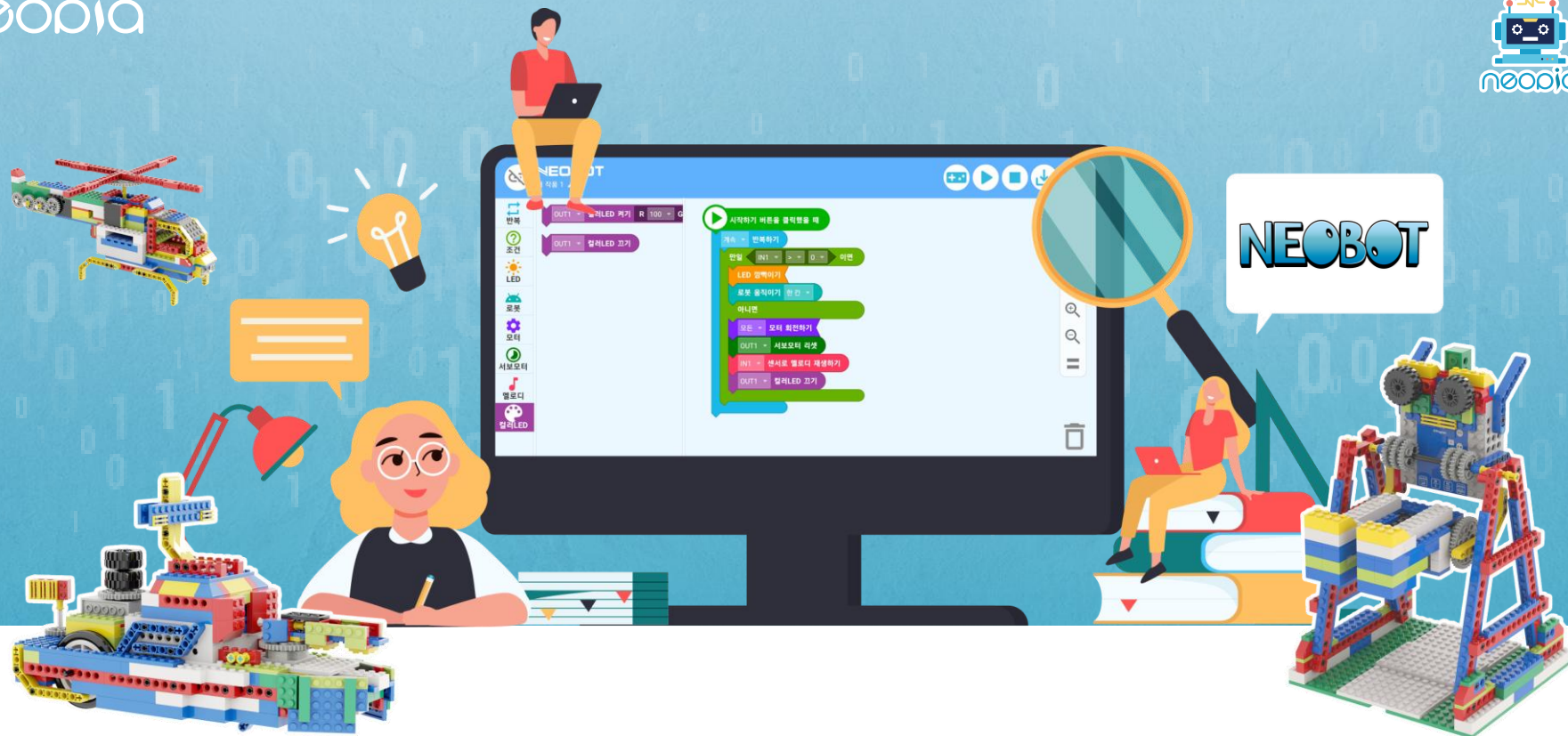




Creative Block & Robot & Coding Class

· Course Launch Proposal ·

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01

Company Introduction

- Company Profile
- History
- Our Achievements



1-1. Company Introduction

① Company Introduction

Founded in 1999, NEOPIA is a total education company with a 26-year history of creating Educational Tools and developing educational content to foster creative and convergent talent.

- ✓ After-School Block Tool [NEOBOT]
- ✓ Textbook Coding Robot [NEOBOT Edu]
- ✓ Thematic Coding Tool [NeoCoding]
- ✓ Block-Based Electronic Tool [NeoCircuit]
- ✓ AI and Autonomous Driving [NeoSoCo], [NeoThink-Car]



② Patents and Proprietary Technologies

- ✓ 6 Technology Patents Registered
- ✓ 6 Design Patents Registered
- ✓ 5 Trademark Rights Registered
- ✓ Certified Venture Company
- ✓ Company-Affiliated Research Institute
- ✓ SW Education Partnership with KNUE Campus
Partner Company of Incheon National University,
- ✓ Industry-Academia Collaboration with Inha Technical College



1-2. History

NEOBOT

네오봇에듀
SMART

NEOCODING

NEO
CIRCUIT

Present
~
2018

2024.12 FlatCo has been the finalist of the BETT Awards 2025
2023.11 Promising Small and Medium Enterprises by Incheon City
2023.09 19th Outstanding Edutech Contest Wins Excellence Award in 'Flatco' Service Field
2022.10 Completed 7 series of NEOBOT for after-school programs
2021.10 Development of AI Self-Driving Car 'Neo-Think Car'
2020.12 Development of AI coding robot 'Neo SoCo'
2019.09 Development of 'Non-face-to-face Coding Platform and Robot System'
2019.09 Launched 3rd generation block robot [NEOBOT]
2019.07 Signed SW education partnership with Korean Teacher's Campus
2018.11 **Selected for 2015 curriculum 6th-grade practical arts textbook**

