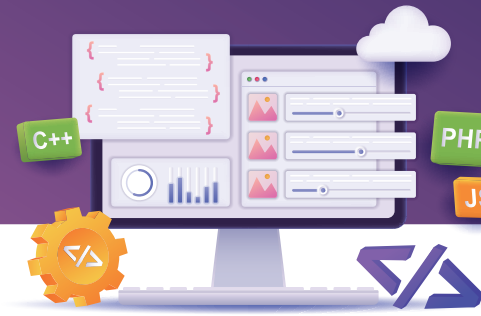


CO:DEEP

: Programming All by Yourself



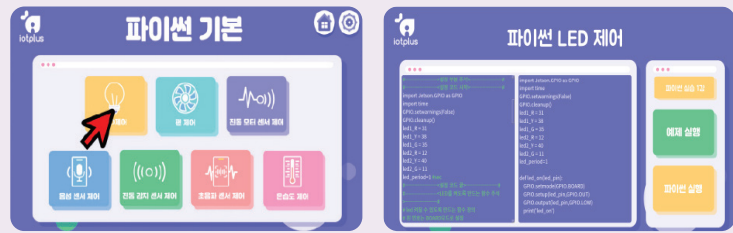
From **Basic** to **Advance** Levels

From **Block-Based Coding** to **Command-Based Programming!**



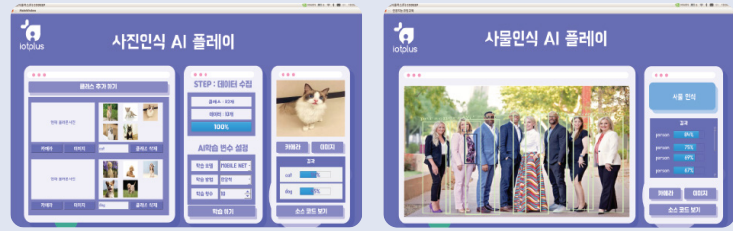
New to Programming?

Learn the basic knowledge (concepts, operational mechanisms, hands-on experience, etc) of programming through CO:DEEP, and go on to the next level.



Want to Learn Real-Life Skills?

Through detailed comments about the statements, learn about command-based programming and acquire real-life skills.



Want to Learn about AI?

Learn about Artificial Intelligence, from basic concepts to practical experience

Self-Learning Methods through CO:DEEP

STEP. 01

Video Lecture

Video lecture inside CO:DEEP enables learners to follow each steps.

STEP. 02

Run Exercises

Learn the basic concepts of programming through given exercises.

STEP. 04

Detailed Comments

Detailed comments on every statement enable easy learning of programming principles.

STEP. 03

Source Code

Visually observable source codes will lead to easy understandable programming principles.

STEP. 05

Practice Programming

Experience programming by writing statements directly

STEP. 06

Check Results

Check if your statements are in order by observing whether the sensors operate properly.

Product Information

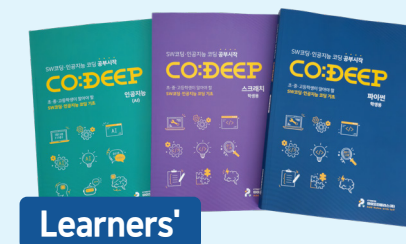
| | |
|------------------------|--|
| Model | CO:DEEP |
| Product Dimension | 387(W) x 283(D) x 55(H) (mm) |
| Sensor Types | LED, Fan, Vibration-Motor, Vibration-Detection, Temperature-and-Humidity, Ultrasonic Wave, Sound |
| Composition | Jetson Nano, Micro SD Card 64GB, 7 Sensors, Board PCB, etc |
| Monitor Specification | 15-inch LCD 1920 x 1080(FHD) |
| Power Input | 15V 4A |
| Connectable Interfaces | USB x3, HDMI x1, Stereo jack |
| Expansion Ports | 3pin * 7, 4pin * 3 |
| Lesson | Scratch (27) + AI (7) Python (27) + AI (7) |

| | |
|-------------------|-----------------------------------|
| Model | CO:DEEP Charger |
| Product Dimension | 612(W) x 617(D) x 1107(H) (mm) |
| Internal Capacity | 24 Max |
| Power Consumption | 220V |
| Features | Tempered glass, Air-cooled cooler |
| Image | |

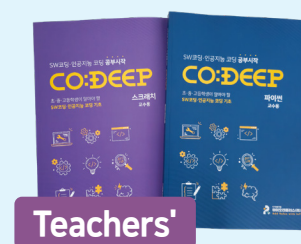
G2B / S2B

| Product Line | Product Name | G2B & S2B Identification Number | Price | Remarks |
|----------------------------|---------------------------------------|---------------------------------|------------|---------|
| Education SW | CO:DEEP | 24492362 (G2B) | 3,980,000₩ | G2B |
| | CO:DEEP | 24989339 (G2B) | 3,800,000₩ | G2B |
| Multimedia Learning Device | CO:DEEP Textbook (Integrated Version) | 202403048235914 (S2B) | 180,000₩ | S2B |
| | CO:DEEP | 202310047268574 (S2B) | 3,980,000₩ | S2B |
| CO:DEEP Charger | CO:DEEP Charger | 202409049416797 (S2B) | 3,300,000₩ | S2B |

