

REINVENTING PROJECT-BASED LEARNING

*Your*

# FIELD GUIDE

*to real-world projects in the digital age*

SECOND EDITION

*Suzie Boss  
Jane Krauss*



# Contents

Preface to the Second Edition.....	xiii
<b>Introduction</b> “I’ll Never Go Back”.....	1
Starting Your Journey.....	4
How to Use This Book: Turn It into Your Own Project.....	7
<b>Your Turn:</b> Where Are You Starting?.....	11

## Section One

### ANTICIPATION

<b>Chapter 1</b> Mapping the Journey—Seeing the Big Picture.....	15
<b>Side Trip:</b> Tour the Blogosphere.....	18
Teachers Are Learners, Too.....	20
<b>Spotlight:</b> The New Tech Network.....	21
Getting Ready.....	24
Your Investment.....	28
What’s Next?.....	29
<b>Technology Focus:</b> Social Bookmarking.....	29
<b>Your Turn:</b> Start with the Big Picture.....	31
<b>Chapter 2</b> Creating a Professional Learning Community.....	33
Change Happens.....	34
<b>Spotlight:</b> Changing Their Worldview.....	37
School as a Learning Organization.....	38
<b>Spotlight:</b> High Tech High.....	40
<b>Side Trip:</b> Project-Tuning Protocol.....	45
Communities within Communities.....	47
<b>Technology Focus:</b> Online Communities.....	49
How to Start?.....	51
<b>Technology Focus:</b> QuadBlogging.....	53
Get Your Feet Wet.....	54
<b>Your Turn:</b> Reading Group.....	57

## Section Two

### PACKING UP

<b>Chapter 3</b> Imagining the Possibilities .....	61
What Is Most Important? .....	62
What's the "Big Idea"? .....	63
<b>Technology Focus:</b> Create a Wiki .....	64
Planning for Rigor and Digital-Age Skills .....	67
Digital-Age Literacies—A Synthesis .....	68
Learning Dispositions .....	71
<b>Spotlight:</b> Thinking Aloud about Learning Dispositions .....	72
Keep Your Students in Mind .....	73
Essential Learning with Digital Tools and the Web .....	74
<b>Your Turn:</b> Develop a Conceptual Framework for Your Project .....	77
<b>Chapter 4</b> Strategies for Discovery .....	79
Reviewing Projects .....	80
Overcoming Pitfalls .....	81
Designing Terrific Projects: Getting Started .....	84
<b>Side Trip:</b> Project Design Resources .....	86
The Best Projects Share Important Features .....	87
Where Project Ideas Come From .....	88
<b>Your Turn:</b> Design Your Project .....	90
<b>Technology Focus:</b> Collect and Track Assets Online .....	93
<b>Chapter 5</b> Making Assessment Meaningful .....	95
Authentic Assessments in PBL .....	96
Plan for Summative Assessment .....	98
Science-Fiction Short Story Assignment .....	101
Plan for Formative Assessment .....	112
<b>Spotlight:</b> Just-in-Time Feedback .....	124
<b>Technology Focus:</b> Online Grade Books .....	125
<b>Your Turn:</b> Review Work Samples .....	126
<b>Chapter 6</b> Project Management Strategies for Teachers and Learners .....	127
<b>Side Trip:</b> Be Resourceful .....	128
Gathering Resources: What (and Who) Will You Need? .....	129
<b>Spotlight:</b> Creating Opportunities .....	131
Milestones and Deadlines: It's About Time .....	132
Team Planning .....	133
<b>Spotlight:</b> Teams That Maximize Results .....	135

<b>Technology Focus:</b> Project Management with Technology .....	136
Online Project Spaces .....	138
<b>Your Turn:</b> Set Up a Project Space .....	140

### Section Three

## NAVIGATING THE LEARNING EXPERIENCE

<b>Chapter 7</b> Project Launch—Implementation Strategies .....	145
Laying the Groundwork .....	146
Get Minds Ready .....	147
Ideas for Generating Interest and Promoting Inquiry .....	148
Teach the Fundamentals First .....	151
Prepare for Technology .....	153
<b>Technology Focus:</b> Screencasting .....	155
Promote Inquiry and Deep Learning .....	159
Build Toward Information Literacy: Less Looking, More Thinking .....	162
<b>Your Turn:</b> How to Tell Your Story .....	163
<b>Chapter 8</b> A Guiding Hand—Keeping a Project Moving .....	165
Make Classroom Discussions More Productive .....	167
<b>Spotlight:</b> Expeditionary Learning .....	173
Optimize Technology .....	177
<b>Technology Focus:</b> Podcasting .....	179
Help with Troubleshooting .....	180
Manage Conflict .....	181
<b>Your Turn:</b> Analyze Your Classroom Conversations .....	182

