



ISNS G1-G2 | Weekly STEAM Class 2025

STEAM PROGRAM

STEAM 科学实验课

Find your spark

Curriculum aligned with



Supported By



About Big Bang Academy

关于我们

Big Bang Academy is an edtech company reinventing how children of age 3-16 learn science and technology. With the vision to foster passionate, self-directed learners, we work with global STEAM academia and industry experts to provide the most effective and transformative learning experience. Since inception in 2020, our programs have reached over 25,000 students across Hong Kong, Singapore, Taiwan and the US.

Big Bang Academy是一家致力于创新3-16岁儿童科学和科技学习方式的教育科技公司。

我们的愿景是培养充满热情、自主学习的学生。通过与全球STEAM学术界和行业专家合作，提供最有效和具有变革性的学习体验。

自2020年成立以来，我们的课程已覆盖香港、新加坡、台湾和美国等地，累计受益学生超过25,000名。



OUR MISSION & VISION

我们的愿景和使命

We foster passionate, self-directed learners by crafting immersive and captivating learning experiences that transcend the confines of traditional classrooms.

Empower Every Child to fall in love with learning and becoming self-driven learners.

我们通过打造沉浸式且引人入胜的学习体验，超越传统课堂的局限，培养充满激情、自主学习的学习者。

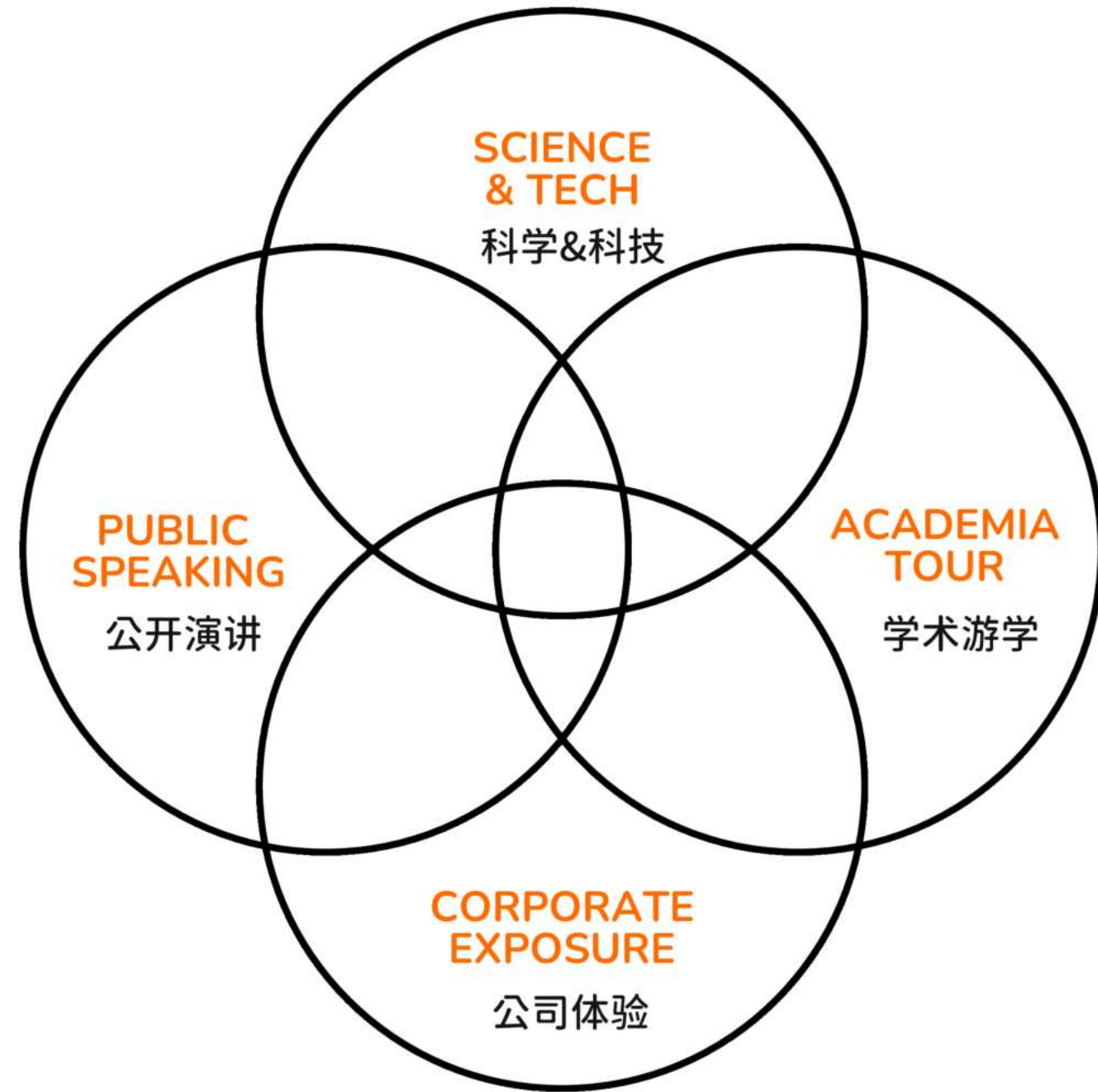
激发每个孩子对学习的热情，培养他们成为自主学习者。





“LEARNING BEYOND CLASSROOM”

创造超越传统课堂的学习体验



Elevating learning experience with exclusive access to STEAM academia, interaction with industry experts and global awareness development.