Textbook



Learners'



Teachers'

Patents and Certifications



Headquarters : F-403 13, Gyoyuk-gil, Naju-si, Jeollanam-do, Republic of Korea
Corporate research institute/facility : F-402 and F-301 13, Gyoyuk-gil, Naju-si, Jeollanam-do, Republic of Korea
P. 010.4223.0127 T. 061-337-9080 F. 061-337-4270 E. thow289@naver.com
www.iotpluskorea.com

www.iotpluskorea.com

Programming Learning System

CO:DEEP

Programming & Deep Learning



No.1
Do Programming for Yourself!

CO:DEEP

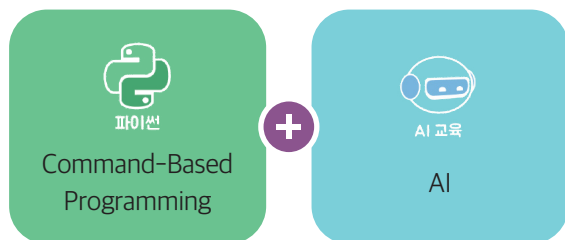
Programming & Deep Learning

CO:DEEP, an AI-SW programming education tool, is an all-in-one system which users can experience programming and write statements on their own.

Scratch

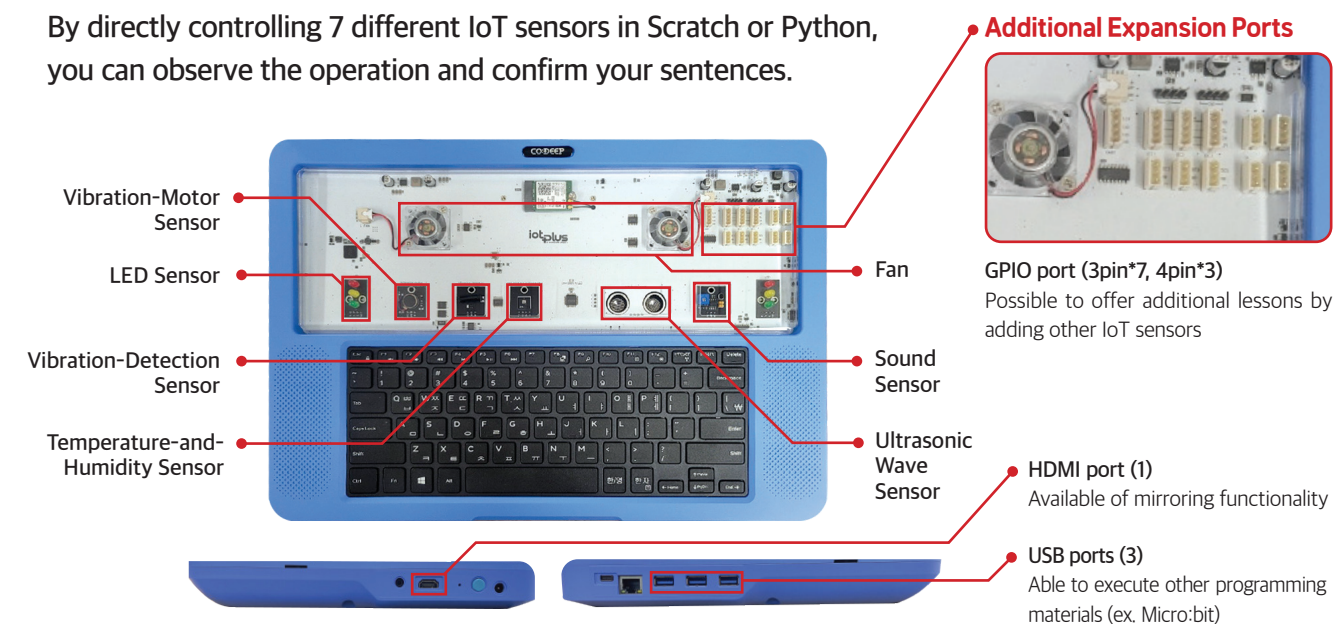


Python



Sensor Configuration

By directly controlling 7 different IoT sensors in Scratch or Python, you can observe the operation and confirm your sentences.



Features and Advantages

Possible to Teach and Learn Without Prior Research

- Possible to teach programming without prior research using the provided teachers' guide.
- Provide different level textbooks for learners and offer 68 video lectures to enable self-directed learning.

All-in-One Tool for Programming

- Possible to learn Scratch (Block-Based Coding), Python (Command-Based Programming), and AI in one device.

From Experiential Learning to Real-Life Skills

- Learners can write sentences on their own, and visually confirm whether the sentences they wrote controls the operation.