2011
~
2017

2017.06 **Selected for 2017 Excellent Character Development**
2016.02 Registered 3 private qualifications (block, robot, coding) with the Korea Intelligence Development Institute
2015.11 Acquired ISO9001 Quality Management Certification
2015.03 **NEOBOT is adopted as a robot education product in practical course textbooks in Korea**
2014.07 Established NEOPIA R & D Institute
2012.09 Selected [NeoBot] for Korean-Chinese space project experience programs
2011.06 **Selected as a promising company** in the Knowledge Economy Sector

1999
~
2010

2010.08 **2007 Educational Tools for Curriculum and Electronic Practice <Neo Circuit> Adopted**
2009.05 Development and operation of Education tools for the national project 'DiKi-3000'
2002.11 **Adopting an electronic block kit for electronic practice in the 7th curriculum textbook**
2000.12 Awarded by the Commissioner of the Korean Intellectual Property Office
2000.04 **The world's first electronic block kit <Neo Circuit> patent** registration and launch
1999.10 Establishment of a corporation of NEOPIA Co., Ltd



1-3. Our Achievements

➤ Coding Tools Manufacturer for Elementary School's Practical Course Textbooks



Geumseong



Create a robot that avoids obstacles through coding.

MiraeN



Create a robot that follows a line and avoids obstacles with coding.

Chunjae



Create a puppy robot and understand coding movement principles.

Dong-A



Create a car robot and operate sensors such as touch sensors and infrared sensors.

Kyohaksa



Create a robot that follows a line.

Visang



Create a handheld vacuum cleaner robot and use a light sensor to operate the cleaner.

NEOPIA is a coding robot manufacturer featured in **85% of elementary school Practical Course textbooks nationwide.**

02

NEOBOT

- Specialty of NEOBOT
- Learning Effect
- Educational System
- Robot-Making & Coding
- Systematic Curriculum
- Perfect Solution for Children



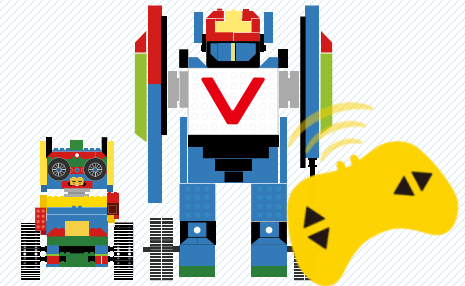
2-1. Specialty of NEOBOT



Textbook-Endorsed
Professional Brand

Proven
Educational
Effectiveness
with
Block-Based
Learning

Experience in mechanics, science, robotics,
and coding all at once with blocks!



