

# **Fun and Games Replace Drill and Kill**

## ***By Lorrie Jackson***

### **WHY A TECHTORIAL?**

#### **What will I learn today?**

You will learn how to select online games and activities for student use.

#### **What hardware and/or software does the techtorial apply to?**

The techtorial applies to any computer with Internet access. Be aware, however, that many games require a faster Internet connection than might be found in some classrooms, and many games require [Shockwave](#) and [Flash](#), both free downloads.

#### **Which National Educational Technology Standards for Teachers does the techtorial address?**

The techtorial will help teachers accomplish standard IIIa in particular.

The International Society for Technology in Education (ISTE) has developed a set of National Educational Technology Standards for Teachers. Standards or Performance Indicators are included for each techtorial to help teachers and administrators improve technology proficiency. For a complete description of the standards indicated, go to [NETS for Teachers](#).

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### **FUN AND GAMES REPLACE DRILL AND KILL**

Parents and teachers often complain about the amount of time students spend playing games on the computer. So, why not use kids' love of games to the best advantage? Age-appropriate online games can boost academic skills by keeping students focused on content. In moderation, games can be an engaging and beneficial learning tool.

Online games can be used for remediation, enrichment, or acceleration. The activities can fill a few minutes when one student is done with her work, when a lesson is completed and there's still 10 minutes left in the period, or when you're working with one group of kids and others are getting restless. Best of all, games don't require a lab full of computers. Just one classroom computer will do!

#### **General Tips For Selecting and Using Games**

- Know students' aptitudes and attitudes. If a game is too easy, students lose interest; if too difficult, they get frustrated and go off task.

- Be sure that games, as well as on-site and linked ads, are age-appropriate. Even the most educationally sound game for kindergartners is useless if it includes ads designed for more mature audiences.
- Make sure a Web site is what the industry calls "high in usability." In a recent study, The Nielsen Norman Group found that students ages 5-17 on the Web:
  - give up easily.
  - rarely scroll down "past the fold" (below what you can typically see when first opening a Web site)
  - love mouse-overs (text, graphic, or audio that is activated when you point your mouse, but click on an object on a Web page less often.
  - click ads.
  - enjoy animation.
  - like simple tools, like Google.
  - read more instructions than adults (surprise!).

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## **SELECTING PRE-SCHOOL AND PRIMARY GAMES**

Students ages 3-6:

- are highly motivated to learn on the computer.
- enjoy sharing what they know with others.
- do not mind repeating an activity.

Challenges for this age group include the following:

- Developing motor skills, small hand size, and emerging literacy/problem-solving skills can make it hard to understand and navigate a given Web site.
- Poor Web design makes some pre-K-1 sites hard for young children to navigate.
- Students love to "click" and can quickly get off site.

Choose sites that

- contain limited or no written directions.
- use speech provided by adult speakers. "Baby talk" should be avoided.
- reinforce concepts using multiple elements -- color, text, pictures, and sound.
- allow students, not just to play, but to navigate as well.
- provide their own games rather than simply linking to games from other sites.

Top picks include

- [Literacy Center](#). This site provides French, Spanish, and German versions, in addition to the English version..
  - [StoryPlace](#). Charlotte/Mecklenberg County's Public Library offers several dozen online stories that include audio and animations. Stories are easy to navigate, with clearly marked directions (non-verbal); however, stories are short (3 minutes or so), so if you're using them in a lab, be aware that students might need your help to move to the next story or to the game that goes with that story.
  - [Starfall](#). Starfall is an excellent starting point for emerging readers. Based upon a phonic curriculum, stories include audio prompts that sing about a given phonic sound from the story. Free downloads, including worksheets, make this a don't-miss site!
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## SELECTING GAMES FOR ELEMENTARY STUDENTS

Elementary level students:

- are highly motivated.
- can read most navigation directions.

Challenges for this age group include the following:

- Differing abilities might require providing a number of different games.
- Curious or bored students can click off site quickly.

Choose sites with

- a limited number of ads and other temptations to get off-task.
- a solid connection to content in addition to entertainment value.

Top picks include

- [Power Proofreading](#). This game from Houghton Mifflin is one of the best grammar review games on the Web. PowerProofreading uses memos, letters, paragraphs, and other selections and asks students to find the grammatical errors within the text. You can select grade level, grammar concept covered, and writing genre.
- [A+ Math](#). Don't be fooled by the simple design of this Web site. The games are solid, and student love to compete in Math-O (like bingo). Concepts include addition, subtraction, multiplication, division, and geometry, with games, worksheets, and homework help!

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## SELECTING GAMES FOR MIDDLE AND HIGH SCHOOL STUDENTS

Use games with middle- and high-school students to:

- fill in learning gaps (particularly for transfer or ESL students).
- review for tests, such as SATs and Advanced Placement exams.

Challenges for this age group include the following:

- Web site design often is too juvenile.
- Appropriate games for high-school students are harder to find.

Choose sites that

- allow you to customize games to fit your curriculum.
- de-emphasize style in favor of substance.

Because high-school class content can vary tremendously (French? Astronomy? Current Events?), rather than looking for games for your specific classroom, choose sites that allow you to create your own customized review games.

Top picks include:

- [Quia](#). Existing games and quizzes are free to use, but you need a paid subscription to customize your own games and to save student scores.
- [E.L. Easton's Exercises, Quizzes, and Tests](#). This site provides a comprehensive list of grade 7-12 activities, some pre-made, others you can create yourself.

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## TELL ME MORE!

### Where can I find more information?

Check with your textbook publisher. Many publishers now put supplemental activities online. Scott Foresman's KnowZone is an excellent example of how online activities can be used to review concepts in middle-school math and language arts. In addition, [Family Fun Sites](#) and [Fun and Games](#) both are excellent resources for locating more games appropriate for use at home and at school.