Blended Instructional Design

Introduction	This guide explains how to teach lesson with Prentice Hall Algebra 1, Geometry, and Algebra 2—the new Prentice Hall High School Math series. The guide shows teachers how to blend print and digital media to deliver effective instruction. It also explains how to introduce a chapter, teach each part of a lesson, and summarize the lesson with the end-of-chapter activities.
Before We Get Started	The goal of this guide is to help teachers understand the instructional design and the online interactive lesson content.
	With this knowledge, teachers can make decisions about blending the print and digital media content of the lessons based on the availability of computers in their classrooms.
	To learn more about accessing lesson content on PowerAlgebra.com and PowerGeometry.com, watch the SuccessNet Teacher Center tutorial on this Web site.
Blended Instruction	The Prentice Hall High School Math series includes both print and digital instructional media. Teachers can use PowerAlgebra.com and PowerGeometry.com to enrich their instruction.
	The online interactive lessons engage twenty-first-century learners. Students can complete lessons and take assessments online. Teachers should be sure to make online lessons available to students for independent study.
	As students work through the online problems, avatar coaches provide online instructional support. Be sure to assign the interactive lessons to students for independent study.
	Animations help students visualize the problem-solving process. The lesson window provides ample white space for illustration. The space allows teachers to use interactive whiteboards and writing tools to draw additional examples, add emphasis, and complete arithmetic.

Introducing a Chapter

To introduce the chapter, begin with the Get Ready! page. On this page, teachers can use the diagnostic assessment to determine if students have the necessary prerequisite skills.

The teacher's edition provides an item analysis chart that identifies resources for every skill assessed. If necessary, use these resources for remediation before starting with the first lesson. This assessment is also available online.

The next page shows the chapter title. The colorful buttons on the left describe the online lesson activities. Discuss the key vocabulary terms with the class. Students can find definitions of these terms in the visual glossary at the back of their student edition or online. The online glossary includes audio support.

Teachers can also access a multilingual handbook contains glossaries in a variety of languages. To find the multilingual handbook, select the Teacher Resources link from the Teacher Center Home page on Savvas SuccessNet.

Every chapter provides a My Math Video. This video provides students with a real-world application of the chapter topic. After students watch the video, consider discussing how the video relates to the chapter topic. Students can also produce and share their own math videos. Go to SavvasVideoChallenge.com for more information.

Next, discuss the Big Ideas and Essential Questions for the chapter. As students work through each lesson, encourage them to reflect and think about these questions so they can organize their ideas about key mathematical concepts.

Every lesson also features an Essential Understanding to help students make connections between lesson skills and the Big Ideas.

Teaching a Lesson	Before starting a lesson, check the information in the wrap of the teacher's edition. Every lesson activity includes teaching suggestions and may also include error-prevention tips.

The teacher's edition wrap includes boxes that describe the activities on PowerAlgebra.com or PowerGeometry.com. This information identifies which online problems are animated and if the lesson contains a Dynamic Activity. Animated problems illustrate the mathematical process in action. |
| **Interactive Learning** | Lessons begin with interactive learning. Solve It! helps students to start thinking and reasoning mathematically by having them solve a real-world problem. The problem also helps students make connections to the Essential Understanding. |

Some of the online lessons include a Dynamic Activity. This activity requires students to sequence a mathematical process or manipulate variables to determine their effect on a solution or formula. The visual impact of Dynamic Activities helps students conceptually understand important math concepts.

Guided Instruction	Lessons continue with Guided Instruction. Example problems model the mathematical process one step at a time. Think–Plan callouts model thinking and reasoning. The Know–Need–Plan callouts illustrate how good problem solvers think.

Color coding helps students visualize part of an equation or process. In this example, color coding visually illustrates which numbers to group when multiplying numbers in scientific notation.

The Foundations Series includes additional features that provide instructional support. Example problems may include Hint boxes to help struggling learners get started.

The Foundations Series places more emphasis on the mathematical process than the mathematical sentence by displaying it on the left. In some instances, students see the explanation first. Then they see the mathematical computation for each step, which appears on the right.

