

Make IT Happen

2018-2019



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Background



Lifelong skills development, Gröna Kronoberg
(regional development strategy)



Teachers' needs for further education, dialogue
with school leaders and principals



Programming - new area for most teachers



Long collaboration with Linnaeus University

Main objective (long term)

According to the Swedish National Agency for Education, 52% of the country's technical teachers are qualified in Technology.

Provide all students with increased knowledge of computer science and on the importance of programming for community development, entrepreneurship and technology development.

Increase the number of applicant students to IT-intensive education at high school, such as engineering, electricity and energy programs. Change youth attitudes to programming, increase the interest of girls.

Objectives



Increase the number of teachers who use the possibilities of programming in different subjects and in classroom education.



Enhance understanding and use of programming skills in the classroom.

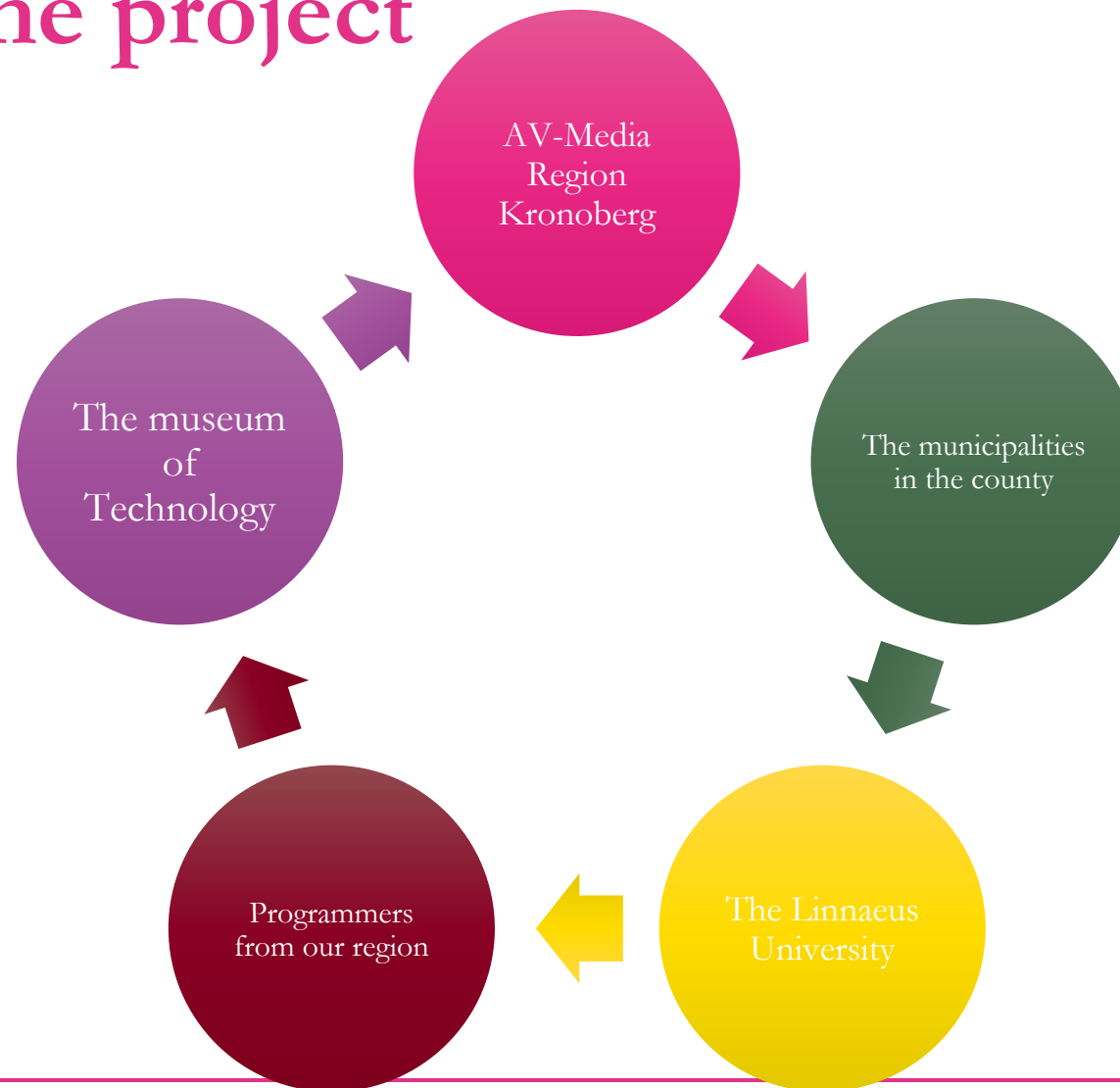


Teachers implement gender perspective in teaching with regard to ICT and programming skills.



Increase student participation in technology in general and programming skills in particular.

Actors in the project



Activities

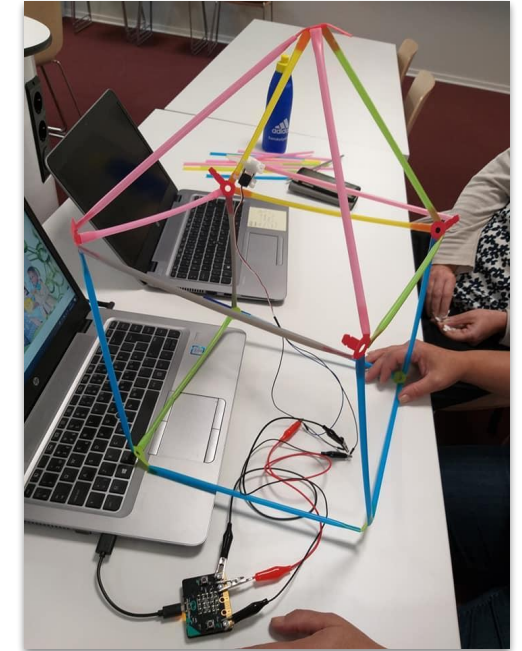
Lectures and workshops

Scientists visits

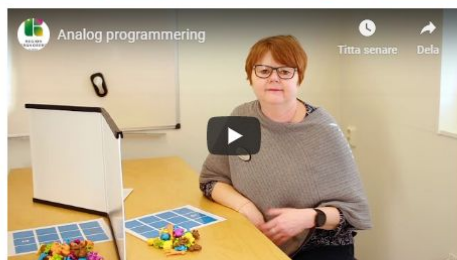
Seminars

Courses in Python

Workshops and lectures on
Digital Competence Day week 44



Unplugged



Om sidan

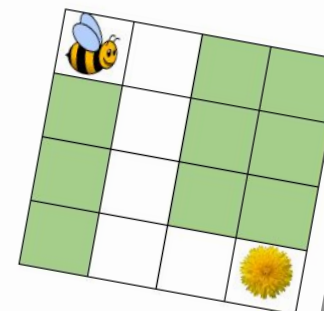
Analog programmering är ett bra sätt att lära sig programmeringens olika ord och begrepp. Berit Svensson har samlat material som enkelt visar vad programmering är och hur det kan fungera. Sidan innehåller lektionsförslag som kan användas i klassrummet.

