# **Company name:** QuiverVision

**Weblink**: http://www.quivervision.com/apps/quiver/

**Key words**: Augmented Reality, coloring, arts

**Digital resources:** Augmented reality mobile app

**Background:**

QuiverVision Limited develops a 3D colouring mobile application. QuiverVision Limited was formerly known as Puteko Limited. The company was founded in 2012 and is based in Auckland, New Zealand.

80 Queen Street Auckland, 1010 New Zealand

Founded in **2012**

**Phone: 64 21 202 3261**

**quivervision.com**

**Pricing:** App on Itunes $7.99

**Age focus**: 6-8 years

**Rating**: 3

**Additional Info:**

* Seller: PUTEKO LIMITED
* © 2016 Puteko Limited

Requires iOS 7.1 or later. Compatible with iPhone, iPad, and iPod touch.

# **Company name:** 3D Bear

**Weblink**: http://3dbear.fi/

**Key words**: 3D printing, [Gaming](https://www.crunchbase.com/category/gaming/dd1ef1338ee8088cbbe1bdf22241358f),

**Digital resources:** 3D VR & AR

runs on almost any device, such as a tablet or a PC

**Background:**

We make 3D printing fun and engaging in schools. Our learning modules utilize also virtual reality (VR) and augmented reality (AR). 3DBear is a game that runs on a tablet. Unlike any other application, 3DBear hides all the complexity of 3D printing and makes it a child’s play. can explore different worlds, 3D print the most fascinating objects, and learn about history, natural sciences, mathematics – or practically speaking almost any school subject – in a way never seen before.

**Founded: 2016 by: Kristo Lehtonen**

Helsinki, Southern Finland

**Phone: +358408032638**

**Pricing:** 490 e for teachers

**Age focus**: 5-18 years of age

**Rating**: 4

**Additional Info:**

Example of a lesson plan (in finnish) https://docs.google.com/document/d/1WObFF7TeLX\_Ua3Z2FFp3YL-CW\_NqKsFAQyP9d0nVbYE/edit

# **Company name:** LYFTA

**Weblink**: http://www.lyfta.com/

**Key words**: digital storytelling, globalization,

**Digital resources:** 360 content, VR, digital lesson plans

**Background:** Lyfta is a platform for immersive, meaningful stories from around the world. We take fascinating, complex topics from real life and re-build them into beautiful, immersive landscapes, using Virtual Reality, 360 storytelling, rich media and high quality film content.

## Lyfta is a platform for immersive, meaningful stories from around the world. We take fascinating, complex topics from real life and re-build them into beautiful, immersive landscapes, using Virtual Reality, 360 storytelling, rich media and high quality film content.Lyfta invites students to become active global explorers and supports teachers to open up serious topics in an engaging way.Our award-winning team has many years of experience in making digital content that captures people’s interest and makes them watch and play.

Now we have added strong education expertise to our EdTech endeavours - bringing immersive interactive documentaries to schools as of autumn 2016.

We offer engaging, beautiful iDocs with teacher user guides, curriculum-based lesson plans and phenomenon-based learning media packs to students.

Our first product is The Awra Amba Experience, a web documentary about a fascinating village in Ethiopia.

Founded in May 2016

LYFTA OY, 7 SILTAVUORENPENGER, HELSINKI, , 00170, FINLAND

**Phone: +358 440 998015 (Finland)**

**Pricing:** 500L per school year/1250 all products

**Age focus**: 5+

**Rating**: 5 (where?)

**Additional Info:**

# **Company name:** CSE Entertainment

**Weblink**: http://www.cse-entertainment.com/

**Key words**: sports, fitness, education

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:** Not really for school education because CSE is selling bigger products.

# **Company name:** Alivestudiosco

**Weblink**: http://alivestudiosco.com/math-alive-kit/

**Key words**: math, pre-k through kindergarten, AR, and 3D

**Digital resources:**

for PC

• Operating System: Win 7 SP1 or higher

• Processor: 1Ghz or faster 32-bit (x86)

or 64-bit (x64)

• RAM: 2GB (32-bit) or 4GB (64-bit)

or higher

• Graphics Requirements:

– Video RAM: 256MB or higher

– OpenGL 3.0 (or better)

for Mac

• Operating System: Mac OS 10.6

or higher

• Processor: Intel i5 or better

• RAM: 4GB or higher

• Video RAM: 512k or higher

**Background:**

**Our friends at Alive Studios are changing the way pre-kindergarten and elementary students develop reading and math skills. Using this series of powerful augmented reality learning tools, students will engage more, learn more, and retain more of the key concepts they are learning in the classroom!**

**The mission at Alive Studios is to equip teachers with engaging solutions that help young students become proficient in reading and math by third grade. Their products are the first of their kind to utilize augmented reality within a full-year curriculum. Kaplan is proud to partner with Alive Studios to bring these new augmented reality tools into PreK and elementary classrooms.**

