

Packetville Press

Newsletter for Educators

Why Educational Games?

Even those who are not computer game enthusiasts have to admit that playing games is fun. We learned from *Monopoly* and *Scrabble*, and we didn't think of them as educational.

Sure, there are games that don't belong in a school setting, but we've got to admit that games have great potential for our classrooms. We don't need research to tell us that our students can learn by playing games. Consider all the games we've used to help students review content and learn basic facts such as the multiplication tables, spelling words, vocabulary, and history and science facts. The advent of computer games gave us new teaching tools, and those games have evolved into the dynamic interactive video-type games that are possible in education today.

In fact, using video games in the classroom is showing such promise that a team of educators and game developers is busy designing a new "video game" school that is scheduled to open in 2009. The MacArthur Foundation has contributed \$1.1 million to create a New York school where students in Grades 6-12 will learn through games. The idea is to use games to give students a boost in literacy and skill development.

If you've been searching for online games to use in your classroom, you might want to check teacher Larry Ferlazzo's site (bayworld.net/ferlazzo/onlinegame.s.html). — And you know you can head to Packetville (www.cisco.com/go/packetville) for engaging interactive games and lessons featuring understanding of the Internet and careers in engineering, mathematics, science, and IT.

Did you know? In 2000, there were approximately 11 million students ages 12-17 online; today there are 22 million. (PEW Internet Survey)

There's Nothing Like Packetville

by Dr. Merle Marsh

I'm an educator who helped to create Packetville. Of course, I'm partial to its content, but I can tell you that while working on the site I searched the Internet, browsed traditional educational materials, and walked the floors of many NECC (National Education Computing Conference) to scout out similar projects. I found none. There is no other program that I could find that does what Packetville does:

1. Packetville teaches understanding of the Internet through interactive games that are enriched with an abundance of teacher materials, parent and advisor suggestions, and student activities.
2. Packetville uses games, lessons, and activities to introduce students to careers in IT and motivate them to create their own paths to the future.

Packetville is indeed a unique community. It's filled with a cast of lively characters like Peter Packet and his niece Penny who lead students through a series of challenges designed to provide a foundation of knowledge that will be useful to them now and in the future. It is a place where your students can learn on their own or learn with your guidance. Within the Packetville community, there are sections for students, teachers, parents, and club advisors. In the teacher area, you'll find detailed lesson plans and activities that cross the curriculum. You can download graphics, music, craft ideas, sticker templates, and even a play to use with your students.

I know that selecting teaching tools for your classes is not easy today. There are software programs and online materials that might fit with your lessons, but finding the right ones is often difficult. Some programs try to cover everything and cost more than your school budget allows. Others are so specific that you don't know where you could possibly fit them into your course of study. In Packetville everything is free, and the program does just what it says it does: introduce understanding of the Internet and motivate students to consider careers in IT. That's it. It's easy to understand and to use. Even if you are not a computer expert, with Packetville, teaching about the Internet and IT is easy.

So where would Packetville fit into your lessons? If you are a technology teacher, use the *Peter Packet* games as you teach your students how the Internet works. Once they jump into Packetville, they'll get acquainted with packets, servers, routers, FTP, wireless technologies, etc., while learning how to avoid viruses, hackers, and hacker packets. If you are an elementary teacher or a social studies teacher, you might want to use the *Peter Packet* games to help your students learn about how technology can be used to help others throughout the world. Math, science, and career education teachers will find the second *Peter Packet* game and the *Career Capture* game perfect for encouraging students, especially girls—to consider careers in math, science, and information technology. You don't have to use all the activities and resources in Packetville. Just pick the ones you want, and use them online or download them to your computer. I suggest that you download the games to student computers, especially if you are planning to use them with an entire class.

Lessons accompany each of the games in Packetville. In fact, for some of the games, you'll find a sequence of lessons that tackle different phases of the game. In the first *Peter Packet* game, there is an introductory lesson, along with separate lessons featuring servers, routers, wireless communication, community service and careers. There are WebQuest lessons, girls' only and boys' only lessons, and lessons that motivate students to use their creative talents to come up with innovations. All the lesson materials are provided for you in Packetville. You can download them and change them so that they'll work well with the students in your classes.

The content in Packetville is what all students need to know, and it's waiting for them and for you online at www.cisco.com/go/packetville. I think you'll like it, and I don't think you'll find anything like this anywhere else.

2007 Technology Standards

ISTE NETS-S

There's lots of talk today about the need to help students learn how to think creatively and innovatively. In fact, when in June 2007, the International Society for Technology in Education released its "refreshed" standards for students, creativity and innovation were at the top of the list.

Packetville is all about creativity and innovation. From its educational games to its lessons and activities that encourage students to think differently, it helps students learn in unique ways and gives them the inspiration to take off on their own creative paths. The cross-curricular program gets students thinking of the Internet and digital technologies as they've never done before. Once they've learned that packets, routers, servers and such are easy to understand, they investigate careers that use the Internet and digital technologies. Throughout Packetville, students are challenged to build career paths; develop products; write stories, poems, comics, drama, and music; take on challenges

The second and third standards of NETS-S call for communication, collaboration, research, and information fluency. In Packetville students work individually or with partners as they learn to avoid viruses, hackers, interference, and other calamities that befall them in Packetville's video-type games. Collaboration is through group work, and in some lessons, through online messaging. One game features difficulties being faced by children around the world and how technologies can be used to help. Activities include encouraging students to take part in safe international online projects such as those provided by *KidLink*, *ePals*, and *SchoolNetGlobal*.

Critical thinking, problem solving, and decision-making are the ingredients of ISTE's fourth standard. These important skills are covered in Packetville's lessons, games, and activities. Students identify problems and use their knowledge to solve them. In the MP3 lesson, for example, students collaborate to create their own children's product that features an MP3 file. In the melodrama activity, they act out and complete a zany play based upon the characters in two of Packetville's games. Girls taking part in Packetville meet women who have successful careers in IT and use the knowledge they gain from these women as a take off to considering if IT has a place in their future.

In the Packetville community, digital citizenship, the fifth of NETS-S standards, is emphasized. The Peter Packet game takes students to three countries where children aren't able to get the education they want. Students are asked to discover how technology can help the young people in those countries. All of the Packetville games are designed to lead students to consider how technologies work now and can be used to benefit others now and in the future. The concept of using technologies safely and efficiently and for lifelong learning is central to Packetville. Students participating in the Packetville community learn to think of the Internet in new ways. They understand how it works, they know its problems, and they consider how it is now and will continue to be part of their life.

The last of the NETS-S standards, technology operations and concepts, is stressed in Packetville, especially in the Peter Packet games. One of the goals of Packetville is understanding of the Internet and how it works, and another is to introduce students to IT careers. While students aren't given hands-on practice with troubleshooting technologies in Packetville, they are getting the foundation they need to move on to these skills later.

The sections of NETS-S standards not *directly* covered in the Packetville community are items that feature actual troubleshooting of technologies and working with the finding and evaluation of sources on the Internet. Most of the source material in Packetville is provided in the program, and although interaction with others online is encouraged, communication is basically among students in classrooms or clubs. The rest of NETS-S and their components are part of the Packetville program.

For additional information, you'll want to go to the [International Society for Technology in Education \(www.iste.org\)](http://www.iste.org) site, where you'll find the list of [ISTE NETS-S 2007](http://cnets.iste.org/students/) (<http://cnets.iste.org/students/>).