The Got It! problems allow students to practice and apply what they have learned. Use these problems to check for understanding and then make instructional decisions about modeling another example or continuing with the lesson.

Lesson Check

After walking through the lesson problems, use the Lesson Check to assess students' understanding of the lesson skills and concepts. The Do you know HOW? problems address skills and Do you UNDERSTAND? questions address math concepts and vocabulary.

The teacher's edition identifies which lesson problems to review if students are struggling with solving the problems or answering the questions correctly.

Practice

After the lesson check, teachers can assign a series of practice problems. The teacher's edition provides a variety of leveled assignments to meet the needs of different students. The Homework Quick Check saves teachers time by suggesting which problems to check the next day for a quick review of key skills.

Students can either use their student edition or go online to access the practice problems and begin working independently. The online lesson includes a self-assessment with problems on the first page and solutions on the second page.

Students can gauge their level of understanding and decide if they need additional help. MathXL for School may provide them with just the help they need. MathXL for School interactive tutorials include instruction and feedback. Students can find this practice at the mid- and endpoints of each online chaper.
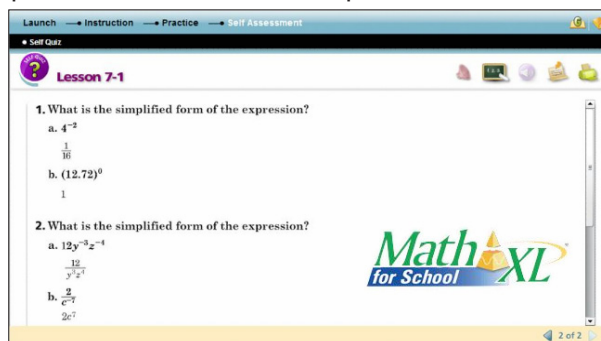

Assess and Remediate

After providing lesson instruction and giving students time to practice, teachers can give the Lesson Quiz. Teachers can use a print transparency, or they can assign students the quiz online.

Use the quiz results to make instructional decisions about appropriate review assignments. Notice the ready-made prescription in the teacher's edition. A complete list of resources is available for intervention, on-level, and extension review assignments. When students take the quiz online, Success Tracker automatically scores the quiz and assigns remediation activities. This feature saves time for teachers.

Summarizing a Chapter

To summarize the chapter, turn to Pull It All Together and Chapter Review at the end of the chapter.
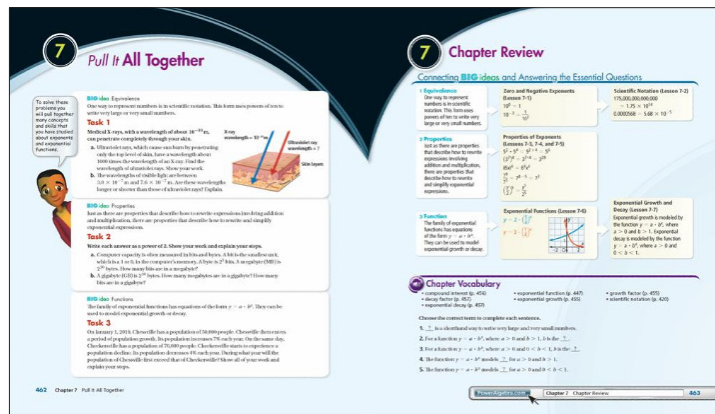
These end-of-chapter activities summarize the Big Ideas and answer the Essential Questions. The performance tasks in Pull It All Together help students evaluate their understanding as they prepare to take the chapter test.

Review

This guide explained how to teach a lesson with Prentice Hall Algebra 1, Geometry, and Algebra 2, using Algebra 1 as the example. It showed teachers how to blend both print and digital instructional media to deliver effective instruction.

The guide also explained how to introduce a chapter, teach each part of a lesson, and summarize the lesson with the end-of-chapter activities.

For more information, please watch the other Prentice Hall High School Math series tutorials on this Web site.