

# **Using Web 2.0 Tools in the K-12 Classroom**

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**BEVERLEY E. CRANE**

**Neal-Schuman Publishers, Inc.**  
New York                      London



Don't miss the companion Web site that accompanies this book  
available at:

[www.neal-schuman.com/webclassroom/](http://www.neal-schuman.com/webclassroom/)

Published by Neal-Schuman Publishers, Inc.  
100 William St., Suite 2004  
New York, NY 10038

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Printed and bound in the United States of America.

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences-Permanence of Paper for Printed Library Materials, ANSI Z39.48-1992.

Library of Congress Cataloging-in-Publication Data

Crane, Beverley E.

Using Web 2.0 tools in the K–12 classroom / Beverley E. Crane.

p. cm.

Includes bibliographical references and index.

ISBN 978-1-55570-653-1 (alk. paper)

1. Teaching—Computer network resources. 2. Internet in education. 3. Education, Elementary—Curricula. 4. Education, Secondary—Curricula. I. Title.

LB1044.87.C74 2009

371.33'44678—dc22

2008046167

## ***Dedication***

For my family, with love—  
My parents who stressed the importance of education;  
My husband who instilled the need for education  
in our sons Michael, Mark, Kenneth, and Scott;  
and, as fathers, our sons who continue to emphasize the value of education  
with our grandchildren.



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# Preface

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The Internet is as commonplace in schools as desks and blackboards. Youth today, perhaps even more so than their teachers, are skilled in using computers and small devices for text-messaging, sending pictures, sharing music, reading books, and simply surfing from Web site to Web site. Thus, it is now more vital than ever that teachers use technology to engage their students' attention across the curriculum. Many teachers crave effective models for how, why, and when to use new Internet technology with daily lessons.

*Using Web 2.0 Tools in the K–12 Classroom* provides library media specialists, technology coordinators, and teachers at the elementary and secondary levels with guidelines, models, and strategies for using Web 2.0 (or the Read Write Web, as it is often called). The pages that follow contain strategies and practical suggestions that English, language arts, social studies, science, and English-as-a-second-language teachers can use to integrate Web 2.0 as an essential part of the lessons and units they teach. Parents, who in greater numbers are teaching their children at home, can use the unit plans to incorporate technology into writing, literature, science, and social studies. Pre-service teacher educators and library school program instructors may use the exercises and step-by-step instructions to provide their students with the knowledge and skills to meet state-mandated technology standards.

This book has four goals:

1. To describe Web 2.0 tools to educators new to the technologies so they can discuss them intelligently with students and their colleagues
2. To model Web 2.0 tools through classroom examples
3. To explain to beginning users how to get started with each tool
4. To present practical unit plans illustrating the use of Web 2.0 in the K–12 content-area curricula

*Using Web 2.0 Tools in the K–12 Classroom* is divided into eight chapters. Chapter 1 introduces trends for the twenty-first century, teaching strategies using Web 2.0, and describes the framework for the model units that appear in the following chapters. Chapters 2 through 8 focus on Web 2.0 tools that educators have identified as useful and motivating to student learning. They include blogs, podcasts, wikis, digital storytelling, Google tools, VoiceThreads, and social bookmarking.

Each chapter emphasizes one or more of the following:

1. Incorporating Web 2.0 into the curriculum for communication, research, collaboration, and connections that will bring teachers and library media specialists together
2. Activities that are varied, interesting, and achieve the fullest, most productive involvement of students
3. Instructional techniques that include independent, competitive, and cooperative learning
4. Interdisciplinary studies so that students will recognize the connections among subject areas