**Phone:**

**678) 404-7473 Office**

**(678) 248-9030 Fax**

**Alive Studios**

**1461 Harbins Rd**

**Dacula, Georgia 30019**

**Pricing:**

$795 - 1,295.00

Sold in packages with flashcards and tools

**Age focus**: Pre-k through 3rd grade

**Rating**: 3

**Additional Info: Play**

# **Company name:** Google

## **App name:** Google Expeditions

**Weblink**: https://edu.google.com/expeditions/

**Key words**: VR, Field trips

**Digital resources:** Google Expedition kits

**FOR 30 STUDENTS**

• 30: Student Devices

• 30: Virtual Reality Viewers

• 3: Rapid Chargers

• 1: Teacher Device

• 1: Router

• 1: Case

• Geek Squad® White Glove Service

**Background:**

**Phone:**

**Pricing:** $9,999 - for 30 kits

**Age focus**: 7 and up

**Rating**: 4

**Additional Info:**

**Distribution:**  At least Cloudpoint distributes products in Finland and they also lend test packages for a one-week period.

**Company name:** Google Expeditions

## **App name:** Expeditions

**Weblink**: **https://edu.google.com/expeditions/#about**

**Key words**: field trips, VR

**Digital resources:** tablet, phones, and router or Google VR glasses kits

**Background:**

**Phone:**

**Pricing:** App is free but kits are 6000+$

**Age focus**: ages 11 or older

**Rating**:

**Additional Info: available in over 20 different languages including Finnish**

**Distribution:**

**Company name:** Google Inc.

## **App name:** TiltBrush

**Weblink**: <https://www.tiltbrush.com>

**Key words**: 3D painting, creativity

**Digital resources:** HTC Vive, Oculus Rift

**Background:**

Tilt Brush lets you paint in 3D space with virtual reality. Unleash your creativity with three-dimensional brush strokes, stars, light, and even fire. Your room is your canvas. Your palette is your imagination. The possibilities are endless. You can paint life-size three-dimensional brush strokes, stars, light, and even fire. Experience painting as you have never before.

**Phone: -**

**Pricing:** 27,99 € for Vive; 29,99 € for Oculus

**Age focus**: 3+

**Rating**: 5, We think this is a great artistic tool for those schools which have Vive or Oculus

**Additional Info:**

**Distribution:** Steam, Oculus

STEM:

# **Company name:** EvoBooks

**App name:** Clarify

**Weblink**: <http://www.clarifylearning.com>

**Key words**: geometry, anatomy, solar system, atomic models, biology, physics

PLAY

**Digital resources:** iPhone, iPad, VR glasses

**Background:** Clarify Learning Academy provides with a large collection of courses based on fun and engaging simulations. It encourages learning through the interaction with 3D educational content, allows to encounter complex contents by following simple paths. It features: 3D animation, interactive activities, badges and awards system, as well as offers a constantly expanding list of courses.

Developed by EvoBooks, a digital publisher of educational content in Brazil.

**Phone: -**

**Pricing:** Free trial period, subscription: 2.99$ weekly, 7.99$ monthly, 39.99$ annually

**Age focus**: 11-17 years old

**Rating**: 4, Seems good.

**Additional Info:** Educational experts spent the last five years planning the program's contents and over half a million students currently use this system.

**Distribution:** App Store only

# **Company name:** Motion Math

**Weblink**: http://motionmathgames.com

**Key words**: math, VR games, practical skills

PLAY

**Digital resources:** iPad, PC

**Background:** The app is developed at the Stanford School of Education. Motion Math's visual, adaptive games help pupils master the most challenging standards. Learners improve their ability to perceive and estimate fractions in multiple forms. Based on growth mindset research, Motion Math builds math fluency, conceptual understanding, and encourage pupils to take the challenge. Motion Math helps learners perceive and estimate many representations - numerator over denominator (1/2), percents (50%), decimals (.5), and even pie charts.

Pupils are able to practice addition or multiplication in the virtual environments outside of school, by applying their math skills to run a cupcake business. Practical skills are trained in processes from figuring out the cost of each cupcake, fulfilling orders, to paying back business loans to keep the bakery running.

**Phone: -**

**Pricing:** free 7-days trial, 1.99 $

**Age focus**: 11

**Rating**: 4

**Additional Info:** The app is inspired by embodied cognition, research suggesting that connecting one's body to abstract concepts can deepen understanding. By estimating each problem with its distance on the number line, learners can develop a fast, accurate perception of fractions.

