

STEAM TRAIN EDUCATION PRESENTS TO YOU



AN ESCAPE ROOM INSPIRED EXPERIENCE FOR YOUR STUDENTS



We are passionate about delivering activities that truly engage students and to inspire them to explore studies and careers in STEM.

As parents, we want our child to be excited by the vast learning opportunities within STEM, but we know how tough it can be for schools to continually create or find activities that will be relevant and stimulating to curious young minds.

We hope that through Steam Train Education, the skills and creative confidence that the students gain today will help them tackle the challenges and opportunities of tomorrow.

We look forward to working with you!

Jodie and Tom

Jodie Burton & Thomas Hudson Founders - Product Designers - Parents



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OUR APPROACH TO STEAM EDUCATION

The individual pillars of STEM Education (Science, Technology, Engineering & Mathematics) have appeared in school curriculums for decades, but with the exponential development in industry demands it just isn't enough for employees to succeed with a learn, copy, repeat approach.

The fundamental principles of STEM Education are to reference at least two pillars and to encourage students towards their own conclusion through exploration, curiosity and critical thinking.

Through the growing philosophy of STEAM (the inclusion of Arts) we can now raise engagement in the core STEM principles by delivering ideas through creative, artistic and expressive platforms for learning.

The boundaries for learning are infinite but to get students onboard the Steam Train, we understand that our activities must first capture the imagination!

Challenge Accepted!



THE NEW WORLD

In partnership with The Mystery Rooms we have produced an engaging STEM aligned activity in the framework of an 'escape room' inspired game.

Students take on a shared mission to complete an objective by following a trail of clues and solving a series of puzzles. They must work as a class and as smaller organised groups focussing on leadership skills, teamwork, observation, communication, creative thinking and problem solving.

Objective: Students onboard the Pandora Spaceship arrive at Exoplanet Anthora to find the landing probe damaged. They must travel to 4 corners of the new world to retrieve essential information for getting communications back online before the ship's oxygen runs out.

ESCAPE THE PREDICTABLE
GROUP SIZE 16-32 PLAYERS
SESSION TIME 90-100 MINUTES
YEARS GRADE 7-10
SESSION COST \$600 (EX GST)



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THE NUTS & BOLTS (AND SLIGHTLY MORE COMPLICATED THINGS ...)

The puzzles are varied and will expose students to a broad range of STEM topics and observations. Though no prior knowledge of these topics are required, the puzzles will raise learning/discussion in such topics that include:

- Invisible Light Spectrums
- Light Refraction, Reflection and Absorption
- Magnetic Properties of Metals
- Radio Waves
- Mechanical Systems
- Electrical Engineering Sensors
- Magnetic Locks
- Navigation
- Binary & Decimal Conversions

Our missions also require rotating leadership roles and engaging in the 8 core employability skills set out by the Victorian Government.

- Communication
- Teamwork
- Problem Solving
- Initiative & Enterprise
- Planning and Organising
- Self Management
- Learning
- Technology

Students are equipped with a range of tools to assist them in their mission. Such examples include:

- Endoscope
- Compass
- UV torch
- RGB torch
- Stud Finder
- Digital Tuner
- Magnets

In addition students will have tech exposure to hardware that includes:

- PCB
- Arduino
- Gyroscope
- Reed switches
- RFID
- Wifi router
- Sound sensors
- Neo-pixels
- MP3 Modules





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TIMINGS

The New World sessions last between 90-100 minutes depending on your class timetable and are designed to run over a double lesson. Bookings are on a per-day basis with the ability to run 3 sessions per day to 3 different groups of students.

SPACE

We require the school to provide an uninterrupted indoor space approximately the size of 1/3 netball court.

UPON ARRIVAL

Each class/group of students (16-32) is assigned the holistic mission by our Steam Train Education facilitator.

The class is then divided into 4 smaller teams (random or predetermined), each travelling to 1 of 4 zones in The New World with a 12–14 minute window of opportunity to locate a key component of the mission.

After each zone completion, a quick reset ensues and the groups rotate around the zones until all 4 teams have completed all 4 zones. Each zone requires multiple steps to be achieved, using a variety of different puzzles that expose a variety of topics aimed at promoting conversation and interest in STEM themed topics.

Upon the completion of all 4 zones, our Steam Train Education facilitator will guide the class through a final 4 stage challenge using all of the information gathered during The New World exploration.

AN APPROXIMATE 90-100 Minute Session Run Sheet Might Look Like:

15 minutes: Class arrival, welcome and briefing **12-14 MINUTES: ZONE 1**

2 minute: Reset 12-14 MINUTES: ZONE 2

2 minute: Reset
12-14 MINUTES: ZONE 3

2 minute: Reset
12-14 MINUTES: ZONE 4

18 MINUTES: CLASS TECHNOLOGY PUZZLE 3 minute: Conclusion







GET ONBOARD

Bookings are made on a per day basis, providing you with 3 double lesson sessions (100 minutes each) to run throughout the day according to your school/class timetable.

This allows 48–96 students per day, run as 3 sessions of 16–32 students per session. Equivalent per student price starting from \$18.75 (ex GST).

