#### Expert Guidance on Children's Interactive Media

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#### **Deep Sims: A Case Study**

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#### You Say Software, I Say App.

#### A Look at the Twisted Language of Educational Technology

Last year, NECC (National Educational Computing Conference) became the ISTE (International Society for Technology in Education). Why the name change? It seems that nobody knows what to call the stuff we review. Over the years, our own publication has morphed from *Children's Software Revue* (1993), to *Children's Software & New Media Review* (1998) to *Children's Technology Review*. In this issue (page 11), I make a noble attempt to take a closer at the language of this space.

#### A Real Virtual Playroom: Designing Media to Foster Creative Engagement

When researchers spend time playing with children, it can generate some terrific research questions. Such was the case when MIT Ph.D. student Seth Hunter was playing Angry Birds with a 5-year-old friend. It made him wonder, "What distinguishes digital media from traditional media like books, television, and learning toys?" His article (page 6) explores six possibilities.

#### LittleClickers: All About Cell Phones

Do you know what the word cell in cell phone means? If you were an engineer at Apple, and Steve Jobs said design the iPhone 5, what would it look like? What year was the first cell phone made, and in what city? Scroll to page 4 to find these and other answers to common questions about this amazing device.



**August 2011** Volume 19, No. 8, Issue 137

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*The non-profit Mediatech Foundation is where we test and archive review copies of software. Visit* **http://www.mediatech.org**.

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#### Sites and videos about

# ll Phoni

Do you know what the word cell in cell phone means? What year was the first cell phone made? Here's a look at this amazing pocket-sized gadget that has changed our world.

1. Which of these best matches the function of a cell phone?

- a) a walkie-talkie
- b) a computer
- c) a GPS

d) a monthly drain on your bank account -- up to \$80/month. e) all of the above

According to the Free Dictionary, http://bit.ly/qve6SA the best answer is e) all of the above.

2. What year was the first cell phone call made, and where? a) 1962 b) 1973 c) 1986 According to CNN <u>http://bit.ly/i431h7</u> the first cell phone call was made by Martin Cooper of Motorola in 1973 in New York City using a brick-sized phone.

3. Why is it called a cell phone, anyway?

The cell refers to the ten mile or so honeycomb-shaped regions created by special antenna that communicate with each other. As you move, your call is passed from antenna to antenna, like swinging from one vine to the next vine. The more antennas your town has, the better your call. See a map of your town's registered antennas at <u>http://www.cellreception.com</u> (enter the name of your town). Learn more about the science of the cells at <a href="http://www.private-">http://www.private-</a> line.com/mt\_cellbasics/

4. What's the difference between a smart phone and a cell phone? According to <u>http://btcomputersystems.wikispaces.com/cellphones</u> smart phones have the additional ability to access the Internet with Wi-Fi and they can have apps installed on it.

5. What is the world's smallest cell phone? The most expensive?

The Modu phone is just larger than a pack of gum, described at

http://techcrunch.com/2008/02/07/modu-revealed. We found a gold plated, diamond studded phone at <u>http://bit.ly/pmommK</u> that costs \$3.2 million. Don't drop it in the pool!



APPLICATION 1: Cell phone tear down. Find an old

cell phone and tear it apart, like they do in this video

<u>http://youtu.be/co6ekERw1yU</u>. See if you can find the following components: the battery, screen, keyboard, antenna, microphone, speakers and microprocessors. Make sure to dispose of all the parts properly.

APPLICATION 2: Design your own cell phone. Go to EdHeads (http://www.edheads.org/activities/eng\_cell/index.shtml) and play the Design a Cell Phone activity. You'll learn about the challenges of designing a cell phone that people can use.



#### LittleClickers YouTube Playlist: Cell Phones

http://www.youtube.com/playlist?list=PL4AA97058015D479E











Towers - Rooftop

Cellular Antenna



cell phone ad



Speedy white IPhone 4 teardown



Martin Cooper, shown in Time Magazine's Photographic History of the Cell phone http://ti.me/sxG6d



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See this page online, at http://www.LittleClickers.com/lccellphones811.html

Tutorial Directions

## Deep Sims

#### How a dated \$50 (including controller) flight simulator can bring a spark— a big spark— to a cinder block library.

At precisely 8:52 AM, Saturday, August 6, 2011, two 12-year-old boys, Andrew Vollenberg and Tim Sabbarese will open the throttle all the way on the Spirit of St. Louis, and try to stay on the runway as their overloaded monoplane slowly increases speed. If they can get off the ground, they'll bank toward the open ocean, and try to land the next afternoon in Paris, France.

The boys are scared. This will be the third attempt to repeat the flight using this simulator, and no team has made it without a crash. At about 100 miles per hour, it takes just over 33 hours to get from New York to Paris. Back in 1927, it was called a suicide flight. As these boys prepare, everyone is wondering, can they make it?

This explains why Andrew and Tim have been so interested in compass headings, the geography of Newfoundland, the weather in the North Atlantic and the history of 1920's aviation, despite being on summer vacation. They know where the Eiffel tower is in Paris, and have memorized the GPS code for Le Bourget airport where they will land. They've both also watched the National Geographic special on the famous flight, thanks to YouTube (see <u>http://youtu.be/oR1FkSasydM</u>).

They know that the hardest part will be around midnight, when they'll meet the same fog, icing and thunder storms that Lindbergh faced alone. But unlike Lindbergh, they'll have a GPS, Google Maps on an iPad. They'll also have pizza and a bathroom.

Sure, it's all pretend. But how else can you make history so real? It's easy to tell a student that 33.5 hours is a long time, but until you've tried holding a controller for so long, you really don't know what it is like. If you doze off, even for a minute, the plane might stall and slip into the ocean. Only then do you start to understand how challenging this flight actually was. Do you fly over or under an approaching cloud bank? There's land ahead. Is it





*Microsoft Flight Simulator 2004: A History of Flight runs on Windows XP and Windows 7 computers costs \$15 on Amazon.com. You'll need Thrustmaster TFlight Hotas X USB controller (\$35), although there are many other flight controllers that lend realism to the job. Other sims to note that take a lot less time, but do a good job putting a child into novel situations can be found at Edheads (www.edheads.org, \$free). The most recent simulation lets you be a heart surgeon. See Repair a Heart! At http://www.edheads.org/activities/stem3/swf/index.htm.* 

Ireland? Only if your compass is correct. Such a simulation makes math, geography, science and history your best friends. Here are some things we've learned.

• Make sure the parents are on board. Staying up all night can loose it's luster around 4 AM. Make sure the parents are willing to help out to provide support and supervision.

• Match the simulation with the learner. In this case, both boys volunteered for the flight. Because they are 12 years of age, they're old enough to stay on task for such a tedious challenge, and developmentally they can think abstractly, required in order to conceptualize concepts like the curve of the earth and the physics of flight that would be impossible for a younger child to understand.

• Choose a simulation that has local significance. We chose this simulation because the pilot, Charles Lindbergh used to live in our county.

• **No sugar coating.** Kids instantly know if something is authentic. A good simulation is realistic, and that means it might be very challenging. The pilots will fly in the same flight time slot that Lindbergh did, using a powerful, graphically rich flight simulator.

• **Provide support.** Andrew and Tim will have plenty of time to practice and get to know one another. During the flight, they'll learn how important it is to work as a team in order to achieve a singular goal. If they crash, the plane is programmed to keep flying, so they will have another chance to salvage the mission. They'll also have their parents in the next room, and cell phones handy, and experienced pilots from the previous flight, just in case.

• Celebrate. Let the pilots know you are proud of their accomplishment.

## A Real Virtual Playroom: **Designing Media to Foster Creative Engagement**

by Seth Hunter

Last week, I spent a few hours with Luca, a fiveyear-old boy, on our porch with his mother's iPad and a LEGO set. He showed me his favorite games and activities on the iPad. We played Cut the Rope and Angry Birds, both strategy games in a simulated physics world. We took turns using our fingers to do things like feeding a frog by slicing a series of ropes.

While we were playing Luca commented that the iPad was his favorite thing in the world because it's like a TV that you can take anywhere and play games on. His mother came in after an hour and took away the iPad, and we transitioned to playing with Lego bricks. We set up a battle between characters, and started making up rules about how they interacted and who was going to live or die. We constructed a maze on the floor and guided little men through it, acting out a scenario in which the characters were racing through the maze, as it grew increasingly hard to navigate.

Although I enjoyed playing the games on the iPad with Luca, I learned more about his personality from the LEGOs because we were communicating with each other and enacting our own scenario. I don't think there is anything inherently bad about computer games, but I usually don't incorporate game

mechanics like the ones in Angry Birds in my own designs because I believe they support actions without fostering creative inquiry or deep understanding. Trends like gamification [27] and edutainment [39] are often used by developers to try to make media and education more engaging by taking advantage of our psychological predisposition to repeat something over and over when the game rewards us in small ways as we go. This might be one reason why Luca would have kept playing with the iPad during our entire session if his mother had not taken it away.

Part of my criticism of game mechanics is also derived from my recent work as a media researcher. I am working on a series of physical shadow puppets - dragons, birds, and mice that are mapped to digital characters in an open ended virtual environment. So far, pilot tests of the system with nine children have revealed two general categories of responses: How do I win? and Can I make my own? The two responses indicate an underlying set of assumptions the children brought to the interface which raise critical questions to me as a designer. Is the How do I win? approach an inherent or a learned response to screen based systems? What motivated the children who wanted to make their own?

Lifetimes of research by developmental psychologists such as Jean Piaget [1], Erik Erikson [2], and computer pioneers like Seymour Papert [3] and Mitch Resnick [4] have demonstrated a correlation between early imagination, play, and creativity with the capacity for empathy, critical thought, and inventiveness. My views follow educational researchers and designers that advocate for more constructive Can I make my own? approach to media design. I think it will help children grow into creative careers, understand the perspectives of others, and author their own possible futures.

The immediate challenge for designers (as I see it) is to invent tools and scenarios that make creating things as easy and compelling as playing games. I believe one way of doing this is to leverage the affordances of both the digital and physical domains with a critical eye on what will have lasting benefits for the child.



