



Using Technology to Enhance Instruction

Introduction

This guide explains how to use digital content within the Miller & Levine Biology program to enhance instruction. It looks at Biology.com, which is the digital hub for all versions of the program, and it walks through many of the resources that are available on that Web site.

Biology.com has a range of digital content that can help illustrate complex topics, reinforce content objectives, and assess student understanding.

Text Resources

The first place to look for resources is the Chapter Opener page in the Teacher's Edition. The right margin lists many of the digital resources available for the chapter. There are options to reinforce the Chapter Mystery, analyze data that is gathered during a virtual exploration, and an interactive art activity.

Look at the first page of a lesson in the Teacher's Edition. In the Getting Started section of each lesson there is a list of digital resources available for that particular lesson. Locate the Biology.com icon to find the resources.

The bottom of many pages displays a Biology.com bar. This bar lists the resources applicable to that page.

Browse the Table of Contents

Log in to Biology.com to locate the digital content. When teachers log in, they see a screen similar to this one.



Under the bar that says "Select your program to view the table of contents," click **Biology**. This shows the table of contents for Miller & Levine Biology, where teachers can browse the units and chapters of the book.

From here it is possible to view the lesson, assign the lesson, find out more information about the lesson, view the lesson in the online Teacher's Edition, or add the lesson to the online Lesson Planner.

Searching for Content

Teachers can locate content by keyword, media type, or by topic. To search for an instructional piece, click **Search**.

To search by keyword, enter any word in the search box, and the system provides all of the resources related to that word.



To search by media type, choose **Media Type** from the options on the left. Then choose a media type: Activity, Quiz/Assessment, or Video. Once a media type is chosen, all of those resources for the program are displayed.



Finally, teachers can search by topic. Choose **Topic** from the options on the left, which brings up the various topics for the program. Select a topic to see all of the media available for that topic.



Biology.com Lesson

To understand how all of this content fits together to make a lesson, select a lesson. There are four tabs that students use to navigate through the lesson content.

The Lesson Overview tab summarizes the lesson. It asks students guiding questions and revisits the key concepts of the lesson.

The Lesson Notes tab provides students with a place to collect and organize lesson information. This tab also functions as their online notebook.

The Activities tab provides content that reinforces lesson concepts. One example of an activity is a visual analogy. Visual analogies relate complex biology concepts to familiar situations.

The last tab is the Assessment tab. Here students have the option of taking a self-assessment, or teachers can assign them a formal lesson assessment.

Learning Resources

There are a few other activities that are especially helpful for struggling students or students with limited English language proficiency.

An example of these activities is Tutor Tube, which helps students who are struggling with the concepts. These videos break down the concept and illustrate it through animation. There are also vocabulary games that help students practice chapter vocabulary.

The static images in the textbook come alive with interactive art and animations. Students can also manipulate some of these images.

Untamed Science

Biology.com also includes Untamed Science. Bringing a perfect blend of energy and scientific knowledge, the Untamed Science team brings concepts into the classroom.

Featuring the Ecogeeks, this team presents at least one video per chapter. These videos take concepts from the Chapter Mystery and further explore those concepts out in the field.

These three- to five-minute segments engage students and bring a sense of adventure to the classroom.

Biology.com PLUS

Biology.com PLUS is the premium side of Biology.com. Biology.com PLUS provides access to special content such as periodic updates from authors Ken Miller and Joe Levine. They keep teachers connected with the latest breakthroughs and trends in biology. With Biology.com PLUS, teachers also have unlimited access to virtual labs and activities.

Review

This guide explained how the textbook features alert teachers to engaging content found online at Biology.com.

It showed the three ways to search the content: by keyword, media type, or topic. The guide also discussed the content that is available for a typical lesson and the additional content that can be used for struggling students.

Finally, it mentioned the Ecogeeks, who are featured in Untamed Science, as well as the premium content that is available with the Biology.com Plus option.

For more information regarding the program features and components, please view the other tutorials on this Web site.