



Webinar: New offers - NAO Blockly & Social Emotional NAO bundle presentation

AGENDA

1. Introduction : New offers - webinar series
2. Digital skills and connected economy
3. NAO Blockly – Introduction
4. NAO Blockly – Solution Presentation
5. Social Emotional NAO – Introduction
6. Social Emotional NAO – Solution presentation
7. Q&A



Introduction

New NAO **Back To School** Bundles

Welcome to the first webinar dedicated to new **NAO Back to School** offers. These series are dedicated to introduce you to the new bundles offered by United Robotics Group.



Webinar Schedule

Today: NAO Blockly

Today: Social Emotional NAO

Next Webinars:

- NAO Language Assistant **14th September 11h** (Paris time)
- NAO Co-Therapist **21st September 11h** (Paris time)

Thriving in the connected economy requires digital skills, numeracy, critical thinking, problem-solving, and collaboration abilities. NAO promotes the acquisition of those skills



Member States making digital progress, but
low adoption of AI and big data even among EU leaders

In 2021, 87% of people aged 16-74 used the internet regularly, but
only 54% had basic digital skills

Only
19% of ICT specialists and one-third of STEM graduates are women, highlighting a significant gender imbalance.

ICT sector leads with 25% AI adoption, followed by publishing at 18%, while other sectors are less with 5-7%.

In 2020,
55% of EU businesses faced challenges finding ICT specialists, as the demand for these professionals continues to outpace supply.

EU Code Week

In the past five years
15.5 million people joined EU Code Week to learn programming and related skills.

In 2021, some 4 million people participated in the initiative, with an **average age of participants of 11 years** and nearly half the participants being girls (49%).

EU Code Week

NAO Blockly

NAO Blockly – a solution destined for **primary and secondary school level education** or **extra-curricular skill development**. It allows to learn and develop **programming skills** and is a perfect tool for the initiation to **STEAM** topics and to enhance **learning by doing**.

Benefits for the classroom



Reinforce and enliven the **learning experience** and introduce learning activities from a **new perspective**



Introduce **scratch-like coding** on a real social humanoid robot allowing to see the **immediate illustration of the results** of student work



Allows teachers and educators to easily create **new activities** with NAO robot: quizzes, oral comprehension exercises, story-telling..



Skill development: logic, mathematics, programming, core computer science concepts, problem solving skills, creativity...



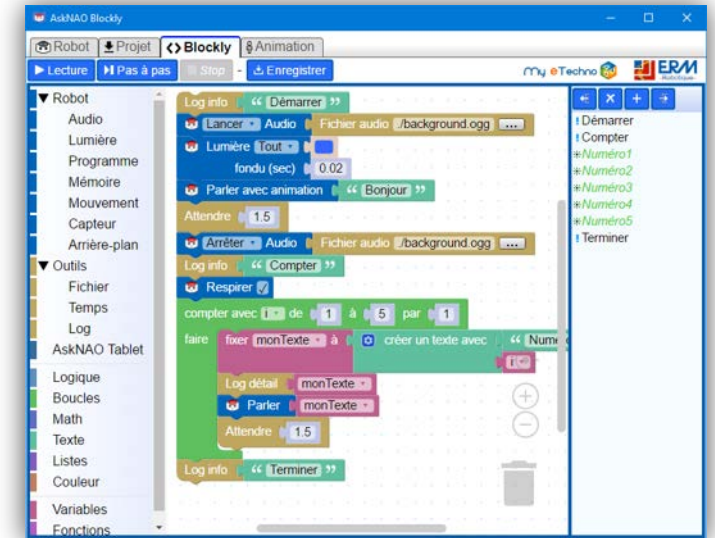
Audience: primary schools, secondary schools, specialized education institutions, day centers, institutions for extra-curricular activities...

NAO Blockly Bundle

NAO as a companion for STEM education, initiation to programming and algorithmic thinking

NAO Blockly

- Humanoid social robot NAO 6 :
 - 2 years warranty
 - Pack of all available languages
- Router 5Ghz
- Perpetual licence for ASK NAO Blockly application - scratch-like coding platform



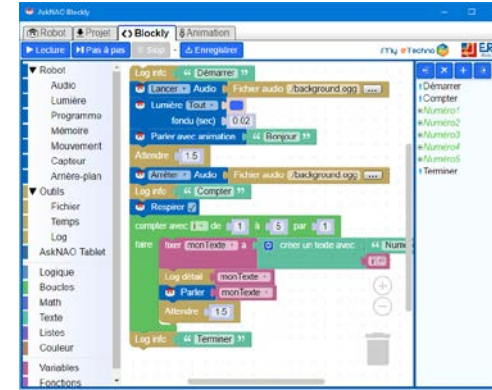
Reach out to get you demo license!

