Introduction

Welcome!

Dear Colleague:

My own interest in using technology in the classroom began years ago as a new teacher at the secondary level. Unfortunately, I was not able to match my student's technological savvy and often felt intimidated as I tried to keep up. On top of that, I spent so much time preparing lessons, grading papers, and working with students in extracurricular activities, I struggled to find the time to even start looking for new ideas.

As I forced myself to learn more and more about technology, I found out how using digital technologies allowed me to better engage with my students and increased their motivation to learn. I discovered so many tools that helped me reach my struggling learners in new and exciting ways. However, I also found my biggest challenge was keeping all the exciting things I was learning and the tools I was finding organized!

So now, Kara, Don, and I humbly offer you some of the newest technology tools AND simple ways to keep them organized for best practice in your own classroom. We are pleased to be able to share with you what we have learned about managing educational technology for all students in all content areas. We will share realistic tips, useful suggestions, creative tools, and easy-to-use techniques that will help you develop and strengthen your own technology work on behalf of your students.

This handbook is organized so that each of you can take specific ideas to use in your own classroom regardless of your content area or level of learner. The handbook combines large-scale, general strategies and step-by-step examples to make sure no one is left feeling confused. The focus is on *practical strategies* for discovering, introducing, and integrating devices, apps, and web tools into your classroom. If you follow the steps in the handbook, by the end of the year you will be amazed at how far you have come in regards to integrating technology into your instruction. I know you will find the handbook useful, enjoyable, and fun!

Keep Allowing Genius in Your Classroom!

Zachary

How to Use This Workbook

Purpose

The purpose of this teacher workbook is to simplify the process of integrating mobile technology (smartphones, Android devices, iOS devices, etc.) into teaching and learning. This is the "Last Backpack Generation"- the last generation of students who will need to carry backpacks to school. In the future, much of the information students interact with will be via a mobile device (primarily their phone) as opposed to a physical textbook, worksheet or library research article. This workbook is intended to help with the process of implementing these resources in a strategic way so that it remains **about pedagogy- not about technology.** Therefore, the workbook is divided into unique, practical sections.

The Basics of Teaching with Technology section will arm you with the practical know-how for managing multiple mobile devices in your classroom. **The Basics of Devices** digs into what you need to know about mobile technology in order to maximize it for student learning.

The **Strategies** section will focus on strategies for implementation with dozens of practical examples. While we do share many specific tools, our aim is to provide proven strategies for learning. This is done by focusing on the categories of simple tools first- for example, video and pictures- that can have a major impact on learning.

The **Lesson Planning** section will focus on schedules, lesson plans, and ideas for seamlessly implementing technology into your classroom. There are lesson planning worksheets available for you to use as you integrate the proven strategies. This section is intended to make implementation easy and less overwhelming.

Finally, the **Resources** section provides information for further exploration and continued learning about mobile technology.

This workbook can be used individually, in a group, or as a resource during a facilitated workshop. The book is set up in a "choose your own adventure" format where you have the ability to decide what strategies will work best for you. If using as a group, the facilitator can help you with the process of using a tool while you focus on the application in class. Further, we know that many of the tools we use are updated frequently. Keep an eye on our Companion Website (http://resources.corwin.com/lastbackpack) for updates. One thing that will not change is the strategies used. They will still be valuable even if the technology changes- it will be about adapting and tweaking- which is what we teachers do every day anyway!

And please remember- the tools and strategies we recommend are simple ideas that are used in classrooms. **Be creative and modify** the ideas as needed for your situation. After all, you know your classroom, your school, and your students' best!

Educators, administrators, and tech supporters will appreciate many of the features in this book including the features listed below.

Unique Features

- Classroom management strategies and tools that help students stay on task and focus on learning.
- Semester planning and accountability worksheets that effectively align your learning goals for your students with specific strategies for students.
- Detailed lesson-planning worksheets that allow teachers to plan, try, evaluate, revise, and try again.

General Features

- Practical examples of proven strategies for integrating simple technology into instruction
- An easy-to-use format for educators to use to quickly access the resources they want to implement into the classroom tomorrow.
- Dozens of ideas on how to manage your own learning as well as facilitating your students' learning.

Outcomes and Benefits

- Learn the key components for effectively using mobile technology at all levels of learning.
- Step-by-step techniques for creating engaging lessons that fully involve your students and significantly enhance their learning.
- Powerful websites, apps and interactive tools to give your students choice and voice.
- Dozens of proven strategies, tips and tools to ensure that mobile learning helps students meet or exceed content standards.
- Engaging and assessing the diverse learners in your classroom

Here is What You'll Learn

- Strategies, tips and techniques to give students the voice and choice they need to succeed with their projects.
- The keys to ensure that technology is naturally integrated and facilitated.
- Simple ways to infuse technology for non-traditional learners.
- The newest, most innovative ways to use social networks in class.
- Multiple techniques to give and receive real-time formative feedback to keep students on track with their projects.
- Innovative ways to implement mobile learning in your classroom
- Creative, new ways for your students to share their projects.