**Distribution:** App Store

# **Company name:** HarperCollins Publishers Ltd

**App name:** Brian Cox's Wonders of the Universe

**Weblink**: <https://itunes.apple.com/fi/app/brian-coxs-wonders-of-the-universe/>,

<https://play.google.com/store/apps/details?id=com.glidecreations.wonders_android>

**Key words**: astronomy, solar system

EXPERIENCE

**Digital resources:** iPad, iPhone

**Background:**

App is based on positioning Brian Cox’s written narrative and related BBC video content in a bespoke 3D environment which changes dynamically as user journey deeper and deeper into the realms of the Universe. The app provides access to 200 interactive articles pinned to the stars, planets, galaxies and other wonders modelled in extraordinary 3D, written in Professor Brian Cox’s accessible style and accompanied by two and a half hours of video from the BBC TV series Wonders of the Solar System and Wonders of the Universe. The app also includes hundreds of infographics and images of space objects supplied by astronomy experts, NASA and other space researchers.

**Phone: -**

**Pricing:** 1,99 €

#### **Age focus**: 7+

**Rating**: 3

**Additional Info:** For Apple devices: Requires iOS 8.0 or later.

The content in this app is very highly detailed, featuring many high-resolution textures to produce the real-time 3D scenes. This requires at least 2GB RAM 1.5 GHz on your device.

**Distribution:** App Store, Google Play

# **Company name:** Simple Machines

**Weblink**: <https://tinybop.com/apps/simple-machines>

**Key words**: physics, VR games

PLAY

**Digital resources:** iPhone, iPad

**Background:** App allows to experiment with levers, pulleys, inclined planes, levers, pulleys, inclined planes, wedges, wheel and axles, and screws. Children are invited to discover how they work and investigate the invisible forces behind them in this sandbox app. In learning process, they interacts with the content of the app: e.g. children can destroy a castle, make music, send satellites into orbit etc.

**Phone:**

**Pricing:** 2,99 €

**Age focus**: 6-8

**Rating**: 4

**Additional Info:** Requires iOS 7.0 or later. The app is available in Finnish and Swedish

**Distribution:** only in App Store

# **Company name:** DrashVR

**Weblink**: http://titansofspace.net/

**Key words**: Vr, Space, astronomy

**Digital resources:** Google cardboard, HTC VIVE, Oculus, Monitor

**Background:** The primary aim is to gain new perspective on what our universe actually looks like by taking advantage of the increased spatial awareness made possible by modern VR. A secondary aim is to entertain the player with music and exciting visuals that are otherwise probably impossible to experience in our lifetime.

**Phone:**

**Pricing:** v1.8 free on googleplay, v 2.0 7.99e on Steam, they also accept donations

**Age focus**: any

**Rating**: 4.4 on google play, 5 on Steam

**Additional Info: no info about App store for IPhone**

**Distribution: Steam/google play/oculusstore/vivepoint**

# **Company name:** Thinglink

**Weblink**: https://www.thinglink.com/

**Key words**: 360 & VR for education

CREATE

**Digital resources:**

Mobile phone

Headset

Desktop

**Background:**

**ThingLink is bringing the immersive world of interactive virtual reality to your classroom. StudentThingLink is bringing the immersive world of interactive virtual reality to your classroom. Students and Teachers explore and build 360° projects that take them as far as their imaginations can reach.**

ThingLink's editor for 360° and VR Content allows you to bring a fully unique and immersive interactive experience directly to your audience.

**Phone: info@thinglink.com | 358 5054 76463**

**Pricing:** $120 billed annually- more for VIP package

**Age focus**:

**Rating**: 4

**Additional Info:**

**Founded: 2010**

**Contact: info@thinglink.com | 358 5054 76463**

**Employees: 11 - 50 |** [**3 in Crunchbase**](https://www.crunchbase.com/organization/thinglink/people)

**Thinglink is an image engagement tool that makes it easy to add clickable tags to any image on the web and share the tagged images on social networks. Any publisher or brand can distribute tagged images to bloggers and other publishers and still receive traffic back to the original image source.**

**Distribution:** Subcription

# **Company name:** Tinybop

## **App name**: The Earth

**Weblink**: https://tinybop.com/apps/the-earth

**Key words**: geology, VR game

PLAY

**Digital resources:** iPhone, iPad

**Background:** The Earth is an app which offers an interactive model that lets kids study and observe the geological forces that change the planet—above and below the surface, in a matter of minutes and over millions of years. Interactive function allows to trigger earthquakes! Make volcanos erupt! Investigate plate tectonics, weathering, erosion, and deposition. Travel across time to see how our home has changed over eons, pre-Pangea to the present.

