

the handheld educator

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every
child can
learn

Brain-Based Learning

Educators say that given the right conditions, every child can learn. Scientists who study the brain and how it performs when children are learning agree, and through years of research have determined three varieties of instruction that have an optimal effect on students. The theory behind these approaches is called brain-based learning.



Classroom Strategies

The first strategy is to create learning environments in which students are immersed in what they are doing. The second is to provide activities that challenge students but don't create a fear of failure. The third is to encourage students to analyze and synthesize information. One model that incorporates all three strategies is when teachers encourage teamwork and structure curriculum around real-world problems so students can learn in context.

Assessment

In order to use this brain-based model successfully, assessment is key. For students, this means being able to gain insight about their own learning process through regular feedback. We often think about assessment as a culminating activity such as a standardized or end-of-year test. However, assessment should work with instruction and drive it to determine additional or alternative methods. With regular checks on comprehension and skills, teachers can individualize instruction and students can practice the skills they need.

Technology Tools

One way for teachers to monitor student learning is to combine observation methods and frequent, non-judgmental tests that assess improvement. As you'll see on Page 3, using Classroom Wizard™ on a Palm handheld to give short quizzes can determine student progress and allow a teacher to tailor activities to meet specific needs. Teachers can write observations and students can compile portfolios of work on handhelds; both provide records of growth. Using these strategies and discussing students' progress with them on a regular basis leads them to understand much better how to achieve, and it fulfills the tenets of brain-based learning.

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DBNOW TIPS

To create a custom database (like BookSmart), use the dbNow software on your computer.

1. Open dbNow Deluxe Desktop.
2. Select New Database from the File menu.
3. Enter a name for your new database, indicate whether you want to be able to edit the database on your handheld, and click the Next button.
4. Select the names of the handheld users who will use the database. Click the Next button.
5. Enter the name of the first field (up to 20 characters) in the Field Label field.
6. Select the data type for the first field from the Field Contains list and click the Next button.
7. Create your database fields in the order you want them to appear in the Record window.

COPYRIGHT RIGHTS

When anyone creates a story, poem, song, or just about anything, he or she owns the copyright to it. That makes it illegal for anyone else to use it without permission. For more information, visit The Copyright Society of the U.S.A. Web site. <http://www.copyrightkids.org/>

BOOKSMART DATABASE

RECORD#	The record number helps you keep track of entries. Many databases assign this number automatically.
TITLE	Complete title of book or article.
AUTHOR	Person who wrote the book or article.
TYPE	Type of publication (Eg. book, article, Web site).
SUBJECT	Brief statement of what information you want to use.
PUBLISHER	Company that printed the publication.
OTHER	Use this category for a magazine title or publication other than a book.
EDITION	Enter the volume and number of the publication, if any.
YEAR PUB	What date the book or article was published.
QUOTE	The words you want to use from this publication.

LESSON

book smart

Grade Level(s): Secondary

Subject Area: Interdisciplinary

Software: dbNow www.pocketexpress.com

Technology Needed: Palm handheld computer

Lesson Description: Students will learn about creating bibliographies for research reports. They will keep track of bibliographic information in order to create group citations for a team project.

Objectives: Students demonstrate understanding of copyright issues.
Students practice writing bibliographies for research reports.
Students begin keeping track of books they read.

Vocabulary: copyright, bibliography, intellectual property

Before the Lesson:

1. Create a book database on your desktop computer (See categories on the left.); call it BookSmart, and perform a HotSync operation with student handheld computers.
2. As an example, enter information about a book that most students have read.



Educator's Guide to Copyright and Fair Use*

Lesson:

1. What makes something "intellectual property"?
2. What would you think if another student claimed that your work was his or hers?
3. You know it's wrong for someone to steal your work. Is it illegal? (See COPYRIGHT RIGHTS.)
4. When you write a report and want to use information from a book or Web site, what do you have to do in order to use it? (Answer: If it's a sentence or two, quote it. If it's original artwork, a story, or a long passage, get permission to use it.)
5. What does it mean to quote something? (Answer: Briefly attribute the source of information in the report and list complete information at the end in a bibliography.)
6. We're going to create lists of books and articles that you can use for your reports to keep track of copyright information and to share with others.
7. Take out your Palm handhelds and open the BookSmart database.
8. Look at the first entry, which was done for you.
9. What information is there? Why are these categories important to know?
10. Use another publication and enter the information about it into record 2.

Assignment:

As you read books and other materials for reports and projects, enter the information about them into this database. You can perform a HotSync operation or beam the lists to combine and share with other students.

LESSON

math matters

TECH SMART TIPS

Grade Level(s): Elementary

Subject Area: Math

Software: Classroom Wizard and Skills Connection from Scantron
www.scantron.com, www.classroomwizard.com

Technology: Palm handheld computer

Lesson Description: Students learn and practice the basic mathematics skill of equivalence, check their comprehension, and review. They learn fractions and decimals to address the math standard of equivalence.

Objectives: Students practice solving grade-appropriate math problems. Students take diagnostic quizzes using Classroom Wizard to determine understanding of the math standard of equivalence. Students use Skills Connection's individualized practice problems that address areas that need improvement.