Chapters have a similar three-part structure: Part 1, “Ideas and Insights,” identifies and describes the Web 2.0 tool that is the focus of the chapter and illustrates through a series of examples in specific

content areas, how the tool integrates into the curriculum, as well as advantages for using it in the classroom. Part 2, “Getting Started,” provides examples of a Web 2.0 tool and illustrates step by step how to begin using the tool. Part 3, “Practical Applications,” includes practical unit-plan models in different content areas at both the elementary and secondary levels. The unit explains how the technology combines with broad-based examples in core content areas—language arts, social studies, and science. Educators can use the plans as they are presented or modify them to meet the individual needs of students and curricula. Two sets of exercises in each chapter offer opportunities for readers to practice what they have just learned, become familiar with Web 2.0 tools, and reflect on the content of the chapter. Each chapter also contains a glossary of new terms and a list of Web sites that will be useful for the topic under discussion. Appendix A includes a list by chapter of all URLs contained in the book. Appendix B describes the accompanying Web site.

In addition to its focus on a different Web 2.0 tool, each chapter also incorporates a different subject area, topic, and age level. Chapter 2, “Blogging in the Language Arts,” for example, illustrates blogging in secondary English. The topic of contemporary issues is ideal for an I-Search paper, and the unit plan emphasizes the science topic of “stem cell research.” Chapter 3, “Experiencing History Through Podcasts,” lets upper elementary or middle school students explore in groups the current hot topic of “immigration” through research and creating a podcast. Taking the topic a step further, they analyze the concept of the “American Dream.” Chapter 4, “Creating Literature Wikis in the Classroom,” explores the novel *The Great Gatsby*, taught to secondary English students. The unit lets students collaborate easily using wiki technology. Chapter 5, “Digital Storytelling: Cross-Curricular Connections,” enables middle school students to focus on their preferred learning style as they create stories and incorporate video and audio into a digital story. Chapter 6, “Google in the Classroom—More Than Just Research,” goes beyond using Google for research and introduces a suite of other tools for collaborating, blogging, exploring the earth, and much more. The unit for this chapter uses the popular WebQuest to explore Cuba, the island that has been isolated for over 20 years. Chapter 7, “Enhancing English Language Learning with Web 2.0 Tools,” lets non-native English speakers collaborate on culture with students in other countries. Finally, Chapter 8, “Social Bookmarking and Putting It All Together,” introduces a new tool and culminates with a science unit on the environment, which combines several Web 2.0 tools discussed throughout the book.

In addition to this printed book, *Using Web 2.0 in the K–12 Classroom* features a companion Web site: [www.neal-schuman.com/webclassroom](http://www.neal-schuman.com/webclassroom). The Web site provides curriculum examples from pioneering educators around the world, as well as exercises and lessons in subject areas and grade levels not highlighted in the book. A “What’s New” section will keep readers up to date with interesting technologies and ones where space in the book prevented covering them. A link on the Web site provides access to Bev’s Edublog so readers can share tips on technologies and innovative lesson ideas. Web site notations in each chapter indicate places where the Web site might provide additional information.

*Using Web 2.0 Tools in the K–12 Classroom* is intended to encourage educators to learn more about and try Web 2.0 tools that many of their students are already using outside the classroom. The explanatory material, step-by-step explanations, examples and model units should prompt teachers and library media specialists to try these new technologies, and the accompanying Web site will continue to expand their knowledge and skills. All educators seek to motivate students to learn the content we are teaching, to think critically while learning, and to communicate on broad levels both inside and outside the classroom. Students are already using Web 2.0 tools discussed in this book in their daily lives. We must take advantage of their knowledge and skill to make learning that much more exciting and meaningful for them. A successful experience using Web 2.0 tools in the classroom can make all the difference!

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# Acknowledgments

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This book is the result of the time and effort of teachers, library media specialists, and IT educators who spent hours learning about Web 2.0 technology and, more important, integrating it into content area lessons and libraries so that motivated students may learn the skills they will need for tasks and jobs in the twenty-first century. Thanks to the educators who appear in my book for permission to use illustrations of their excellent ideas that appear on their Web sites.

Special thanks to Sandy Wood, my editor at Neal-Schuman, whose help with Bev's Web site has added a further dimension to *Using Web 2.0 in the K-12 Classroom*.

