



LET'S TEACH
CHILDREN
HOW TO
THINK...





Hvorfor arbejde med kodning og Teknologi i børnehaven?

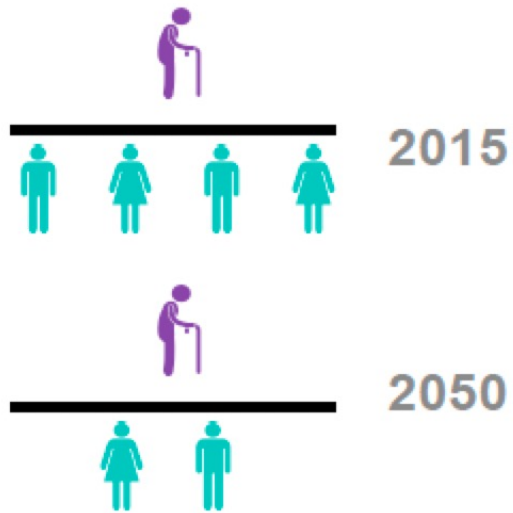
Størstedelen af de globale udfordringer vi står overfor skal løses gennem teknologi



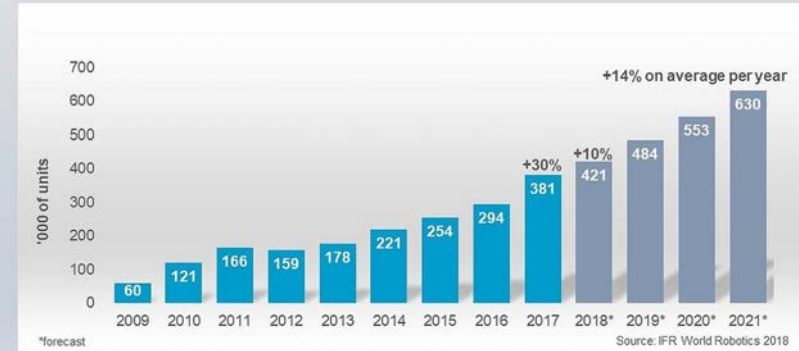
FNs VERDENSMÅL
for bæredygtig udvikling



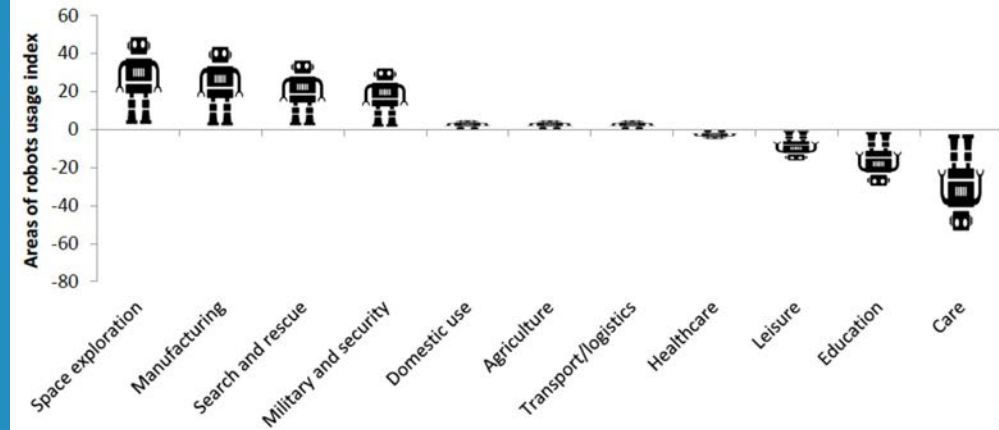
Populations are ageing
 Old-age dependency ratio 65+/(15-64)
 OECD average



**Estimated annual worldwide supply of industrial robots
 2009-2017 and 2018*-2021***



In which areas is the application of robots most/least acceptable?



En verden drevet af teknologi kræver

...indsigt og teknologiforståelse – Så vi ikke bliver styret af teknologien. Opbygge evnen til at vælge til og fra

**Vi bliver vurderet på vores „korrekthed“
Facebook/Instagram - Det perfekte billede af os.**

Og Skolen giver dig karakterer ift antal rigtige svar.