NEOBOT

Creative
Convergence
Education
System

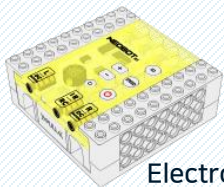
Certified Safe
Teaching Tool



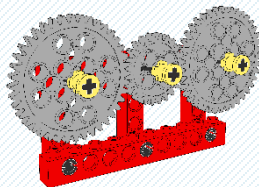
Block Making



Software



Electronic
Engineering

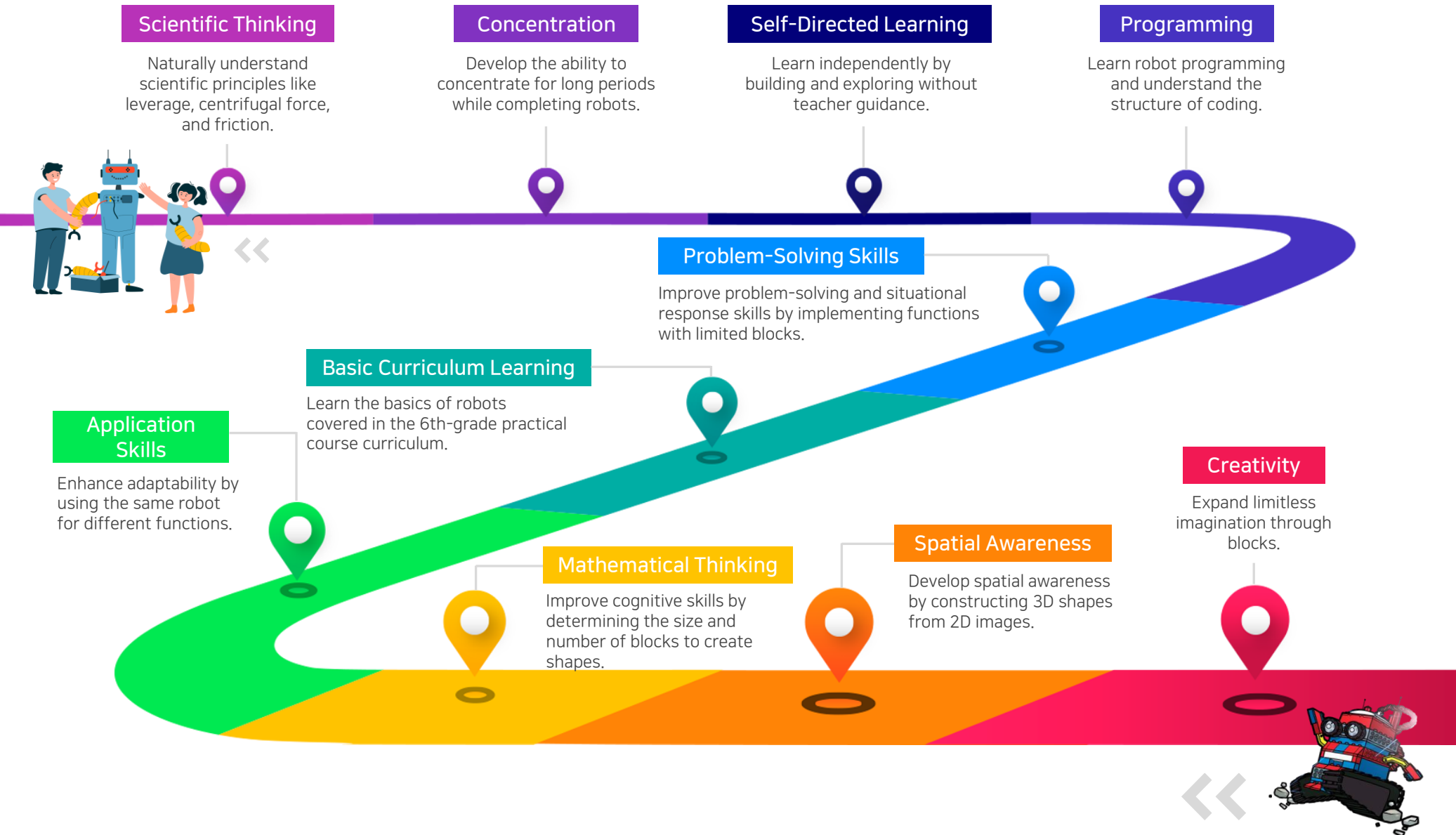


Mechanical
Engineering



- 100% Domestic Development and Production
- High-Quality Virgin Plastic / Non-Toxic ABS (e.g., STAREX)
- ISO9001 Quality Management Certification
- Korean KC, European CE, and Chinese CCC Certification
- Uses Blocks That Pass KOLAS Hazardous Material and Safety Tests

2-2. Learning effect



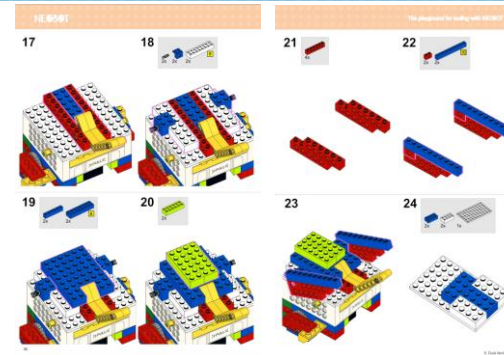
2-3. Educational System

Step.1 Enhancing Creativity Through Humanistic Thinking



A stage for exploring topics and stimulating curiosity.

Step.2 Improving Spatial Awareness and Concentration



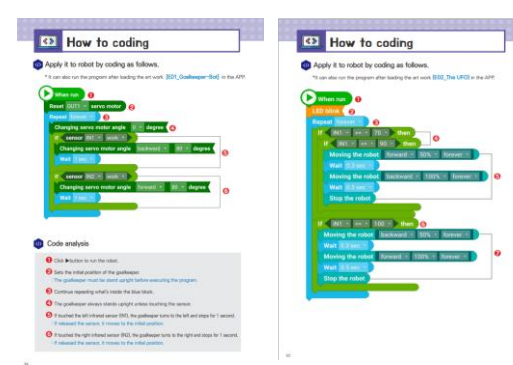
Understand scientific principles while building robots.

Step.4 Enhancing Community Spirit Through Play



A stage to operate robots through play and games.

Step.3 Cultivating 21st-Century Coding Talent



Improve creativity through invention-based Coding.

2-4. Robot-Making



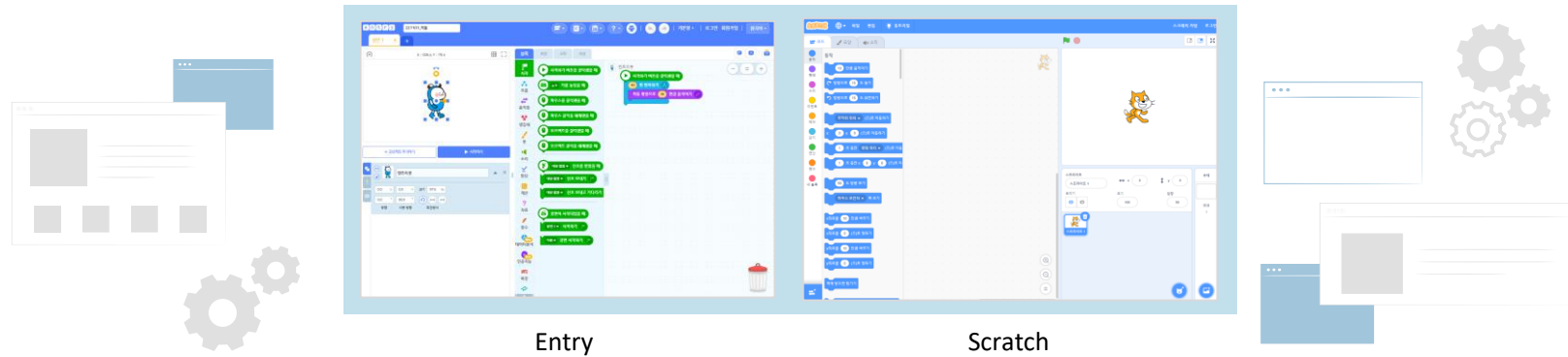
Let's Make
Blocks Alive!



2-4. Coding

Why use block coding on popular platforms like Entry and Scratch?

Because it's Easy! Intuitive! Effective!



Is computer coding difficult for students who struggle with keyboards and a mouse?

NO!

NEOBOT allows coding by dragging your fingers on a smartphone or tablet!



2-5. Step-by-Step Systematic Curriculum

1

Block Course

Stage 1(S) & Stage 2(T)

- A process for learning creativity and creation using blocks.
- This process enables the real application of Robots.



