# Appendix 3 – Technology that promotes STEAM learning

## List of apps for STEAM learning

Some of these apps are free, some are pay up front, and many have in-app purchases. Just be aware when downloading that what may be free at first can look for payment for extras within the app.

- Barefoot World Atlas (6+)
- Busy Water (4–9 years)
- Crazy Gears (5–8 years)
- Creature Garden (6+)
- DiscoverE (5+) ENGINEERING
- DIY.org-Creative Challenges (5+)
- Faces iMake (5+)
- How It Works-Games for Kids to learn & discover (6+)
- Inventioneers (2-8 YRS)
- k-5 Science for Kids-Tappity (5+)
- Kahoot! Algebra by DragonBox (5+)
- Khan Academy (5+)
- Kodable (6+)
- Light & Colour by Tinybop (6+)
- Loopimal (6+)
- Marble Math Junior (5+)
- MathTango (6+)
- MathTango (6+)
- Montessori 1st Operations (5+)
- Music4Kids-Learn and Compose Music Through Play (6+)
- Musilla (6+)
- Nature Cat's Great Outdoors (5+)
- NASA (7+)
- Ocean Forests (6+)
- Odd Bot out (4+)
- Plum's Creaturizer (5+)
- Smart Tales-STEM learning (3+)
- Star Walk Kids: astronomy game (6+)

- STEMWerkz (5+)
- Tami's Tower (4+) ENGINEERING
- The Cat in the Hat Builds That (4+)
- The Earth by Tinybop (6+)
- The Little Line (5+)
- The Robot Factory by Tinybop (6+)
- Thinkrolls 2 (4–9 years)
- Thinkrolls Play & Code (5+)
- This is my Spacecraft–Rocket Science for Kids (6+)
- Toca Blocks (6+)
- Toca Lab: Elements (6+)
- Toca Lab: Plants (6+)
- Toca Builders (6+)
- What's in Space? (6+)

### List of STEAM Television shows

RTÉ STEAM Programmes – RTÉ Learn (https://www.rte.ie/learn/stem-subjects/)

BBC STEAM Programmes – BBC – <u>STEM Resources (https://www.bbc.co.uk/programmes/articles/1MRy38W8Khj4PM7xBkM7Dv0/stem-resources)</u>

Blaze and the Monster Machines (Nick Junior and YouTube)

StoryBots (Netflix and YouTube)

Helpsters (Apple TV and YouTube)

Annedroids (Amazon Prime)

Odd Squad (Netflix)

The Magic School Bus Rides Again (Netflix)

Creative Galaxy (Amazon)

Dinosaur Train (PBS and YouTube)

Magic School Bus (Netflix)

Catie's Amazing Machines (CBeebies)

Emily's Wonder Lab (Netflix)

List of STEAM YouTube channels

Earth to Luna (4+)

Super Sema (5+)

#### **CDI DOODLE STEAM: Facilitators Manual**

Toy Hackers (6+) Science with Sophie (5+) Khan Academy Kids (4+) HoopLa Kidz Lab (also called Lab 360) (6+) RTÉ Hub Lab (5+) Steve Spangler Science (6+) Da Vinci Kids (6+) SciShow Kids (5+) Dublin Zoo (4+) Red Ted Art (5+) Art for Kids Hub (5+)

## List of STEAM Websites

NASA Kids Club (NASA Kids' Club | Play Games and More! | NASA) (https://www.nasa.gov/ kidsclub/index.html)

National Geographic Kids (National Geographic Kids) (https://kids.nationalgeographic.com/)

National Geographic Little Kids (Little Kids (nationalgeographic.com)) (https://kids. nationalgeographic.com/little-kids/topic/littlekids)

Kitchen Lab 4 Kids (Kitchen Lab 4 Kids – K4K) (http://kitchenlab4kids.eu/)

<u>American Museum of Natural History ((250) American Museum of Natural History - YouTube)</u> (https://www.youtube.com/user/AMNHorg/videos)

<u>Eco Explorers Club (Dublin Zoo) ((250) SSE Airtricity | Welcome to The Eco Explorer's</u> <u>Club - YouTube) (https://www.youtube.com/watch?v=FBN1csqMRNY&list=PLQo-FG8d2Gj11zNoud5hZ5fQ1v05YJrOA)</u>

<u>Generation Genius (Balanced and Unbalanced Forces Video For Kids | 3rd, 4th and 5th Grade</u> (generationgenius.com)) (https://www.generationgenius.com/videolessons/balanced-andunbalanced-forces-video-for-kids/)

<u>Science Kidz (Science for Kids - Fun Experiments, Cool Facts, Online Games, Activities, Projects, Ideas, Technology (sciencekids.co.nz)) (https://www.sciencekids.co.nz/)</u>

CBeebies (CBeebies | Enjoy Games, Activities, Videos and More) (https://www.cbeebies.com/)

EIE at the Museum of Science (Boston) (Engineering Activities at Home | EiE) (https://www.eie.org/ engineering-activities-home)

<u>Wow in the World Podcast (Wow in the World | (tinkercast.com)) (https://tinkercast.com/shows/wow-in-the-world/)</u>

## Advice for parents on children using digital technology and screens

- South Dublin County Partnership video on Parenting and Technology: (258) Session 4: Technology – YouTube (<u>https://www.youtube.com/watch?v=FfnFrfUIQf8</u>)
- Webwise and Cyber Safe Kids, both of which contain lots of great information about screen time and keeping children safe online:

Parents - (https://www.webwise.ie/parents/)

Resources – CyberSafeKids (https://www.cybersafekids.ie/resources/#resources)

• CommonSense Media, which is a great site for finding out if content online, in apps, on television, etc., is safe and appropriate for your child. Great for reviews too!! Check out the Parents Need to Know section – so much useful information!

Parenting, Media, and Everything in Between | Common Sense Media<u>(https://www.commonsensemedia.org/articles/screen-time)</u>

• HSE has advice here on screen time and technology:

Screen time and young children – HSE.ie (<u>https://www2.hse.ie/wellbeing/babies-and-children/play/screen-time/</u>)

• Safefood's START Programme has good information here:

safefood | Reducing screen time (https://www.safefood.net/start/reducing-screen-time)

• Barnardos have really nice videos and other resources for parents available here:

For Parents | Barnardos (<u>https://www.barnardos.ie/learning-development/training/online-safety-programme/for-parents</u>)