NAO Blockly : learn programming

Blockly for NAO is a software suite with:

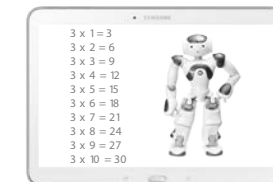
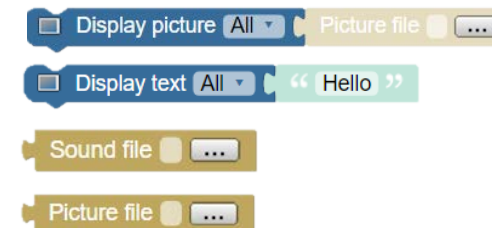
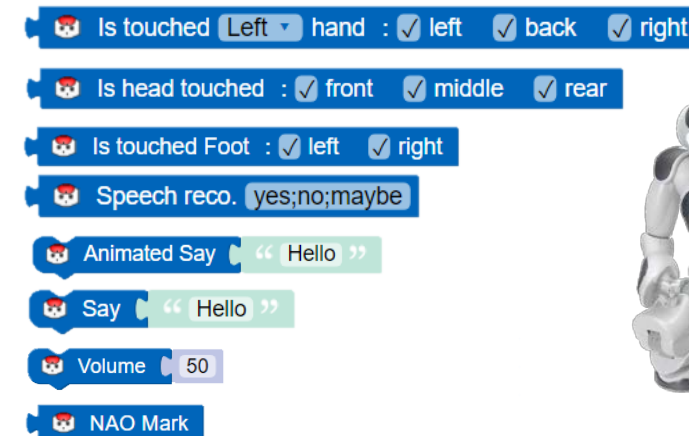
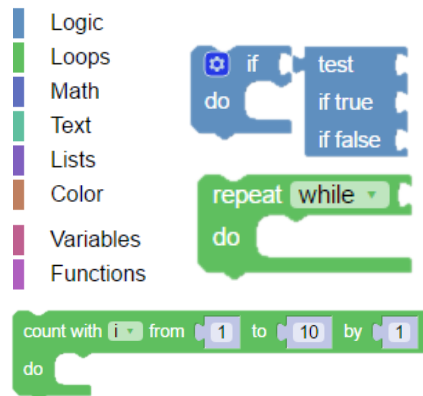
- ❑ A free online version (www.erm-robotique.com/blockly)
- ❑ A full offline version (school license) with extended functionalities : tablet interaction, sounds and images integration, new movements recording, QR-code use

Basic functions of the robot



Walk - straight ahead (m) 0.3
step aside (m) 0
turn (deg) 0

Basic functions of Blockly

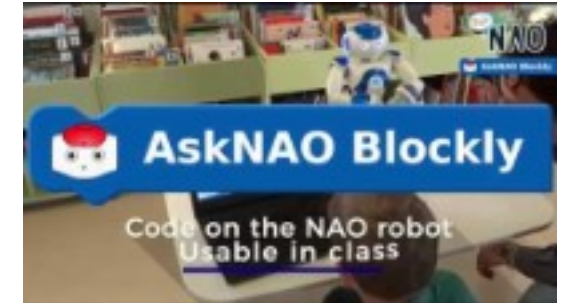


Functions with media files and communication with a tablet

Blockly for NAO : easily create new activities

Blockly for NAO, easily create

Thanks to Blockly, all teachers can create their own **educative activities** (capsules) such as



Oral comprehension

→ Story telling

Story with movements, images on the tablet.

It is also possible to complete the story with questions and answers.

Oral comprehension

→ Phonem recognition

The NAO robot asks: «In which word do you hear the sound [u]?». NAO proposes several words and/or displays images associated to words on the tablet. The child answers by repeating the word, proposing a card or selecting the right answer on the tablet...

