

HOW TECHNOLOGY Can Jumpstart the Inquiry-based FOURTH GRADE CLASSROOM

5 Projects that Align with
National Standards



ASK A TECH TEACHER

First Edition 2012

Part of the Structured Learning Technology for the Classroom series

Visit the companion website at <http://askatechteacher.com> for more resources to teach technology to Kindergarten-Eighth Grade

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Introduction

Today's classroom is all about authentic lessons that are inquiry-driven, student-centered, with technology that is critical but invisible—just another part of the lesson. They must scaffold current knowledge with new so students are comfortable as risk-takers whether they are digital natives or newbies. The new educational mandates require users to share, show evidence of learning, collaborate on outcomes, and publish their work.

The question we get often from teachers—both new and seasoned—is: How do you teach technology skills (i.e., the use of foundational programs like word processing and keyboarding) while integrating it into classroom units AND keeping student interest?

With the right resources, that's easy. We've put five of them together in this bundle for you. This is one part of the K-6 ***"How Technology Can Jump-Start the Inquiry-Based Classroom: 35 Projects That Align with National Standards"***.

Teachers, you're going to love these lessons. They're easy to understand and implement, fascinating to the students you teach, and quick to accomplish what might seem to be the impossible goals of integrating and sharing.

If you own the [Structured Learning K-6 technology curriculum](#), this book will be a favorite addendum. These lessons are practical strategies for 1) extending the 32-lessons contained in that seven-year curriculum, 2) differentiating instruction so it suits your unique group, and/or 3) focusing on web-based programs rather than installed software.

If you haven't committed to a K-6 technology curriculum, this book will provide lessons that help you comply with state and national education standards by 1) integrating technology into your school's K-6 classroom, and 2) providing methods to publish and share student work.

These five projects show you great ways to **align** your technology curriculum with ISTE national standards, **integrate** technology into class units of inquiry, and **teach** critical skills—here's the important part—*when students are ready to learn them* without taking your focus off the organic needs of your school's educational standards.

Who Needs This Book

You may be the Technology Specialist, the Coordinator for Instructional Technology, IT Coordinator, Technology Facilitator, Curriculum Specialist, Technology Director or the technology teacher for your school—tasked with finding the right computer project for each K-6 classroom unit. You have a limited budget, less software, and the drive to do it right no matter the roadblocks. How do you accomplish your job?

Or you're the classroom teacher, a tech enthusiast with a goal—and this time you mean it—to integrate the wonders of technology into lessons. You've seen it work. Other teachers in your PLN are doing it. And significantly, you are trying to comply with the requirements of Common Core State Standards, ISTE, your state requirements, and/or the IB guidelines that weave technology consistently into the fabric of all units of inquiry as a method of delivering quality education. How do you reach your goal?

Each of the lessons in this book includes practical strategies for integrating technology authentically into core classroom lessons. They are easily adapted to any number of subjects be they science, literature, history, math, reading, writing, critical thinking, or another. The focus is on easy-to-use online tools (with some exceptions) that are quick to teach, inquiry-driven, intuitive, and free. You introduce the tool, demonstrate the project, answer clarifying questions, and let students' curiosity loose.

Do you need this if you bought the [SL Technology Curriculum](#) with its 32 lessons or if you invested in Structured Learning's 110- lesson [Technology Toolkit](#) for K-8? In fact, this book was originally intended for you. The hundreds of schools across the country that use that curriculum contacted us and asked for it. Why?

1. Their school didn't have some of the software suggested in the textbook (say, MS Publisher)
 2. Their classes finished a lesson earlier than planned.
 3. They needed 34 lessons instead of 32
 4. Their school aligned with Common Core State Standards, which meant they needed more lessons that allowed for publishing and collaborating
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5. They had a particular unit of inquiry that wasn't addressed in either the curriculum or toolkit
6. They wanted more web-based tools
7. Some had been using the curriculum for several years and simply wanted change.

This book is for you.

How to Use This Book

For each lesson, the organization is clear and intuitive, with sections to address the most important parts of what you need to deliver a comprehensive, clear, tech-integrated project. Here's a sample:

2. Which tech curriculum lesson could this one replace?

3. Topic supported

Skills Learned	Replacement for:	Collaborations
<ul style="list-style-type: none"> Brainstorm Mind map 	<ul style="list-style-type: none"> 1st grade— Lesson 4 2nd grade— Lesson 17 3rd grade— Lesson 3 	<ul style="list-style-type: none"> Writing

1. Primary skills learning

4. How much time does lesson take?

5. ISTE standard(s) supported

Time Required	NETS-S Standards
30 minutes (2 sessions)	1, 2, 4

6. Where do you get help? <http://askatechteacher.com>

7. Brief overview **Overview**

8. Step-by-step directions **Objectives and Steps**

...a colorful mind map to organize information on a topic.

...nt helps when using technology with youngsters who get more easily by problems and questions.