### Section Four

## EXPANDING YOUR CIRCLE

<b>Chapter 9</b> Building Connections and Branching Out .....	185
Connecting with Experts .....	187
Expanding the Learning Circle .....	189
<b>Technology Focus:</b> Online Collaboration .....	192
Communicating Findings .....	193
<b>Spotlight:</b> EAST Initiative Model .....	194
Let Students Lead .....	198
Extending the Benefits .....	199
<b>Your Turn:</b> Where Next? .....	200

<b>Chapter 10</b> Celebrating and Reflecting .....	201
Reflect on the Journey .....	202
Plan Your Reflection Questions .....	203
Elaborate: Where to Now? .....	203
Build Tradition and Identity: “We Are the School Where Kids Get to ... ” .....	205
<b>Technology Focus:</b> Photo Sharing .....	206
<b>Spotlight:</b> Starting a “Visual Conversation” .....	207
Celebrate! .....	209
Display Student Work .....	209
Year-in-Review Retrospective to Celebrate Learning .....	210
<b>Your Turn:</b> Plan a Celebration .....	210

## Section Five

### UNPACKING

<b>Chapter 11</b> Bringing It Home .....	215
Capitalize on Your Investment .....	216
Critique with Colleagues .....	217
Share Your Insights .....	218
Become a Resource for Your Colleagues .....	220
Enter a Contest .....	220
Enjoy the Journey .....	221
<b>Your Turn:</b> Join the Blogosphere or Twittersphere .....	221
<b>Chapter 12</b> On the Horizon—PBL Forecast .....	223
Forecast: Deeper Learning through PBL .....	225
Forecast: Achieving Scale—Thoughtfully .....	226
Forecast: Developing the PBL Mindset .....	227
Forecast: Reconsidering When and How Students Learn .....	228
Forecast: Finding More Ways to Learn Together .....	229
A Final Story .....	230

## Appendixes

Appendix A	Essential Learning with Digital Tools and the Web.....	233
Appendix B	ISTE Standards for Students.....	247
Appendix C	Reading Group Guide.....	251
Appendix D	Bibliography.....	255
	References.....	255
	Additional Readings.....	259
	Index.....	261

© Hawker Brownlow Education

## Introduction

# “I’ll Never Go Back”

**FOR YEARS**, a high school humanities teacher named Adam Kinory thought he was doing a fine job of teaching with technology. As computers became more widely available to his students, he made subtle shifts in assignments and expectations to take advantage of new tools. Word processing enabled students to revise their writing without the tedium of repeat drafting on paper. The internet opened new research opportunities. Slideshow software made for more compelling presentations. A class website helped Kinory communicate about deadlines.

But looking back on his first years in the classroom, he can see that those shifts did not make for a fundamental change in teaching or learning. He was merely layering technology onto the teaching methods he had learned as a new teacher. “None of that was a leap,” he admits. “I didn’t really change what I was doing in the classroom.”

The “big leap” happened soon after Kinory gained some hands-on experience using digital media, including video cameras and editing software. That experience, which came about through his participation in the Digital Edge Learning Interchange, got him thinking about the role of multimedia in his classroom. Too often, he had watched his students turn off their critical faculties whenever he showed a video. In particular, he wanted to better engage all students and differentiate instruction for his students whose abilities and learning preferences varied widely.

Now, he began to consider a more active use of video—where students would behave more as directors and critics instead of as passive viewers. After all, many of today’s students are already savvy about making their own short films. Some upload their productions to sites such as YouTube, or use their cell phones to create videos. Many of Kinory’s students have blogs and belong to social networks. Why not build on this digital fluency to reinvent a project for the high school classroom?

Instead of asking students to write traditional thematic essays about the Scopes Monkey Trial, Kinory had them analyze a selection of film clips from *Inherit the Wind* that bring this era to life. He showed students how to embed digitized film clips directly into their documents, linking visual imagery with their written analysis. The assignment not only deepened their understanding of literary theme, but also helped students to think more critically about media as they learned to analyze elements such as lighting and blocking. When he asked students to reflect about the project, Kinory heard them making stronger connections between what they were learning and their own world (Kinory, 2003).

Both teacher and students had to navigate new ways of working together as the project unfolded, but it didn't hurt that students saw their teacher trying new approaches and taking risks as a learner. At the end of that first reinvented unit, Kinory received a career first: a letter of thanks from his students. If he needed more convincing that he was on the right track, that was it.