Vi tror på at kreativitet og innovation bl.a. udspringer af fejl og mod ikke af frygt for at fejle





START YOUNG

An early and playful introduction to coding helps children develop excitement about technology and prevent gender-based stereotypes.





FEEL EMPOWERED

Those who are able to understand, use and control technology have the decision-making power.



LEARN THE LANGUAGE OF CODE

Coding is essentially the language that translates human language to computer language. Digital literacy is an essential skill.





IT'S HOW WE THINK

It's not what we think that matters, it's how. Computational thinking is an important skill, because it helps us to solve problems.



BEYOND ROBOTS

Education must nurture, develop and practice skills that robots are not capable of, including moral intelligence, social belonging and values, and being creative.





FINE TO FAIL

Coding is one of the few areas where making mistakes is a natural part of the learning.



SIMPLE IS BEST

Coding should not be gamified. The basics of coding should be the primary focus of the learning.





COMPUTERS OFF!

Unplugged experiences strengthen the learning. Children benefit from hands-on activities and better peer-to-peer interaction.



FUTURE SKILLS

Problem solving, critical thinking and creativity are the top 3 skills needed for the future according to the World Economic Forum. Coding is ideal for developing those skills.



KUBO Coding Basis sæt



Fra abstrakt til konkret

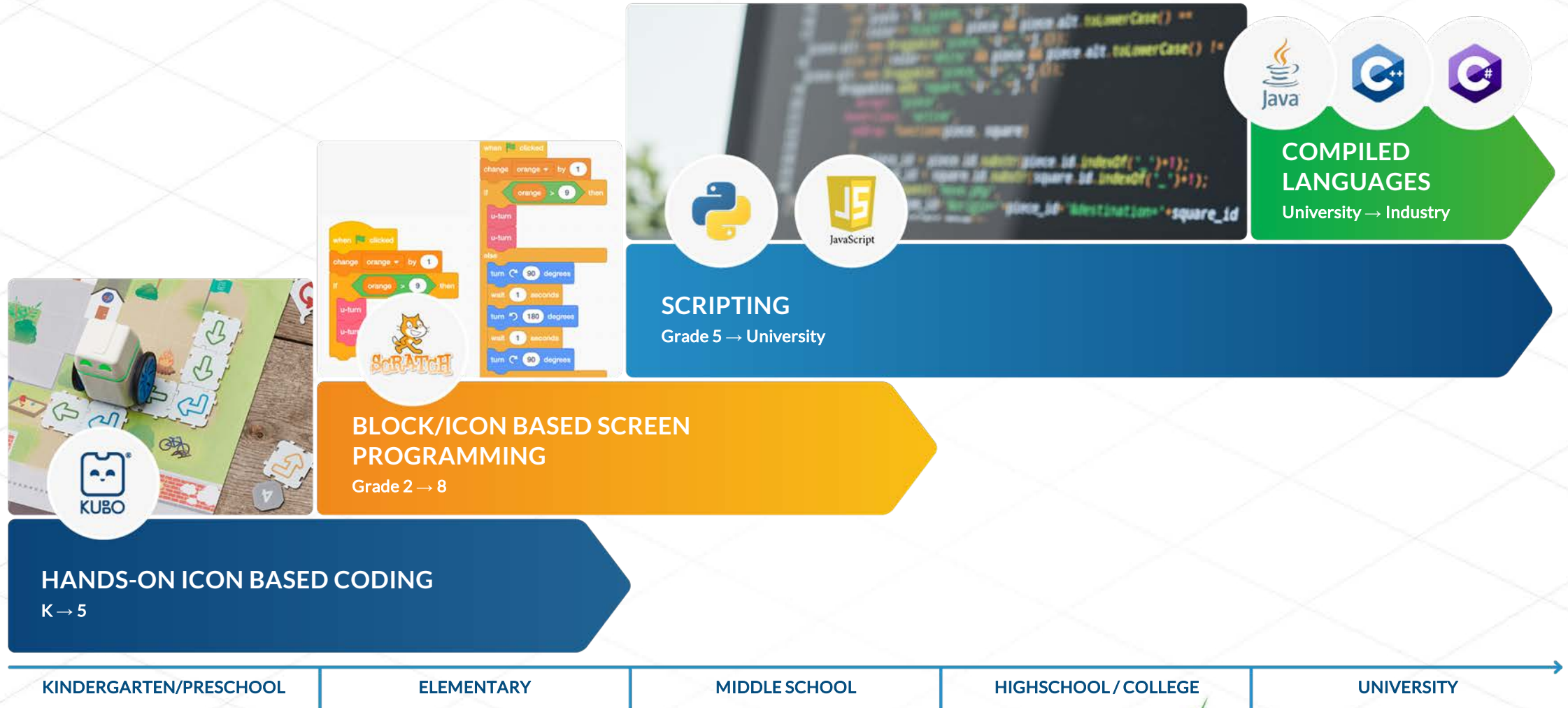
```
function blueFunction() {  
  motors.moveForward();  
  motors.turn(90);  
}
```

```
blueFunction();
```

