

NovaLearn After-School Program



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North Star

NovaLearn Limited is an education technology company accelerating the digital transformation of learning by empowering students as digital leaders through 21st-century STEAM interest-based skills, curated resources designed by accredited educators and industry specialists, and a customizable online school management system.

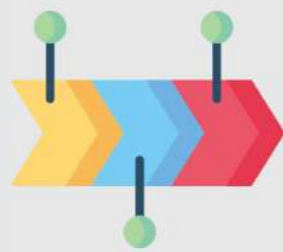
我们的使命

NovaLearn Limited 是一家教育科技公司, 通过传授21世纪 STEAM 兴趣为本的技能, 采用由IB认可的教育家及业界专家策划的课程, 以及使用可定制的学校管理系统, 让学生成为电子时代的领袖, 促进学习的数码转型。

NovaLearn Academic Identity

“ NovaLearn adopts a **hybrid approach** of combining **IB’s Unit of Inquiry with IB’s Learning Cycle**, carried out through **interactive, creative** and **gamified STEAM Curriculum** ”

Curriculum Methodology



IB’s Unit of Inquiry



IB’s Learning Cycle

Curriculum Approach



STEAM Curriculum



Creativity



Gamification

STEAM Curriculum 我们的 STEAM 课程



STEAM curriculum that is STEM.org* accredited, created by IB-certified teachers & aligns with international curricula

由 STEM.org* 认证的STEAM课程，由国际文凭教师策划并对应国际课程



Cambridge Assessment
Cambridge Assessment English (UK)
CEFR Level A1 - C2



HSK
Chinese Proficiency Test
汉语水平考试
HSK (China)
Level 1 - Level 5



d. HASSO PLATTNER Institute of Design at Stanford
Stanford Design School (US)
Kindergarten - Grade 5



NEXT GENERATION SCIENCE STANDARDS
NGSS (US)
Kindergarten - Grade 5



International Baccalaureate
IB PYP / IB MYP
MYP English Language Acquisition,
PYP Science Scope & Sequence,
PYP Arts Scope & Sequence



NATIONAL CORE ARTS STANDARDS
National Core Arts Standards (US)
Kindergarten - Grade 5

STEM.org is the longest-standing STEM education research and credentialing organization in the US.
STEM.org 是美国历史最悠久的 STEM 教育研究和认证机构

NovaClass

Digital STEAM ASA/CCA/ECA
电子 STEAM 课后活动

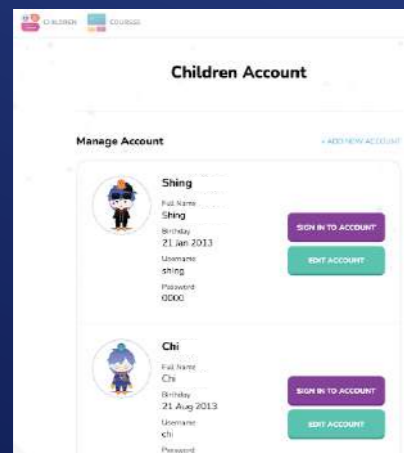
- **10-12 weeks programs:** English, Art, Science, Future-Ready
- Complete with **lesson plans, resources & worksheets**
- Tech support, facilitator training
- Aligns with school curriculum
- **10-12 周课程:** 英文, 艺术, 科学, 生命未来学
- 连同课程计画、学习资源、工作纸
- 技术支援、教师培训
- 与学校课程一致



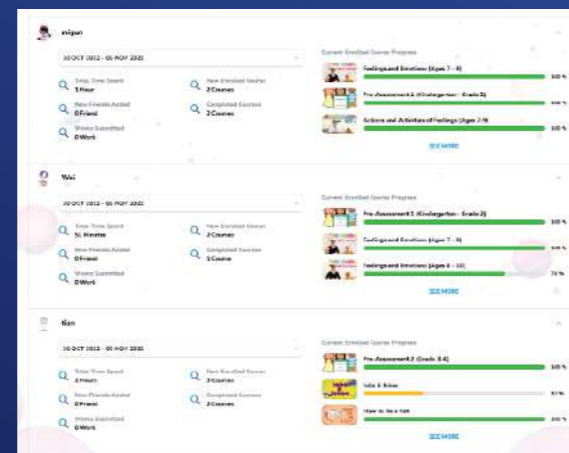
Supplement in-classroom teaching
补充课堂教学



After-school workshops & programs
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Student management 学生管理



Analytics 学生管理

More than **65** edutainment courses –
with new courses every week!