Human body and Gymnastics

The NAO robot performs gymnastic movements or dances. Simultaneously, he gives explanations on the benefits for the human body, anatomy.

Blockly for NAO : easily create new activities

Examples of activities provided to be adapted and completed

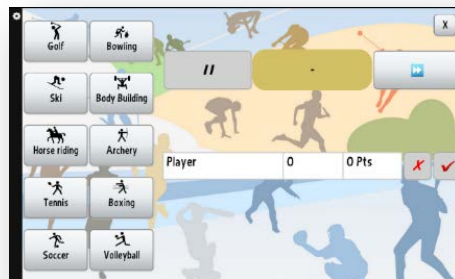
- ❖ *Tale of a mischievous cat*: NAO tells the beginning of a story where a cat breaks dishes at night, which wakes its owners.
- ❖ *Review a Natural Sciences lesson*: The robot explains that a tree is a living being. Then he asks questions about their eating habits.
- ❖ *Count to three and do the "wave"*: Making the robot count is a very simple task. The little animation at the end is to make the exercise more fun.
- ❖ *Mental maths*: NAO itself creates addition, subtraction, multiplication and division. He asks the question, waits a bit and gives the correct answer.
- ❖ *Find the correct order*: NAO would like to brush its teeth but forgot the order in which to proceed. The child has all the answer cards, must find the correct order, and show the robot the cards. It is a funny way to teach everyday tasks.



Be creative and share your education capsules with the community



NAO, education assistant: references, support & community



Softwares Suite

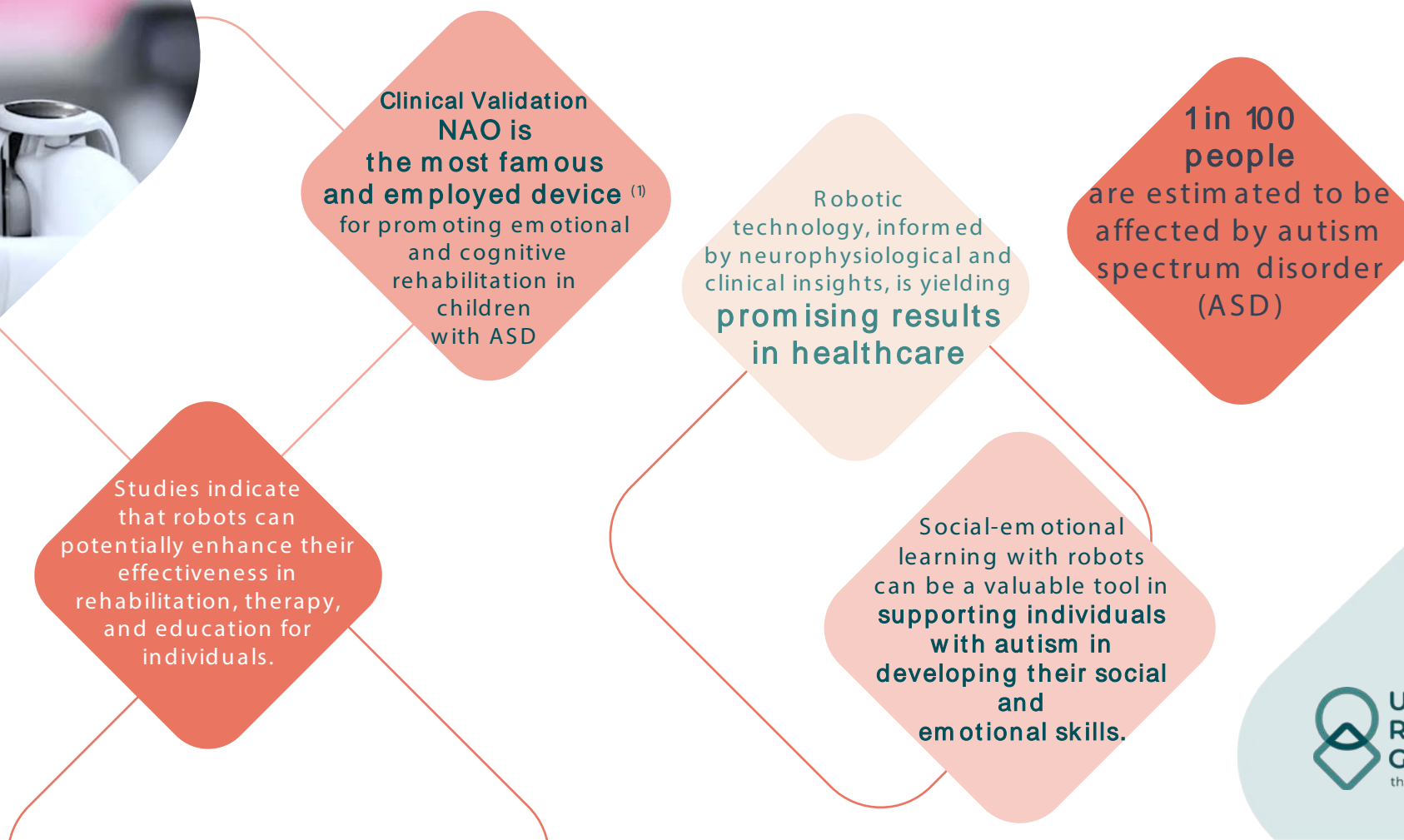
- **my friend NAO** (Educational Games, Stories, Physical Activities, Rewards) for multi-tablets use (1Teacher and up to 4 students)
- **my friend NAO + Blockly for NAO** In addition, Blockly allows Learning Programming and Creating Educational Activities Quickly

