

Foreword

by Bob Pearlman

“High school is boring,” says Chicago Mayor Richard Daley in a front-page headline in the September 18, 2003, *Chicago Tribune*. “Students are apathetic,” a rural school district administrator from central Louisiana told me recently.

We are now fifteen to twenty years into the standards movement. State after state has enacted a system of content standards and testing in core subjects. Schooling has gotten more boring, and limited, with its focus on content, core subjects, basic skills, and content testing. The unfortunate result of this limited assessment and accountability system has been to identify, and shame, the same schools everyone knew were failing previously. And the latest results from the National Assessment of Educational Progress (October 2009) shows that there was more overall student progress in the six years prior to the No Child Left Behind law than in the six years following the passage of this law.

Standards—what students should know and be able to do—should have worked to enable, not impede, innovative learning approaches, as James Bellanca points out in this wonderful teacher’s guide, *Enriched Learning Projects: A Practical Pathway to 21st Century Skills*. All the early 1990s work by the math, science, and other subject-matter associations aspired to just that. However, once the states took control, they turned standards into fodder for basic skills accountability only.

Project-based learning has a long history over the past century. Traditional education, or teacher-directed whole-group learning, holds sway, but project-based learning keeps coming back. And each time it does, it is implemented with more rigor—with stronger methodology, practice, innovative tools, and assessment.

Bellanca has devoted a career to helping teachers acquire the skills to be effective in the classroom. He is the author of numerous books—on cooperative and collaborative learning, graphic organizers, and other instructional strategies—and the publisher of many teacher “how to” books.

Bellanca recounts his own personal history as a project-based learning teacher long before he moved into a career as a writer and publisher of practical education

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books. Most compelling was his time at the Center for Self-Directed Learning, a small school-within-a-school in Illinois, from 1974 to 1984. There, the teachers—known as “learning facilitators”—fostered student self-assessment, student portfolios, and the exhibition of “products” for evidence of student mastery.

Every decade brings its own fresh insights and powerful new tools and methods. New e-tools began to emerge in the 1980s, standards emerged in the 1990s, and in the 2000s, 21st century skills emerged. These skills go beyond content knowledge to include communication, collaboration, critical thinking, creativity, technology, global awareness, cross-cultural skills, and more, as identified by the Partnership for 21st Century Skills (2002).

Bellanca knows that teachers want to be effective with their students. Nothing pleases them more than seeing their students learn and demonstrate their learning. Bellanca incorporates all the best new tools and methodological improvements in this worthy teacher’s guide.

From 2001–2009 I traveled the United States helping local education, civic, and business leaders envision a new, more powerful 21st century learning model, that of New Technology High School. The New Tech model features 100 percent project-based learning, one-on-one computing, and assessment of 21st century skills. Whether I went to East Los Angeles, rural central Louisiana, or rural, suburban, or urban Indiana, I heard the same refrain: “We need to prepare our students to be knowledge workers and citizens of the future. That means 21st century skills. That’s why we need project-based learning.”

I personally have had two distinct passions regarding project-based learning: (1) to help individual teachers change their classroom practice to project-based learning, and (2) to engage students and give them 21st century skills.

During most of my career I have dealt with helping individual teachers. In the late 1970s and early 1980s I pioneered in using personal computers in education and helped teachers to leverage these new tools to change instruction. At the Autodesk Foundation, from 1996–2000, our team developed a national network of project-based learning practitioners. Two thousand people attended our year 2000 Kids Who Know and Do Annual Conference of Project-Based Learning.

But then my second passion also became possible, and starting in 2001 we assembled a school development team, the New Technology Foundation, based in Napa, California, to assist communities nationally in launching new 21st century high schools.

James Bellanca addresses both my passions—classroom practice and 21st century skills. He writes, “I have designed *Enriched Learning Projects* to be a useful tool for teachers who appreciate the value and benefit of learning experiences

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based in projects, who want the best learning for their students, and who value 21st century learning” (page xx).