The transformation in Kinory's teaching style has been profound—and permanent. "It's natural now for me to integrate technology. A few years ago, my students were surprised but reacted positively when I started using digital tools. Today, my students would react negatively if I didn't teach this way. I'll never go back," he insists, "to the way I used to teach."

Not every successful project ends with a thank-you note. Nonetheless, themes in Kinory's story echo in classrooms around the world. From California to Australia, from Singapore to rural Montana, more and more educators are making similar shifts. They recognize that digital tools are essential features of the environments in which today's students are living and learning. What's more, these educators see how technology opens opportunities to reinvent projects so that the projects become more authentically connected to students' lives. When educators succeed in designing an effective project, they are wise enough to recognize that they are also changed by their students' success.

Kinory has continued to introduce new instructional strategies that meet learners squarely in their world, where he sees technology as "a fundamental building block of their experience." When he teaches about point of view in the short story, for instance, he might stream audio clips from National Public Radio shows such as "This American Life" to illustrate key ideas. Some students are motivated to produce their own podcasts, and several have won an essay contest sponsored by the public radio show "Selected Shorts."



This book is about the journey that unfolds when teachers decide to move away from traditional teaching and toward this new vision of instructional design. It's a learning journey for teacher and student alike. For instance, you may decide to take advantage of digital tools for inquiry, collaboration, and communication to connect learners to one another or even to the world beyond the classroom. This endeavor requires learning about new and emerging technologies. You decide to give up the traditional teacher's role of being the content expert, and that means learning new ways to engage with your students.

This is a journey that involves calculated risks. Many of the teachers you will meet in the chapters to come are like Adam Kinory—willing to try new strategies to meet instructional goals and reflective about wanting to improve their own practice so that all learners will succeed. Like him, many also turn to their colleagues as a sounding board for new ideas. He regularly brainstorms with a colleague he has come to trust for “helping me formulate critical questions to think about what I'm doing.” Increasingly, educators are finding their sounding boards online by connecting with colleagues around the world.

Long before we began writing this book, each of us embarked on our own learning journeys that opened our eyes to new possibilities for digital-age instruction. Jane Krauss has seen her approach to teaching evolve during her 20-plus years in education. She has been a special and general education teacher, supervisor of preservice educators, curriculum writer, presenter, trainer, and director of professional development. In the elementary classroom, she was an early adopter of project-based learning (PBL) and experienced the shift in what was possible when technologies became available to make projects more authentic, meaningful, and rigorous. Jane continues to work with educators around the world to explore the potential and promise of education technology.

Suzie Boss, a journalist specializing in education, has spent much of the past 15 years observing effective teachers, learning from them about best practices, and chronicling their stories. She has seen how innovative approaches to instruction can combine with new tools to better engage learners and even transform communities. Both of us have worked with teachers around the globe, from North America to India, who are ready to shift their practice to project-based learning.

For this second edition of *Reinventing Project-Based Learning*, we have interviewed and observed teachers who have found success by reinventing the

project approach to better meet the needs of digital-age learners. These educators work in all kinds of environments, some of which are more welcoming than others to new ideas for instruction. Project examples from around the world demonstrate how real-world projects can help diverse learners meet instructional goals in wildly different contexts.

Many of these educators feel like pioneers in reinventing project-based learning to take advantage of the opportunities that digital tools afford. Some are part of PBL networks or individual schools that make projects the centerpiece of curriculum; others may be the only one in their building to attempt PBL. Fortunately, these pioneering educators are willing to share their insights and discoveries. In fact, many of those we highlight are active bloggers, tweeters, edcampers, and participants in social spaces who make a point of sharing their learning journeys online so that others can join the conversation. The growing community of connected educators provides increased opportunities for peers to come together to offer improvements, share strategies and enhancements, and work more collaboratively to develop improved versions of promising projects. Indeed, these peer-to-peer learning experiences for educators mirror best practices for effective PBL for students.

## Starting Your Journey

Where are you starting your journey? What has motivated you to consider new strategies for the classroom? Maybe you're an old hand at project-based instruction, but now you want to incorporate technologies in new ways to reach ambitious instructional goals. Maybe you're a newcomer to the profession, looking for authentic project ideas you can't find in a textbook. Perhaps your school is part of an initiative that is making new technologies available or working to develop common standards and language around assessment. Or perhaps you're an administrator or technology specialist, working with a team of teachers on improving instruction across a grade level or subject area.

We also know that the Common Core State Standards, with their emphasis on application of knowledge, critical thinking, and performance assessments, are causing increasing numbers of schools and districts across the United States to adopt PBL as a core strategy. Throughout the book, we will highlight examples of projects that address these new standards, which have been developed with the goal of better preparing students for college and careers.