=



Kodnings continuum



KUBO - Rute



- Tænd KUBO ved at sætte hoved på KUBO
- Sæt KUBO på en TagTile® og hvad der sker?
- Byg en rute KUBO kan følge. KUBO har lige været i supermarkedet og skal nu hjem med bussen. Lav en rute fra supermarkedet (E1) til busstoppet (C4).



KUBO - Funktioner

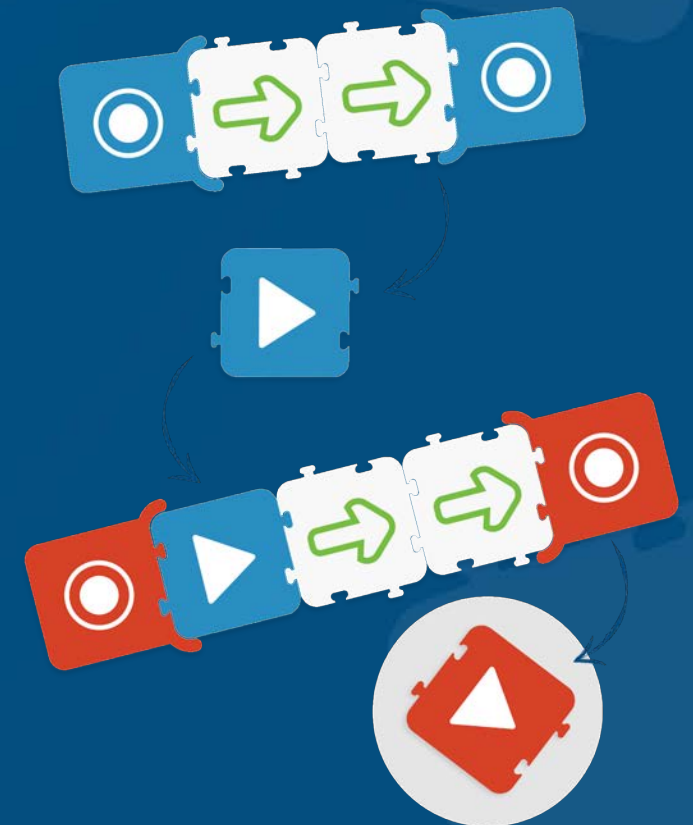


- KUBO kan også huske en kode I har lavet ved at optage det i en "funktion". Når KUBO "optager" skal ruten laves på en lige linie som på billedet oven over
- Kan I indsætte jeres rute fra tidligere og konvertere det til en funktion? Når KUBO skal afspille funktionen, skal den sættes på en "play" TagTile. Prøv det.
- Lav en funktion som flytter KUBO fra D1 til C6

KUBO - subrutine



- KUBO kan også koble flere optagelser/funktioner. Fx som I ser på billedet. Hvad tror I der sker?
- Prøv at lave en subrutine, hvor I først besøger Legepladsen og derefter Lejrbålet. Start I feltet A7
- Byg en blå og en rød funktion
- Indsæt den blå funktion I den røde funktion
- Optag begge funktioner og afspil den efterfølgende