Stage 3(B) & Stage 4(C) & Stage 5(D)

- A process for learning robot design and sensor principles.
 - Enjoy battles while realizing the importance of coding.

Robot Course

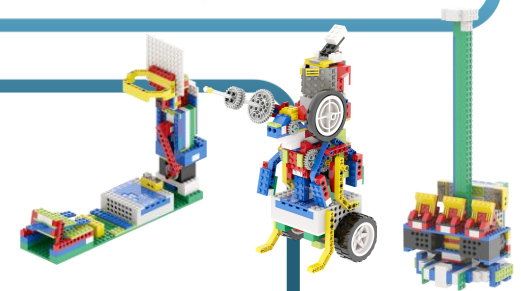
2

3

Coding Course

Stage 6(E) & Stage 7(F) & Stage 8(G)

- Coding to bring all your ideas to life!
- Completing the coding course turns everyone into a Robot & Coding expert.

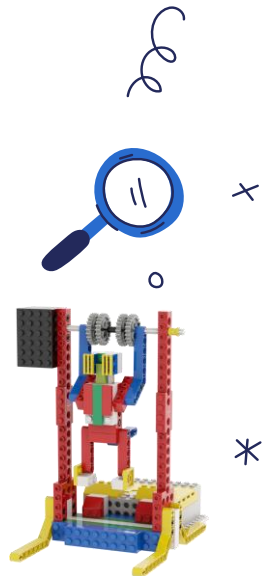
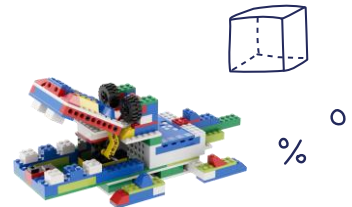
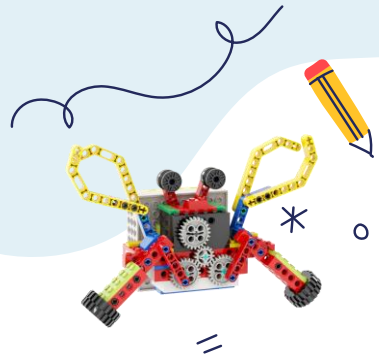


2-6. Children Today Have Packed Schedules... neopia

Even outside of schoolwork,
they need to work with robots, experience coding,
and above all, they need plenty of playtime...

NEOBOT can satisfy all these needs!

Play with blocks, build robots,
and experience systematic coding education.
Meet NEOBOT, the play-based coding robot!



03

NEOBOT Series

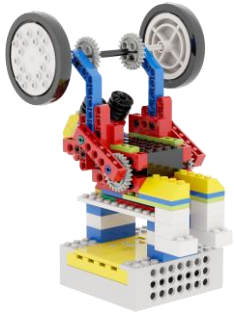
- NEOBOT Series Introduction
- All Curriculum of NEOBOT



3-1. NEOBOT S-G Series Introduction

Start

Let's build robots with NEOBOT!



Training

One motor is just the beginning!
Real robot starts with "T"!



Best

Robots are for battle!
Battle with NEOBOT



Challenge

Now you can operate NEOBOT with sensors!



Dream

Wow, is this what coding is like? It's not so hard!



Extension

What do you want to build?
You can do it all!



Final

Finally,
Robotics & Coding Expert!



Gift

Gift for the Best!
Coding Master Challenge!



3-1. A step-by-step curriculum

Block

Robot

Coding

Start

Training

Best

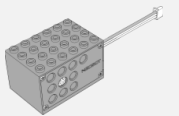
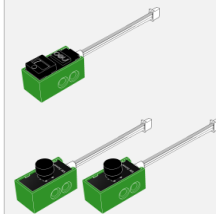
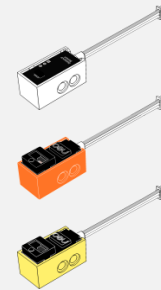
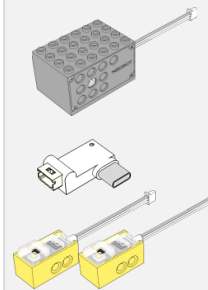
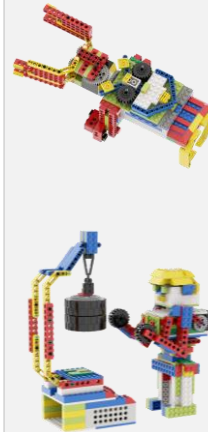
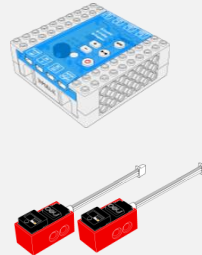
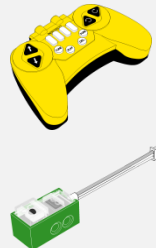
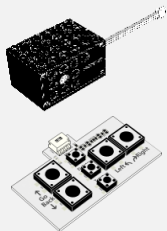
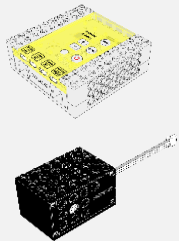
Challenge

Dream

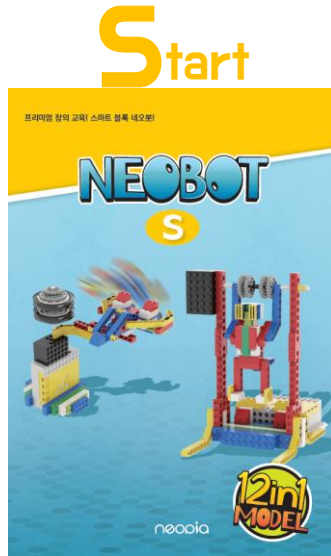
Extension

Final

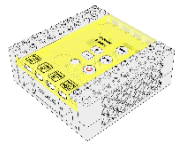
Gift



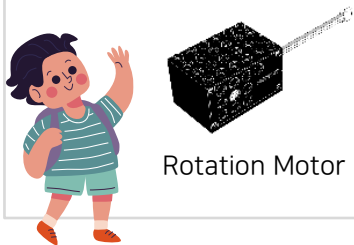
3-2. Curriculum 1 - NEOBOT S



Key Components



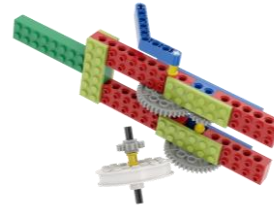
Controller (Remote)



