21st Century Skills - shift in our concept of literacy
- Ways of Thinking
  - Creativity
  - Critical thinking
  - Problem Solving
  - Decision Making
  - Meta-cognition
- Ways of Working
  - Collaboration
  - Communication
- Tools for Working
  - Connecting with information and communication technology literacy
- Living in the world
  - Contributing
  - Citizenship and personal responsibility

How are video games a learning space?
- Student engagement
- Problem solving
- Motivational memorization
- Individual and collaboration
- Rapid and clear feedback
- Long and short term aims
- Cognitive dissonance
- Failure
- Games are systems

7 Ways Video Games Engage the Brain:
- Experience bars measure progress
- Multiple long and short term aims
- Rewards for effort
- Rapid, frequent, clear feedback
- An element of uncertainty
- Windows of enhanced attention
- Involve other people

Video games can provide a number of benefits to learners:
- Engagement
- Critical thinking
- Problem solving
- Positive failure
- Collaboration
- Relevancy
- Authentic assessment
- Systems think

Supportive Apps

Evernote - Evernote lets you take notes, snap photos, create to-do lists, scan docs, record voice reminders

Bitboards - Bitsboard catalog including tens of thousands of gorgeous flashcards and carefully curated lessons covering hundreds of topics, is ideal for learning languages, mastering vocabulary, learning to read, learning to speak, and is fully customizable

Kahn Academy - view Khan Academy's complete library of over 4,200 videos and articles including K-12 math, science topics such as biology, chemistry, and physics, and even the humanities with playlists on art history, civics, and finance

Groupboard Collaborative Whiteboard - allows you to draw and chat in real time with other people anywhere on the internet, even with users using a web browser.

Hopscotch - is programming designed for everyone. Kids can use simple, intuitive building blocks to create games, animations and apps in this colorful, interactive environment.

Poptopica - Create a Poptropican, then start exploring the world of Poptropica. Collect gold shards when you first enter Poptropica and earn a prize! Travel to each Island to solve the mysteries that await.

Aurasma (AR) - is an augmented reality app · Bring tagged images, objects and even physical locations to life with interactive digital content, such as video, animations and 3D scenes, we call Auras. Requires some setup

Wikitude (AR) - Use Wikitude as a tool to experience augmented reality content, campaigns, projects, promotions, games and so much more by simply scanning the things you see. Requires some setup

Dragon Dictation - Dragon Dictation is an easy-to-use voice recognition application that allows you to easily speak and instantly see your text or email messages

Brigit – operate your desktop computer from your iPad

Dyslexia Quest (only on large iPads)- Climb the mountain and play the yeti games. Each game will test memory and learning skills. The Yeti Master will explain signs of dyslexia

Everyday Social Skills (only on large iPads)- Covering basic social skills needed for everyday activities in your community, Everyday Social Skills includes common daily activities such as walking down the street, using a restroom, waiting in line, asking for directions, asking for information and joining in a group.

LetterReflex (only on large iPads)- LetterReflex provides a fun way to help overcome common letter reversals

Reading Raven 1 & 2 (only on large iPads)- lessons designed to help young children build a solid foundation for reading.

SentenceBuilder (only on large iPads)- A fun new sentence builder app is designed to learn about words, sentences, pronunciation, grammar, and punctuation

Language Apps

ZooBurst (AR) - is a digital storytelling tool that lets anyone easily create his or her own augmented reality 3D pop-up books.

Our Discovery Island: Phonic Tricksters (AR) - Tricksters have escaped from Our Discovery Island and are stealing letter-sounds from the English Bank of Phonemes! Only you can catch them, using a fun, innovative and immersive Augmented Reality chase game - and by testing your knowledge of phonics.

Super Duper Story Maker - you can create all the picture and photo stories you want and tell them over and over — plus, you can make your own photo albums, special occasion cards, comic books, etc.

