Program Overview

Introduction

This guide provides a quick overview of Savvas's middle school science program, Interactive Science. It examines the three innovative learning paths for the program, which include text, inquiry, and digital options. This guide also discusses essential best practices that are included in the program: the Understanding by Design® framework (or UbD™ framework) and the 5E Learning Cycle.

Twelve Interactive Science Modules

Interactive Science is a standards-based, next-generation science program for middle grades. There are twelve modules available for the program.

These modules are grouped by the following strands:

- The Nature of Science;
- Earth Science;
- Life Science; and
- Physical Science.

Three Pathways

Interactive Science features three learning paths:

- a text path;
- an inquiry-based path; and
- an engaging digital path.

Choose to follow one instructional path or integrate all three.

Text Path

The text path includes Savvas's innovative write-in student edition and the DK Big Ideas of Science Reference Library.

The write-in student edition is not a workbook but rather an interactive text. It provides students with a personal record of their learning experiences in science class. Interactive Science allows students to read, write, draw, graph, and self-assess all in one place.

This interactive student edition engages students while encouraging them to foster ownership for their own learning.

Part of learning about science involves students exploring their own natural curiosities. The DK Big Ideas of Science Reference Library reinforces the unifying concepts of science and encourages student to dig deeper in their explorations of these Big Ideas.

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Inquiry Path

The inquiry path features hands-on labs and activities that are scaffolded for all learners. These opportunities are in each lesson. Look for the LabZone symbol in the student edition and Teacher's Edition.

This indicates the hands-on inquiry activities that can be found in the comprehensive Teacher's Lab Resource, which includes black line master resources for all hands-on inquiry labs.

In addition, kits of hands-on science materials are available directly from Savvas.

Digital Path

The digital path features Savvas's next-generation online learning environment. It is not just an e-book that students read online. It is an engaging digital learning and management environment available at MyScienceOnline.com.

There are a wealth of digital tools that allow teachers to plan lessons, edit worksheets and tests, make assignments, assess, and remediate.

Students can complete online assignments and participate in games and activities that support vocabulary and concepts. They may also watch engaging videos and complete online tests.

Struggling readers benefit from using MyReadingWeb. They will have access to leveled reading passages that are related to the chapter content. They will also benefit by using MyScienceCoach. This is a personal online study partner that provides extra help on difficult science concepts.

MyScienceOnline.com features the Untamed Science Crew. This is a team of scientists who are featured in the Untamed Science videos that accompany each chapter of the program. These videos, available on DVD or online, engage students by taking them out into the real world of science. These episodes are more like reality TV than typical educational videos, and they are sure to inspire students.

Understanding by Design® Framework

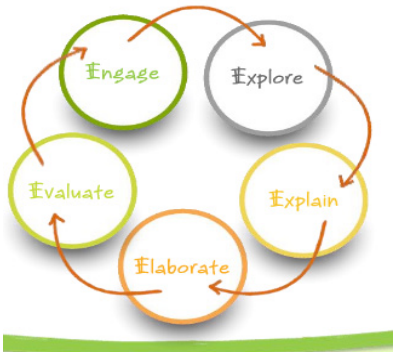
Grant Wiggins, coauthor of *Understanding by Design*, believes that teachers are designers, crafting curriculum and learning experiences to meet the needs of all students. Wiggins uses a best practice called *backward design* to help teachers make decisions regarding what content students should learn and how they should learn it as well as how evidence should be collected to prove students understand it.

As a lead author of Interactive Science, Wiggins employs the UbD™ framework to help students investigate the meaning of the Big Ideas of science. Each chapter starts with a Big Question. These questions guide students as they investigate the Big Ideas of science.

5E Learning Cycle

Interactive Science also aligns with the 5E Learning Cycle. This model, which originated with the Biological Science Curriculum Study (BSCS), is a best practice that is widely used in the development of science curricula.

The content and activities in every lesson are organized to guide teachers and students through the Engage, Explore, Explain, Elaborate, and Evaluate cycles.



The 5E Learning Cycle is integrated throughout the program. This approach fosters inquiry-based learning and allows students to use and build upon prior knowledge and experience to construct meaning.

Review

Interactive Science is a flexible, highly innovative, and adaptable approach to teaching middle school science.

This guide discussed the three learning pathways of this program:

- text;
- inquiry; and
- digital.

Teachers may focus on one pathway or integrate all three. The text path features a write-in student edition and the DK Big Ideas of Science Classroom Library. The inquiry path features hands-on lab activities. The LabZone icon indicates when a lab activity is available. The digital path provides an engaging digital learning and management environment available at MyScienceOnline.com. Digital tools include reading support through MyReadingWeb and content support through MyScienceCoach. Finally, this guide explained that the program utilizes the essential best practices of the UbD™ framework and the 5E Learning Cycle.