超过**65**个娱乐教材课程 –
每周都有新课程!



NovaLearn After-School Program

Description

This after-school program covers English, Arts & Crafts, Science, and Future-Ready skills. It's a self-paced online STEAM program designed by experienced IB teachers in different subjects. All courses are designed to develop students' communication, research, social, thinking, and self-management skills with the core of engaging students with real-world applications.

Platform

<https://www.novalearn.org/>

Facilities

Hardware: iPad, computer

General Supplies: Journal notebook, lined paper, white paper, paint, brushes, pencils, scissors, erasers, markers, colored pencils, glue sticks

Special Supplies for some courses:

- Nova Crafteria: glue, construction paper, used box, toilet paper rolls, tapes, cardboard, bottle caps, straws
- Elements of Art: toy, paint (red, blue, yellow, white, black)
- Force: play dough
- Culture and Identity in Art: used newspaper and magazines, any printed images

Program Outline

Courses in This Program:

1. English Pre-Assessment
2. Internet Safety and Technology Awareness
3. Feelings and Emotions (Ages 8-10)
4. Nova Crafteria
5. The Science of Curiosity
6. Family Members and Relatives (Ages 8-10)
7. Elements of Art
8. Forces
9. Kid-preneur
10. Friends and Friendship (Ages 8-10)

Extra Courses:

1. Our Environment
2. Culture and Identity in Art

Learning Objectives



Future Ready

- Learn how to avoid computer viruses.
- Know how to keep private information safe online.
- Understand what online cyberbullying is.
- Follow the processes and techniques skillfully and inventively.
- Understand what an entrepreneur is and get familiar with all the steps before starting a business.
- Be able to transform a hobby into a business idea.



English

- Recognize and spell vocabulary related to feelings and emotions, family members, and friendship.
- Understand familiar everyday expressions about familiar topics.
- Understand the main points and content of an audio book.
- Read short, rehearsed statements/texts.
- Find and understand the key and detailed information in the text.
- Read nonfiction texts with a good level of comprehension.
- Write a short paragraph with simple sentences to introduce family members.
- Write a very brief recipe using the standard recipe format.
- Write about personal experiences with some details in simple connected text.



Science

- Make observations using the senses.
- Identify many objects in our daily lives that we push and pull.
- Weight affects force and movement.
- Effect shape has on movement and force.
- The environment is made up of living and non-living things.
- Living things need natural resources to survive.
- We are responsible for taking care of our environment.



Art

- What are the elements of art?
- How do we use the seven elements of art?
- Formulate an artistic investigation of personally relevant content for creating art.
- Elaborate visual information by adding details in an artwork to enhance emerging meaning.
- Create works of art that reflect community cultural traditions.
- Develop a work of art based on observations of surroundings.
- Explore and invent art-making techniques and approaches.

IB Skills Covered

- **Social Skills** – Respecting others, accepting responsibility
- **Thinking Skills** – Acquisition of knowledge, comprehension, analysis, evaluation, application
- **Communication Skills** – Listening, reading, writing
- **Self -Management Skills** – Time management, safety, fine motor skills, gross motor skills
- **Research skills** – Formulating questions, observing, collecting and analyzing data, presenting