Definition

For the purposes of this book, *mobile technology* is defined as any device that can be transported by a student for learning inside and outside the classroom. We will primarily focus on strategies that can be implemented with phones and tablets.

Glossary of Terms

Backchannel—

This is a real-time online conversation that occurs while a lesson is being taught. For example, a teacher can set up a forum where students can take notes, ask questions, and discuss the topic being presented while it is happening. In addition, you could set up a hashtag (e.g. #lastbackpack) on Twitter that your students can use as a backchannel.

Screencasting—

A screencast is a video screen capture with audio narration. A screencast is a digital recording of computer screen output. For example, using software, a teacher can record their voice while talking through their slides or watching a video on their computer. The software will capture what is on the screen and the teacher's voice and produce a video which can be shared with students.

Learning Management System (LMS)—

A LMS is an online site to exchange information, assignments, take attendance, share resources, and do assessments. Examples include Edmodo, Haiku, Schoology, Moodle, Blackboard, Google Classroom and many others. We recommend that schools adopt one LMS and train all their teachers on that one so that students don't have to learn multiple different systems.

Universal Design for Learning—

According to CAST (2011), Universal Design for Learning (UDL) is a set of principles for curriculum development that give all individuals equal opportunities to learn. UDL provides a blueprint for creating instructional goals, methods, materials, and assessments that work for everyone—not a single, one size fits all solution but rather flexible approaches that can be customized and adjusted for individual needs. See page 213 for more details.

Whiteboarding—

This is the practice of using and sharing a whiteboard on-line. Just as a teacher would diagram, write notes, draw explanations on a physical whiteboard in class, certain softwares allow people to do this online while recording their voice. These whiteboard videos can then be shared with students.

Current Research on Mobile Technology

Listed below are just a few of the latest research facts regarding mobile technology. What does this mean for our students? What does it mean for the workplace they are going to be entering? Part of the reason that we believe in the implementation of mobile technology into the classroom is because of how prevalent technology is becoming in every other area of our lives. It is important to consider what this means for our students and for our teaching.

Facts

Over 50% of the global population has a mobile phone (We are Social, 2014).

Research has shown that daily technology integration into every class period is the most effective at improving teaching and learning (Project Red, 2010).

By 2017, half of the world's employers will no longer provide devices for employees; instead, employees will be expected to supply their own work device (New Horizons Report, 2014).

In 2014, 56% of U.S. school districts have a BYOD program in place, up 30% from 2013 (New Horizons, 2014).

Students who attend schools where technology is used in courses daily have fewer discipline problems, higher attendance rates, and are more likely to attend college than students who use technology weekly, monthly, or not at all (Project Red, 2010).

Of the technology used in schools, 45 % is use of mobile devices, such as laptops, netbooks, tablets, and smartphones used in schools (Project Red, 2010).

By 2015, 80% of people who access the Internet will do so from a mobile device (2011 Horizon Report).

During 2014, American K–12 schools will spend an estimated $9.94 billion on educational technology, an increase of 2.5 percent over last year, according to Joseph Morris, director of market intelligence at the Center for Digital Education.

Reflection Questions

What does this mean for your school district? Your school? Your classroom?

How will this impact the students in your classroom after they enter the workplace?

Research Reports

If you are interested in reading more about integrating technology into the classroom or you are trying to convince your administration that technology integration is important, the following research reports are interesting, insightful, and important to read.

Visit our Companion Website for live links and Other Recent Reports (http://resources.corwin.com/lastbackpack).

- Sloan Consortium (2015): **Taking the Test: Tracking Online Education in the United States** (http://onlinelearningconsortium.org/read/survey-reports/)

- Project Tomorrow (2014): **Making Learning Mobile 1.0: Leveraging Mobile Devices to Transform Teaching and Learning** (http://www.tomorrow.org/publications/MobileDevicesTransformTeaching.html)

- Cisco (2014): **The Global Information Technology Report 2014** (http://www3.weforum.org/docs/WEF_GlobalInformationTechnology_Report_2014.pdf)

- Horizon Foundation (2014): **The NMC Horizon Report: K-12 Edition** (http://www.nmc.org/horizon-project/horizon-reports/horizon-report-k-12-edition)

- Project Red (2010): **The Technology Factor: Nine Keys to Student Achievement and Cost-Effectiveness** (http://pearsonfoundation.org/downloads/ProjectRED_TheTechnolgyFactor.pdf)

- The U.S. Department of Education Office of Educational Technology: **Powered by Technology Reports** (http://www.ed.gov/edblogs/technology/research/)

- Innosight Institute (2012) **Classifying K-12 Blended Learning** (http://www.christenseninstitute.org/wp-content/uploads/2013/04/Classifying-K-12-blended-learning.pdf)