Project-based learning is hard to do well. To be effective, it requires the design of projects that meet and bring to life both state standards and 21st century skills. It requires appropriate benchmarks, interim and final assessments, and significant teacher facilitation. An effective project gets better over time, refined through both execution in the classroom and scaffolding activities.

Project-based learning is getting better and stronger in many countries. In the past, it has not always been implemented effectively, and this has caused new practitioners to rename or rebrand it to emphasize the superior practices and quality of the newer approaches. In Australia they call it *rich tasks*. At Ninestiles School in Birmingham, England, it's called *reality-based learning*. At Homewood School in Kent, England, it is *total learning*.

Bellanca rightly calls his project-based learning *enriched learning*. He really upgrades the methodology and practice of project-based learning, which in the past has often focused on the experiential. He doesn't abandon this goal; instead he gives the teacher reader new practices and methods to ensure student success. His important new approaches include the use of digital tools and teacher's mediation skills to support student critical thinking and problem solving

Enriched Learning Projects is an outstanding companion to the Buck Institute of Education's *Project Based Learning Handbook* (Markham, Larmer, & Ravitz, 2003). This handbook effectively guides teachers through project planning, assessment, and implementation. Bellanca does this and more. His book is an intellectual dialogue direct with you, as a teacher, showing you not only how to design, assess, and implement projects, but also how to directly support your students with mind tools and mediation of critical thinking.

Bellanca identifies five attributes of the enriched learning model: 1) it is research-based; 2) it uses technology as a tool to promote students' learning efficiency; 3) it involves self-assessment (students' thinking about their thinking); 4) it involves learning *from* doing; and 5) it intentionally includes 21st century skill development. He then shows how to design an enriched learning project through backwards design. He brings readers up to date on new technology tools that support students and on teacher implementation of enriched learning projects.

But where he really makes a contribution to the field is in those areas that he has long studied. In chapter 4, "Which Instructional Strategies Count Most?" Bellanca articulates the three phases of enriched learning projects:

1. Gather information
2. Make sense
3. Communicate results

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Bellanca shows high-yield strategies that assist students in doing research, in making sense of their findings, and in showing their new understanding. These include the use of graphic organizers, such as KWL (what we *know*, what we *want* to know, what we *learned*), concept maps, fishbone charts, sequence charts, problem-solving charts, and written summaries.

Teachers, in Bellanca's view, are mediators of quality thinking. Bellanca translates Reuven Feuerstein's work to education and identifies the six essential cognitive functions that are most necessary for the success of projects. He shows teachers how to use questioning and suggestions—what he calls mediation skills—to help students keep focus, be flexible, and make connections.

Bellanca also stresses practices that we have found highly effective in the roll-out of New Tech schools nationally. One is the establishment of a collaborative classroom culture to support a project-based learning environment, and a second is an emphasis on student self-assessment. "Projects give you an opportunity to shift the primary responsibility for learning and its assessment onto the students' shoulders," he writes. "Although not a quick and easy task, this shift is possible and desirable. Making the shift so that students take the lead in assessing what and how they are learning enables you to enrich their learning" (page 152).

Finally, Bellanca reclaims the standards movement and shows that the enriched learning project model is the best way for students to learn, and master, the standards. He points out that most state standards go beyond content and call for students to explain, verify, analyze, make generalizations, predict, forecast, estimate, and draw conclusions—mental operations that fit under the generic label of critical thinking.

Most implementation of standards in the United States has stressed rote learning and neglected the thinking operations identified in the standards. Bellanca advises teachers that "by aligning your project with the process element of the standards, you can focus students on explicit development of those critical and creative thinking skills embedded in the standards" (page 117).

Bob Pearlman is a 21st Century School Development consultant. He is the former director of strategic planning for the New Technology Foundation and former president of the Autodesk Foundation (email: bobpearlman@mindspring.com).

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