#1 Course Outline

Subject: English	Grade: 2-3	Duration: 30 Minutes
Course Name:	Pre-Assessment #1	
Course Description:	<p>This assessment is at a similar level to the Cambridge A1 Movers test. It's designed for Grade 2 native speakers and Grade 3 low English proficiency students. The assessment includes 5 parts:</p> <ol style="list-style-type: none"> 1. Look and Read 2. Listen to the Conversation 3. Read the Story 4. Listening Comprehension 5. Reading Comprehension 	
Standard:	<p>CEFR Level A1 High - A2 Low</p> <ul style="list-style-type: none"> • Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type • Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows, and things he/she has • Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help 	
Objectives:	<ul style="list-style-type: none"> • Understand the students' English proficiency level briefly • Help arrange the students into the appropriate groups during ASA • Keep the data to measure students' improvements 	
IB Skills Covered:	<ul style="list-style-type: none"> • Thinking Skills – Comprehension, application • Self-Management Skills – Time management • Communication Skills – Listening, reading, writing 	
Materials:	iPad/Computer	

#1 Course Outline

Subject: English	Grade: 3-4	Duration: 30 Minutes
Course Name:	Pre-Assessment #2	
Course Description:	<p>This assessment is at a similar level to the Cambridge A2 Flyers test. It's designed for Grade 3 native speakers and Grade 4 English language learners. The assessment includes 5 parts:</p> <ol style="list-style-type: none"> 1. Read the Article 2. Listen to the Conversation 3. Read the Story 4. Listening Comprehension 5. Reading Comprehension 	
Standard:	<p>CEFR Level A2 – B1 Low</p> <ul style="list-style-type: none"> • Can understand sentences and frequently used expressions related to areas of most immediate relevance • Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters • Can describe in simple terms aspects of his/her background, immediate environment, and matters in areas of immediate basic need 	
Objectives:	<ul style="list-style-type: none"> • Understand the students' English proficiency level briefly • Help arrange the students into the appropriate groups during ASA • Keep the data to measure students' improvements 	
IB Skills Covered:	<ul style="list-style-type: none"> • Thinking Skills – Comprehension, application • Self-Management Skills – Time management • Communication Skills – Listening, reading, writing 	
Materials:	iPad/Computer	

IB Theme: How the World Works

#2 Course Outline

Subject: Future Ready	Grade: 3-5	Duration: 25 Minutes
Course Name:	Internet Safety and Technology Awareness	
Course Description:	An interesting online life can be full of hidden dangers. The devices you use to get on the internet can be dangerous as well. In this course, students will learn with Helios how to properly use devices and stay safe online.	
Standard:	21st century skills taught by subject-matter experts.	
STEAM Related Subjects:	Technology	
Objectives:	<ul style="list-style-type: none"> • Know how to properly treat electronic devices • Understand what online cyberbullying is • Learn how to avoid getting computer viruses • Know how to keep private information safe online 	
Connection to UOI:	This course is an inquiry into the impact of scientific and technological advances on society and the environment.	
IB Skills Covered:	<ul style="list-style-type: none"> • Thinking Skills – Acquisition of knowledge • Self-Management Skills – Safety • Social Skills – Respecting others 	
Key Vocabulary:	device, cyberbullying, viruses, privacy, honest	
Materials:	iPad/Computer	

IB Theme: How We Express Ourselves

#3 Course Outline

Subject: English Language Learning	Grade: 3-5	Duration: 45 Minutes
Course Name:	Feelings and Emotions (Ages 8-10)	
Course Description:	In this course, students will learn alongside Helios from Miss Krista about familiar everyday expressions. They will read short stories and feel the characters' feelings through the whole story. Students get a chance to practice writing simple phrases and sentences to express their own feelings.	
Standard:	IB Language Acquisition Phase 3-4 CEFR A2 <ul style="list-style-type: none"> • Listening A2 - Can catch the main point in short, clear, simple messages and announcements • Reading A2 - Can understand short, simple texts on familiar matters which consists of high frequency words • Writing A2 - Can write simple isolated phrases and sentences linked with simple connectors • Oral Production and Interaction A2 - Can deliver short, rehearsed announcements on familiar topics 	
STEAM Related Subjects:	Art	
Objectives:	<ul style="list-style-type: none"> • Understand familiar everyday expressions about feelings and emotions • Recognize words on feelings and emotions in the most common everyday situations • Read short, rehearsed statements/texts • Write simple isolated phrases and sentences to express feelings • Present simple and past simple 	
Connection to UOI:	This course is an inquiry into the ways in which we discover and express feelings.	
IB Skills Covered:	<ul style="list-style-type: none"> • Thinking Skills – Acquisition of knowledge, comprehension • Communication Skills – Listening, reading, writing • Self-Management Skills – Time management • Research Skills – Formulating questions, observing 	
Key Vocabulary:	afraid, surprised, embarrassed, disappointed, thrilled, frustrated, jealous, confused, annoyed, wonderful	
Materials:	iPad/Computer, lined paper and pencil, markers/colour pencils	