**Phone:**

**Pricing:** 2.99$

**Age focus**: 5 to 8

**Rating**: 4

**Additional Info:** iOS 7.0 or later.

**Distribution:** App Store only

**Company name:** Tinybop

## **App name:** Everything machine

**Weblink**: https://tinybop.com/apps/the-everything-machine

**Key words**: practical skills, building mechanisms, team work, imagination

CREATE

**Digital resources:** iPhone, iPad

**Background:** The app allows children to create machines and mechanisms by using device’s camera, microphone, speakers, gyroscope, and/or screen. Children are invited to make a light bulb, a stop-motion camera, a kaleidoscope, a voice disguiser, a cookie thief catcher, or anything else they can think of!

By adding logic gates and routers pupils can build more complex machines. You can also connect devices to play with classmates (team work function).

Children can save their inventions on the device. If child makes something really great, he or she is encouraged to tap the share button and email it to a friend or the developer.

**Phone: -**

**Pricing:** 2,99 €

**Age focus**: 9-11

**Rating**: 4

**Additional Info:**  Requires iOS 7.0 or later. Video tutorials can be found on YouTube (search for Tinybop + Everything Machine). The app is available in Finnish and Swedish

**Distribution:** App Store only

# **Company name:** ScratchJr

**Weblink**: <https://www.scratchjr.org>

**Key words**: storytelling, programming, designing

CREATE

**Digital resources:** smartphone, tablet

**Background:**

With ScratchJr, children learn important new skills as they program their own interactive stories and games. By snapping together graphical programming blocks, children can make characters move, jump, dance, and sing. In the process, children learn to solve problems, design projects, and express themselves creatively on the computer. They also use math and language in a meaningful and motivating context, supporting the development of early-childhood numeracy and literacy.

**Phone:**

**Pricing:** free

**Age focus**: 6-7

**Rating**: 4

**Additional Info:** Requires iOS 8.0 or later. The latest version of ScratchJr works only on tablets that are 7-inches or larger, and running Android 4.2 or higher.

**Distribution:** App Store, Google Play

# **Company name:** Luden

## **App name:** InCell VR

**Weblink**: https://luden.io/incell/

**Key words**: VR game, biology, human body

PLAY

**Digital resources:** smartphone, tablet, with/without VR glasses

**Background:**

InCell is an action/racing VR game with a bit of strategy and science thrown into the mix. You'll take an exciting journey inside the highly unusual micro world of human cell and stop the virus advance.

Getting closer to understanding cell structure and organelles functions (which are similar to the real functionality of the organelles) players will improve their skills and will have a chance to impress completely suspicious

**Pricing:** free

**Age focus**: 12+

**Rating**: 4

**Additional Info:** Requires iOS 8.0 or later. Compatible with Google, View Master, Fibrum, Homido, Lakento, Archos, Durovis and others Cardboard like headsets.

**Distribution:** App Store, Google Play, Steam, HTC vive, Samsung Gear, Oculus

**Company name:** Luden

## **App name:** InMind 2 VR

**Weblink**:

**Key words**: VR game, neuroscience, biology, human body

PLAY

**Digital resources:**

**Background:**

InMind 2 is an action/arcade VR game.Students activate different decision making strategies and explore neuroscience of the human brain.

Students are invited to take part in the process of one teenager named John becoming an adult, and help shape John's future self, while experiencing an exciting journey inside the micro world of the carefully recreated human brain. The game places emphasis on the chemistry behind human emotion, greatly inspired by the Pixar/Disney movie "Inside Out" and (more scientifically) Lövheim’s theory of emotions. By making decisions in John’s life and his brain students are also going through the simulation of events/actions of their near future (decision making regarding profession etc.), which provides an experiential learning.

**Pricing:** free

**Age focus**: 16

**Rating**: 4

**Additional Info:** Requires iOS 8.0 or later. Compatible with Google, View Master, Fibrum, Homido, Lakento, Archos, Durovis and others Cardboard like headsets.

**Distribution:** App Store, Google Play, Steam, HTC vive, Samsung Gear, Oculus

# **Company name:** Wakingapp Realities

## **App name:** EnTiTi

**Weblink**: https://www.wakingapp.com/

**Key words**: Content, creation, AR, VR, easy

**Digital resources:** computer with windows or mac OS, VR glasses, smart devices (IPAD, Smart tablet).

**Background:**

## ENTiTi CREATOR FREE DOWNLOAD

## VIRTUAL REALITY AND AUGMENTED REALITY

## EASY CONTENT CREATION PLATFORM

## The ENTiTi Creator platform is the first of its kind to enable the creation of interactive VIRTUAL AND AUGMENTED REALITY content without requiring any programming skills. Its innovative drag-and-drop interface and cloud-based system allow any business to easily publish content for leading smartphones and VR/AR devices. Content can be easily and quickly updated anytime, anywhere