Rotation Motor



Gadget Arm



NEO Spinner



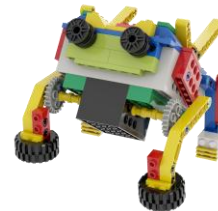
Shoot Car



Acrobatic Man



Balancing
Butterfly



Giant Frog



Athlete Monkey



NEO Crab



Bike Factory



Space Shuttle

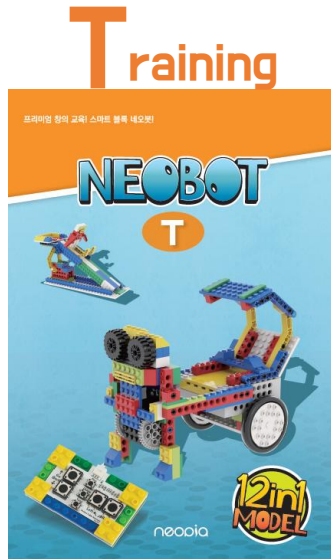


Health Bot

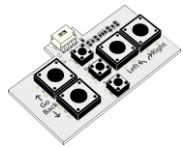


NEO Beagle

3-2. Curriculum 2 - NEOBOT T



Key Components



Wired Remote Control



Wired Cable



Ski jump



Dancing boy



Tyrant Tyranno



Transformer
Robot KABI



Duck family



A tea cup ride



Wild horse
(Mustang)



Flyer III



Rickshaw driver



Ladybug



Stone Picther



Push-Man

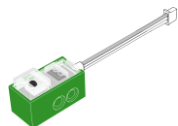
3-2. Curriculum 3 - NEOBOT B



Key Components



Wireless Remote Control



Remote Control Receiver Sensor



Fire-Gun



Wrinkle-Monster



Rudolph-Sleigh



Big-Benny



Walking-Heli



Guide-Bot



Neo Soldier



Stag beetle-Bot



Mechani-Car



Pelican-Dice

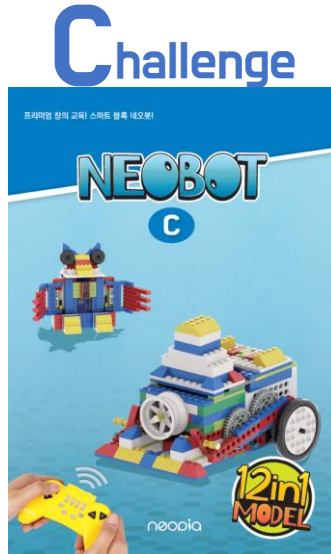


Running-Bugs



Striker

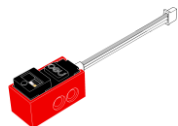
3-2. Curriculum 4 - NEOBOT C



Key Components



Controller (Coding)