Seth Hunter is a Ph.D. student at the MIT Media Lab. His research explores how to design media interfaces that are more socially and phys*ically engaging. He is currently* working on mixed reality applications for children with a focus on creativity, expressiveness, and learning. Hunter has a BA in cognitive science and digital art from the University of Virginia, and an MFA in art and technology from the School of the Art Institute of Chicago. He has been employed as a toy designer, multimedia developer, instructional technologist, media artist, and teacher.

#### Why did I write this?

This essay presents observations of children from my perspective of an interactive media designer. It examines the limitation of game dynamics and presents a proposal for more creative mixed reality applications. It outlines six principle opportunities afforded by digital media and argues that incorporating them into play experiences will empower children to invent their own possible futures.

#### Statement of Bias:

Seth is a graduate student at the MIT Media Lab and a Fellow of Hasbro. Some of the references in this article include colleagues and alumni of the Media Lab, including Mitch Resnick, Hayes Raffle, Sherry Turkle, Natalie Freed and Eric Rosenbaum. He is also an active member of the Interaction Design for Children community and referenced papers of colleagues at that conference. Most of the references in the article are not personally associated with the author.

What principles should

inform the design of soft-

and exposure to different

forms of media increases?

What do children expect

designer in shaping these

How should new media be

integrated with the tradi-

tional play patterns and

experiences of the child?

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#### **A Real Virtual Playroom**

Children are increasingly exposed to a diverse media ecology of devices in their play spaces. Recent studies by the Sesame Workshop [5] indicate that the average child over 8 years of age spends more than 10 hours a day interacting with media devices like phones, televisions, video games, and computers. Being an active citizen in society increasingly requires being able to navigate and participate in the activities facilitated by these devices.

The effects of these devices generate mixed reports by researchers like Howard Chudacoff [6], who outlines trends that suggest that play is shifting from a world invented by children to a world prescribed by parents and other adults. He states, The resourcefulness of children's culture has eroded, as children have become less skilled at transforming everyday objects into playthings. The critical question for educators, parents, and designers is not how to protect our children from exposure to media but how to design tools that creatively empower them within a changing media landscape.

This is a fascinating area for designers to explore because increasingly portable devices are putting computers in our pockets and our children's bedrooms. The dynamics between gaming and creative play, the digital and the physical, the fantastic and the real are converging. Children often fluidly transition between media devices and physical toys, imaginary play and real communication, inventing their own rules and playing games on personal devices.

Imagine for a moment that Luca and I could construct a world of characters on the iPad by holding Lego men up to the screen. Then we would invent our own maze for them to wander through by drawing the borders with our fingers and put the men in a medieval landscape by holding up a picture book from Luca's bookshelf. Luca could add his own dramatic voice effects as the characters ran into each other. Later, Luca could share the game he invented with his mother and change the background to a moonscape. As an interactive designer my mind often quickly sketches out applications like this that re-contextualize scenarios we enact in the physical world. I contrast these to existing software applications and there is a huge gap in expressive capability. I want to combine the ease and immediacy of the physical with the plasticity and imaginative possibilities of the digital.

It's easier to build things with Lego bricks than do so in software environments. This is one of the primary arguments behind tangible learning systems in the Interaction Design for Children Community [7,8]. But the two domains inform each other. The iPad games Luca and I played were simulating aspects of reality in carefully designed scenarios that encouraged problem solving. When we were playing with Lego bricks we added our own rule set and constructed an evolving landscape. But on the iPad our choices were limited. We were not able to invent and adapt the scenario.

#### Six Creative Affordances of Digital Media

Luca likes the activities he plays on the iPad. He asks his mother if he can play when the adults are talking about things he is not interested in. Initially the applications seem like harmless puzzles, but when he keeps repeating the same actions over and over, I start asking myself questions. Are there unique affordances of digital media that could benefit him in the long run? What are the properties that distinguish digital media from traditional mode bits hocks, talorision



What distinguishes digital media from traditional media like books, television, and learning toys? Here are six question you can ask.

- 1) Create and Program: Can I make my own and bring it to life?
- 2) Pretending and Fantasy: Can I do impossible things?
- 3) Transformation: Can I become something new?
- 4) Interactivity: Can I make it respond to me?
- 5) *Time-Based Storytelling and Playback: Can I tell a story?*
- 6) Social Play at a Distance: Can I play with my *friends*?

distinguish digital media from traditional media like books, television, and learning toys?

Lev Manovitch outlines unique principles that underlie new media in his book The Language of New Media [9]: automation (new media objects can be created and modified automatically), variability (they exist in multiple versions), transcoding (it influences how we understand and represent ourselves), and modularity (elements exist independently). These are insightful on a conceptual level because they help define the medium, but the principles don't translate into tools we can use to create meaningful experiences for the child. The screen can be a magical canvas for the human imagination. It can be a portal that connects us with others, helps transform our identities, responds to our actions, and records our ideas.

In place of a conceptual framework, I propose a set of six principal questions as guidelines for deepening the value of creative software applications. They are derived from exploring what human experiences are made possible through interaction with digital media. These areas are by no means exhaustive; they are intended to frame a critical conversation around creative potential from the perspective of the child. After each question, I discuss examples of existing software and research that provide insight into ways of supporting the child in that area. At the end, I discuss strategies for software developers and companies that are following this approach today.

#### 1) Create and Program: Can I make my own and bring it to life?

Online massive multiplayer environments for children like Disney's Pixie Hollow [10], and Club Penguin [11] understand that every child wants to make something that is uniquely theirs. Children go through an extensive process of choosing the attributes of their character - its skin, hair, eyes, wings, costume and accessories - before entering the world. This is in part to motivate the child to feel some ownership of the avatar, and in part to motivate them to spend time in the world playing games to earn tokens for more merchandise. The economy of these worlds has been criticized by reviewers like Mireya Navarro in an article entitled Pay up kid, or your igloo melts [12] as encouraging consumerism.

In my opinion, Disney took the easy way out. They added game dynamics to something that could be a highly creative environment. If Pixie Hollow let you design your character and then act out stories with other children, imagine the possibilities! The goals would shift to how to bring your character to life, give it expression, and define its relationship with the virtual world. Should designers do this work, or can designers learn to scaffold this process for the child?

Environments like Scratch [13], Alice [38], and Stencyl [39] provide more open-ended environments that allow the child to learn basic programming concepts. Programming is a gateway to expression. They enable the child to tell the computer what to do instead of following instructions. They allow the child to exhibit control and feel empowered. Through these environments children convey a set of instructions for how to bring the things on the screen to life. What follows is making it interesting and immersive through fantasy and imagination.

#### 2) Pretending and Fantasy: Can I do impossible things?

One of the most compelling things about playing with children is that their imaginations are not yet limited by empirical knowledge. They love to make pigs fly, let farm animals talk, and give superpowers to their creations. Fantasy is about enacting the impossible because it is exciting! But it's also a critical part of the child's development.

Piaget [1], Erikson [2], Freud [16], and Vygostky [17] outline stages of childhood development that transition from egocentric to socially aware. The process begins by acting on the world and discovering object permanence, and continues as the child learns to represent things symbolically through pretend play. She will assign agency to her dolls, and then fantasize about what they do. Hartup [18] and others theorize that fantasy leads to rule based play, the ability to imagine possibilities, and eventually the perspective of others. This type of socio-dramatic play is more accentuated in girls than boys. Boys tend to focus on amplifying aspects of themselves, often in impossible heroic ways.

Often the stories and metaphors are embedded in media entertainment and appropriated in various ways by children across different forms of media. Henry Jenkins [19] describes in Convergence Culture how many children respond to the Harry Potter fantasy world, joining fan clubs and reinventing aspects of the story to fulfill their desires as they shape their identities. Part of the mass appeal of this epic series is that it satisfies fantasies we have about ourselves by casting them in a world fictional characters with magical powers that can do impossible things.

#### 3) Transformation: Can I become something new?

David Rokeby describes media interfaces as Transforming Mirrors in his essays about the metaphors that underlie digital experiences [20]. He writes that they operate like a wayward loop of consciousness through which one's image of one's self and one's relationship to the world can be examined, questioned and transformed.

We reinvent ourselves throughout our lives, particularly during transitional stages in our development. We also enact aspects of ourselves in virtual activities where the story is embedded in a safe world that cannot hurt us. Sherry Turkle in Life on the Screen [21] says the imperative to self-knowledge has always been at the heart of interaction. She portrays online environments as liminal spaces that are between real and fictional, not quite a mirror of the child but reflecting aspects of themselves that they project and transform.

Transformation is imbued with surprise and delight because it allows us to experiment with our identities. One safe way for children to do this is in their homes with their toys. Another is in applications that capture and transform their movements and expressions. Hayes Raffle and Kimiko Ryokai illustrate this idea in an application called StoryFaces [22]. Children explore emotional expressions in storytelling with video by placing their faces in various parts of a story like a balloon or a dragon costume. The authors conclude: Our preliminary results suggest that digital authoring can give young children an opportunity to play and reflect on their pretend emotions, and that when these emotions are cast into the context of a traditional narrative, children can engage with and meaningfully manipulate elements of those stories.

A key question for future developers is who determines how things get transformed. For example, if Hasbro Inc. is developing an application, does the child become a My Little Pony or a Transformer? Or, can they bring any object from their environment into the virtual world? Can they then decide what it will become? How much will the brand concerns of companies influence the scope of possible transformations?

#### 4) Interactivity: Can I make it respond to me?

The speed and automated behavior of a computer give the impression of something that is alive and capable of responding to our actions. This magic can be used as a learning tool if we allow children to define the relationship between inputs in the world and outputs on the screen.

A child might inquire about what is possible. Can I make it do something when I speak? Can I control it with my body? Can I enact a story with my dolls? Interactive designers ask themselves similar questions when they are trying to envision how people are going to

use their software. Why not let users make choices that inform designers about possible uses?

Devices like the Cricket [23] from Mitch Resnick's Lifelong Kindergarten group at the MIT Media Lab are designed specifically with this purpose in mind. Crickets are programmable devices that connect input sensors like light, sound, and touch sensors and output devices like motors and speakers. Computers have the capability of associating any set of mappings space to time (see SoundForms [24]), voice to action (see Jabberstamp [25]), sound and color (see Singing Fingers [26]) in unexpected and surprising ways. Designing a rich and expressive set of possible mappings will allow children to exhibit control of when and how things respond in virtual environments.