WakingApp LTD. provides applications that enable various companies or individuals to create interactive virtual and augmented reality content without coding. It offers ENTiTi, a virtual and augmented platform that enables users to create and publish content; to create advanced interactive data connections and games without coding; and to view and share virtual and augmented reality content. It also provides cloud-based design tools; and allows artists, studios, agencies, and SMBs to create interactive content. It serves advertising, real estate, retail, service, education, and gaming sectors. The company was founded in 2012 and is based in Rosh HaAyin, Israel

**Phone: 972 5 445 76969**

**Pricing:** Free until 2017 unless a business wants something customized

**Age focus**: Adults

**Rating**: 3

**Additional Info:**

**13 Aamal St.**

**Park Afek**

**P.O. Box 11443**

**Rosh HaAyin, 4809249 Israel**

**Founded in 2012**

**Distribution:** Website download

# **Company name:** Altspace VR

**App name:**

**Weblink**:

**Key words**: social platform, VR,

Experience

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** App Minded Ltd.

## **App name:** MoleculE VR

**Weblink**: <http://www.appmindedapps.com/molecule-vr.html>

**Key words**: biology, cell structure, VR expedition

EXPLORE

**Digital resources:** smartphone with gyroscope, cardboard glasses

**Background:** App provides students with a virtual expedition into the cell. It invites for the immerse journey in the microworld of the cell, during which students get to explore the cell surface and the molecular complexes on it.

MoleculE VR is a virtual reality tour introducing some of the basic concepts about cell communication and signalling: how cells receive and respond to messages from their environment, interact with other cells and coordinate their biological processes. In MoleculE VR, real crystallographic data from the Protein Data Bank (PDB) turns into 3-D virtual structures and takes Molecular Modelling Science to the next level.

Some of the structures presented in this app have been solved by world-leading scientists at Heptares Therapeutics Ltd (a wholly owned subsidiary of Sosei Group Corporation). This detailed structural information is enabling the design of new medicines targeting important receptors for the treatment of pathologies including cancer and certain neurological diseases.

MoleculE VR is an innovative educational tool that aims to support and integrate classic teaching and learning methods. It expresses complex concepts of Biology and Medicinal Chemistry, in a visual and interactive format. Moreover, this scientific visualisation app enhances mnemonic techniques and the kinesthetic experience stimulating learning skills. The VR exploration boosts motivation and engagement, key factors to make eLearning fun.

**Phone: -**

**Pricing:** free

**Age focus**: 10+

**Rating**: 4

**Additional Info:** Required version of Android 4.1 or later; Requires iOS 8.0 or later. Compatible with iPhone, iPad, and iPod touch.

**Distribution:** AppStore, Google Play, Amazon

# **Company name:** [Immersive VR Education Ltd.](http://store.steampowered.com/search/?developer=Immersive%20VR%20Education%20Ltd.&snr=1_5_9__408)

## **App name:** Apollo 11 VR

**Weblink**: http://store.steampowered.com/app/457860/

**Key words**: space, documentary-based, expedition

EXPLORE

**Digital resources:** HTC Vive, Oculus Rift, controllers

**Background:**

Apollo 11 VR is the story of the greatest journey ever taken by humankind. This VR experience is a recreation of the events which took place between July 16th and July 24th 1969. Now for the first time ever you get to experience this historic event through the eyes of those who lived through it. Now for the first time ever, you get to experience this historic event through the eyes of those who lived through it. Using a mix of original archive audio and video together with accurate recreations of the spacecraft and locations, all set to inspirational music. Get set for an experience that will not only educate you but will also leave a lasting impression and deep respect for the men and women who worked on the Apollo program during NASA’s golden era.

Apollo 11 VR is a new type of documentary, not only do you get to relive the events of 1969, you can also take control and fly the command module, land the lunar lander, explore the Moon's surface and deploy the lunar experiments all before returning to earth in a fiery re-entry.

**Phone: -**

**Pricing:** 9,69 €

**Age focus**: 6+

**Rating**: 4

**Additional Info:** If you are using the Oculus Rift please right click on the App before starting and choose "Launch Apollo 11 VR in Other VR Mode" --> Rift

**Distribution:** Oculus, Steam

# **Company name:** EON Reality, Inc.

## **App name:** EON Experience AVR

**Weblink**: https://www.eonreality.com/eon-experience-avr/

**Key words**: 3D lessons, anatomy, biology, geography, history, physics, astronomy

**Digital resources:** smartphones, cardboard googles

**Background**: EON Experience AVR is an Augmented Reality and Virtual Reality based personalized learning library designed to engage students with gamified AR/VR lessons and to promote creativity across subjects such as anatomy, engineering, biology, geography, history, physics, and astronomy. EON Experience AVR enables users to easily create, share, collaborate, and publish Augmented Reality (AR) and Virtual Reality (VR) knowledge content with no programming skills.