Infrared Sensor



Penguini



Neo-Cleaner



Dile-E



Army-Benny



Soccer-Bot V2



Dice-Bot



Jeep-Car



Waterwheel



Chaser



Roy

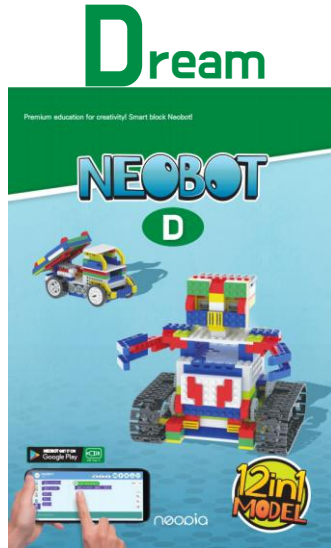


Neo-Handyman

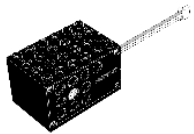


Car-Port

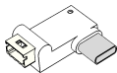
3-2. Curriculum 5 - NEOBOT D



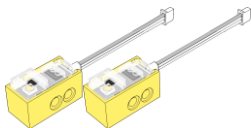
Key Components



Rotation Motor



Wired Cable Holder



LED Block



NEO-Helicopter



Flag-Bot



Golf-Bot



Vending Machine



Finger Basketball Machine



NEO Robot-Arm



Power-Truck



Drawing-Bot



Conveyor System



Mars-Benny



NEO-Tank

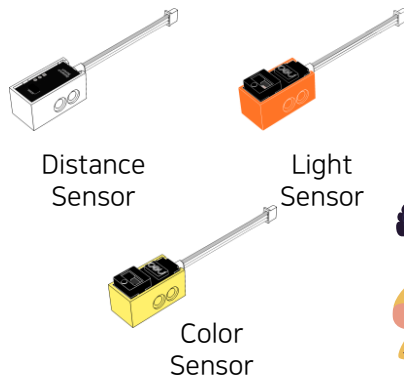


Boxing-Bot

3-2. Curriculum 6 - NEOBOT E



Key Components



Goalkeeper-Bot



The UFO



Dancing Gorilla



Battle Cruiser



Horror Ferris Wheel



Folk lift



Car simulator



Pteranodon



Neo Knight



Robot Factory



Aegis warship

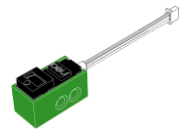


Sharkosaurus

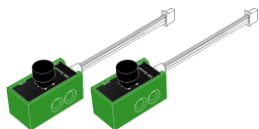
3-2. Curriculum 7 - NEOBOT F



Key Components



Sound Sensor



Contact Sensor



Tummy Flip Bar Robot



Hovercraft



Whack-A-Mole
Game Machine



EV Charging Station



Sensor Bike



Excalibur



Tumbling Car



Bowling Bot



Server Bot



Robotic Arm 2



Gyro Drop



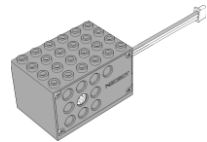
Geobukseon

3-2. Curriculum 8 - NEOBOT G

Gift



Key Components



Servo Motor



Snow Frame Car



Stride-X



Road Ranger



Taekwondo Storm



Jindori



Road Carrier



Crawler Packer



Metrogate



Chameleon Bot



Fighter Link



Popping Pinball



Candy Claw

04

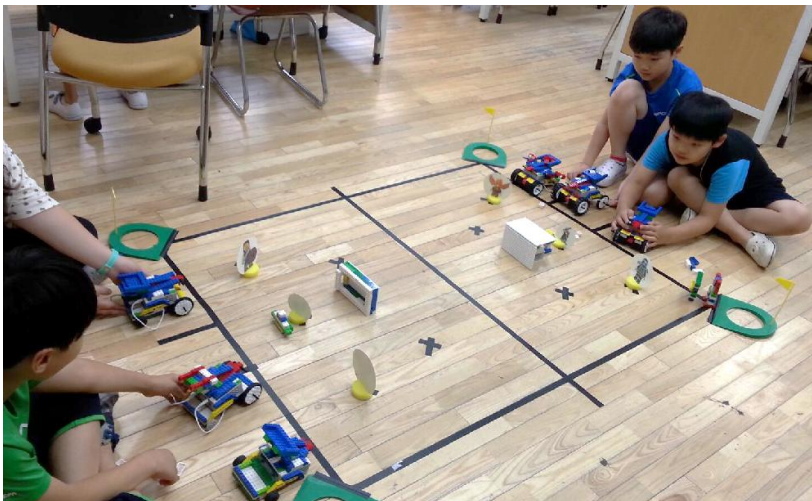
Our Support System

- Education Scenes and Certificates
- Instructor Training and Certification
- Class Operation Materials



4-1. Education Scenes and Certificates

Education Scenes



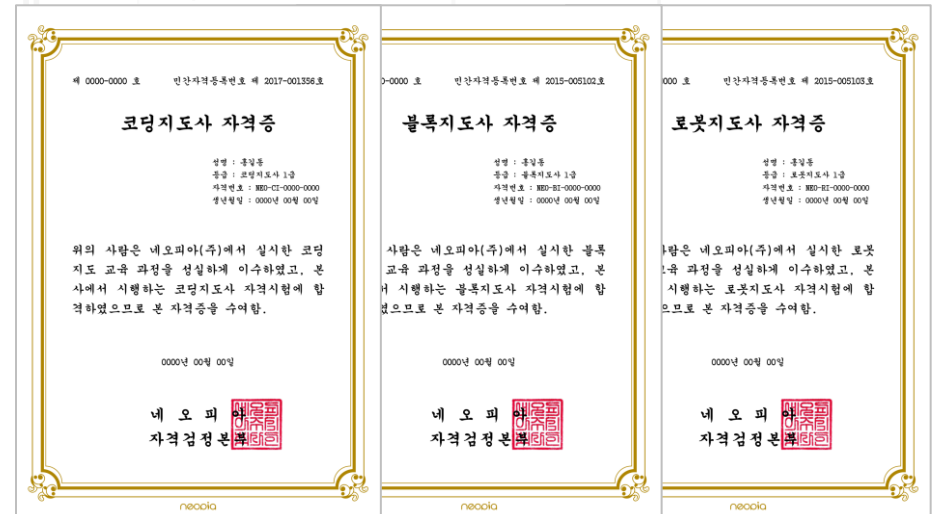
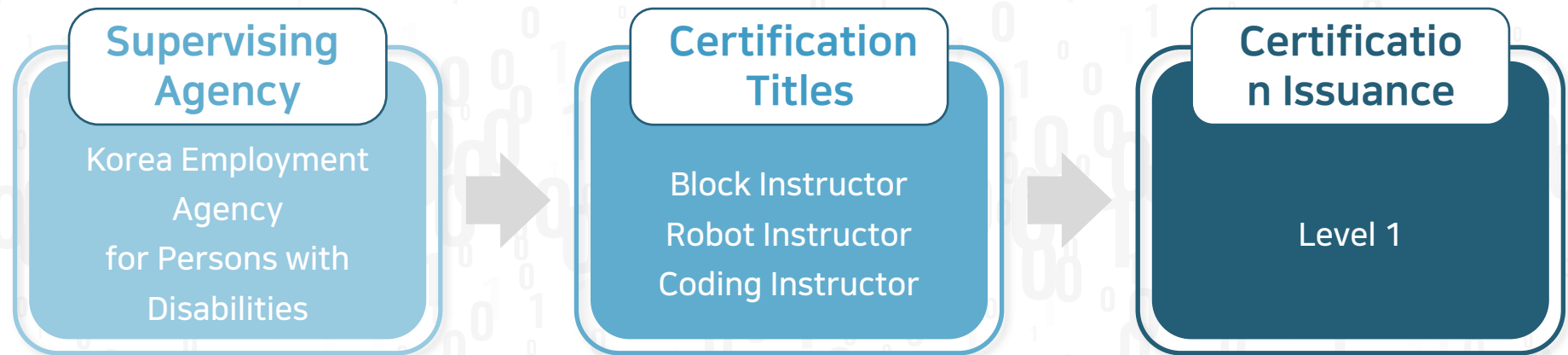
Certificates