IB Theme: How We Express Ourselves

#4 Course Outline

Subject: Art	Grade: 3-5	Duration: 60 Minutes
Course Name:	Nova Crafteria	
Course Description:	In this course, students will learn how to write artistic letters, as well as how to make a bouncy animal, nameplate, paper leaves, skyscrapers, and paper mache! Students use their imagination to create their own works of art. They'll need various tools and any materials they have at home.	
Standard:	21st century skills taught by subject-matter experts.	
STEAM Related Subjects:	Art	
Objectives:	<ul style="list-style-type: none"> • Be able to use materials to create artistic products • Follow the processes and techniques skillfully and inventively 	
Connection to UOI:	This course is an inquiry into the ways students extend and enjoy their creativity.	
IB Skills Covered:	<ul style="list-style-type: none"> • Thinking Skills – Acquisition of knowledge • Self-Management Skills – Fine motor skills, gross motor skills 	
Key Vocabulary:	artistic letter, bouncy animal, nameplate, skyscrapers	
Materials:	iPad/Computer, glue stick, pencil, eraser, markers, scissors, construction paper, paint, brushes, glue Special materials for each activity: Bouncy animals: general materials Artistic letters: colored pencils Skyscrapers: used box, toilet paper roll, tapes Nameplate: cardboard, bottle caps, straws Paper leaves: general materials	

IB Theme: How the World Works

#5 Course Outline

Subject: Science	Grade: K-2	Duration: 50 Minutes
Course Name:	The Science of Curiosity	
Course Description:	Welcome to the Science of Curiosity! This is a fun course that will teach students how to ask questions like a scientist, make observations like a scientist, and take notes like a scientist. There's an amazing world out there for students to discover, so let's get started!	
Standard:	Next Generation Science Standards (NGSS) Scientific Investigations Use a Variety of Methods <ul style="list-style-type: none"> • Scientists use different ways to study the world (K-PS2-1) 	
STEAM Related Subjects:	Science	
Objectives:	<ul style="list-style-type: none"> • What is science? – asking questions • Making observations using senses • How to make observations outdoors • Writing in a field journal 	
IB Skills Covered:	<ul style="list-style-type: none"> • Thinking Skills – Analysis, evaluation, application • Communication Skills – Listening, writing, presenting • Research Skills – Observing, collecting and analyzing data, presenting 	
Key Vocabulary:	science, curiosity, observations, question	
Materials:	Computer, pencil, journal notebook, colors	