EON Experience AVR has been specifically developed to teach the skills needed for the future by enabling learners to explore, play, work as a team, compete, and be rewarded for their achievements through AR/VR lessons. We turn traditional classroom learning into engaging learn-by-doing lessons that assess, coach, and encourage learners every step of the way.

**Contacts:** 949.460.2000, sales@eonreality.com

**Pricing:** free

**Age focus**: 12+

**Rating**: 3

**Additional Info:**

Requires Android 4.4 and up; iOS 8.0 or later

**Distribution:** App Store, Google Play

* **Don’t make a card for this one- it’s just for future reference.**

**Company name:** UC Davis

**App name:** Augmented Reality Sandbox

**Weblink**: **https://arsandbox.ucdavis.edu/**

**Key words**: augmented reality, geography, and topography

**Digital resources:**

* A **computer with a high-end graphics card (*see the “Computer” section below for more specific hardware recommendations*), running any version of Linux**. The AR Sandbox software, in principle, also runs on Mac OS X, but we advise against it.
* A **Microsoft Kinect 3D camera**. **The AR Sandbox software**, or rather the underlying [Kinect 3D Video Package](http://idav.ucdavis.edu/~okreylos/ResDev/Kinect/index.html) as of [version 2.8](http://idav.ucdavis.edu/~okreylos/ResDev/Kinect/LinkDownload.html), supports all three models of the first-generation Kinect (Kinect-for-Xbox 1414 and 1473 and Kinect for Windows). All three are functionally identical, so get the cheapest model you can find. **Note:** The second-generation Kinect (Kinect for Xbox One or Kinect for Windows v2) is *not yet* supported by the AR Sandbox software.
* A **digital video projector** with a digital video interface, such as HDMI, DVI, or DisplayPort.
* A **sandbox** with a way to mount the Kinect camera and the projector above the sandbox.
* **Sand**.

**Background: The project combines 3D visualization applications with a hands-on sandbox exhibit to teach earth science concepts. The augmented reality (AR) sandbox allows users to create topography models by shaping real sand, which is then augmented in real time by an elevation color map, topographic contour lines, and simulated water. The system teaches geographic, geologic, and hydrologic concepts such as how to read a topography map, the meaning of contour lines, watersheds, catchment areas, levees, etc.**

**Phone: contact@arsandbox.org**

**Pricing:** Free

**Age focus**:All ages

**Rating**: 4

**Additional Info:**

**University of Helsinki (Department of Geosciences and Geography has this devise.**

**Distribution:** Can download software from website but have to purchase your own hardware equiptment.

# **Company name:** Alchemy VR

**App name:**

**Weblink**: http://www.alchemyvr.com/

**Key words**:

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** FullDive (Competitor)

**App name:** Fulldive

**Weblink**: http://fulldive.com/#feature

**Key words**: VR, database, entertainment, free

**Digital resources:** Andoid

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:** Google play

# **Company name:** Construct3D

**App name:**

**Weblink**: https://www.ims.tuwien.ac.at/projects/construct3d

**Key words**:

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**: high school and university

**Rating**:

**Additional Info:**

**Distribution:**

# 

# 

# **Company name:** VRmath 2.0

**App name:**

**Weblink**: https://vrmath2.net/node/20

**Key words**:

**Digital resources:**

**Hardware**

In order to support [WebGL (OpenGL ES 2.0 for the web)](http://www.khronos.org/webgl/), a recent graphic card such as [nVidia](http://www.nvidia.com/) GEForce GT series and later, or [ATI](http://www.amd.com/) HD series and later, with their *latest driver* installed is recommended. Unfortunately, some older integrated graphics may not work due to the lack of OpenGL support or driver support. However, newer integrated graphics such as Intel 965 express chip (quite old :-)) and Intel Q54/Q43 express chip do work.

Here is a list of [conformant products](http://www.khronos.org/adopters/conformant-products/#topengles) from [Khronos Group](http://www.khronos.org/). Please note that conformant products are not limited to this list.

**Update**: as of November 2014, most computers and mobile devices are now supporting OpenGL ES standard, and capable of running VRMath2.

## **Software**

The latest [Chrome](http://www.google.com/chrome) and [Firefox](http://www.mozilla.com/firefox/) support now webGL natively without any further effort. You just download and install [Firefox](http://www.mozilla.com/firefox/) or [Chorme](http://www.google.com/chrome) and get webgl for free. No extra about:config or command-line settings needed.

We strongly recommend the use of lastest Google Chrome for viewing VRMath 2.0 site. For more info on browser support, please visit the [browser support page at X3DOM](http://www.x3dom.org/?page_id=9).