KUBO - Loops



- Byg en funktion indeholdende et loop, der får KUBO til at køre to gange rundt om lejrbalet



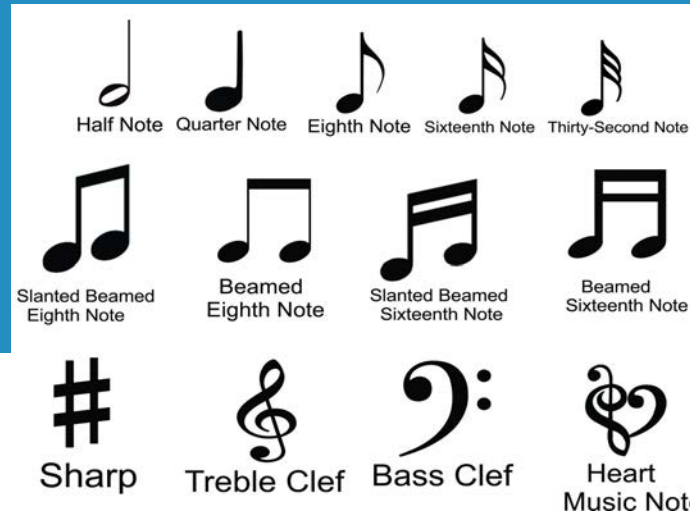


Hvor møder vi "kodning" I hverdagen

A screenshot of a Microsoft Excel spreadsheet titled "Import a Worksheet from One Workbook to Another in Excel-2 - Microsoft Excel". The spreadsheet shows a "Sales" table with columns for months from January to September and rows of numerical data representing sales figures.

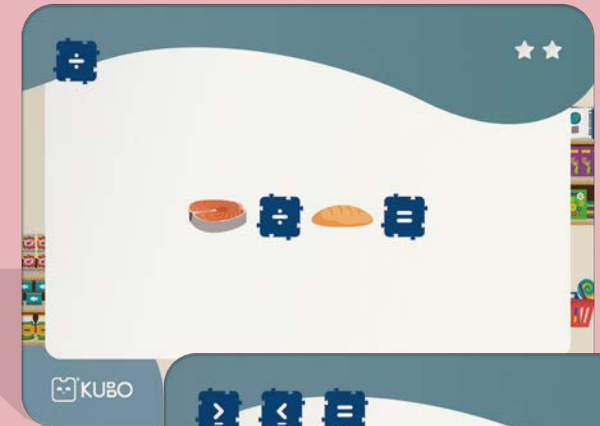
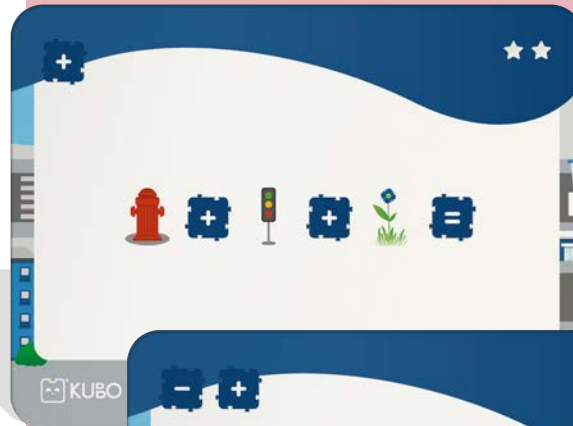
	January	February	March	April	May	June	July	August	September
1,486	\$14,094	\$12,427	\$10,529	\$11,000	\$11,446	\$13,994	\$12,794	\$ 12	
1,392	\$10,803	\$11,084	\$13,239	\$11,009	\$11,708	\$13,313	\$11,649	\$ 13	
1,555	\$13,893	\$12,961	\$11,229	\$10,572	\$12,922	\$11,987	\$13,454	\$ 11	
1,944	\$10,828	\$13,802	\$13,851	\$13,841	\$14,426	\$11,922	\$11,904	\$ 11	
1,520	\$14,050	\$13,968	\$13,137	\$11,578	\$11,681	\$12,663	\$10,559	\$ 13	
1,695	\$11,341	\$12,340	\$12,699	\$12,021	\$11,502	\$10,229	\$10,042	\$ 10	
1,905	\$14,286	\$14,063	\$10,605	\$10,725	\$11,555	\$13,020	\$14,503	\$ 13	
1,372	\$12,236	\$13,583	\$14,072	\$13,326	\$14,360	\$13,964	\$10,075	\$ 14	
1,127	\$12,582	\$14,348	\$12,662	\$10,184	\$11,710	\$11,468	\$10,373	\$ 12	
1,540	\$12,111	\$12,042	\$10,123	\$11,880	\$12,276	\$10,196	\$13,229	\$ 14	
1,878	\$10,254	\$13,872	\$10,010	\$13,436	\$11,112	\$10,510	\$11,565	\$ 12	
1,226	\$12,771	\$10,841	\$11,974	\$12,298	\$11,359	\$11,227	\$12,490	\$ 11	