#### 5) Time-Based Storytelling and Playback: Can I tell a story?

Returning to storytelling for a moment, many children who have used the digital puppetry system I am working on have asked me if they can make a movie. I'd love to incorporate this capability into the work. Programs like Toontastic [15], iStopMotion [28], Animationish [29], Reel Director [30], Voice Band [31], and Shidonni [32] are applications designed to help children author time based media. The empowering aspect of their approach is that they scaffold the process of self-expression, and encourage reflection by allowing the child to replay and modify portions of the timeline.

The capability to record and combine multiple states make graphic user interfaces ideal for the creation of time based stories. The linear nature of time can be circumvented and manipulated by creating tool sets that are flexible and provide graphic representations of editing capabilities. Efforts have been made at Tufts University to make a Tangible Video Editor [9] by embedding clips in tangible pieces that can be rearranged but because of the precise nature of video editing they have very limited capabilities.

#### 6) Social Play at a Distance: Can I play with my friends?

Digital representation allows information to pass so quickly over networks that interaction at a distance feels simultaneous. The richness of these experiences is increasingly compelling in applications like Skype, Google+, and iChat. Researchers at Nokia [33] and Georgia Tech [34] are doing extensive investigations on how to design software that can help families connect at a distance, particularly for children ages 3-5.

Simultaneously under development are networked environments like Club Penguin. They have been very successful at garnering the interest of children to interact together in virtual environments. Researchers such as Ito et al [35] report that children are partially motivated to play games online because they share secrets with each other in their real life social networks. Further research at Arizona State University [36] has found that children understand the idea of remote connection and can relate through the perspective of dolls. The dolls act as bodily extensions of the child through which they can enact their own concerns. The dolls can also scaffold interactions between children and provide a context for an ongoing dialogue between the characters.

Software like Club Penguin presents privacy concerns for parents regarding the safety of the children. As a result, the communication enabled in the environments is very restricted. I can imagine an application more like Skype for Toys in which the parents control who is in the child's network. The application would allow children to invite approved friends to play in

#### Practical Guidelines: Make Software Simple, Open Ended, Flexible, and Modifiable

Supporting children as designers and not just players is not a new idea; it's an ongoing effort by many researchers in the children's design community. So what are some practical guidelines to help developers follow the principles outlined above? They are doing so by using simple metaphors, creating open environments, designing flexible tools, and embedding modifiable rules [37]. Very good examples of physical systems that embody these concepts are the Adventure Playgrounds [40] in Europe and the New Imagination Playgrounds [41] in the US. These playground systems are designed to encourage open ended, unstructured play, allowing children to configure their own landscapes and invent games with giant foam blocks.

There are also many examples of software environments on the horizon that follow some of these guidelines. As Laura Richardson [37] highlights: Games like Ridemakerz and Xtractaurs are trying to bridge the physical-digital divide, while also enabling creators to design some aspects of their play. Shidonni, Spore, and Scribblenauts are truly embracing the open and digital potential. With them, the play is so unlimited no one cares that someone else wrote the rules. Kids get to design their own games in real time with Scratch, Kodu, Kerpoof, and Alice. LEGO Mindstorms, Pleo, and the Spy Tracker System from Wild Planet enable authors to write their own software applications for physical products.

environments they create instead of those designed by Disney. In such a world, children would share assets they have created: character costumes, effects, and even behavior scripts. They might even collaborate to record stories of their characters and share them with each other.

#### Conclusion

My experiences with Luca and the children who have used my software have been encouraging. Regardless of whether they think it is a game or a creative platform, they enjoy exhibiting control over the characters, and experience delight as they discover the affordances between the physical and digital versions. But extending the interaction beyond this initial novelty will require me to make some critical design choices about the principles behind the application.

Earlier I presented the argument that applications that empower children to build and model their own worlds will have a more lasting positive impact than game-based approaches. The physical and digital worlds both have affordances that can enrich the lives of a child. We already have an intuitive understanding of physics, the properties of real objects, and the ability to manipulate things in the physical world. Can people have the same intuitive understanding of the dynamics of digital spaces?

Digital representation has the potential to allow children to create their own worlds and tell the things in their world how to behave. Fantasy and Storytelling are critical aspects of the child's development and the screen can provide a safe place to enact and explore their assumptions about the world. As children interact with media they project and transform representations of themselves - enacting possible futures and shaping their identities. In this way the computer becomes a transforming mirror of the self. It has the potential to empower the child when they control the mappings between the world and the media. Results from the interaction may take the form of movies, animations, interactive stories, and even games that they can share with other people; and in an ideal future this will happen in a networked environment where children can simultaneously create things together.



There are many critical choices to make moving forward as we adapt software applications to new media platforms. Portable video players, smart phones, tablets, and learning devices are already in the homes of many children today. But television remains the medium children spend the most time with [5]. A shift is occurring away from television to more interactive media, but will this interaction be a game or a canvas with infinite possibilities? In this essay I propose a Can I make my own? approach that utilizes the tools and toys in our everyday physical world. By making creation as easy as gaming we can help the child grow into creative careers, understand the perspectives of others, and author their own possible futures.

#### **Bibliography**

- 1. Inhelder, B. and J. Piaget (1958). The Growth of Logical Thinking from Childhood to Adolescence. New York: Basic Books.
- 2. Erikson, Erik. Childhood and Society, 1950
- 3. Papert, Seymour. Mindstorms: Children, Computers, and Powerful Ideas, 1980
- 4. Resnick, Mitchel. Computer as Paintbrush: Technology, Play, and the Creative Society, Marble Machine, Handout LLK Workshop, 2006
- 5. Gutnick, Aviva Lucas. Always connected : The new digital media habits of young children. Sesame Workshop, 2011
- 6. Chudacoff, Howard. Children at Play: An American History, 2007
- 7. Bakker, Saskia, Alissa N. Antle, and Elise Van Den Hoven. Identifying embodied metaphors in children's sound-action mappings. In Interaction Design and Children, 140-149, 2009.
- 8. Eisenberg, Michael, Nwanua Elumeze, Michael MacFerrin, and Leah Buechley. Children's programming, reconsidered: settings, stuff, and surfaces. In Interaction Design and Children, 1-8, 2009.
- 9. Manovitch, Lev. The Language of New Media, 2001
- 10. Pixie Hollow: http://pixiehollow.go.com/
- 11. Club Penguin: http://www.clubpenguin.com/
- 12. Navarro, Mireya Pay up kid, or your igloo melts, New York Times, 2007: http://www.nytimes.com/2007/10/28/fashion/28virtual.html
- 13. Scratch: http://scratch.mit.edu/
- 14. GoAnimate: http://goanimate.com/
- 15. Toontastic: http://launchpadtoys.com/
- 16. Frued, Sigmund Three Essays on the Theory of Sexuality, 1905
- 17. Vygotsky, L.S. Play and its role in the Mental Development of the Child, 1933
- 18. Higgins, Ruble, Hartup. Social cognition and social development : a sociocultural perspective, 1984
- 19. Jenkins, Henry Convergence Culture: Where Old and New Media Collide, 2006
- 20. Rokeby, David, Transforming Mirrors: Subjectivity and Control in Interactive Media, 1996
- 21. Turkle, Sherry Life on the Screen: Identity in the Age of the Internet, 1995
- 22. Kimiko Ryokai, Robert Kowalski, Hayes Raffle. StoryFaces: Children Exploring Emotional Expressions in Storytelling. ACM CHI Conference on Human Factors in Computing Systems (alt.CHI) 2011.
- 23. Resnick, Mitch Rethinking Learning in the Digital Age. In The Global Information Technology Report: Readiness for the Networked World, edited by G. Kirkman. Oxford University Press.
- 24. Hunter, Seth, Pla, Pol, Soundforms: A Tangible Interface for Collaborative Musical Expression:, 2010 http://fluid.media.mit.edu/people/seth/current/soundforms.html
- 25. Raffle, H., Vaucelle, C., Wang, R., Ishii, H. Jabberstamp: Embedding Sound and Voice in Traditional Drawings. In Proceedings of Conference on Computer Graphics and Interactive Techniques, Educator's Forum (SIGGRAPH '07)
- 26. Rosenbaum, Eric Singing Fingers, 2010: http://singingfingers.com/
- 27. O'Brien, Chris Get ready for the Decade of Gamification, 2010 San Jose News
- 28. iStopMotion: http://boinx.com/istopmotion/overview/
- 29. Animationish: http://www.fablevision.com/animationish/
- 30. Reel Director: http://www.nexvio.com/product/ReelDirector.aspx
- 31. Voice Band: http://www.wavemachinelabs.com/voiceband/
- 32. Shidonni: http://www2.shidonni.com/v2/LandingPage.aspx
- 33. Hayes Raffle, et al. Family Story Play: Reading with Young Children (and Elmo) Over a Distance. CHI 2010.
- 34. Yarosh, S. and Abowd, G. Mediated Parent-Child Contact in Work-Separated Families. Proc. of CHI, ACM (2011), 1185-1194. Ito, Games
- 35. Freed, Natalie, Winslow Burleson, Hayes Raffle, Rafael Ballagas, and Naomi Newman. User interfaces for tangible characters: can children connect remotely through toy perspectives? In Interaction Design and Children, 69-78, 2010.
- 36. Richardson, Laura, Frog Design: The Four Secrets of Playtime That Foster Creative Kids, Fast Co Design, December, 2010
- 37. Stoll, Clifford High Tech Heretic, 1999, Doubleday
- 38. Alice Programming Environment: http://www.alice.org/
- 39. Stencyl: http://www.stencyl.com/
- 40. Carlisle, Rodney Play in Today's Society p. 11, Adventure Playgrounds, 2009
- 41. Imagination Playgrounds: http://imaginationplayground.com/

### **You Say Software, I Say App** Welcome to the Twisted Language of Educational Technology

by Warren Buckleitner

Last year, North America's biggest educational technology show changed its name. NECC (National Educational Computing Conference) became the ISTE (International Society for Technology in Education).

It's not alone. The IDSA (Interactive Digital Software Association) became the ESA (Entertainment Software Association). The SPA (Software Publisher's Association) is now the SIIA (Software & Information Industry Association). Why all the title broadening? Nobody knows what to call it. Our own publication has changed names three times, from *Children's Software Revue* (1993), to *Children's Software & New Media Review* (1998), to it's current name, *Children's Technology Review*.