IB Theme: Who We Are

#6 Course Outline

Subject: English Language Learning	Grade: 3-5	Duration: 50 Minutes
Course Name:	Family Members and Relatives (Ages 8-10)	
Course Description:	In this course, students get to know Krista's family members and Helios' family story. The challenges not only sharpen the students' knowledge about family members, but also builds students' understanding of generosity, community, and service to others.	
Standard:	IB Language Acquisition Phase 3-4 CEFR A2 <ul style="list-style-type: none"> Listening A2 - Can generally identify the topic of discussion around them when it is conducted slowly and clearly Reading A2 - Can understand short, simple texts containing the highest frequency vocabulary Writing A2 - Can write about everyday aspects of their family using linked sentences 	
STEAM Related Subjects:	Art	
Objectives:	<ul style="list-style-type: none"> Recognize and spell vocabulary related to family members Understand the questions from short recordings about family members Understand the main points and content of an audio book about family members (their relationship, and sharing and caring) Ask and answer questions to exchange information about family members Read a factual text on families with satisfactory level of comprehension Write a short paragraph with simple sentences to introduce family members 	
Connection to UOI:	This course is an inquiry into the nature of human relationships, including families.	
IB Skills Covered:	<ul style="list-style-type: none"> Thinking Skills – Acquisition of knowledge, comprehension Communication Skills – Listening, reading, writing Self-Management Skills – Time management Social Skills – Accepting responsibility 	
Key Vocabulary:	mother, father, sister, brother, daughter, son, grandmother, grandfather, wife, husband, parent children, grandparents, grandchildren, aunt, uncle, niece, nephew, cousin, granddaughter, grandson, mother-in-law, father-in-law, daughter-in-law, brother-in-law, stepfather, stepmother, stepsister, stepbrother, stepson, stepdaughter	
Materials:	iPad/Computer, lined paper and pencil, markers/colour pencils	

IB Theme: How We Express Ourselves

#7 Course Outline

Subject: Art	Grade: 3-5	Duration: 60 Minutes
Course Name:	Elements of Art	
Course Description:	In this course, students will join Andrea and Helios on a creative journey to learn about the building blocks that artists use to make art. Students will explore the different elements of art and become an expert in art!	
Standard:	Exploring and Creating - Explore the elements of art Reasoning and Reflection - Develop processes and technical skills to refine artistic abilities	
STEAM Related Subjects:	Art	
Objectives:	<ul style="list-style-type: none"> Students will learn what the elements of art are Students will be able to know how to use the seven elements of art 	
Connection to UOI:	This course is an inquiry into the ways students extend and enjoy their creativity.	
IB Skills Covered:	<ul style="list-style-type: none"> Thinking Skills – Acquisition of knowledge Self-Management Skills – Fine motor skills, gross motor skills 	
Key Vocabulary:	element, line, horizontal, vertical, diagonal, straight, curved, shape, geometric, organic, form, length, width, depth, space, three-dimensional, colour, hue, value, intensity, texture, surface	
Materials:	iPad/Computer, toy, pencil, eraser, paper, paint (red, blue, yellow, white, black)	

IB Theme: How the World Works

#8 Course Outline

Subject: Science	Grade: K-2	Duration: 55 Minutes
Course Name:	Forces	
Course Description:	In this course, students will understand that force is nothing but a push or a pull. They will learn that running, closing the door, or opening a water bottle all need just the right pull or push. This course also covers gravity and how much push or pull is needed to move an object based on its shape and weight.	
Standard:	Next Generation Science Standards (NGSS) K-PS2-1 Plan and investigate to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	
STEAM Related Subjects:	Science, Art (Fine Arts)	
Objectives:	<ul style="list-style-type: none"> • Force is a push and pull. • If we do not exert force on objects, we would not be able to manipulate them. • To identify many objects in our daily lives that we push and pull. • All movement is caused by pushing and pulling. • Weight affects force and movement. • Effect shape has on movement and force. • Concept of gravity. 	
IB Skills Covered:	<ul style="list-style-type: none"> • Thinking Skills – Analysis, evaluation, application • Communication Skills – Listening, writing, viewing, presenting • Research Skills – Observing, collecting & analyzing data, presenting 	
Key Vocabulary:	force, push, pull, motion, heavy, light, weight, shape, movement, gravity	
Materials:	Computer, paper, pencil, play dough, colors	