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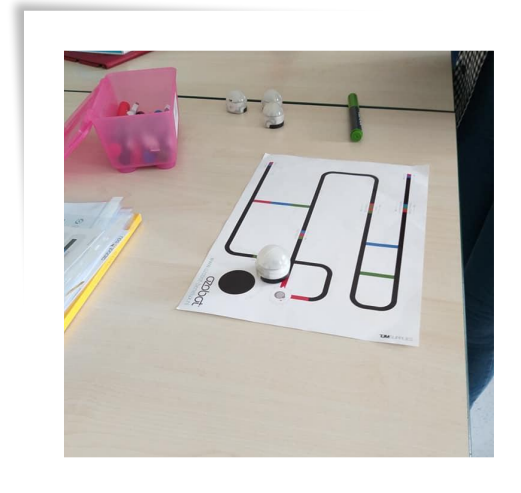
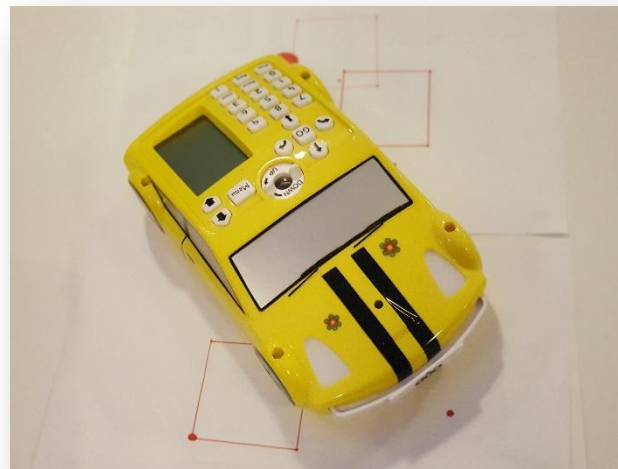
A. Biet flyger till blomman

1. Ett steg framåt.
2. Sväng höger.
3. Två steg framåt.
4. Sväng vänster.
5. Två steg framåt.

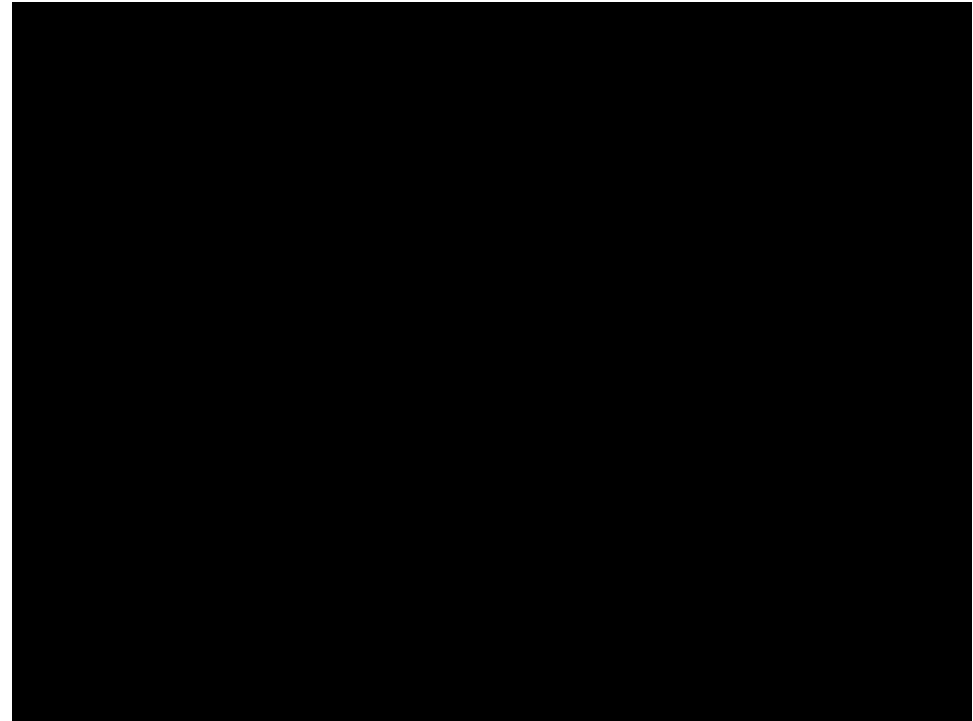
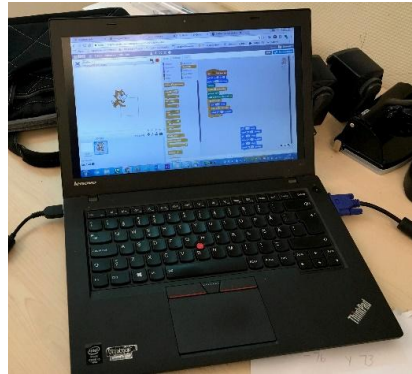
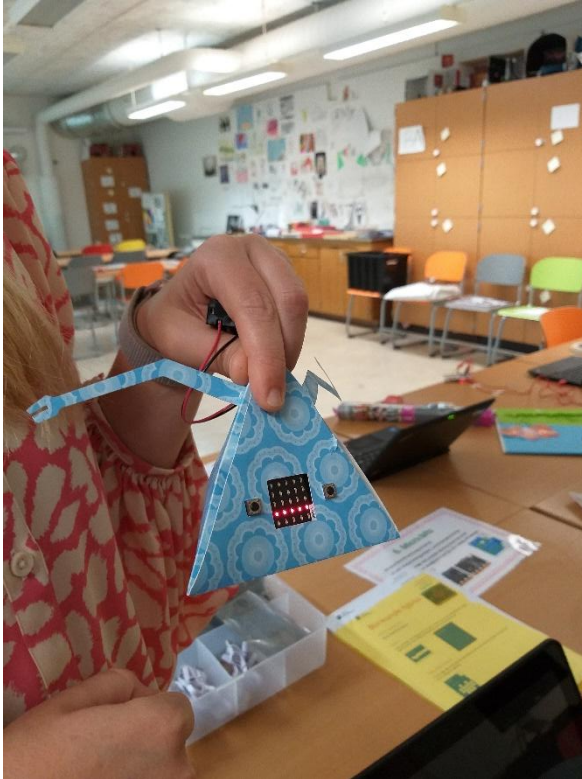