The need for some common language reference points is increasing. The National Association for the Education of Young Children (NAEYC), of which I'm a member, is trying to finish a position statement that will contain a good deal of official language about children and technology. One of the authors of the statement, Chip Donahue of the Erickson Institute posted a request to narrow the blurry language on a the ECEtech listserve. That's what inspired this article.

I like Interactive Media (IM) as a least worse choice, because it best sums up the products we review. The word interactive refers to the relationship between the child and the content, or the media which, when taken literally, could mean just about anything. This interaction (inter) in part implies activity, which lies at the heart of play, active learning (aka constructivism), and it provides a big enough umbrella to cover apps, play, smart toys, video games, virtual words, ebooks and web sites. It also has enough of a constructivist flavor to send a soft message without scaring away the behaviors.

Another solution is to flip the challenge upside down and ask What shouldn't we call it? Here are some ideas, followed by a list of terms that seem hot or cold. :

- **21st Century**. Policy makers and politicians use phrases like "affordances of digital media" or game-based learning with 21st century STEM learning. This is code for hey brother, can you spare a grant?
- **Constructionism**. There are some other blurry words that can stain you with a cultural badge you might not want. Say constructionism instead of constructivism and you can make Piagetians squirm, and everyone knows you're drinking the Papert kool-aid.
- **Digital**. Another way to blur the conversation is to use digital as in digital media or digital learning. I've noticed it is popular with smarter people with funding, who might also drop words like transmedia, which is multimedia with an Internet twist. Connected is another word losing favor, becoming as unsexy as the eRate. These ivory tower words are really too squishy to move a conversation along toward a conclusion. Like screen you can use digital to distort a sentence into just about any direction. Plus -- as of 2009, all television media became digital by law, so just about everything that isn't analog is digital, from cameras to flashlights. See <u>http://www.dtv.gov/whatisdtv.html</u>.
- **Edutainment**. See chocolate covered broccoli. Just don't use it. It will pull you back ten years, when Pre-DVD multiplatform CD-ROMs ruled were king.
- **Games**. If you're a stodgy old educator say over 25, who wants to be hip, you might say games, video games, serious games, or video game based learning. You might call yourself a gamer yourself who perhaps attends E3 and watches G4 where it's also called electronic entertainment as in the Electronic Entertainment Expo. You want kids to program games and gamify learning experiences, which implies making a set of math problems more fun; a trick good teachers have long mastered long before the microprocessor with games like Around the World. You might also say chocolate covered broccoli (see Jenkins et al). If you go the game world, you might also consider wearing a tight black T-shirt. But use the G word with caution around 5th graders, gamblers and librarians. At

#### A Guide to the Words: Hot, Warm and Cold

Based on my reading of press releases and conference presentations, here's an attempt to sort some of the words. Keep in mind, this is just one person's attempt to interpret this language.

#### Hot Words

3D 4G Android App Store Apps AR (augmented reality) Browser Based Game Casual Game Cloud Download Ebook eMail Friends (as in friends circle) Google Handheld HD (for high definition, which TV) HDMI (replacing VGA) Information Motion-based controls (motion based interface) Multi-touch Personal (as in personal computer, or personal technology) Streaming Tablets (instead of just iPads, because it can include Android devices) Texting (replacing typing) Twitter and Tweets Virtual World



<u>http://1.usa.gov/oH7TVa</u> a game is a slot machine, and many librarians think a game means Scrabble to be used for a gaming night. I say it's time for game to go the way of the fax machine.

- **Multimedia**. If you want to date yourself, say PC, multimedia or macromedia instead of Flash or browser-based. See also Edutainment.
- **Play**. At conferences like INPlay and the Sandbox Summit, the word play comes up a lot, as something to be cherished and protected. But this is really code for constructivism and active learning which are hardly new ideas, at least in educational psychology circles. Play is like technology. It is a general idea that, when used alone, can create a conceptual spinout. It needs to be combined with another word to provide framing.
- **Screens**. I think there's a reason the word screen, as in screen-based learning is just two letters off from scream. I've heard it come up in conversations with those who think children should grow up in an electronics-free world, aka luddites. The word makes no distinction between interactive and non-interactive experiences, lumping all new stuff into one bucket. So the billboard displaying a new car video on the entrance ramp going into the Lincoln Tunnel could be the same thing as an episode of Mr. Rogers. Screen is a word for circular discussions and should be used with a guiding word, if at all.
- **STEM** stands for Science, Technology, Engineering and Mathematics which is the governments way of saying we need more geeks who wear pocket protectors. See 21st Century. See also No Child Left Behind. See also eRate. STEM is code for we'll help you get federal money or you can pay for your really overpriced mono-touch white board with federal grant money. Just write us into your grant.
- **Technology**. Here's another word that is easy to carelessly toss into a sentence, whilst forgetting that flint arrowheads and staplers were, at one point, cutting edge technology. Technology works far better when guided with another word, like personal as in personal technology or educational technology or early childhood technology.

This vocabulary problem is the price we all pay for living during a time of tech-fueled change. With time and scholarly discourse, our collective vocabulary will settle, as the larger culture assimolates, accommodates. In other words, it may be a while before we all know what we're talking about. In the meantime it's fun to sit by the sidelines and watch the words bounce around.

At E3, the Wii became the Wii U, the PSP the Vita, and Toshiba just released the Thrive Tablet. Apple stores double as funny word generators. Listen as one of the clerks (geniuses) sells a new computer (Mac Book) to a PC user. Over at the counter (the genius bar) they call a wire thunder-bolt and an operating system lion.

Perhaps we can take comfort in the fact that we're living in a time when we can make up our own word, like wired or geek, gadgets and bits, -- the last two the names of technology blogs in the New York Times. At CTR, we like to call new products dust or magic. All these words are fun to drop in a conversation. Just be careful not to say OMG around a 15-year old.

#### Words Neither Hot or Cold

Code Computer Consumer Electronics Digital Hardware Programming language Social Media Software Typing USB Video Game Wiki Wireless

#### **Cold Words**

Arcades (arcade games) Blogs (replaced by Facebook and Google +) Computer cafes Computer labs Computer literacy Computer literate Console (as in Game Console) CD ROM Cyber cafes Cyber savvy Disk, Floppy Disk or Diskette DVD Educational software Edutainment Fax Facsimile Hard disk Keyboarding Laptop Micro Microcomputers MMORPG (or Massive Multi-Player) PC (Personal Computer) RSS Serious Games Smart phones (increasingly all phones will be smart) Television Transmedia TV (remember that?) VGA or SVGA Video Game



*Here's an alphabetical listing of new products, along with a full review, ratings and tester feedback. The "Entry Date" refers to the date we first learned of the product.* 

#### abc PocketPhonics

Teachers of young children (Pre-K to 3) take note. This is a rare app -- the first we've seen that combines letter tracing with the ability to switch between D'Nealian or Zaner Bloser, with additional options for lower case, upper case or cursive.

While light on "fun" (the "game" consists of a multiple-choice letter matching activity), the most valuable part of this app is the ability to trace a letter and get real-time feedback.

A free Lite version is available that features only the first six letter sounds. We reviewed the full version, and found the management features to be excellent. Created in the UK by John Friend, a computer programmer who is married to a teacher.

Details: Apps in My Pocket Ltd, www.appsinmypocket.com. Price: \$2.99. Ages: 3-7. Platform: iPad, iPhone, iPod Touch. Teaches/Purpose: phonics, reading. Rating (1 to 5 stars): 4.6 stars. Entry date: 7/22/2011. [WB]







#### **Baby's Musical Hands**

Sometimes an app is good because of what it doesn't do, instead of what it does. Consisting of nothing more than three rows of five brightly colored musical squares, this app turns your iPad screen into a colorful music exploration. The red squares (the top row) make drum sounds, yellow squares (the middle row) play whole-tone piano notes, and blue squares (the bottom) play whole-tone guitar notes. Every touch equals a responsive burst of sparks, so you really feel like you're making something happen, and the multi-touch is active, so you can hit several keys at once, if a whap is more desired than a touch. About time somebody figured out the key to an effective baby app.

Details: Streaming Colour Studios, www.streamingcolour.com. Price: \$0.99. Ages: 1 -2. Platform: iPad. Teaches/Purpose: causality, music. Rating (1 to 5 stars): 4.7 stars. Entry date: 7/11/2011. [WB] Ease of Use 10 Educational 8 Entertaining 9 Design Features 10 Good Value 10





FEATURE REVIEWS, AUGUST 1, 2011

#### Ben 10 Ultimate Alien: Cosmic Destruction

Hard, and at times frustrating but addicting, this newest Ben 10 game (based on the television series) lets you take control of Ben Tennyson and up to 17 alien forms including Armodrillo, WaterHazard and AmpFibian, as you jackhammer through enemies, unleash water blasts, and emit explosive radiation beams. You will journey to Paris, Tokyo, China and Rome in search of an ancient alien artifact that will help save humanity from a mysterious cosmic storm. You will use the power of the new Ultimatrix, an upgraded alien watch that transforms Ben into the most powerful, hyper-evolved alien forms ever in the game. The new Quick Switch feature allows you to transform from alien to alien quickly, and create custom alien combos, and the new Upgrade System lets you enhance your alien's strength, speed, defense and special attacks by gaining experience from defeating enemies, collecting rare sumo slammer cards, and crushing cars, forklifts, furniture, and various objects throughout each level.

Testers: This game is fun and a bit addicting, but it can be very frustrating at times. For example, "I tried to move this huge cage, but they didn't tell you where to put the cage (like with markers on the ground). That's just bad design." I also didn't like how easy it is to die in this game. The bottom line? Borrow it.

Details: D3Publisher of America, Inc., www.d3publisher.us. Price: \$30. Ages: 6-12. Platform: Xbox 360, PlayStation 3. Teaches/Purpose: logic. Rating (1 to 5 stars): 4 stars. Entry date: 10/29/2010. [WB]

#### Blue Hat, Green Hat

Limited in content (for the relatively steep price of \$4) but rich in interactive innovation, like Moo Baa Laa (CTR June 2011) Blue Hat, Green Hat is another interactive adaptation of a toddler board book, by author Sandra Boynton. It follows in the tradition of excellence established by previous Loud Crow publications.