Learn Coding is the same proces as:





Ex. Opgave kort

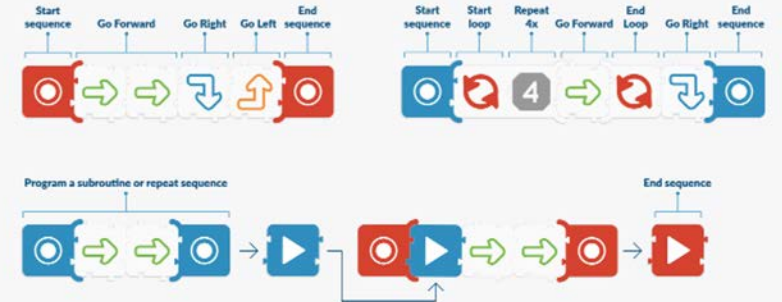


The K-5 Coding Continuum



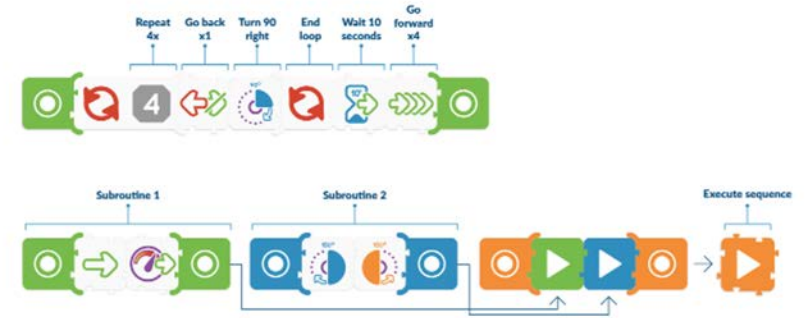
1

KUBO Coding introduces concepts of sequences, loops and subroutines



2

KUBO Coding+ adds dimensions of time, distance, speed and direction



3

KUBO Coding++ introduces events, variables and conditions





Kubo.education

preben@kubo-robot.com

The landing page features a white navigation bar with the KUBO logo, links for "Why KUBO", "Solutions", "Explore", "About", and "Local Partners", and buttons for "Login" and "Get started with KUBO". The main content area has a background image of the KUBO robot. The headline reads "THE CREATIVE CODING SOLUTION FOR ELEMENTARY". Below this, two paragraphs describe KUBO as an educational coding solution for kids aged 4 to 10+, providing both hands-on and digital learning experiences. At the bottom, there are two buttons: "CREATE ACCOUNT" and "SEE KUBO IN ACTION".

The dashboard has a dark blue header with the KUBO logo and navigation links for "Dashboard", "Curriculum", "Guides", and "Schools". A "KUBO Play" button and a user profile icon are also present. The main content area is titled "Dashboard" and includes a "Welcome back, Preben" message. Below this is a "Learning material" section with the text "The KUBO Portal gathers your learning material, curriculums and guides in one place." There are four cards representing different resources: "12 Lesson plans" (available in 12+ languages), "34 Cross-curricular activities", "5 Quick start guides", and "3 White papers". Each card has a "View" button.



LET'S MAKE A REAL DIFFERENCE