient data has been collected, teachers can use suggested SAM resources, including Differentiated Instruction Lessons and SAM practice pages, to differentiate instruction.

Teacher and Student Scoring Guides, or rubrics, are used to measure acquisition of 21<sup>st</sup> Century Skills in several different contexts. First, each workshop includes two direct instruction lessons on 21<sup>st</sup> Century Skills related to the workshop theme. Scoring guides are used to assess students' work in these lessons. Second, for each writing assignment, students and teachers use the Traits of Writing Scoring Guide to assess students' use of key qualities of effective writing. Third, for the Expert Project, an Expert Project Scoring Guide is used to assess students' use of the two 21<sup>st</sup> Century Skills targeted in the workshop. These rubrics not only provide additional informal assessment opportunities, but they also provide students with clear performance guidelines and involve them in evaluating and taking ownership over the quality of their own work.

Each Expert 21 workshop includes three summative assessments to evaluate students' acquisition of key skills: the Expert Project, the Strategy Check, and the xSkills test. The Expert Project presents students with the opportunity to apply the knowledge and skills accumulated during the workshop and demonstrate facility with key 21<sup>st</sup> Century Skills. The Strategy Check, a combination of multiple choice and short answer questions, provides an opportunity at the end of each workshop for teachers to teach a variety of test-taking skills and strategies and to assess whether any key concepts need re-teaching before students take the xSkills test.

The xSkills Tests are the online final assessment for each Expert 21 workshop. There are eight xSkills tests per course, with printable versions available on SAM. These tests assess the core skills taught in each workshop and a selected set of "recursive" skills taught in previous workshops. Test scores and skills data from the tests help teachers evaluate students' progress, differentiate instruction, and determine grades. Each xSkills test assesses reading, vocabulary, grammar, and writing through 40 multiple-choice questions, three constructed-response items, and one writing prompt. The xSkills test items reflect the kind of variety and complexity found on rigorous state tests. The reading passages on each test are divided evenly between literary and informational texts, and they encompass a range of passage length and Lexile levels that is appropriate for each course level. In addition, many of the test items require students to use higher-order thinking skills; approximately 30–50 percent of the items on each test represent a high level of cognitive complexity.

## **Conclusion**

While there are many competencies that students will need to be successful, productive citizens in the 21<sup>st</sup> Century, literacy is at the core. As outlined in this paper, Expert 21 provides middle school and beginning high school students with necessary literacy skills through a program grounded in a robust base of research on adolescent literacy instruction, engagement, and learning. Expert 21's inquiry-based design provides students with a real-world purpose for learning and helps them build deep conceptual understandings of their world as they read. The program's even mix of high-interest informational and literary texts integrates English language arts with content-area literacy, while direct instruction in 21<sup>st</sup> Century Skills—reinforced through the Expert Space Digital Curriculum and the 21<sup>st</sup> Century ToolKit—builds essential competencies that students will use in college, career, and life. Throughout, differentiated support in the lessons and in Expert Space helps ensure that all learners get the scaffolding they need to be successful. Altogether, Expert 21 combines research and best practices to maximize students' learning and prepare them with the literacy expertise they need to thrive in the 21<sup>st</sup> Century.

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