



## School Science Software

With the federal No Child Left Behind Act expected to expand its focus from reading and math to science instruction this year, educators are on the lookout for solutions that promise to improve the quality of science lessons in the nation's classrooms. To help educators explore their options, *eSchool News* presents its latest Readers' Choice Awards.

In November, we asked our readers to give us their top picks for software to improve science instruction across four major disciplines: earth science, life science, physical science, and space science. We also asked readers to vote for their software of choice in three other important categories: virtual dissections, chemistry lab experiments, and probeware, or data collection and analysis software.

Nearly 700 readers responded to our online poll, which closed Nov. 30. The results appear on the next three pages, along with a brief analysis of our survey findings and some comments from your peers.

While Discovery Education's unitedstreaming video-on-demand service appeared to be the product our readers were most familiar with—it swept three of the four major disciplines in our survey—a number of other software products received consideration also, including titles from some of the world's top educational publishers as well as other lesser-known products you might not have heard of until now.

For the most part, educators who responded to the survey remained loyal to a single solution and seemed to stick with it throughout the survey, regardless of students' grade level or discipline. Others, however, complained that many of the products featured in our poll were unfamiliar to them, giving rise to speculation that science teachers in general don't really know the range of solutions that exist to help improve the quality of their practice.

### Best Software for Teaching Earth Science for...

#### EARLY LEARNERS (Kindergarten through Grade 3):

1. unitedstreaming (Discovery Education)	50.6%
2. Sammy's Science House Series (Riverdeep Interactive Learning)	12.6%
3. Sidewalk Science Series (Tom Snyder Productions)	6.7%
4. Thinkin' Science (Sunburst Technology)	6.4%
5. Waterford Early Math and Science (Pearson Digital Learning)	4.1%
5. (tie) Learn About Earth Science Series (Sunburst Technology)	4.1%

#### MIDDLE GRADES (Grades 4-8):

1. unitedstreaming (Discovery Education)	50.6%
2. Discovery School Science CD-ROMs (Discovery Education)	8.3%
2. (tie) Science Court (Tom Snyder Productions)	8.3%
4. Science Seekers (Tom Snyder Productions)	6.4%
5. Field Trip Series (Sunburst Technology)	4.4%
6. SciTech Earth Science Course (Virtual Learning Systems)	4.2%

#### HIGH SCHOOL (Grades 9-12):

1. unitedstreaming (Discovery Education)	40.5%
2. Curriculum Pathways Series (SAS inSchool)	11.3%
3. Decisions, Decisions: The Environment (Tom Snyder Productions)	7.3%
4. Discovery School Science CD-ROMs (Discovery Education)	6.4%
5. NovaNet Comprehensive Online Curriculum (Pearson Digital Learning)	3.7%
6. My World GIS (PASCO Scientific)	3.4%

Discovery Education's unitedstreaming video-on-demand service was the top vote-getter in the earth science category, landing enough first-place votes to lead the way across all grade levels—from early learners to the middle grades and on up through high school. When asked to explain their choice, educators praised the searchable video library for its versatility and wide array of science-related content.

"I chose unitedstreaming because of its wonderful, simple-to-understand, thoroughly covered topics and videos," offered one elementary educator. A fellow middle-school teacher agreed, saying, "My students are visual learners. We use the videos to teach about places and concepts we cannot afford to take our students to see. We can individualize the videos to meet the needs of all our kids." Another educator testified to using unitedstreaming "several times a week" as a means of providing visual examples of tough scientific concepts.

But unitedstreaming isn't the only software or web-based product educators turn to when teaching earth science. In the early grades, Riverdeep's Sammy's Science House Series received 12.6 percent of the vote, enough to capture second place over Tom Snyder's Sidewalk Science Series (6.7 percent) and Sunburst Technology's Thinkin' Science product (6.4 percent). One satisfied customer called Sammy's Science House "perfect for early learners" and said it engages students while simultaneously encouraging them to learn.

In the middle grades, two products tied for second with 8.3 percent of the vote apiece—Tom Snyder's Science Court software and another Discovery product, Discovery School's Science CD-ROMs—while Curriculum Pathways by SAS inSchool was the clear runner-up among high-school science teachers. One educator called Curriculum Pathways "an outstanding resource to teach core concepts," adding, "Every day, a percentage of students decide for one reason or another not to pursue a career in science. Curriculum Pathways engages students and makes learning exciting, keeping the door of opportunity open a bit longer . . . outstanding stuff."