Each page lets children combine colored hats, shirts, shorts or shoes on fun animal characters, using art directly from the book. There's an "oops" button on several pages, that causes something to go wrong. For example, it might make a rain cloud fill up a page with water, or flip a character upside down. This successfully creates a hidden surprise on each page.

We liked how each word and object responds to a child's touch or swipe. The narration and art are all non-cluttered and foster feelings of "I can do this!"

Details: Loud Crow Interactive Inc., www.loudcrow.com. Price: \$3.99. Ages: 2-5. Platform: iTunes, Nook, Android. Teaches/Purpose: classification, word recognition, color and clothing related words. Rating (1 to 5 stars): 4.9 stars. Entry date: 6/30/2011. [WB]







#### Book of Me

This set of personalized stories for small screen (no iPad) lets you put your child's name and favorite color into three different stories.

You can also record the narration for each page, which greatly increases the educational value of this app. But the content, art and features are dry.

Content includes two stories: Book of Goodnight deals with the bedtime routine. A child can choose to explore space as an astronaut or protect the city as a superhero during the night. Book of Food covers four food groups. It is possible to share a child's avatar or a page from each book with friends and family via email or Facebook. You can create and save up to three different bookshelves for different children. There is no text-to-speech.

Details: Book of Me LLC, www.bookof.me. Price: . Ages: 2-6. Platform: iPhone, iPod Touch. Teaches/Purpose: reading, language. Rating (1 to 5 stars): 3.9 stars. Entry date: 6/15/2011. [WB]



#### **Cataline HD**

Like Angry Birds dressed up with embroidered tapestry this 60 level physics game from Singapore lets you try to launch a kitten (instead of birds) to catch fish.

In order to advance to the next level, you have to calculate the angle correctly. Enemies include Flying Pirate ships, falling missiles, rain drops and castle guards. The graphics look great, although the game doesn't have the zany appeal of Angry Birds.

Details: Afzainizam Zahari , www.afzane.com. Price: \$1.99. Ages: 5-8. Platform: iPad. Teaches/Purpose: angles, problem solving, fine motor skills. Rating (1 to 5 stars): 4 stars. Entry date: 8/2/2011. [WB]





Ease of Use 7

Educational 8

Entertaining 7

80%

#### **Counting Beads**

Here's an interesting new angle on sequencing/counting games, designed to provide playful, auto-correcting practice with counting and alphabet abilities. The numbers appear as colored magnetic beads (that look a bit like M&Ms) that you connect by dragging into order. When you successfully connect, say, the 7 bead with the 8 bead, they stick together, forming a chain. You can also move the bead chain by holding the device face-up parallel to the floor and tilting it slightly to let gravity roll the leading bead downhill.

Options include the ability to choose between 10 to 40 beads, or letters in either upper or lower case form. You can also choose to turn a timer on or off. The task is fun, but there's no context to the task. So a student might ask "why?" For a teacher looking for a new way to present number or letter sequencing, this is certainly an interesting and potentially useful app.

Details: Visual Math Learning, www.visualmathlearning.com. Price: \$0.99. Ages: 3 -12. Platform: iPad, iPhone. Teaches/Purpose: counting, number order, alphabet. Rating (1 to 5 stars): 4 stars. Entry date: 7/20/2011. [WB]

#### **Dinosaurs (Dine-uh-sours)**

Quiet and gimmick free, this Dinosaur app lets you peel back the skin of nine popular dinosaurs, shown with a person to put the size in perspective. You can drag a slider bar across the image to gradually unveil the skeleton. You can also touch five or so hot points to explore features. Facts are presented in blocks of text. If you're looking for features, you won't find it with this app. Teachers might like the quiet, commercial free presentation of this app.

Details: Intentionally Blank, www.stuartjmoore.com. Price: \$1.99. Ages: 10-up. Platform: iPad. Teaches/Purpose: dinosaurs. Rating (1 to 5 stars): 3.2 stars. Entry date: 8/1/2011. [WB]









#### **Dolls House**

This ten room doll house lets you drag and drop three people (a man, women and girl) into place for role play situations. The rooms include a backyard and a basement, plus the ability to peek beyond the walls of the room. For example, you can swipe down when you are in the backyard to see underground -- a nice touch.

Features and items are disappointingly limited, however, and the people move oddly or bump into each other and fall down. Some rooms have items, like balls that bounce or a tire that swings, and the girl's outfit changed depending on which room she is in. This doll house app is easy to use, but could do much more. See My PlayHome for a better option.

Details: happyMedium, . Price: \$1.99. Ages: 4-up. Platform: iPad. Teaches/Purpose: creativity. Rating (1 to 5 stars): 3.2 stars. Entry date: 7/20/2011. [WB]



Featuring outstanding management features, lots of levels, but rather dry puzzles, this collection of 12 dot-to-dot puzzles can be used to practice counting, the alphabet, or times tables. For example, to connect the dots, you might be asked to follow a number patter that increased by 1 at the easy level, to 8s or 12s at the harder levels. Other options include the ability to keep records for one child at a time, and a leaderboard feature. This app has a lot of classroom friendly features and could be a good math enrichment app.

You can add your child's name and choose between seven challenge levels.

Details: Apps in My Pocket Ltd, www.appsinmypocket.com. Price: \$1.99. Ages: 4-7. Platform: iPad, iPhone, iPod Touch. Teaches/Purpose: math, the alphabet, counting, math facts, times tables. Rating (1 to 5 stars): 4.2 stars. Entry date: 7/22/2011. [WB]



Ease of Use 9







ESRB Rating: Everyone 10+, Mild Cartoon Violence



#### DualPenSports

Fun, addicting and good for fine-motor development with two hands, this unique game uses two styluses at once.

You start by creating and customizing your own own avatar.

Content includes seven "sports," including Home-Run Challenges, Archery, Soccer Penalty Kicks, and more; Rank Match - Play to be the best and earn points in each sport; Score Try - Practice each sport with specialized trials and challenges; Today's Challenge - different sports challenges every day; and Tap Exercise - Hone your touch senses with these activities requiring you to perform feats of dexterity using both hands. Tester's conclusion: Buy it.

Details: Namco Bandai Games America Inc., www.namcobandaigames.com. Price: \$40. Ages: 8-up. Platform: Nintendo 3DS. Teaches/Purpose: logic, fine motor coordination. Rating (1 to 5 stars): 4.5 stars. Entry date: 6/23/2011. [WB]



#### Fantastic Flying Books of Mr. Morris Lessmore

Based on the book by William Joyce, this is an interactive edition of a short animated film that nicely tells the story of a man (Morris Lessmore) who loves books.

Each of the 27 pages weaves interactive features with the storyline. For example, you help scatter the books during a windstorm by circulating your finger on the screen, spell words using alphabet cereal, or tilt the screen to fly Mr. Lessmore through a tunnel of words. Each page uses something different and the effects -- or nice touches -- are subtle and wonderfully crafted, making this a case study in the art and science of interactive story telling.

There are no reading helpers, labeling or other scaffolding features. Instead children are left to read for themselves (the old fashioned way), and they must figure out how to get the page to turn, pulling in a bit of problem solving.

Programmed by Twin Engine Labs, created by Moonbot Studios.

Details: Moonbot Studios, www.moonbotstudios.com. Price: \$4.99. Ages: 7-up. Platform: iPad. Teaches/Purpose: reading, logic. Rating (1 to 5 stars): 4.7 stars. Entry date: 7/12/2011. [WB]

#### Jack and the Beanstalk by Mindshapes

Playful and well-narrated, this iPad edition of Jack and the Beanstalk has 18 screens and is told with a modern twist. In this case, Jack is addicted to video games, when his mother asks him to go to the market.

Content includes 18 screens or pages of content, each with zany story-related hot spots. Text is both highlighted or you can touch and hear individual words, making this a viable language experience. There is both Read to Me and Read to Myself modes.

To help Jack climb the beanstalk, you tilt the screen, and you can design Jack's super-hero outfit by mixing and matching parts. It is easy skip through the book, increasing control.

Details: Mindshapes Limited, www.jellytoons.com. Price: \$2.99. Ages: 4-up. Platform: iPad, iPhone. Teaches/Purpose: reading, language, some creativity. Rating (1 to 5 stars): 4.7 stars. Entry date: 7/31/2011. [WB]

#### Ease of Use 9 Educational 8 Entertaining 10 Design Features 10 Good Value 10





Ease of Use 9 Educational 9 Entertaining 10 Design Features 9 Good Value 10



23%



Ease of Use 1

Educational 4

#### KidEditor: TLP (Three Little Pigs)

Poorly designed but potentially of use to reading teachers, this talking story construction activity is designed to let young children experiment with sentence construction. There are two modes: Edit and Write. In Edit, you see a page of print, from the Three Little Pigs. It is possible to touch select words, marked with an underline, to toggle between different options. So, for example, you can change "there were three <u>little pigs</u>" to "there were three <u>smelly hippos</u>." To hear the entire story read outloud, you can drag over the sentences or touch the page number. In Write, there are 10 blank pages with "word drop" zones that are hard to find and even harder to figure out. Made with GameSalad.

Details: WIldcat Apps, www.kideditor.com. Price: \$0.99. Ages: 4-up. Platform: iPad, iPhone, iPod Touch. Teaches/Purpose: reading, writing, creativity. Rating (1 to 5 stars): 1.1 stars. Entry date: 7/26/2011. [WB]





#### Leo the Lightning Bug

Featuring wonderful graphics but limited interactivity or control over navigation, this ebook app is based on the children's book of the same title (by Eric Drachman)

In the story, Leo -- the littlest lightning bug of all, can't make his own light. The other lightning bugs tease him, but eventually Leo learns to light up the night.

Features include professional narration, background audio, and enlarged artwork for each scene. There are three presentation modes available from the main menu --Read to Me, lets you listen to the narrated story with words highlighted as they are read; Read it Myself, lets you read the book in its traditional form; and Auto Play, which plays like a movie, automatically reading and turning pages.

There are no animations, but hidden sounds can be found by tapping around the page. Unlike other Oceanhouse Media books, there is no labeling.