通过独家访问STEAM学术界，与行业专家互动和全球意识发展，提升学习体验。



We go beyond the traditional classroom learning experience to elevate our students' STEAM education.

Through our premium programs designed by Cambridge University educators, students gain access to a hybrid of offline classrooms and our exclusive STEM e-learning platform.

Our curriculum delivers a Cambridge-quality science and technology education with public speaking training and exposure to industry leaders. Students can interact directly with experts from top tech and science companies like **NASA, Alibaba Group, and our university partners.**

Our learning beyond the classroom approach nurtures both global awareness and future-proof skills through interactions with the **global academic and professional STEAM community.**



我们致力于提供超越传统的课堂学习体验，提升学生的STEAM教育水平。通过我们由剑桥大学教育专家设计的优质课程，学生可以获得线下课堂和我们独家STEM在线学习平台相结合的学习体验。

我们提供与剑桥大学教育标准一致的科学和技术教育课程，并提供演讲训练和与行业领袖的互动机会。学生可以直接与来自NASA、阿里巴巴集团等顶尖科技和科学公司的专家进行互动，也有机会与知名大学教授学者们交流对话。

我们超越传统课堂的学习方法通过与全球学术和专业STEAM社区的互动，培养学生的全球意识和未来所需技能。



OVER 70 + COLLABORATION SCHOOLS

超过70所合作学校



Our Research-based STEAM Curriculum

以研究为基础的STEAM课程



The 1st HK-based STEAM curriculum that is STEM.org* accredited & aligns with national science curricula

首个获得STEM.org*认证的香港STEAM课程，并与国家科学课程保持一致



Trusted Brand in Science Education

值得信赖的科学教育品牌

*列入教育局供应商名单



*STEM.org is the longest-standing STEM education research and credentialing organisation in the US

*STEM.org是美国历史最悠久的STEM教育研究和认证组织

Research Based Pedagogy with University of Cambridge 剑桥大学研究型教学法

International Journal of STEM Education

Effectiveness of an Inquiry-based Blended Learning Approach in 2019: A Meta-analysis Study on Young Children's Attention, Cognitive, and Academic Outcomes

Using Educational App to Bridge Formal and Informal STEM Learning: the Effect of Ready-to-use Blended Learning Environment in Young Children's Attention, Cognitive, and Academic Outcomes

Abstract
Blended learning is being recognized to lead to improved learning and learning experiences by combining appropriate use of online and engagement with real-world learning (STEM) activities.

Keywords: Blended Learning, Social Learning, Inquiry Learning, Learning Outcomes, Educational App

Introduction: Research in science education has traditionally focused on direct classroom-based (single) instruction, in a one-to-one setting. In the current learning technology landscape, and the arrival of digital, online and blended learning, it is important to understand and investigate the effectiveness of blended learning. This research aims to investigate the effectiveness of blended learning in young children's attention, cognitive, and academic outcomes. The study also explores the role of educational apps in bridging formal and informal STEM learning. The study also explores the role of educational apps in bridging formal and informal STEM learning. The study also explores the role of educational apps in bridging formal and informal STEM learning.