Other products cited by our readers but not appearing in the accompanying graph include Houghton-Mifflin's Discovery Works in the middle grades and Thomson Gale's Science Resource Center—an in-depth, curriculum-oriented science database that features full-text science articles, multimedia resources, and web links—at the high-school level.

## Best Software for Teaching Life Science for...

### EARLY LEARNERS (Kindergarten through Grade 3):

1. <b>unitedstreaming (Discovery Education)</b>	<b>49.7%</b>
2. Sammy's Science House Series (Riverdeep Interactive Learning)	17.2%
3. Learn About Life Science Series (Sunburst Technology)	7.2%
4. Sidewalk Science Series (Tom Snyder Productions)	6.2%
5. Digital Field Trip Series (Digital Frog International)	4.1%
6. Waterford Early Math and Science (Pearson Digital Learning)	3.8%

### MIDDLE GRADES (Grades 4-8):

1. <b>unitedstreaming (Discovery Education)</b>	<b>50.2%</b>
2. PLATO Life Science (PLATO Learning/CyberEd Inc.)	10.6%
3. Science Court (Tom Snyder Productions)	6.2%
4. Rainforest Researchers/ Rainforest Designer (Tom Snyder Productions)	5.9%
5. Science Seekers (Tom Snyder Productions)	3.7%
6. Field Trip Series (Sunburst Technology)	3.4%

### HIGH SCHOOL (Grades 9-12):

1. <b>unitedstreaming (Discovery Education)</b>	<b>35.1%</b>
2. PLATO Life Science (PLATO Learning/CyberEd Inc.)	13.0%
3. Curriculum Pathways Series (SAS inSchool)	11.4%
4. Discovery School Science CD-ROMs (Discovery Education)	5.0%
4. (tie) Decisions, Decisions: The Environment (Tom Snyder Productions)	5.0%
6. NovaNet Comprehensive Online Curriculum (Pearson Digital Learning)	4.3%

The trend toward streaming video continued in the life sciences category, with unitedstreaming once again winning out across all three grade levels. While some educators said they use the videos to enhance the aging and often outdated materials available to them within their school buildings, others praised the technology for providing content aligned with state standards and for reinforcing difficult biological concepts.

"My children need to see animal and plant life cycles, not just talk about them," observed one elementary educator, referring to the visual impact of video in the classroom. "The ability to search by standard is also very helpful," said another middle-school teacher. "The selection of short clips is a great tool to reinforce or introduce ideas and concepts."

In the early grades, Sammy's Science House Series once again placed second, with 17.2 percent of the vote, and Sunburst Technology's Learn About Life Science Series took third with 7.2 percent. PLATO's Life Science, from PLATO Learning and CyberEd Inc., finished second in the voting at both the middle school (10.6 percent) and high school (13 percent) levels, and SAS inSchool's Curriculum Pathways (11.4 percent) also fared well at the high school level in this category.

According to respondents, the strength of PLATO's technology lies in its ability to break down difficult scientific concepts at a level where students can grasp them. Plus, "the interactive format keeps students interested," suggested one middle-school teacher, and "Try explaining DNA construction to students on your own and then use the DNA section in CyberEd and see how much easier it is for students to truly understand," challenged one high-school teacher who voted for the PLATO product.

Also cited by readers in our poll, but not appearing in the accompanying graph, was Holt, Rinehart and Winston's (HRW's) Simulations product.

## Best Software for Teaching Space Science...

### EARLY LEARNERS (Kindergarten through Grade 3):

1. <b>Sammy's Science House Series (Riverdeep Interactive Learning)</b>	<b>28.0%</b>
2. Learn About Earth Science: Astronomy (Sunburst Technology)	21.6%
3. Space Academy GX-1 (Riverdeep Interactive Learning)	12.5%
4. KnowledgeBox Digital Learning System (Pearson Digital Learning)	12.1%
5. HOB0 Henry Science Kit (iScienceProject.com)	6.9%
6. unitedstreaming (Discovery Education)	3.5%

### MIDDLE GRADES (Grades 4-8):

1. <b>Great Solar System Rescue (Tom Snyder Productions)</b>	<b>27.3%</b>
2. Discoveries: Explore Aviation and Flight (Sunburst Technology)	13.9%
3. Space Academy GX-1 (Riverdeep Interactive Learning)	13.4%
4. Discover! Astronomy (EOA Scientific Systems)	13.0%
5. KnowledgeBox Digital Learning System (Pearson Digital Learning)	10.0%
6. HOB0 Henry Science Kit (iScienceProject.com)	5.2%