Level 1 Level 2 Level 3 Level 4 Level 5 Level 6 Level 7

4-2. Instructor Training and Certification

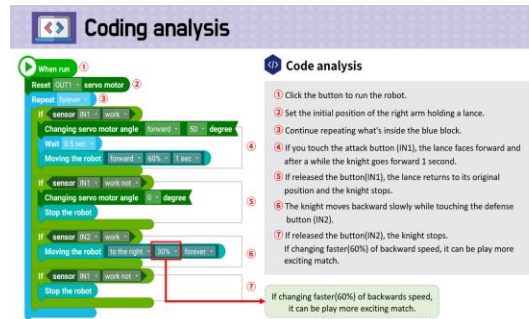
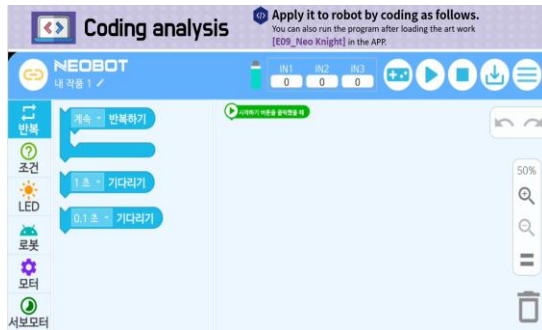
➤ Instructor Training and Block Instructor Certification



4-3. Class Operation Materials

Support with Class Operation Materials

Lecture PPT



Annual Plan

(창의 블록 교실) 연간 프로그램 지도계획서

프로그램명	창의 블록 교실		지도교사	(인)
지도기간	2022년 3월 ~ 2023년 2월 (매주 ○요일)			
지도목표	1. 자기주도 학습을 통해 잠재력을 블록으로 표현할 수 있다. 2. 움직이는 블록으로 과학적 탐구력과 논리력을 향상할 수 있다. 3. 교재와 실물을 통해 자유롭게 창작, 표현하여 창의력을 향상할 수 있다. 4. 창의적 사고력을 통해 사고의 유연성과 생각하는 힘을 기를 수 있다.			
지도 계획				
월	주	주 제	지도내용	비고
3	1	가재트말	지레의 원리를 이용하여 놀아나는 가재트 말을 만들어 본다.	
	2	탑스피너	기어배를 이용한 평이틀 만들어 평이틀 돌려 본다.	
	3	슈커	고무줄의 탄성을 이용하여 고무줄 자동차를 만들어 움직여 본다.	
	4	네오베니	콘트롤러와 모터로 로봇의 기본 구조를 만들어 움직여 본다.	
4	5	사커봇	축구 로봇을 만들어 친구들과 축구 경기를 해본다.	
	6	통덕	위험거리는 오리 로봇을 만들어 재미있는 움직임을 만들어 본다.	
	7	열도저	봉도저 로봇을 만들어 블록 지우는 작업을 해본다.	
	8	네오비글	베들레헴기로 만든 튼튼한 강아지 로봇을 만들어 춤을 추게 한다.	
5	9	미나트릭	동작 코딩으로 트릭을 원하는대로 움직여 본다.	
	10	무시맨	회전을 직선운동으로 바꾸는 무시맨으로 놀아내기 게임을 한다.	
	11	로봇마차	말을 만들어 다자를 끌어보고, 줄다리기 게임을 해본다.	
	12	스톱피쳐	지레의 원리를 이용한 투석기를 만들어 블록을 날려본다.	
6	13	파이어건	고무줄 충돌을 만들어 블록을 발사해 본다.	
	14	주름괴물	주름 괴물로 주름 중이를 만들어 재미있는 모양을 꾸며 본다.	
	15	루돌프 열매	블록을 실을 수 있는 열매 로봇을 만들어 리모컨으로 조정에 본다.	
	16	빅베니	탐사로봇에 헤드폰을 넣고 탐사로봇처럼 주변을 탐색해 본다.	
7	17	원당행려	끌어가다니는 헬리콥터를 만들어 장애통을 날아가 본다.	
	18	가이드봇	캐터펄러로 움직이는 가이드봇을 만들어 코딩으로 움직여 본다.	
	19	네오솔저	사람을 태우고 전투를 하는 아바타 로봇을 만들어 조정에 본다.	
	20	스태그비틀	집게발이 움직이는 사슬벌레 로봇을 만들어 움직여 본다.	