**Update**: as of November 2014, most browsers (on both computers and mobile devices) now support WebGL.

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution: ARtoolkit**

# **Company name:** ARtoolkit

**App name:**

**Weblink**: https://artoolkit.org/

**Key words**: AR, Development tool, Open-source

**Digital resources:**

**Background:**

ARToolKit is software that lets programmers easily develop Augmented Reality applications. Augmented Reality (AR) is the embedding of computer generated content into the natural environment, and has many potential applications in entertainment, media, advertising, industry, and academic research.

The source code for this project is hosted on [GitHub](https://github.com/artoolkit) and the compiled SDKs for all platforms (Mac OS X, PC, Linux, Android, iOS), along with the ARToolKit plug-in for Unity3D, are available at our [Downloads](http://artoolkit.org/download-artoolkit-sdk) page.

Each of the individual platform downloads include a README file and example applications to help you get started immediately. The documentation pages here include: detailed APIs, tutorials, and examples from novice to expert levels. Further support can be found by joining the [ARToolKit Community Forum](http://artoolkit.org/community/forums/).

Features:

Robust Tracking, including Natural Feature Tracking

Strong Camera Calibration Support

Simultaneous tracking and Stereo Camera Support

Multiple Languages Supported

Optimized for Mobile Devices

Full Unity3D and OpenSceneGraph Support

**Phone:**

**Pricing:** Free

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:** Free on internet

# Company name: Nicoletta Adamo-Villani, Kelly Wright

## **App name:** SMILE:

an immersive learning game for deaf and hearing children

**Weblink**: http://dl.acm.org/citation.cfm?id=1282058&dl=ACM&coll=DL&CFID=745482983&CFTOKEN=78514990

**Key words**: Deafness, 3d, immersivness

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** CyberMath

**App name:**

**Weblink**:

**Key words**:

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** sketchometry

## **App name:** sketchometry

**Weblink**: **https://sketchometry.org/en/index.html**

**Key words**:

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** zspace

**App name:**

**Weblink**: https://zspace.com/

**Key words**:

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** VR-neosun

**App name:** [**VR Jurassic Land**](https://play.google.com/store/apps/details?id=com.NeosunGame.Trex)**:**

**Weblink**:

**Key words**:

**Digital resources:**

**Background:**

**VR Jurassic Land transports students back into the time of the dinosaurs. Students can learn about the paleontology first-hand in this virtual, realistic world.**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** ARLOOPA Inc. Augmented and Virtual Reality Apps

## App name: [Maze Cardboard](http://maze-vr-cardboard.android.informer.com/)

**Weblink**: http://maze-vr-cardboard.android.informer.com/

**Key words**: AR,

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

Company name: ARLOOPA Inc. Augmented and Virtual Reality Apps

## App name: Chemistry VR

**Weblink**: http://www.virtual-reality-shop.co.uk/chemistry-vr-cardboard/

**Key words**:

**Digital resources:**

**Background:**

Software Name: Chemistry VR – Cardboard

Age Rating: Family Friendly

System: Android

Type: Educational

Size: 49M

Ads: No

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** Mattel \*

**App name:**[**View-Master Space**](http://shop.mattel.com/product/index.jsp?productId=71529046)

**Weblink**:

**Key words**:

Digital resources: Comes in a box not available as web download

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** **Harmony Internet Limited**

## App name:[The Brain App](https://play.google.com/store/apps/details?id=uk.co.harmony.brainapp)

**Weblink**: https://play.google.com/store/apps/details?id=uk.co.harmony.brainapp

**Key words**:

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

**Company name:** **Harmony Internet Limited**

## App name: **iSpace AR**

**Weblink**: https://play.google.com/store/apps/details?id=com.CarltonBooks.iSpace

**Key words**: AR, Astronomy

**Digital resources:** Android (needs paper products)

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**: 3,0 (play store)