### HIGH SCHOOL (Grades 9-12):

1. <b>Space Academy GX-1 (Riverdeep Interactive Learning)</b>	<b>28.6%</b>
2. Discover! Astronomy (EOA Scientific Systems)	21.4%
3. Astronomy Explorer (EOA Scientific Systems)	14.8%
4. HOB0 Henry Science Kit (iScienceProject.com)	9.7%
5. NASA.gov (National Aeronautics & Space Administration)	3.1%
6. unitedstreaming (Discovery Education)	2.0%

The only major discipline not won by Discovery's unitedstreaming, space science proved to be somewhat of an anomaly. In the younger grades, Sammy's Science House took top honors with 28 percent of the vote. Unitedstreaming placed sixth, with 3.5 percent—as a write-in candidate.

When asked why they chose Sammy's Science House, one educator said, simply, because "kids like it." Another was a little more specific, stating that the software is easy for students to use and gives teachers another tool to teach the most fundamental concepts.

Also favored in the early grades were Learn About Earth Science: Astronomy from Sunburst (21.6 percent), Riverdeep's Space Academy GX-1 (12.5 percent), and the KnowledgeBox Digital Learning System from Pearson (12.1 percent), among others.

In the middle grades, Great Solar System Rescue from Tom Snyder carried the top spot with 27.3 percent of the vote. "Students love this series," wrote one survey respondent, who labeled the software effective because it enables students to work together in groups and gives everyone a specific "role to play." Three products came within a single percentage point of second place: Sunburst's Discoveries: Explore Aviation and Flight (13.9 percent), Space Academy GX-1 (13.4 percent), and Discover: Astronomy from EOA Scientific (13 percent).

At the high school level, Riverdeep's Space Academy GX-1 claimed 28.6 percent of the vote to take first place, with two products from EOA Scientific—Discover! Astronomy (21.4 percent) and Astronomy Explorer (14.8 percent)—coming in second and third, respectively.

Also getting strong support from our readers was the NASA.gov web site and its considerable—and free—space-science resources.

## Best Software for Teaching Physical Science for...

### EARLY LEARNERS (Kindergarten through Grade 3):

1. <b>unitedstreaming (Discovery Education)</b>	<b>49.0%</b>
2. Sammy's Science House Series (Riverdeep Interactive Learning)	14.6%
3. Thinkin' Science (Sunburst Technology)	7.0%
4. Learn About Physical Science Series (Sunburst Technology)	6.1%
5. Invent Lab Series (Sunburst Technology)	3.8%
6. Sidewalk Science Series (Tom Snyder Productions)	3.2%

### MIDDLE GRADES (Grades 4-8):

1. <b>unitedstreaming (Discovery Education)</b>	<b>50.3%</b>
2. PLATO Physical Science (PLATO Learning/CyberEd Inc.)	9.4%
3. Thinkin' Science: ZAPI! (Sunburst Technology)	8.4%
4. Discovery School Science CD-ROMs (Discovery Education)	5.5%
5. Virtual Labs: Light and Electricity (Riverdeep Interactive Learning)	4.5%
6. Science Court (Tom Snyder Productions)	4.2%
6. (tie) SciTech Physical Science Course (Virtual Learning Systems)	4.2%

### HIGH SCHOOL (Grades 9-12):

1. <b>unitedstreaming (Discovery Education)</b>	<b>39.2%</b>
2. PLATO Physical Science (PLATO Learning/CyberEd Inc.)	14.6%
3. Curriculum Pathways Series (SAS inSchool)	10.8%
4. Invent Lab Series (Sunburst Technology)	6.9%
5. NovaNet Comprehensive Online Curriculum (Pearson Digital Learning)	5.2%
6. Discovery School Science CD-ROMs (Discovery Education)	4.5%

Once again, unitedstreaming was the No.1 pick across all three grade levels, although a host of other products also received votes in this category—suggesting that educators use a wide variety of in-class solutions when teaching students about the physical sciences.

Among younger students, educators again pointed to Sammy's Science House Series (14.6 percent) and Sunburst's Thinkin' Science (7 percent) as unitedstreaming's stiffest competition. In the middle grades, PLATO Physical Science placed second with 9.4 percent of the vote, while Thinkin' Science: Zap! from Sunburst placed third with 8.4 percent.

In high schools, PLATO Physical Science garnered 14.6 percent of the vote, finishing just ahead of Curriculum Pathways (10.8 percent). Making its debut on the survey, in fourth place, was Sunburst's Invent Lab Series at a distant 6.9 percent, with Pearson Digital Learning's NovaNet Comprehensive Online Curriculum (5.2 percent) and Discovery School's Science CD-ROMs (4.5 percent) also receiving votes.