Session Plan

특기/적성 (창의블록교실)부 교수/학습 지도안

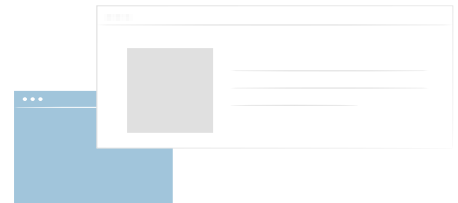
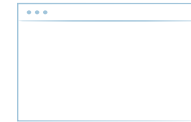
수업일	20	년	월	일	()요일	차 시	2 / 12차시
차시명	2. The UFO					강사명	
학습 목표	☐ 색깔에 따른 컬러센서 값을 알 수 있다. ☐ UFO를 조종하고 넘어진 UFO를 코딩으로 바로 세울 수 있다.						
단계	학습 요소	교수 - 학습 활동				시간 (분)	자료 및 유의점
도입	오늘의 주제	1. UFO 알아보기 - 이름과 실제 모습 사진 알아보기 2. 만화로 외계인과 UFO 관련 가지기				10	PPT 자료
전개	로봇 만들기	<The UFO 만들기> 1. 블록 재료 컨트롤러, 모터 2, LED, 컬러센서, 리모컨, 스마트폰(APP), 글 외 2. APP 프로그램 실행 - APP 커넥터로 스마트폰(태블릿)과 컨트롤러 연결 - 네오봇 APP 실행				30	교재 네오봇 교구
	작동하기	1. 로봇 작동 영상보기 2. 자신이 만든 로봇 동작시키기 - 코딩 APP : 'E02_The UFO' 불러오기 또는 코딩하기 3. 로봇의 구조와 과학적 원리 이해하기 4. 실행할 적용 사례 or 아이디어 발표하기				10	영상 로봇 PPT 자료
	Activity	1. 코드 분석하기 - 컬러센서에 빨간색이나 파란색이 감지되면 UFO가 날개를 오므렸다가 파지면서 넘어졌던 UFO가 세워진다. 2. UFO 게임 - 코끼리코 게임 : 리모컨으로 UFO 10바퀴 돌리기 - UFO 세우기 : 리모컨으로 넘어진 UFO 세우기 - 반원점 돌아오기 : 리모컨으로 반원점 먼저 돌아오기 게임 - 컬러센서로 UFO 세우기 : 빨간공과 파란공으로 UFO 세우기 * 완성 코드에 아이디어를 붙여 코드 추가해 보기				20	영상 로봇
정리	정리 차시예고	1. 부분 정리하기 - 만들고 난 블록 부동 및 주변 정리하기 - 완성 로봇 네오봇 가방에 넣기 2. 차시 예고 - 다음 주 만들 로봇 영상보기 - 다음 주까지 로봇 문제해 오기				10	네오봇 교구 PPT 자료



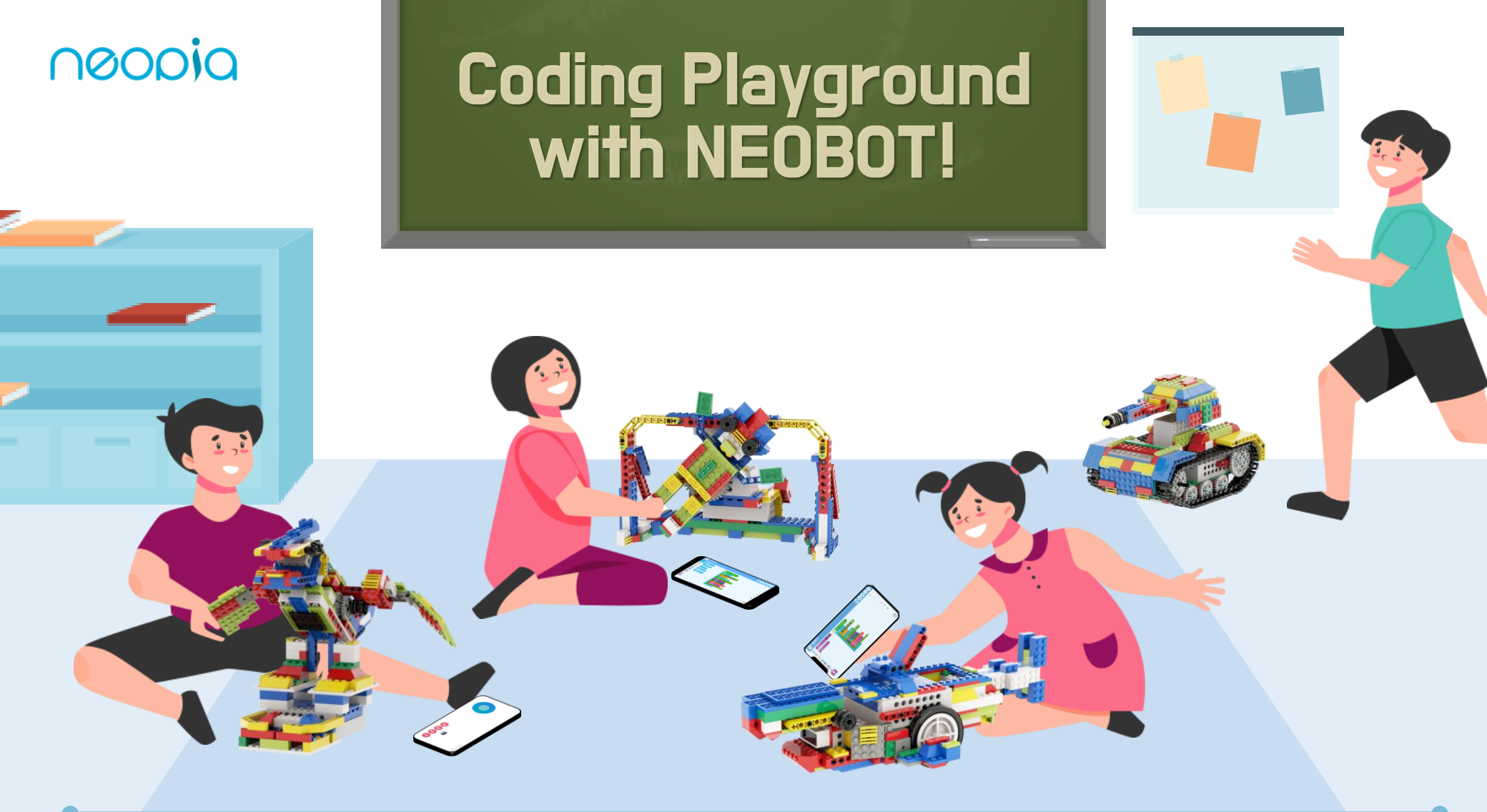
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