Details: Oceanhouse Media, www.oceanhousemedia.com. Price: \$2.99. Ages: 3-5. Platform: iPad, iPhone, Android. Teaches/Purpose: reading. Rating (1 to 5 stars): 3.7 stars. Entry date: 7/20/2011. [WB]

#### Milk and Coffee

Like the Incredible Machine, this physics puzzler let's you try to unite two cats --Milk and Coffee, by dropping different widgets and gizmos such as balloons, pins, speed boost and speed brakes onto a game board. It could also be described as a "design your own pinball machine."

The early levels are nicely designed, despite being designed for the iPhone's smaller screen, making this one of the better drag-and-drop problem solving options.

There are 100 levels (and progress is saved automatically), offering plenty of content. Created in Kuala Lumpur, Malaysia. The iPhone or iPad game uses the OpenFeint leaderboard system, and requires iOS 3.0 or later with 16.8 MB.

Details: CitizenTree, www.citizentree.net. Price: \$free. Ages: 6-up. Platform: iPhone, iPad. Teaches/Purpose: problem solving, deductive reasoning. Rating (1 to 5 stars): 4.6 stars. Entry date: 7/14/2011. [WB]

#### Ease of Use 9 Educational 8 Entertaining 7 Design Features 6 Good Value 7











Ease of Use 4 Educational 8 Entertaining 9 Design Features 9 Good Value 9



#### Numbers League

Comic book super heroes meet math facts, in this complicated iPad version of the tabletop card game of the same name: Numbers League.

Your goal is to rid Infinity City of villains by making a super hero that has a mathematical value. To do this, you use a spinner which generates a hero with a random value. Your job is to add up that value, and pick a bad guy with the same or less value to defeat. When all the bad guys are locked up, you win the game. The graphics and sounds are nicely done, and there are options for the timer, background music, hints and difficulty of the game play. This game is hard to figure out, but can grow on you. It helps to like the theme, however.

Details: Bent Castle Software, www.bentcastle.com. Price: \$4.99. Ages: 5-up. Platform: iPad. Teaches/Purpose: math facts, addition, mental math. Rating (1 to 5 stars): 3.9 stars. Entry date: 7/8/2011. [WB]



#### Odd 1 Out

Your challenge is to spot the "odd one out" from a set of moving fruit, shapes or colors in this limited app that could be used to support an early math curriculum.

You start with a challenge, e.g., "spot mango" (with a picture of a mango). As the mangos fly across the screen, mixed with other types of fruit, your job is to tap just the mangos, and not the strawberries or bananas. The shapes and colors present harder levels. The sound can become repetitious, and the task is void of meaning.

Details: Punflay, www.punflay.com/. Price: \$0.99. Ages: 4-up. Platform: iPad. Teaches/Purpose: classification, math, logic. Rating (1 to 5 stars): 2.7 stars. Entry date: 7/22/2011. [WB]









#### OneVoice

Let's say you suddenly lost your voice. How would you communicate? There's an app for that -- several, actually and they range greatly in price and quality, due in part to the growing diversity in the app store.

The reality is the iPad, iPhone and iPod Touch -- which comes with a microphone, camera, clear speakers, text to speech software, and is a ready made Augmented Alternative Communication (AAC) device.

One of the most expensive and best apps is OneVoice (but also check out iConverse, Get Talking, iMean). Created by Boise-based Legend (www.thinklegend. com), OneVoice 1.1.2 served up a starter set of 100 icons; each associated with a common phrase like "I want" and "breakfast."

To speak, you just tap an icon, and you hear the words spoken, in clear, synthesized speech, available in one of four voice choices (two per gender) and adjustable in speed. Phrases can be built, by touching more than one icon, and it is easy to create your own icons using the iPad 2 camera, or simply type a phrase using the standard iOS keyboard.

This type of app has great implications for people with communication disabilities, such as stroke or traumatic brain injury, autism, cerebral palsy, intellectual impairment, Parkinson's disease, or multiple sclerosis.

Designer Nathan Barry of Legend was inspired to create the affordable, easy-to-use application after learning that many people affected by speech disabilities cannot afford the devices currently available on the market. At \$199.99, OneVoice is significantly less expensive than similar devices, the most common of which cost many thousands of dollars. OneVoice can change the way people with speech disabilities interact with their families, friends, and the world around them.

Details: Legend, www.thinklegend.com. Price: \$199.99. Ages: 3-up. Platform: iPad. Teaches/Purpose: An adaptive communication app. Rating (1 to 5 stars): 4.3 stars. Entry date: 3/26/2011. [WB]



#### Peekaboo! Guess Who?

Featuring beautiful art, but a less than straightforward design, Peekabook! Guess Who consists of 10 scenes (Deep Forest, Blue Lake, Country Road and so on). Each scene has aliens tucked behind trees, rocks or other background items. To find the aliens you tap around the screen. A hint feature counts down the aliens left to find. After all the characters are found, you get a round of applause, and a new level. Created by PopApp, Bright Colors and Visualizes.com.ua.

Details: PopApp Factory, www.popappfactory.com. Price: \$1.99. Ages: 2-up. Platform: iPad. Teaches/Purpose: Visual discrimination. Rating (1 to 5 stars): 3.9 stars. Entry date: 7/8/2011. [WB]

#### Penguin's Family: The Story of a Humboldt Penguin

Good facts and illustrations are combined with Oceanhouse Media's excellent labeling techniques to create an excellent early literacy experience that can enhance a child's emerging reading abilities.

Weaknesses: not much content, and the format never changes. Strengths: the content is rich; full of interesting illustrations and facts.

This would be an excellent science/reading addition to any early elementary classroom.

Details: Oceanhouse Media, www.oceanhousemedia.com. Price: \$1.99. Ages: 3-6. Platform: iPad, iPhone, iPod Touch. Teaches/Purpose: reading. Rating (1 to 5 stars): 4.4 stars. Entry date: 8/1/2011. [WB]

#### Playaway View

Librarian's take note. What if you circulated the entire VCR -- along with the tape? That's the idea behind the the Playaway View -- a paperback-sized, bomb-proof, preloaded video player, designed to provide library patrons with a free, portable all-inone video player that is so specialized it is unlikely anyone would want to steal it.

Designed to be simple, portable and durable, the player has enough memory to hold up to six hours of digital video content. Titles include Sesame Street and Weston Woods (pre-kindergarten); Arthur and Super Why! (early elementary); and National Geographic and Shakespeare (5th through 12 grade).

Features include a 3.5" color, shatter-resistant color LCD acrylic screen, built-in speaker and optional headphone jack, rechargeable internal lithium-polymer battery for up to 8 hours of continuous play and a simple 7 button interface. See the entire catalog of content at http://library.playaway.com/view/videos.

A set of library friendly accessories include a security doc and a plastic water proof case.

Details: Findaway World, www.findawayworld.com. Price: \$99. Ages: 4-up. Platform: a handheld video player. Teaches/Purpose: a portable flash memory based video player. Rating (1 to 5 stars): ? stars. Entry date: 7/25/2011. [WB]

Ease of Use 6 Educational 7 Entertaining 8 Design Features 9 Good Value 9

78%





Ease of Use Educational Entertaining Design Features Good Value







#### Presidents vs. Aliens

Looking for a fun, zany drill program to help you memorize some names and facts about the 44 US Presidents? This app is a good choice. Combining flashcard-like facts with a "break-out" game mechanic, the app doles out multiple-choice questions like "Which President succeeded Thomas Jefferson."

To answer the question, you touch one of four labeled portraits. Correct answers give you a chance to fling a President, in ball form, at a set of aliens, until no more are remaining. The formula is tried and true, and it works. You end up answering hundreds of questions in a short amount of time in order to increase your supply of Presidents, and unlock a game of heads of state.

There's no opportunity to apply the factual knowledge, so the facts are less likely to stick, but, all things considered this game delivers as promised. It is possible to create up to five player profiles.

Details: Dan Russell-Pinson, http://dan-russell-pinson.com/. Price: \$1.99. Ages: 6up. Platform: iPad, iPhone, iPod Touch. Teaches/Purpose: history, US Presidents, . Rating (1 to 5 stars): 4.2 stars. Entry date: 7/8/2011. [WB]

#### **Roxie's a-MAZE-ing Vacation Adventure**

Beautiful yet challenging, this detailed maze game (search "A-Maze-ing" in the app store) lets you navigate through 16 detailed, hand-drawn scenes by dragging vehicles through a map.

As you explore the connected maps, you find 85 hidden items embedded in the pen and ink maps that somebody obviously put a lot of time and thought into making. Your mission is to find them all, a task we stopped at around 11. Because up to five player profiles can be stored at once, it is possible to sign in or out and continue progress at a later time.

Hidden items include stars, letters, penguins, numbers and ice cream trucks. While the graphics are beautiful, the narrow streets can make your finger feel fat and some of the dead ends are frustrating. There is no zoom option or mute for the background music. There is no reading required, and no ads or in-app purchases. If you like mazes, this is worth considering as long as you're ready to squint.

Created in the Netherlands. The free version limits the number of levels and the amount of fuel for your car. See also Roxie's Doors.

Details: OCG Studios, http://www.ocgstudios.com/. Price: \$4.99. Ages: 7-up. Platform: iPad. Teaches/Purpose: logic, visual discrimination, problem solving. Rating (1 to 5 stars): 3.6 stars. Entry date: 7/11/2011. [WB]

#### **Roxie's Doors**

This I SPY-like ebook starts each page with a rhyming poem, and then lets you tap around nine pages of hidden objects. There are 50 items, some hidden rather cleverly -for example there's a small cabinet in the cabin of a sailboat, requiring that you open the door to find it. The view changes slightly if you tilt the screen, adding a realistic effect. We also liked how you can toggle between two narrators on the fly, and adjust the background noises.

The pages have no relationship -- you're in an auto garage on one page, a space ship in the other.

Some of the items are too small, and there's no hint system. In addition, there's no acknowledgment when you find all the objects, and your history is erased as soon as you change the page. It is easy to jump to a favorite page at any point, using a pull down table of contents tab.

While this experience is far from perfect, the tried and true formula works, and the variety is nice. It would certainly work as a fail-safe language enrichment activity. See also Roxie's Amazing Adventure.