Documentation & Support

- **Sales brochure** in French and English
- **User guides** in French and English
- **Source documents available for local translations**
- **Translation tables available for localisation**
- **Remote assistance by ERM** in French and English (Only for distributors)
- **Video tutorials** available in Dec. 2023
- **Community website** available in 2024



Why NAO : social humanoid robots validated in clinical trials



Source :

(1) National Library of Medicine

Social Emotional NAO

Social Emotional NAO – learning companion for children requiring **specialized education** program, on the **autism spectrum** or suffering from other **neurodevelopment issues**. It is a powerful tool for educators and therapists working with specialized education programmes

Benefits for learning with Social Emotional NAO:



Reduce the anxiety and frustration, reduce the overstimulation risk during the learning process with special needs audience



Capture children's attention and increase their confidence while working on different pedagogical subjects



Children can develop interpersonal skills and everyday activities knowledge, work on emotions recognition and socialization



Pedagogical value: based on "acquisition/restitution method", limiting parasite words, develop motor skills and multisensory learning, use instructions with action verbs, oral comprehension...



Audience: primary schools, specialized education institutions, day centers, special needs institutions, rehabilitation centers...

Social Emotional NAO Bundle

NAO as a learning companion for children within specialized education

Social Emotional NAO

- Humanoid social robot NAO 6 :
 - 2 years warranty
 - Pack of all available languages
- Router 5Ghz
- Android Tablet
- Perpetual Licence for ASK NAO Tablet Application

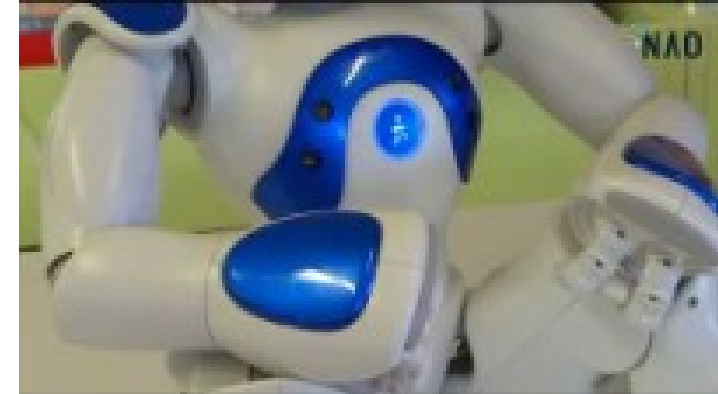
Optional: + Blockly which allows to create additional activities



Reach out to get you demo license!

NAO, education assistant

- Use NAO to introduce students to **programming and skills development** through the handling of innovative devices.
- Use NAO as an **education assistant to transmit knowledge and skills to one or more students with autonomous mini-educational sessions.** NAO is, therefore, the support of a differentiated playful and captivating teaching within the class.
- NAO is also an outstanding tool **for specialized education, including autism treatment, as evidenced by a growing number of studies.** ERM Robotique offers content designed for children with specific needs.