*使用教育应用程序连接正式和非正式的STEM学习:探究式混合学习环境对幼儿情感、认知和学术成果的影响。

International Schools	Local Schools
Harrow International School – STEAM Carnival	Diocesan Boys' School Primary Division – Elective Course
Canadian International School of Hong Kong - ECA	Holy Trinity Primary School – ECA, Summer ECA, Project Alpha Nomination
Hong Kong International School – ECA	HKBUAS Wong Kam Fai Secondary and Primary School – STEAM Day
Singapore International School (Hong Kong) – ECA	Catholic Mission School - Science curriculum provision & ECA
Dalton School Hong Kong – ECA & STEAM Carnival	Yuen Long Public Middle School Alumni Association Primary School – STEAM Day
Malvern College Hong Kong – Summer Camp & ECA	Christian Alliance S.Y. Yeh Memorial Primary School – ECA & STEAM Day
French International School – STEAM workshop at Hong Kong Science Museum	Fanling Assembly of God Church Primary School – STEAM Day
DSC International School – ECA	Po Kok Primary School – STEAM Day
Hong Kong Academy – ECA & Winter Camp	PLK Tin Ka Ping Millennium Primary School – STEAM Day
American School Hong Kong – ECA	HKCA Po Leung Kuk School – ECA & Winter Camp
Rosebud Primary School – Science curriculum provision	AD & FD POHL Leung Sing Tak School - STEAM Day
St. Hilary's Primary School – Science curriculum provision	Buddhist Lim Kim Tian Memorial Primary School - Project Alpha Nomination
Magart International Kindergarten – ECA	SKH Yuen Chen Maun Chen Primary School
Pods International Kindergarten – ECA	Aldrich Bay Government Primary School – Teacher Training Workshop
Mighty Oaks International Kindergarten - ECA	Chinese Methodist School, Tanner Hill - ECA
SKH Crown of Thorns Kindergarten - ECA	Buddhist Chi King Primary School - English x STEAM Curriculum
	Government Organisations & Corporates
	NASA - Dialogue with NASA Mars Engineer – Liv
	Hong Kong Science Museum & Consulate General Festival
	Hong Kong Museum of Art – STEAM x ART Workshop, serving over 100 families
	K11 Musea – Mercedes-Benz x Engineering workshops & Monthly science workshops with Donut Kids Club
	HSBC - STEAM workshops for HSBC staff
	Lenovo – STEAM x TECH workshops at Lenovo's new product launch
	MTR – STEAM workshop for MTR employees

*与国际学校、本地学校以及政府机构合作举办STEAM活动案例

Five Step Scientific Thinking Process

✦ 独家思维训练：五步科学思维法

Learn how to think and experiment like a scientist. Empower your child to apply this problem-solving framework to every challenges they face!

学习如何像科学家一样思考和实验。让你的孩子运用这个解决问题的框架来应对他们面临的每一个挑战!



Step 1

Ask a question

提出问题



Step 2

Make a hypothesis

做假设



Step 3

Do an experiment

做实验



Step 4

Observe & Analysis

观察与分析



Step 5

Conclusion & Presentation

得出结论并演示

Covers 5 Levels, 6 Major Subjects

课程涵盖5个层级，6大科学范畴

5
Levels
五个层级

Pathfinder Explorer Junior Pioneer Expert

K1 (3yo) ➔ K2-K3 (4-5yo) ➔ P1-P2 (6-7yo) ➔ P3-P4 (8-9yo) ➔ P5-P6 (10-11yo)

6
Pillars
六大科目



7
Milestones
七大里程碑

- **Observation and Data Gathering**
观察和数据收集
- **Use of Tools to Measure Data**
使用工具测量数据
- **Use of Scientific Vocabulary**
科学词汇的使用
- **Identification of a Question/ Problem**
问题的识别
- **Investigation**
调查
- **Experiment Predictions**
实验结果预测
- **Data Analysis & Evaluation**
数据分析与评估

Our Practice

我们的实践

Host STEAM Events with a total of **70+** Hong Kong Local and International Schools as well as Government Organizations & Corporations

与累计70+香港本地和国际学校以及政府机构合作举办 STEAM Events



Our Practice

我们的实践



Semester 2 Course Schedule




第二学期课程计划

Time:

Thursday 周四 15:30-16:30,
2025.2.20-2025.5.22

时间:

每周四 15:30-16:30
2025.2.20-2025.5.22

Course Name	Topic
Ecology Evolution of Life 	Fossil & Paleontology
	Animal Classification
	Ice age evolution
	Endangered and Extincted species
Astronomy Weather & Climate 	Shaving cream rain
	Wind Vane
	Snowstorm in an Orb
	Tornado in a Jar
Ecology Marine Biology 	Mysterious Ocean
	Angler Fish Model
	Coral Crystals
	Fish and Sharks

课程名称	主题
生态 生命进化 	古脊椎动物化石
	动物分类
	冰河时代的演变
	濒危和灭绝的物种
天文 气候与天气 	剃须膏雨滴
	风向标
	球体中的暴风雪
	罐子里的龙卷风
生态 海洋生态 	神秘海洋
	垂钓鱼模型
	珊瑚水晶
	鱼和鲨鱼

Registration 注册报名



Course Details 课程安排

The learning content throughout the academic year covers 6 major areas of science, with 3 areas learning in a semester, with 4 lessons in each area. Each class includes teaching on knowledge theory, hands-on experiments, and presentation skills.

整个学年的学习内容涵盖6个主要的科学领域，每个学期学习3个主要科学领域，每个领域有4节课。每节课都包括知识理论、动手实验和演讲技巧的教学。

Class Time 课程时间

Thursday 周四 15:30-16:30,
2025.2.20-2025.5.22

Class Period 课时

12 lessons/semester
12课/学期

Language 授课语言

English 全英语授课

Tuition 总费用

CNY3600/semester
3600元/学期



立即咨询





BIG BANG
ACADEMY