Details: OCG Studios, http://www.ocgstudios.com/. Price: \$2.99. Ages: 7-12. Platform: iPad. Teaches/Purpose: language, vocabulary, visual discrimination. Rating (1 to 5 stars): 4.1 stars. Entry date: 7/31/2011. [WB]









Ease of Use 9 Educational 8 Entertaining 8 Design Features 7 Good Value 9





#### **Savings Spree**

How do you make a painfully dry topic like smart money habits, fun? Create a game show, with a talking piggy bank as a host, and then keep kids busy with matching, sorting or maze games.

There are six games that can be played through as a game show, or individually for practice: Saving Choices (sort items according to four categories -- saving, spending, donating or investing): Earn It! (decorate cup cakes to earn money); Rainy Day Fund (a confusing but fun fortune cookie game); Spend Avoidance (a maze game where you try to avoid wasting money in the mall); Wealthy Habits (decide whether to buy a new book, or visit the library by tilting the screen left or right); and Kids Earn (make cups of lemonade).

It is easy to jump right to a game or play through each activity in sequence to see how much money you can make. This is one app that could be worth many times the \$2.99 required to download it.

Created by award winning designer Daren Carstens for Susan Beacham of Money Savvy Generation.

Details: Money Savvy Generation, www.msgen.com. Price: \$2.99. Ages: 7-15. Platform: iPad, iPhone, iPod Touch. Teaches/Purpose: money, banks, money choices, saving. Rating (1 to 5 stars): 4.7 stars. Entry date: 5/24/2011. [WB]

#### Smurfs Dance Party, The

Testers loved and hated this Wii-only, follow-along dancing program that is based on the movie, The Smurfs.

Content includes 20 dances, each with different sets of moves illustrated by a small squad of strange looking Smurfs.

Using a Wii Remote in each hand, you can dance alongside your favorite characters and heroes from the film, including Smurfette, Pap Smurf, Clumsy, Brainy, Gutsy and Gargamel. Songs include both popular tunes such as One of the Boys and Higher and original songs from the The Smurfs including Smurfberry-licious and Gargamel.

The movement tracking is less than exact, and some of the dance moves are too hard, mostly because the screen is so cluttered with information that you don't know what is going on. Compared to other Dance sims, this one ranks lower, unless, of course, you're a Smurf-a-holic.

Details: UbiSoft, Inc., www.ubisoft.com. Price: \$30. Ages: 7-up. Platform: Wii. Teaches/Purpose: music, dancing, rhythm, gross motor movement. Rating (1 to 5 stars): 3.8 stars. Entry date: 7/22/2011. [WB]





ESRB Rating: Everyone, Mild Lyrics



#### Ease of Use 9 Educational 8 Entertaining 7 Design Features 9 Good Value 8



#### **Tilly's Petting Farm**

Touch a cartoon-ish farm-related object or animal to hear a sample sound, and hear it labeled, animated and described.

For example, if you touch the donkey, you might hear "the donkey has big ears," along with a donkey sound and an animated routine.

Content includes 300 sentences, along with moving pictures and sounds. The app is based on the idea that children learn better by making associations between objects and words. The app uses a clever sliding lock feature to keep younger children from leaving a page; a nice touch. The experience is responsive and based on valid learning theory, although it feels limited in content with just four scenes to explore and the cartoony animation seems less than academic. The upside to this is that it seems less academic, and perhaps more playful. This is the first of a planned series.

Details: Teacher Tilly, www.teacher-tilly.com. Price: \$1.99. Ages: 2-7. Platform: iPad, iPhone. Teaches/Purpose: language, vocabulary, farms, animals, reading. Rating (1 to 5 stars): 4.1 stars. Entry date: 7/8/2011. [WB]



#### **Tot Transport**

This limited app contains 32 high quality, transportation-related photos. Each contains a printed label (e.g., "race car"), simple animation with sound, and pronunciation. To change between the pictures, you swipe. The sounds and narration are low quality.

The app also features parental controls in the setting for turning on or off the animations, sound effects, voice effects and word display, and settings to choose to display the caption text as capitals, lowercase or no text. Unfortunately, it is hard to find the parent options.

Details: Whippersnapper Workshop, www.whippersnapperworkshop.com. Price: \$0.99. Ages: 1-6. Platform: iPad, iPhone, iPod Touch. Teaches/Purpose: transportation, language. Rating (1 to 5 stars): 2.6 stars. Entry date: 7/26/2011. [WB]



53%

Design Features 1

Good Value



Ease of Use 9 Educational 10 Entertaining 10 Design Features 10 Good Value 10



ESRB Rating: Everyone 10+, Cartoon Violence



Ease of Use 8 Educational 10 Entertaining N **Design Features 10** Good Value 10





#### Wii Play: Motion

Our nomination for one of the best games of the year, these twelve ingenious activities marry logical thinking with body motion, further establishing the Wii system as the leader in the kinesthetic interface.

Note that you'll need to have one of the newer Wii Remote Plus controllers (or an older one with the Remote Plus attachment) to make the games work. Fortunately a new black controller comes in the box.

The games are a case study in good design.

For example, in Wind Runner, the controller becomes an umbrella handle that you must tilt to ride gusts of wind along a race course. In Spooky Search, you hunt for invisible spirits using the controller as a ghost detector. And in Veggie Guardin', you use the Wii Remote Plus to swat away pests. The game features multiple difficulty levels for up to four players, and all the games can be played in both single player and multiplayer modes. The game comes bundled with one Wii Remote Plus controller. Keep in mind that the Wii Remote Plus includes the additional gyro motion sensor. Older Wii Remotes don't have this feature and won't work with the game.

Details: Nintendo of America, www.nintendo.com. Price: \$50. Ages: 8-up. Platform: Wii. Teaches/Purpose: logic, gross motor movement, kinesthetic motion. Rating (1 to 5 stars): 4.9 stars. Entry date: 6/23/2011. [WB]

#### Word Wizard

Turn your iPad into a talking alphabet/language generator -- and the perfect tool for a child just starting to experiment with letters and their sounds. To build a word, you drag if from an alphabet strip onto a 44 letter grid, where it snaps into place, pronouncing any word that might be created, including nonsense words. This is a very important app, because it leverages both the powerful speech synthesis abilities of the iPad and the touch screen; so every letter becomes a block of sound that you can touch and hear, or place next to another word to see how they affect each other. Yes, you can spell swear words -- the idea is that this is an open-ended language creation tool, so anything is possible.

The main menu offers two choices: Moveable Alphabet, for free exploration of word combinations; and Spelling Quiz, a talking spelling ten word test with 173 built in word lists (e.g., nature words, or 1000 most frequently used words). In the spelling tests, you hear the word, and must spell it using the same alphabet strip used in the Moveable Alphabet. Note that because the letters are arranged alphabetically, this is not good for typing or fast text entry.

Options include a spell checker that highlights unrecognized words, American and British voices, the ability to change the speed or tone of the voice, uppercase or lowercase letters, and two backgrounds.

Details: L'Escapadou, http://lescapadou.com. Price: \$2.99. Ages: 3-8. Platform: iPad, 160 MB Download. Teaches/Purpose: Reading, spelling, language, phonics, letter recognition, decoding, writing. Rating (1 to 5 stars): 4.8 stars. Entry date: 7/21/2011. [WB]



#### Zizu Cooks up a Tune

This animated music app looks good but could become costly, because of the way it asks children to buy more songs using the in-app sales feature. Each additional song costs \$.99 each. There are two challenge levels, including a Training Mode that gives cues to the child to tap the right keys on the piano, and the recording feature allows them to sing their own tunes.

The Show Musical Notes feature overlays the piano keys with the notes to give the amateur user a chance to play around with the keys more confidently. There is also a Forgiving mode that lets the child tap keys anywhere on the app, and still create intune melodies.

Details: Bubulu Labs, www.bubululabs.com. Price: \$0.99. Ages: 2-up. Platform: iPad. Teaches/Purpose: music, notes. Rating (1 to 5 stars): 3.3 stars. Entry date: 7/11/2011. [WB]

Ease of Use 7 Educational 6 Entertaining 7 Design Features 7 Good Value 6





#### AUGUST 1, 2011

*This section contains a listing of products in the process of being reviewed, but not yet rated. We also include significant updates of older products.* 

#### **BubCap**

BubCaps provide a low-tech solution to a high tech problem -- keeping babies and toddlers from pressing the home button on your iPhone, iPad and iPod touch. They are designed to be rigid enough to deter toddlers from pressing the home button, but are flexible enough to allow adults to activate the home button with a firm press.

There are three models. The regular version is the least rigid, suitable for most toddlers using an iPhone or iPod touch. The Ultra model is more difficult to press and is best suited for toddlers on an iPad, or older, stronger kids on an iPhone or iPod touch. The Max version is the most difficult to press and is designed for older, stronger kids on an iPad.

BubCaps are sold in 4 packs for \$5 each and include: Intro Pack - 2 BubCaps regular and 2 BubCaps Ultra; 4 pack Regular; 4 pack Ultra; and 4 pack Max.

Details: Paperclip Robot, www.papercliprobot.com. Price: \$5.00. Ages: 2-6. Platform: iPad, iPhone,iPod Touch. Teaches/Purpose: home button covers for iOS devices. Entry date: 7/26/2011.

#### **Centipede Infestation**

Now 30 years old, the original arcade game Centipede has been given a completely new look and story, featuring cartoon-style characters, for the Wii and Nintendo DS. It is now an action/adventure shooter with tower defense-style objects. Bugs include centipedes, spiders, beetles, grubs, caterpillars, moths, and boss insects, found in seven environments and 40 stages.

Weapons include machine guns, flame throwers, acid guns, rockets, missiles and 12 power-ups to fight through the invasions.

Like the toadstool of the original Centipede game, each of the 13 insects has a unique defensive object that it can leave behind, as a 'special' variation of that insect is killed. These defensive objects are short-lived combat tools that distract, attack, or block insect assaults during battle.

Here's the story: Twelve years after a nuclear war, the world has turned into an uninhabitable wasteland with mutant insects thriving in a toxic world and humanity holding onto survival in outposts hidden from the poisonous air and the killer Centipedes hunting their natural resources. Humanity's only hope for survival? A boy named Max (you) and his girlfriend Maisy, who possesses a collection of seeds that hold the secret for bringing the plants back.

A two player co-op feature is available. Nintendo 3DS players can use street pass and stop pass features that enable them to share content between passing 3DS users as well as share content between copies of Centipede owned on the Wii and 3DS. Created by WayForward for Atari.