Textbook & CO:DEEP Charger



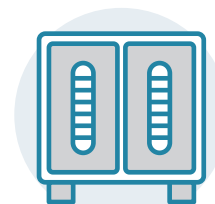
Textbook

- Provide basic&advanced curriculum per level.
- Education curriculums based on the level of the learner.
- Able to proceed with learning after setting the level course.



Teachers' Guide

- More detailed explanations in the guide.
- Able to teach without prior studies about programming.
- Capable of teaching by levels through provided guide.



CO:DEEP Charger

- Easy Storage & Charge
- Prevention of product damage
- Ease of management

Expected Effects

- ✓ Possible to establish concepts about programming.
- ✓ Possible to nurture ICT professionals.
- ✓ Possible to nurture developers in AI, Big Data programs, and more.
- ✓ Possible to nurture future generation's creativity.
- ✓ Possible to reduce technology gap between countries.

Expert-and-Educator-Endorsed Outstanding Product



Empirical Institution :

Chungnam Provincial Office of Education 충청남도교육청

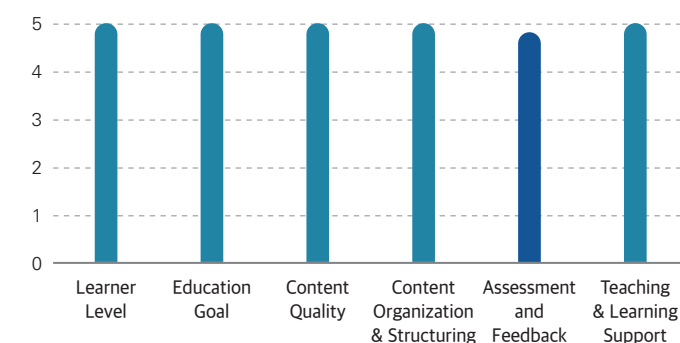
Empirical Evaluation Team :

Chungnam Provincial Office of Education: 10 elementary, middle, and high school teachers.

Empirical Evaluation Results :

Educational utility evaluation result: 4.99 out of 5

Educational Utility Evaluation Result



Curriculum

| Level | Contents | | |
|--------------|-----------|--|--|
| Background | LESSON 1 | LESSON 1 Learning the Background of Programming and the Terms of Scratch | Learning the Background of Programming and the Terms of Python |
| | LESSON 2 | Learning the Basic Syntax of Scratch | Learning the Basic Syntax of Python |
| | LESSON 3 | Exercise | Exercise |
| Basic | LESSON 4 | Controlling the LED Module | |
| | LESSON 5 | Controlling the Fan Module | |
| | LESSON 6 | Controlling the Vibration-Motor Sensor | |
| | LESSON 7 | Controlling the Sound Sensor | |
| | LESSON 8 | Controlling the Vibration-Detection Sensor | |
| | LESSON 9 | Controlling the Ultrasonic Wave Sensor | |
| | LESSON 10 | Controlling the Temperature-and-Humidity Sensor | |
| | LESSON 11 | Cross-Operating the LED Module | |
| Intermediate | LESSON 12 | Cross-Operating the Fan Module | |
| | LESSON 13 | Controlling the LED Module using the Sound Sensor | |
| | LESSON 14 | Controlling the Fan Module using the Sound Sensor | |
| | LESSON 15 | Controlling the LED Module using the Temperature-and-Humidity Sensor | |
| | LESSON 16 | Controlling the Fan Module using the Temperature-and-Humidity Sensor | |
| | LESSON 17 | Controlling the LED Module using the Ultrasonic Wave Sensor | |
| | LESSON 18 | Controlling the Fan Module using the Ultrasonic Wave Sensor | |
| | LESSON 19 | Controlling the Speaker using the Ultrasonic Wave Sensor | |
| | LESSON 20 | Controlling the Vibration-Motor Sensor using the Ultrasonic Wave Sensor | |
| | LESSON 21 | Controlling the Fan Module using the Vibration-Detection Sensor | |
| | LESSON 22 | Controlling the LED Module using the Vibration-Detection Sensor | |
| Advance | LESSON 23 | Constructing High-Temperature-Warning System using the Temperature-and-Humidity Sensor | |
| | LESSON 24 | Constructing High-Temperature-Ventilation System using the Temperature-and-Humidity Sensor | |
| | LESSON 25 | Constructing Earthquake-Detection System | |
| | LESSON 26 | Constructing Break-in-Detection System | |
| | LESSON 27 | Constructing Auto Fan using Ultrasonic Wave Sensor | |
| AI | LESSON 28 | Learning the Background of AI | |
| | LESSON 29 | AI Image Recognition | |
| | LESSON 30 | AI Face Recognition | |
| | LESSON 31 | AI Alphabet Recognition | |
| | LESSON 32 | AI Voice Recognition | |
| | LESSON 33 | AI Video Effect | |
| | LESSON 34 | AI Object Recognition | |