By Martin Nikirk

Introducing Interactive Technology—"Toy Story 3"

"COMPUTER GAME DEVELOPMENT AND ANIMATION (CGDA) PROGRAM STUDENTS AND STUDENTS FROM THE MULTIMEDIA PROGRAM WORKED PROGRAM WORKED TOGETHER TO DISCOVER AND EXPLORE THE COMPONENTS OF INTERACTIVE MEDIA WITH THE DISNEY/PIXAR'S 'TOY STORY 3' THEME."



TO INFINITY AND BE-YOND!" is the catchphrase of

Buzz Lightyear, Universe Protection Unit space ranger, a character in the Disney/Pixar "Toy Story" franchise. The three films in the franchise—"Toy Story," 1993; "Toy Story 2," 1999; and "Toy Story 3," 2010—incorporate an innovative blend of many different genres, having spun off video games and dozens of film and game-related consumer products.

The film was used to introduce students at Washington County Technical High School-located in Hagerstown, Maryland-to interactive media. Computer Game Development and Animation (CGDA) program students and students from the multimedia program worked together to discover and explore the components of interactive media with the Disney/Pixar "Toy Story 3" theme. Eight teams learned about media development, logo, continuity and franchising components through eight-minute visits to each of eight stations with activities to complete. The CGDA teacher selected and organized the stations to introduce learning objectives from several of the digital media standards for the CGDA and multimedia programs.

The CGDA instructional program is unique in that students learn the wholeto-part relationship of the interactive media profession, then learn the skills to build each of the assets. Students experience a real-world connection for product development while learning about movie, video game, music, toy, and book production interrelated to an interactive media theme. The teams then reported what they learned from their activities.

Each year the digital entertainment industry releases several blockbuster multimedia products built on interactive technology models where movies, video games and franchised products engage consumers. Last year, the Walt Disney/ Pixar franchise earned \$920 million worldwide; this was the highest grossing computer animated film.

Why Teach This Relevant, Whole-to-Part Learning Lesson?

Students new to interactive technology or interactive multimedia need to clearly know the big picture-the "whole-to-part" association of the types of before-market, market and aftermarket products that are designed, franchised manufactured and sold. "Toy Story 3," a movie that many students greatly enjoyed with their friends or family, provided a relevant and rich media collection for in-school learning from the students' world, including local newspaper advertisements, press releases, journal articles, franchised toys, a highly interactive video game for several platforms, and movie-related products.

Students learned from reading and researching about the movie; they found out that extensive planning took place in writing and drawing "Toy Story" on paper four years in advance, and that 3-D models were built to support the planning for every film, interactive game and multimedia project. The concept development into story writing, interactive storytelling and storyboarding takes place long before the Gantt chart



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(a type of bar chart that illustrates a project schedule) is tasked for building marketable products. Likewise in the game development, animation and multimedia tech areas, students now know that planning the "big picture" with each of its parts is an integral part of the learning.

Full Spectrum Teaching

Multimedia lessons can connect students to the real world at many different levels. Before delivering this lesson, consider the full spectrum teaching approach in your tech area. As humans we have sensory receptors that when stimulated create new "brain wiring" and learning. Think of your tech area as the environment to facilitate such learning. Consider these questions: "STUDENTS EXPERIENCE A REAL-WORLD CONNECTION FOR PRODUCT DEVELOPMENT WHILE LEARNING ABOUT MOVIE, VIDEO GAME, MUSIC, TOY, AND BOOK PRODUCTION INTERRELATED TO AN INTERACTIVE MEDIA THEME."

- 1. What planning and learning environment activities or room changes will cause the student to learn and talk about this lesson for the next several weeks or months?
- 2. Will the stations have tactile experiences and visual experiences?
- 3. How will you use audio to enhance learning such as classroom background music, or composing video game music?
- 4. How will lighting affect the learning? Should I consider different lighting such as lamps or other?
- 5. How will station signage impact learning, following directions, curiosity?
- 6. How will traffic patterns in the classroom encourage participation?
- 7. What follow-up activities need to be planned and co-led by students?
- 8. During the lesson, what plushies and

giveaways will make everyone smile, laugh and remember this lesson?

"Toy Story 3" Stations at Washington County

There were eight learning stations located in the CGDA area for students to visit and interact with:

- 1. Published works: articles Students reviewed several articles to learn about the "Toy Story 3" development process.
- 2. Published Works: books Students skimmed several books to identify audience, style of writing, purpose of book and where each fit

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into the marketing plan.

- **3. The Pixar Blog** Students discovered what is blogged about the movie.
- 4. Media: DVD and Blu-Ray Students viewed trailers and teasers about the movies. As a teacher you may also want to review "How the Film was Made" video clips.
- 5. Music and Soundtracks Students listened to songs (and sang along) from the "Toy Story" production.
- 6. Games—Video Students played a small section of the Xbox 360 video game.
- **7. Toys** Students played with some of the "Toy Story" toys.
- 8. Movie Premier and Tickets Students found local listings for the movie and how to purchase tickets online.

Lesson Objectives

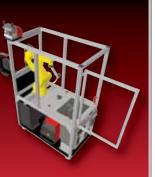
Students learn the whole-to-part concept and unique components of film and interactive media development through completing activities at eight stations, where they write on paper:

- specific skills needed for professionals building each of these components;
- who the audience is and why they think those products were created and licensed;
- the licenses, trademarks and copyrights they think are required for making products seen at the stations;
- the factors that must be considered when creating and franchising each of these products;
- the types of continuity required in developing these products over the lifetime of the concept: and
- what other products they think should be developed in each category for "Toy Story 3" and who the audience would be for each.

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 Students review "Toy Story 3" images and written content at the independent news site Pixar Blog, http://pixarblogspot.com.



Students identify Web sources, print and read online
articles about "Toy Story 3" development.

From meeting with each other, collaborating and completing exercises at these stations, the students learned the similarities and uniqueness of the CGDA team compared to the multimedia program at Washington County Technical High School. Students found that Buzz Lightyear was right: "To infinity and beyond!"—the creative, marketing and licensing possibilities are unlimited in the concept, design, creation, engineering, production and marketing of an interactive media production.

Resources

A Reminder to Teachers:

Since Web content can change, teachers should read articles and Web content before using any sources in class.

Articles

Print several articles for students to review (be sure to read those first). Here are a couple:

"Animating a Blockbuster: How Pixar Built Toy Story 3," *Wired magazine,* May 2010

"More Toys Than Ever Before," *Computer Graphics World*, July 2010

Books The Art of Toy Story 3

Blog

The Pixar Blog http://pixarblog.blogspot. com/2010/05/toy-story-3-in-wired.html

Explore More

Animation careers www.allartschools.com/art-careers/ animation/animation-career

CG Society: Society of Digital Artists www.cgsociety.org

Disney Corporate http://corporate.disney.go.com/ careers/index.html

Pixar www.pixar.com

Walt Disney Animation Studios www.disneyanimation.com

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