Other solutions cited by our readers but not appearing in the graph include Brainpop.com and Houghton-Mifflin's Discovery Works in the middle grades, and QUIA.com and ExploreScience.com at the high-school level.

## Other Top Science Software

### BEST CHEMISTRY LAB SOFTWARE:

1. Curriculum Pathways Series (SAS inSchool)	23.4%
2. Discover! Series Virtual 3D Lab (EOA Scientific Systems)	22.6%
3. PLATO Science Simulations (PLATO Learning Inc.)	21.1%
4. MSS Science Simulations (PLATO Learning/CyberEd Inc.)	8.8%
5. Graphical Analysis/Logger Pro (Vernier Software & Technology)	7.5%

### BEST DISSECTION SOFTWARE:

1. The Digital Frog 2 (Digital Frog International)	40.0%
2. CyberEd Dissection Series (PLATO Learning Inc.)	22.9%
3. Operation Frog Deluxe (Tom Snyder Productions)	15.8%
4. Froguts.com (Froguts Inc.)	1.7%

### BEST DATA COLLECTION AND ANALYSIS SOFTWARE (Probeware):

1. Graphical Analysis/Logger Pro (Vernier Software & Technology)	44.2%
2. Discover! Series Virtual 3D Lab (EOA Scientific Systems)	14.0%
3. DataStudio (PASCO Scientific)	10.6%
4. Imagiprobe/ImagiMath (PASCO/ImagiWorks)	10.0%
5. HOB0 Data Logger Science Kit (iScienceProject.com)	6.6%
6. TI InterActive! (Texas Instruments Inc.)	1.0%

### Best Chemistry Lab Software...

Three lab products finished with more than 20 percent of the vote in this category, suggesting there was no runaway winner. At the top of the list was Curriculum Pathways from SAS inSchool (23.4 percent), followed by Discover! Series Virtual 3D Lab from EOA Scientific (22.6 percent) and PLATO Science Simulations (21.1 percent).

"I like SAS Curriculum Pathways because I can customize a lesson to fit my needs," wrote one educator, who added that the software provides opportunities to expand upon existing lessons, including more in-depth coverage of scientific topics and a list of interactivities designed to bolster the teacher's repertoire of instructional strategies.

Besides the products appearing in the graph, Vernier Software & Technology's data-logging solutions, Pearson Digital Learning's NovaNet, and HRW's Simulations also received consideration.

### Best Dissection Software...

In recent years, several companies have begun marketing software products that facilitate virtual dissections, giving biology teachers a means to avoid both the mess and controversy that accompanies this portion of the science curriculum. The best of these products, according to *eSchool News* readers, is The Digital Frog 2 from Digital Frog International. A follow-up to the successful Digital Frog program, Digital Frog 2 is a CD-ROM-based curriculum that aims to recreate the experience of frog dissections via computer—minus the smell of formaldehyde, of course.

Coming in second with 22.9 percent of the vote was PLATO's CyberEd Dissection Series. With the PLATO tool, students have the ability to perform simulated dissections on six different animals, including a frog, fetal pig, rat, earthworm, perch, and crayfish. One educator called the simulations "beautifully photographed" and said the product contained "excellent step-by-step illustrations" designed to guide students through the dissection process.

Also receiving votes in this category were Tom Snyder's Operation Frog Deluxe (15.8 percent) and Froguts.com, an online dissection simulator from Froguts Inc. (1.7 percent).

### Best Data Collection and Analysis Software...

In this category of software—which enables students to collect data from their surroundings, including light and energy sources, and then evaluate those findings via unique software packages—an overwhelming 44.2 percent of survey respondents gave the nod to Vernier Software's Logger Pro.

"Using Vernier's software in conjunction with handhelds and sensors allows students [to engage in] hands-on experiences and learning in real time," wrote one educator, calling it "a user-friendly program" that provides a wealth of information. Said another: "This was my favorite data collection software when I was still in the classroom; it continues to be the industry standard." Aside from solid software and equipment, several educators complimented the company for its customer service and ongoing commitment to schools.

Other products receiving support from our readers in this category included Discover! Series Virtual 3D Lab from EOA Scientific (14 percent), DataStudio and Imagiprobe from PASCO Scientific (10.6 percent and 10 percent, respectively), the HOB0 Data Logger Science Kit from iScienceProject.com (6.6 percent), and Texas Instruments' TI Interactive! (1 percent).