Vocabulary: decimal, fraction, equivalent

Before the Lesson:

1. Select test questions from Skills Connection for fractions and decimals as a way for students to check how well they understand. (See Sample Questions below.)
2. Import the test questions into Classroom Wizard.

Lesson:

1. You've been learning and practicing fractions and decimals and now we'll check how well you understood them.
2. Take out your Palm handheld computers and open Classroom Wizard.
3. Enter your Student ID and Quiz ID.
4. Read each question carefully and select the correct answer.
5. When you are finished, beam your answers to me.
6. After you beam your answers, you'll see your results on the handheld immediately and be able to check what you got right and what skills you need to practice.

After the Lesson:

1. Place students into groups depending on what skill they need to practice.
2. Use the Skills Connection Home Study Guide to provide individualized work.
3. Students can use the Skills Connection Home Study Guide's tutorials and activities in class and at home to practice the skills they need.



SAMPLE QUESTIONS

Equivalence: Decimal/Fraction

Equivalent forms of numbers name the same numbers. You can write fractions as decimals and vice versa. For example: $\frac{1}{4} = 0.25$.

1. Which of the following is another way to write 0.8?
A. $\frac{8}{100}$ B. $\frac{1}{8}$ C. $\frac{4}{5}$ D. $\frac{2}{16}$
2. Which of the following is another way to write $\frac{9}{10}$?
A. 0.9 B. 0.09 C. 9.0 D. 90

THE CLASSROOM WIZARD ADVANTAGE

With Scantron's Classroom Wizard you can measure student learning with real-time assessment and analysis.

For Students

Students can find out results instantly while the test is still fresh on their minds. They can see what they got correct and what skills they still need to practice. Checking comprehension often helps students recognize what skills they still need to learn so that they don't fall behind.

For Teachers

Create multiple versions for pre- and post-testing throughout the year. Track individual student progress to meet Title I requirements for assessment, tracking and parental communication. Use online reports to show what skills each student needs to focus on. Individualize practice so students keep up with the skills and standards for their grade.

For Parents

Build parent—teacher—school relationships about subject matter and assignments by providing parents with ongoing assessments of student improvement.

THE SKILLS CONNECTION ADVANTAGE

Scantron's Skills Connection, Classroom Wizard's companion test design and parent/teacher communication tool, enhances the overall classroom learning experience.

Teacher Materials

Choose questions from a standards-correlated item bank of 844 skills and over 12,000 validated questions in subjects such as math, language arts, reading and science. Teachers can access questions, answers, and study guides quickly and easily.

Student Practice

Since the Home Study Guide includes tutorials and activities, students are able to practice at home. Teachers can use the word processor to add their own ideas and materials for students.

Parent Communication

Keep parents informed. Generate a Home Study Guide with Skills Connection that parents can read to get a better understanding of how to help students review the skills. Each guide can include descriptions of the skills that students need in addition to helpful tutorials and activities.



data mining

Data mining. Data-driven decision-making. Today's buzzwords mean aggregating essential information to assess students, schools, and systems—and in order to plan for the future.



► Data for Decisions

Using data for decision-making is a concept that's important for student assessment and improvement as well as for educator accountability. Schools and districts collect reams of information and keep it secure in a variety of systems. The challenge? To assemble that collected data in a way that lets educators see achievement patterns, gaps in instruction, and other vital information for making decisions.

► Putting it All Together

Educators need information on student grades, schedules, attendance, discipline, home contacts, and more at their fingertips. Finding and tracking all of this data in an easy-to-use system is key. Pinnacle Plus™ is a centralized database system that brings the instructional and administrative sides of education together. It allows teachers and administrators to link specific learning standards and benchmarks to assessments; track student attendance, demographics and performance; generate required reports; and customize data according to individual needs. Pinnacle Palm™ makes this information mobile. Teachers can monitor progress continually and in real-time, rather than wait for the standardized tests at the end of the year.

► Making it Easy to Use

Making it all accessible from a handheld computer is key to making good decisions. With Pinnacle Palm, you have portable, on-demand access to real-time student, class or school-wide information. Tasks such as analyzing student work and individualizing content are easy and intuitive. You can enter grades into your Palm Gradebook Assistant™ and they become part of the student's record the next time you perform a HotSync operation. The information you need is available wherever you are, whenever you need it—saving you time and paperwork.

► Mining the Data

With the right information at your fingertips, you can integrate standards and benchmarks into any course or curriculum, identify students who need remediation or additional challenges, and keep parents informed. You can chart the progress and achievement of individuals, groups, and classes to make sure they are all on track for success. And you can use the information at hand to make the wisest decisions for the future.

► The Software that Makes it Happen

Excelsior Software's Pinnacle System www.excelsiorsoftware.com

tips and tricks

Don't forget to HotSync

Be sure to perform a HotSync operation every day. You never know when having your files backed up on your computer will come in handy.

Turn off the Light

To turn off the backlight, hold the power button for a few seconds until it turns off. To turn it back on, do the same thing again: press and hold the power button.

Move an Event

To change the time or date of an event, tap the 'Details' button at the bottom and choose the Time or Date and change it.