— This is a summative activity. In this case,

desert, maybe forest

Three Little Pigs

Cinderella

Cinderella, stepfather, mom, Godmother, prince

1. **Skills Learned**—This lists the primary skills learned through this lesson. These are technology skills and also skills best learned through the use of technology.
2. **Replacement for**—If you're using the Structured Learning technology curriculum, this box tells you which of the thirty-two yearly lessons for that particular grade level can be replaced by this one and still deliver the goals of the K-6 Scope and Sequence (listed in the front of each textbook)
3. **Collaborations**—This lists which classroom subject(s) can be supported authentically with this lesson.
4. **Time Required**—This provides an estimate of time you should set aside to complete the lesson. If noted as 'repeat', do this lesson several times to reinforce learning.
5. **NETS-S Standards**—This highlights which ISTE standards are delivered with the lesson.
6. **Lesson Questions? Go To**—This link connects to a blog where you can ask for help or clarification on any book sold by Structured Learning—including this one—from teachers using this book. No other textbook publisher offers this. Of course, you can always email Structured Learning's in-house help at zeke.rowe@structuredlearning.net. (There really is a Zeke Rowe).
7. **Overview**—This is the lesson's central idea.
8. **Objectives and Steps**—This provides practical strategies for achieving the lesson's essential goals with step-by-step guidelines for accomplishing that.

Take special note of the section called 'Replacement For'. This is where we suggest how the lesson fits into the SL Technology curriculum—which lesson it can replace/enrich while maintaining the continuity of the curriculum's scope and sequence (included at the beginning of each textbook).

In deference to the changing landscape of technology in education, these new lessons concentrate on web-based tools. That means they encourage collaboration among students, tools are mostly FREE (because they're web-based), and publication is a snap through websites, wikis, and blogs

Where for-fee software and products are used, we cross-reference free products that accomplish the same goals where possible. There will be some

adaptation required to make them work, but we selected those that are most compatible.

We've included blanks in front of each concept so you can check it off when completed. The nature of educational technology often precludes completing an activity in one sitting. It's useful to track where you ended so you can pick up there when you continue.

You'll find a lot of links in this book. They are **extras in the digital ebook**—like full color images and being able to search with Ctrl+F. To put them in the print version would take oh-so-much-space and ultimately be oh-so-confusing. If you would like a PDF of the book so those links are available, contact the [publisher](http://structuredlearning.net) (<http://structuredlearning.net>) to find out how to get a discounted PDF with your Proof of Purchase. If there are just one or two, visit the helpline (that's our [Ask a Tech Teacher](#) blog noted at the beginning of each lesson) and leave a comment on the most current article requesting the link. Be sure to include the book's name and the page number. We'll post it within 24 hours as the answer to your request.

A note: There are seven (I might say 'only seven'—a testament to how much technology has changed in just a few years) software-based projects—all designed for Windows-based PCs. If you have a different operating system (say, Linux or Mac), you'll need to adapt the instructions.

About the Authors

Structured Learning IT Team is the premier provider of technology instruction books and ebooks to education professionals. Technology and keyboarding curriculums, how-to books, tips and tricks, a one-of-a-kind blog-based helpline—all the tools required to fulfill the tech needs of the 21st century classroom. All materials are classroom-tested, teacher-approved with easy-to-understand directions supported by online materials, websites, blogs, and wikis. Whether you are a new teacher wanting to do it right or a veteran educator looking for updated materials, [Structured Learning](#) and its team of technology teachers is there to assist you.

Ask a Tech Teacher is an award-winning resource [blog](#) run by a group of technology teachers. It has more than 60,000 visitors a month in search of resources and advice, offers oodles of free lesson plans, pedagogical conversation, website reviews and more. Its free newsletters and website articles are read by thousands, including teachers, homeschoolers, and anyone serious about finding the best way to maneuver the minefields of technology in education.

Jacqui Murray (lead Ask a Tech Teacher blogger) is the editor of SL's [technology curriculum](#) for K-sixth grade, creator of two technology training books for middle school, and four ebooks on technology in education. [She](#) is the author of **[Building a Midshipman](#)**, the story of her daughter's journey from high school to United States Naval Academy. She is webmaster for six blogs, an [Amazon Vine Voice](#) book reviewer, a columnist for [Examiner.com](#), Editorial Review Board member for [Journal for Computing Teachers](#), [Cisco guest blogger](#), [IMS](#) tech expert, and a bi-weekly contributor to [Write Anything](#). Her technology articles have appeared in hundreds of online newspapers and magazines.



Lesson #1—How do I Keyboard in 4th Grade?

Skills Learned	Replacement for:	Collaborations
<ul style="list-style-type: none">■ Touch typing■ Home row■ QWERTY row■ Lower row■ Keyboarding	<ul style="list-style-type: none">■ 4th grade— Lesson 2; and replace weekly keyboarding lesson with this approach	<ul style="list-style-type: none">■ Writing■ Researching■ internetting
Time Required 15 minutes (repeat throughout year)		NETS-S Standards 5

Lesson questions? Go to <http://askatechteacher.com>

Overview

Develop touch typing to build on skills learned in K-3. Good habits+Accuracy+Practice=Speed

Objectives and Steps

Keyboarding is a cumulative skill – what can be effectively learned in fourth grade depends heavily upon what has been learned in prior years. If hunt 'n peck habits become ingrained, it's difficult to develop competency in keyboarding skills.

Basics to be focused on during fourth grade are:

- *Correct keying technique*
- *Start hands on home row*
- *Correct reaches to all keys*
- *Correct posture*
 - *Sit up straight, shoulders back, head up, body centered in front of keyboard, feet flat on ground*
 - *Elbows close to sides*
 - *Fingers slightly curved*
- *Use numeric keypad for number keying*
- *Focus on touch typing*
- *Copy to the left or right of keyboard, eyes on copy or screen— NOT keyboard*
- *Key with a steady even pace*
- *Use of keyboard shortcuts (i.e., Ctrl+B, Shift+Alt+D)*