IB Theme: How We Express Ourselves

#9 Course Outline

Subject: Future Ready	Grade: 3-5	Duration: 50 Minutes
Course Name:	Kid Preneur	
Course Description:	In this course, students will learn the essentials of a business. They will learn how to build a business by following their passions.	
Standard:	21st century skills taught by subject-matter experts.	
STEAM Related Subjects:	Depending on students' business plans, it could be any STEAM subject.	
Objectives:	<ul style="list-style-type: none"> • Understand what an entrepreneur is • Be able to transform a hobby into a business idea • Become familiar with all the steps needed before starting a business • Be prepared with resources 	
Connection to UOI:	This course is an inquiry into the ways in which we discover and express ideas, as well as how we reflect on, extend, and enjoy our creativity.	
IB Skills Covered:	<ul style="list-style-type: none"> • Thinking Skills – Acquisition of knowledge, comprehension, analysis • Communication Skills – Listening and writing • Self-Management Skills – Time management • Research Skills – Formulating questions, planning 	
Key Vocabulary:	entrepreneur, product, service, passion, business, resource, customer	
Materials:	iPad/Computer, lined paper, pencil, worksheets Worksheets: <ul style="list-style-type: none"> - Create your own company - What's your passion? - Let's come up with some ideas! - Who might your customers be? - Finishing your business plan 	

IB Theme: Who We Are

#10 Course Outline

Subject: English Language Learning	Grade: 3-5	Duration: 45 Minutes
Course Name:	Friends and Friendship (Ages 8-10)	
Course Description:	In this course, students make their own reports based on the standard format. They will also build up a deep understanding of friends and friendship through analyzing a variety of scenarios.	
Standard:	<p>IB Language Acquisition Phase 3-4 CEFR A2/B1</p> <ul style="list-style-type: none"> Listening A2 - Can generally identify the topic of discussion around them when it is conducted slowly and clearly Reading B1 - Can find and understand relevant information in longer texts <ul style="list-style-type: none"> - Can read straightforward factual texts on familiar subjects with satisfactory level of comprehension Writing A2 - Can write very brief reports in a standard conventionalized format, which pass on factual information and state reasons for actions 	
STEAM Related Subjects:	Art	
Objectives:	<ul style="list-style-type: none"> Find and understand the key and detailed information in the text of Friends Recognize words related to friends and friendship in the most common everyday situations Understand the main points and content of an audio file - Friends Write a very brief recipe using the standard recipe format 	
Connection to UOI:	This course is an inquiry into the nature of human relationships, including friends.	
IB Skills Covered:	<ul style="list-style-type: none"> Thinking Skills – Acquisition of knowledge, comprehension, evaluation, application Communication Skills – Listening, reading, writing Self-Management Skills – Time management 	
Key Vocabulary:	happy, happiness, funny, fun, kind, kindness, unkind, honest, honesty, dishonest, smiley, smile, gentle, gentleness, brave, patient, patience, impatient, helpful, trust, count on, look after, cheer up	
Materials:	iPad/Computer, lined paper and pencil, markers/colored pencils	

IB Theme: Sharing the Planet & How the World Works

Extra Course #1 Outline

Subject: Science	Grade: 3-5	Duration: 60 Minutes
Course Name:	Our Environment	
Course Description:	In this course, students explore the similarities and differences between living and non-living things, and learn that living things have needs such as water, food, and air in order to survive. Students learn the importance of being responsible in caring for their environment.	
Standard:	<p>Next Generation Science Standards (NGSS) Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment</p> <p>Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)</p> <p>2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.</p> <p>Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impact on the land, water, air, and other living things.</p>	
STEAM Related Subjects:	Science, Technology	
Objectives:	<ul style="list-style-type: none"> The environment is made up of living and non-living things. Trees are important components of our planet. Living things need natural resources to survive. We are responsible for taking care of our environment. 	
IB Skills Covered:	<ul style="list-style-type: none"> Thinking Skills – Analysis, evaluation, application Social Skills - Accepting responsibility Communication Skills – Listening, writing, presenting Research Skills – Observing, collecting and analyzing data, presenting 	
Key Vocabulary:	energy, reproduction, environment, oxygen, carbon dioxide, nature, reduce, reuse, recycle	
Materials:	Computer, paper, pencil	



After-school learning, reimagined.

www.novalearn.org