**Additional Info:**

**Distribution:**

# **Company name:** Cyberlearning designand research (university project)

## App name: Earthquake Rebuild

**Weblink**: http://cyberlearningresearch.coe.fsu.edu/blog/?page\_id=4

**Key words**:

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

## App name: Immersive Learning for Students with Autism

**Weblink**: http://cyberlearningresearch.coe.fsu.edu/blog/?page\_id=6

**Key words**:

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

## App name: Inclusive Design of e-Learning

**Weblink**: http://cyberlearningresearch.coe.fsu.edu/blog/?page\_id=8

**Key words**:

**Digital resources:**

**Background:**

**Phone:**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** Aftershock

## App name: Aftershock

**Weblink**: http://aftershock.wateraid.org/

**Key words**: VR documentary, water aid, Empathy. 360 video

**Digital resources:** Andoid

**Background:** About the aftermath of the earthquake in Nepal 2015

**Phone:**

**Pricing:** Free

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** Delightex

## App name: CoSpaces

**Weblink**: <https://cospaces.io/>

**Key words**: VR, creating 3d environments

**Digital resources:** Broweser + andoid/IOS

**Background:**

**Phone: +49 89 21 55 35 490**

**Email:** info@delightex.com

**Pricing:** Free

**Creative commons:** CC BY-SA 2.0 (Share and adapt, even commercially)

**Age focus**: all grades

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:**

## App name: Arilyn

**Weblink**: http://www.arilyn.fi/

**Key words**:

**Digital resources:**

**Background:**

**Phone:**

**Email**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:**

## App name: Arilyn

**Weblink**: http://www.arilyn.fi/

**Key words**:

**Digital resources:**

**Background:**

**Phone:**

**Email**

**Pricing:**

**Age focus**:

**Rating**:

**Additional Info:**

**Distribution:**

# **Company name:** MEL Science Ltd.

## **App name: MEL Chemistry**

**Weblink:** [**https://melscience.com/en/app/**](https://melscience.com/en/app/)

**Key words:** chemistry, 3D models

EXPLORE

**Digital resources:**  smartphone, tablet

**Background:** MEL Chemistry visualizes molecules in 3D. You can rotate, zoom in and zoom out to see molecule structure in details. You have never seen such amazing graphics in chemistry before! Uncover real structure of the things around you. How does sugar look inside on molecule level? And what about salt?

MEL Chemistry will show you structures of these and dozens of other molecules including: Citric acid, Ascorbic acid, Sucrose, Lactose, Tin Chloride, Sodium Carbonate, Sodium Hydrosulfate, Potassium Permanganate, Calcium Hydroxide and many more.

**Phone**: UK: +442036951721

**Email:** support@melscience.com

**Pricing: free**

**Age focus:** 12+

**Creative commons:**

**Rating: 3**

**Additional Info: -**

**Distribution:** AppStore, Google Play

# **Company name:** **HistoryView VR**

## **App name: Matterport VR**

**Weblink:** <https://www.historyview.org/library>

**Key words:** 3D field trips, history, humanities, anthropology

EXPLORE

**Digital resources:** PC or smartphone and cardboard glasses; Samsung Gear VR

**Background:** HistoryView VR is the educational platform for teachers & students to access 3D Virtual Reality Field Trips powered by application Matterport. Working with museums and historical sites, HistoryView is able to share historical experiences and bring history to life for classrooms worldwide.

**Phone:**

**Email:**

**Pricing:** free

**Age focus:** 8+

**Rating: 3**

**Additional Info:** Requires iOS 9.0 or later. Compatible with iPhone, iPad, and iPod touch.

**Distribution:** AppStore, Google Play

# **Company name:** **Playshifu**

## **App name: Orboot**

**Orboot is a 10” globe that highlights every country in the world. To use Orboot, scan the globe with a smartphone or tablet using the Orboot App and enjoy your journey around the world!**

**Weblink: https://www.playshifu.com/**

**Key words:**

**Digital resources:** IPad and globe.

**Background:** PlayShifu is an early learning focused startup. As a team, we are passionate parents and understand that learning in the developmental years is centered around play and exploration.

Being tech enthusiasts as well, we explored Augmented Reality, an upcoming technology, as a promising tool for creating engaging methods of Early Learning.

**Phone: +1 650.485.1702**

**Email:**

**Pricing:** $40

**Age focus:** 5+

**Rating:**

**Additional Info:** Still in Kickstarter phase

**Distribution:** AppStore, Google Play. Have to order globe from the company.

# **Company name:** Fountain Digital Labs

## App name: Virry

**Weblink**: http://virryapp.com

**Key words**: animals, biology, field trips

EXPLORE

**Digital resources:** smartphone, glasses

**Background:** Created in collaboration with leading child development researchers, Virry is specifically designed for kids with a hunger to explore and discover the animal kingdom. Trusted by parents and educators around the world, Virry promotes crucial life skills in a playful way. Virry offers endless hours of animal entertainment and learning in three forms:

* **11 unprecedented and immersive live-streaming technology** gives young children real-time access to their favourite wild animals and their actual behaviours in one of the world’s most advanced and animal-friendly zoos.
* **27 interactive video experiences** help children practice life skills such as impulse control, creativity, reasoning, and problem solving by virtually engaging with their favourite animals in fun mini-games. Children learn to respond to the needs of different animals by breaking down simple problems into parts, developing strategies to solve them, and getting rewarded through positive feedback. They can feed a lion, bathe a rhino, play with orangutans, dance with flamingoes, and quench the thirst of parched giraffes
* **130 video playlists** follow emotional threads to connect different animals and their behaviours and promote empathy and understanding in an entertaining way. Curated high-quality videos show the connections and behaviours common across species and can help children gain a broader understanding of animal life.

**Email:** contact@fountain-digital.com

**Pricing:** free

**Age focus**: 5-8

**Rating**: 4

**Distribution:** AppStore only