Special-needs education & Healthcare : my friend NAO for Autism

Support & Educate children with autism

Learning companion for children with autism

- my friend NAO for autism is a complete **solution to assist educators in supporting children with autism troubles.**
- Educational and playful applications written specifically for the needs of children

What is the my friend NAO environment purpose for autism?

- Customize sessions according to each child profile.
- Inspired by proven approaches and behavioral models and developed with educators and researchers
- Interpersonal communication
- Everyday activities knowledge
- Emotions recognition ...



Special-needs education & Healthcare : my friend NAO for Autism

Activities developed for autism

The activities have many goals aiming to help children :

- Use the « **acquisition / restitution** » method
- **Limit parasitic words**
- Use instructions with **action verbs**
- **Develop motor skills**

ERM participates to the **French experimental research program called Naotism IA.**

Develop targeted skills for children **from 3 to 5 years-old:**

- Imitation
- Sound orientation
- Sight
- Understanding



Some activities with NAO for autistic children

- «Point out objects on the ground»
- «Questioning / object selection in a closed list (tablet, orally)»
- «Body schema, point out body parts»
- «Visual stimulation with card games»
- «Social skills and greetings»

The playful solution for education: my friend NAO

my friend NAO, learning while having fun

my friend NAO solution has specially been designed for children and teachers.

my friend NAO is a software suite that includes:

- ❑ *The tablet application* to control the robot very easily and launch “*apptivities*” on the robot.
- ❑ *Several pedagogical “apptivities”* developed in connection with teachers.



The playful solution for education: my friend NAO

Awards

- ❖ Electroswing dance: NAO dances on Little Lilly Swing by Tri Tachyon.
- ❖ Zombie Disco dance
- ❖ Mister Funk dance
- ❖ Tai Chi Dance: NAO makes Tai Chi movements



Physical activities

- ❖ Yoga adventure: NAO practices Yoga, and the child imitates its positions (Tablet version)
- ❖ Follow me: The child takes NAO by the hand, and the robot follows him.



Available in :



The playful solution for education: my friend NAO

Educational games



Color game: The robot asks the child to recognize objects, by name and/or color, and carry out actions with the objects (customizable – For very young children).



Color hunt: NAO has lost its colors. The student must help him to find them by showing him the colors he named.



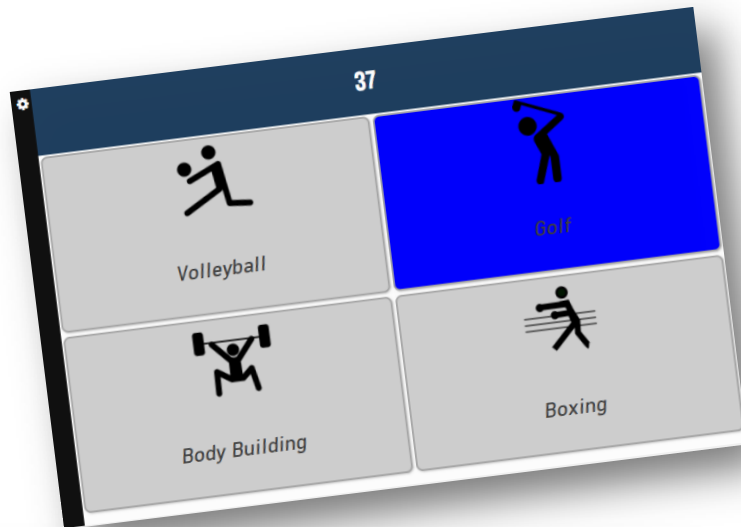
Images game (animals, transportation...): NAO asks the children to show him animals, means of transport and other objects (customizable). « Acquisition / restitution » method