Phonetics with Letter Lilies - game that helps children to learn to read through phonetic recall

Phonetic Genius - speak, read, and recognize words is through phonic awareness

Jumbline 2 - Scramble and twist your brain to make words from jumbled lines of letters. Simply rearrange the scrambled letters into words, and underline them with your finger to score points

ABC Magic Phonetics - learn the sounds of the letters of the alphabet

Timbuktu Pizza – learn to follow instruction by making pizza orders

Bookabi - Create a storybooks in 2D and 3D. Choose from backgrounds, characters, objects and stickers or use your own photos

Perfect Captions – Add captions to your pictures

Phrasal Verbs Machine - In this application, we can find animated illustrations of 100 phrasal verbs. Phrasal verbs are complicated for non-native English speakers to learn

Raz-Kids - app lets you access eBooks and eQuizzes

Spell Better – improve spelling through word prediction and auto-completion

<u>Art Apps</u>

Drawing – Draw and use stamps

MoMA Art Lab - make a sound composition, a shape poem, a group drawing, and more, then save and share your artwork. Explore how artists use line, shape, and color, discover artists' processes and inspirations, and create your own artwork inspired by MoMA's collection

ColAR Mix (AR) - Print, color and see your drawing in beautifully hand-animated 3D worlds

Science Apps

Solve the Outbreak - Get clues, analyze data, solve the scenario, and save lives! In this fun app, you get to be the Disease Detective

Star Tracker Lite (AR) - Just hold up and point the device to the sky and you can see any stars, constellations and deep sky objects you are watching in reality.

Star Chart (AR) - Just hold up and point the device to the sky and you can see any stars you are watching in reality.

Amazing Space Journey (AR) - Discover the Solar System and explore the Sun, the planets and their satellites

Science AR - Science AR is the Augmented Reality App for schools. Makes the Science AR posters come alive. This App works in conjunction with the Science AR posters

Magic Plan CSI (AR) - MagicPlan CSI measures and draws the floor plan of a crime scene just by taking pictures

Spacecraft 3D (AR) - lets you learn about and interact with a variety of spacecraft that are used to explore our solar system, study Earth, and observe the universe

Leaf Snap (AR) - uses visual recognition software to help identify tree species from photographs of their leaves

Project Noah (AR) Grab a photograph of a plant or animal that you find. Can report them to the community, create a field guide or complete field missions

Shout Science - is a comic storybook app for young readers (ages 7-11) about scientists & scientific discovery

Aero! - learn about the dynamics of flight, as you control a bird

Math Apps

Math Ahoy! - you decide where you want to go and use math to get there. It's time to stop drilling and start using math creatively. Based off of Finish school math systems

Multiplications with Math Mathews - Three mini-games created with speech therapists and based on three different methods to practice math

Mental Math with Math Mathews – practice and develop mental math skills with addition and subtraction

Numbler - is a game where players build math equations like scrabble

Dexteria Dots – combine, split, divide groups to understand math concepts

iSolveit: Math Scaled - place different shapes with unknown weights on the scale so that it is balanced

iSolveit: Math Squared – use logic, reason and math skills

KenKen – use logic, reason and math skills

Teachley: Addimals Adventure - teaches single-digit addition. Model effective strategies for solving math facts

Teachley: Mt. Multiplis - focused on getting the answer, but also understanding the process of multiplication and the strategies that kids need to develop

Math Heroes 2: Multiplication - multiplication drill with some shiny shell

Fill The Cup – exploring the concept of parts of a whole (fractions) and adding shapes visually

Long Division Touch - Learn the mechanics of long division with a touch interface. Drag digits down, slide the decimal into the correct position, and tap to identify repeating decimals.

CyberChase Shape Quest! (AR) - use geometry and spatial reasoning to hone their problem solving skills

Fetch! Lunch Rush (AR) - you need to keep up with lunch orders from Ruff's movie crew. The challenge is keeping track of how many pieces of sushi everyone wants

Oh No Fractions! - Practice and explore fractions by swiping left or right to answer if the fraction on the left is LESS, GREATER or EQUAL than the one on the right

Numerosity - play with addition to understand various combinations and reordering equations

Number line - help students learn about fractions, decimals, and percents by ordering equivalent fractions, decimals, and percents on a number line

Number Pieces – virtual math manipulatives; use the number pieces to represent multi-digit numbers, regroup, add, subtract, multiply, and divide

Multi-touch math - hold down your input on the hot spaces to generate the answer. If you hold two fingers on the 10 hot spot your answer will be 20, add two fingers to the 2 hot spot and your answer is 24

Geoboards - Learners stretch bands around pegs to form line segments and polygons and make discoveries about perimeter, area, angles, congruence, fractions, and more

Angles? – find the missing angle on various shapes