Details: Atari, www.atari.com. Price: \$40. Ages: 7-up. Platform: Wii, Nintendo 3DS. Teaches/Purpose: logic, action. Entry date: 6/28/2011.

#### **Chevrolet Camaro: Wild Ride**

This game lets you play against other drivers on nine treacherous tracks across three continents. You can choose from one of 12 Camaro models to drive, ranging from 1971 to modern day. You can also race each track in normal or reverse. Note the Wii version is compatible with the Wii Wheel (sold separately).

Details: Storm City Entertainment, www.stormcityentertainment.com. Price: \$20. Ages: 6-up. Platform: Wii, Nintendo DS. Teaches/Purpose: . Entry date: 11/15/2010.









#### Everloop

Originally launched in 2009, Everloop has been described as "Facebook for Kids." It is limited to children under 15 years of age, although it was possible for me -- many times over 15 -- to easily set up an account and gain access, posing as my daughter. It is easy to register and monitor one or more kids.

Accounts must be verified and linked to an adult's account, which requires either a \$1 charge to a credit card, or a social security number check. Parents are sent frequent email updates about what their child does.

Business model: Everloop is free to use, but offers children extra items that require "evercredits." These credits can be earned by playing games or inviting other friends, or you can buy them with real money. 2000 "evercredits" cost about \$20; that's enough to "goob" somebody many times (fill a friends screen with popcorn). Everloop likes to have the parent's credit card, both for identity verification reasons and to pay for things. Children can request more credits online, which generates an email to the parent. In addition, Everloop generates an email account for your child automatically. The interface seems clean, and can be customized.

Once you're on Everloop, you can chat with friends, play solid but mindless Flash games, and share movies and pictures. Another unique feature is real time communication, using SMS and VoIP, features we did not test. The service is only as good as the number of friends that have signed up for it. There's no way to communicate outside the wall.

Everloop was rebuilt (and refunded) in the Spring of 2011 with a safety twist and a partnership with iSafe. See also Disney's Togetherville.

Details: Everloop, www.everloop.com. Price: \$free to join, freemium. Ages: 6-15. Platform: Windows, Mac OSX, Internet Site. Teaches/Purpose: social networking for kids. Entry date: 3/10/2011.

#### Every Body Has a Brain; The Game

Every Body Has a Brain is a suite of CDs and downloadable games, songs, and stories for Windows or Mac computers.

Children meet Phoebe Brainheart, a girl who loves finding out new things about the brain. Children visit Phoebe's brain to play games, sing along with songs, and play interactive stories. Each game's design mirrors the content. For example, in the Hippocampus, the games engage memory, and in the Cerebellum, they involve coordination and balance. In addition, the 17 songs from the game reinforce what the different parts of the brain do. The game is designed to teach children the basic structures and functions of the brain, understand that all parts of the brain work together, and realize that it's important to protect their brain.

This software was funded by grants from the National Institute of Mental Health's Small Business Innovation Research Program.

Details: Morphonix LLC, www.morphonix.com. Price: \$20. Ages: 4-6. Platform: Windows, Mac OSX. Teaches/Purpose: the brain. Entry date: 7/26/2011.

#### **Fortune Street**

Featuring playable characters from Nintendo and Dragon Quest, as well as the ability to play as your Mii, this board game for the Wii lets you play the real estate and stock markets.

You move around one of 15 boards, buying shops to build your portfolio and collecting symbols you can cash in at the bank to earn more gold to invest.

You can play the stock market, purchase shops and collect shopping fees. Players with multiple shops adjacent to one another see them grow in value and their shops level up, and if another player lands on those squares they have to pay an increased fee. The game also features a beginner setting to help you learn the basics, and an advanced mode with more challenges, options, and the ability to play the stock market. Developed by Square Enix. Scheduled for release Holiday 2011.

Details: Nintendo of America, www.nintendo.com. Price: \$call. Ages: 8-up. Platform: Wii. Teaches/Purpose: money, logic. Entry date: 6/15/2011.









#### Harry Potter and the Deathly Hallows, Part 2

If you liked last year's Deathly Hallows (Part 1) you're supposed to like this one more. Why? Besides being set in Hogwarts castle, "you can change between eight key characters on the fly, and more easily swap between spells in real time," according to Pete Smith, the Executive Producer of EA's Bright Light Studios. I had a preview, and can attest to the fact that this is a more fluid, visceral experience, for better or for worse depending on how you feel about violence. Content includes 12 levels of shooting, blowing things up and freezing bad guys, in this case, members of Lord Voldemort's army. If all goes well you save the day and Voldemort's rule ends, just like the movie.

Besides all the fighting, you must plant carefully timed explosions, and find your way through the maze-like chamber of secrets, so there is a good deal of logic and problem solving, intermixed with the very high body count.

The aesthetics of this HD title are notable, with full orchestration and dark shading. Enhanced features work with Sony Move, but there is no Kinect support. If you're looking for some fast paced Harry Potter adventure, this is a good option.

Things testers didn't like: ot was a short game; one player adventure; and it would be better if it could you could point easier.

Details: Electronic Arts, Inc., www.ea.com. Price: \$50. Ages: 10-up. Platform: Windows, PlayStation 3, PlayStation Move, Wii, Xbox 360. Teaches/Purpose: logic, problem solving. Entry date: 6/8/2011.

#### I SPY Castle

Thirty-six I SPY riddles and 12 mini games are set in a castle setting, in this new rendition for the Nintendo DS, as the I SPY franchise celebrates it's 20th anniversary.

The mini-games are hidden among the riddles, and three logic puzzles unlock additional new rooms of the castle. Players collect objects to unlock rooms and complete riddles, and hint features assist players in finding the most challenging objects. The game is being distributed by Cokem International.

I SPY was written in book form by Jean Marzollo with photographs from Walter Wick, in 1991. Other versions run on the Mac, Windows, Wii, Leapster, Leapster2, Leapster Explorer DS, and LeapFrog's Tag Learning System, iPod touch, iPhone and iPad.

Visit http://www.scholastic.com/ispy

Details: Scholastic Media, www.scholastic.com. Price: \$20. Ages: 5-up. Platform: Nintendo DS. Teaches/Purpose: logic, classification, attributes, sorting. Entry date: 7/18/2011.

#### IXL Learning (www.ixl.com)

This is a subscription math and language drill program organized by grade (K-12), that makes it easy to drill in a school subject.

Cleanly designed in Flash, the questions are multiple choice. There's no deep pedagogy here; little help is provided for wrong answers, other than the right answer. Content is organized around generic common core standards. One of the more interesting aspects of this site (www.ixl.com) is how it lists the common core standards. If you're looking for sophisticated graphics and teaching techniques you won't find it here. What you will find is nice clean drill.

Details: IXL Learning, www.ixl.com. Price: \$10/month. Ages: 5-up. Platform: Windows, Mac OSX, Internet Site. Teaches/Purpose: reading, math, basic facts (from counting to statistics). Entry date: 7/6/2011.





#### Meon Deluxe Animation Studio: Star Wars

The Meon Animation Studio lets you transform your favorite Star Wars characters into "Neon-esque" artwork using Meon wire that lights up in whatever form you bend, lace or shape.

You begin by choosing your design and placing a picture into the frame. Then you snap the pegs into place, following the printed pattern. Next, thread the Meon wire and select a picture mode. The Meon pictures will come to life. You can also create your own artwork, or download more images at www.meonGlow.com, and play games including a memory game and fortune teller.

Includes 11 feet of Meon Wire, 15 inch frame, 45 pegs, peg tool, six picture sheets and instructions. Requires 4 C batteries (not included). The kit is scheduled for release August 2011 and is also available in Disney Princess, Cars, and Fairies versions.

Details: Skyrocket Toys LLC, http://skyrockettoys.com/. Price: \$call. Ages: 5-up. Platform: Smart Toy. Teaches/Purpose: creativity. Entry date: 7/6/2011.

#### **Picture Lives!**

This is a downloadable app for the Nintendo 3DS, available exclusively in the Nintendo eShop. It lets players create a variety of creatures and objects, and then brings them to life with animations and personalities. You can then take control of your creations and explore a game world that can also be modified with customized creations. You start with simple shapes such as circles and squares and build your creatures any way you want, picking the colors and forms, adding legs, eyes, a mouth. Next, your creature gets a name and a voice, and then comes to life with you controlling it using simple touch screen controls. You can make it walk, jump or fly, munch on food, and explore the game world. You can also collect eggs to earn money for additional character-creation tools, or get bonuses that give you extra power-ups. You can also unlock the ability to redesign elements in the game world. The more pictures you draw, the larger the game world grows and the more areas there are to explore. You can also swap characters wirelessly using StreetPass. Developed by Asobism, Co. Itd.

Details: Nintendo of America, www.nintendo.com. Price: \$call. Ages: 5-up. Platform: Nintendo 3DS. Teaches/Purpose: creativity. Entry date: 6/15/2011.

#### ToonGoggles.com

Kids can watch short, generally low quality cartoons or cartoon trailers on their iPad, iPhone and Android devices, with ToonGoggles.com. Features include the ability to watch in different languages, educational content, with "100 series available." It is not clear how the site makes money. Visit www.toongoggles.com.

Children can create their own "facepage" and add cartoons to a toonstrip.

Details: Toongoggles, www.toongoggles.com. Price: \$free. Ages: 3-up. Platform: Internet Site. Teaches/Purpose: a media delivery service. Entry date: 6/28/2011.

#### ToonsTunes.com

Made in Flash, this space-themed virtual world, created by Paul Bohan, lets children sing and share songs. Note that you need to be a member in order to record your own songs.

There are sing-alongs, a morpher where you can change your voice and a multiplayer game.

As you play, you gain experience points and level up, earning Dymonz. There are member only items like new instruments, party packages, homes for your avatar, clothes, accessories and furniture. It is possible to form a band, collect instruments and perform in virtual concerts. Based in San Rafael, California, ToonsTunes is run by Connected Studios, Inc. Visit http://toonstunes.com/. There are one-month, three-month, six-month, or twelvemonth subscriptions.

The site launched July 2011.

Details: Connected Studios, Inc., www.connectedstudios.com. Price: \$6/month and up. Ages: 6-up. Platform: Internet Site. Teaches/Purpose: . Entry date: 7/11/2011.