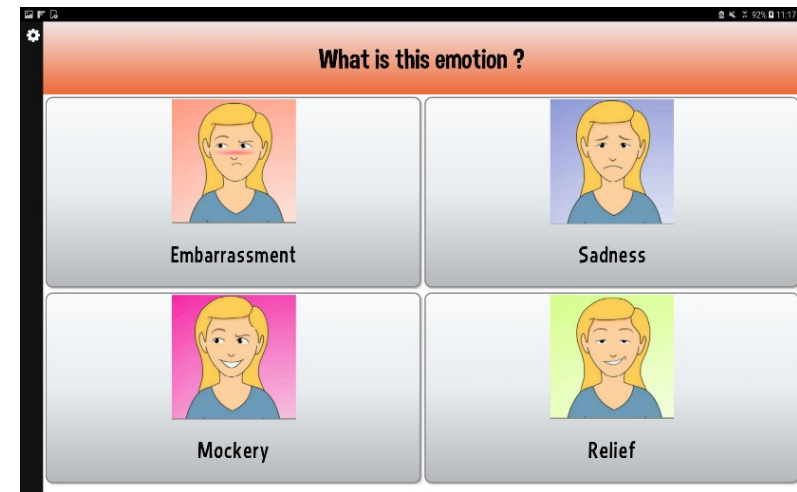
The playful solution for education: my friend NAO



Guess a sport: The robot mimes a sport, and the children have to guess which one it is.



Guess my emotions: The robot mimes the emotions that the student must guess.



The playful solution for education: my friend NAO

Stories To stimulate children's attention and work on oral comprehension:



The three musketeers

Time : 1 minute 15 seconds



Christmas eve

Time : 4 minutes 30 seconds



Pirates story

Time : 1 minute 40 seconds



Other stories

- ❖ The Puss in boots
- ❖ The princess and the pea
- ❖ The king and the nightingale
- ❖ Ansel & Gretel
- ❖ The wolf and the snail
- ❖ Black beard
- ❖ The ugly Duckling



The playful solution for education: my friend NAO

Others...



Motor skills (with Dijon French local education authority) : NAO makes simple or combined movements. The child has to imitate him at best. The aim: follow sequenced instructions and move with a landmark.



The playful solution for education: my friend

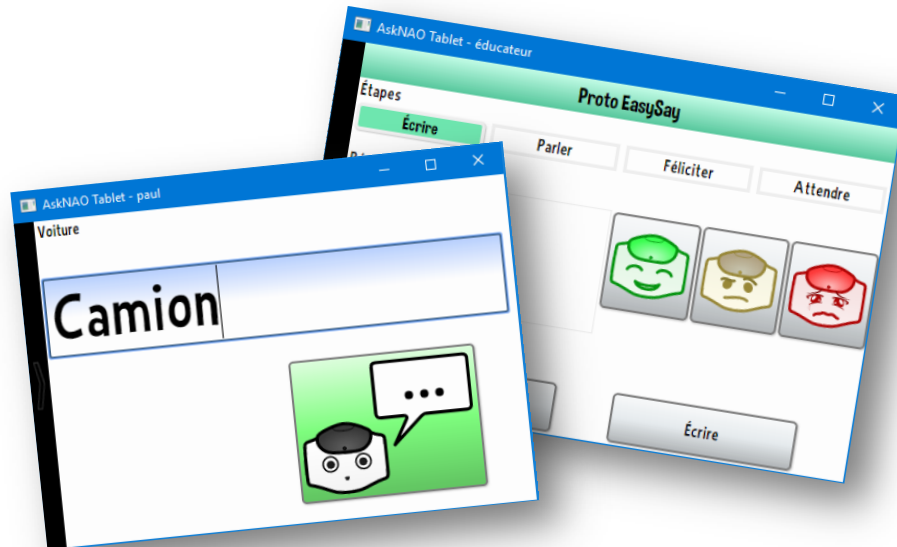
NAO
Coming
soon ...

News activities are under development. Please **propose new ones** or **join the development community** thanks to the SDK



Phoneme – Write (with Thierry LE BUHE, Saint Maurice Hospital)

: The child makes the NAO robot speak. The educator asks the child to write a word that will be read aloud by NAO. The word records are available by the educator.



Phoneme – Listen (with Thierry LE BUHE, Saint Maurice Hospital)

: The aim is to distinguish phonemes. The educator prepares letters, syllables, words and action verb that will be next asked by NAO to the children. It is possible to record the words in cards. Then, NAO will say the card's content aloud as soon as a child will show him the card.



The playful solution for education: my friend

NAO
Coming
soon ...

News activities are under development. Please **propose new ones** or **join the development community** thanks to the SDK

Follow a route (with the French DSDEN84) : NAO is programmed by the children. Through cards, they give the robot orders that it will memorized and replay. The roles can be reversed. Those physical activities allows children to move their bodies.





THANK YOU