Nr _____ är fel det ska vara _____

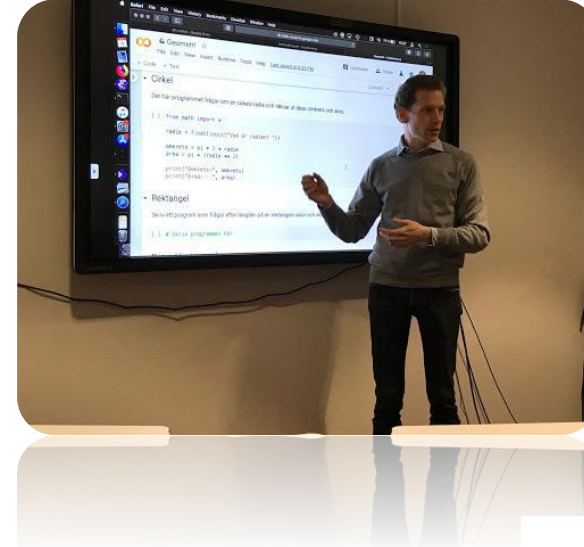
Robots



Digital resources – block programming



Digital resources – text programming



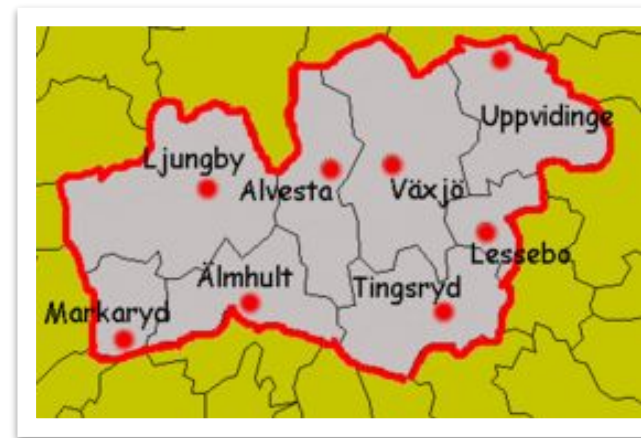
Our region

8 municipalities

400 teachers

51 schools

school classes



Municipalities - weeks in the project

Växjö	Ljungby	Alvesta	Älmhult	Markaryd	Tingsryd	Lessebo	Uppvidinge
7	4	3	3	2	2	2	2

Content

Reference group in each municipality.

4 gatherings in each municipality.

From analog to digital coding, with blocks and text.

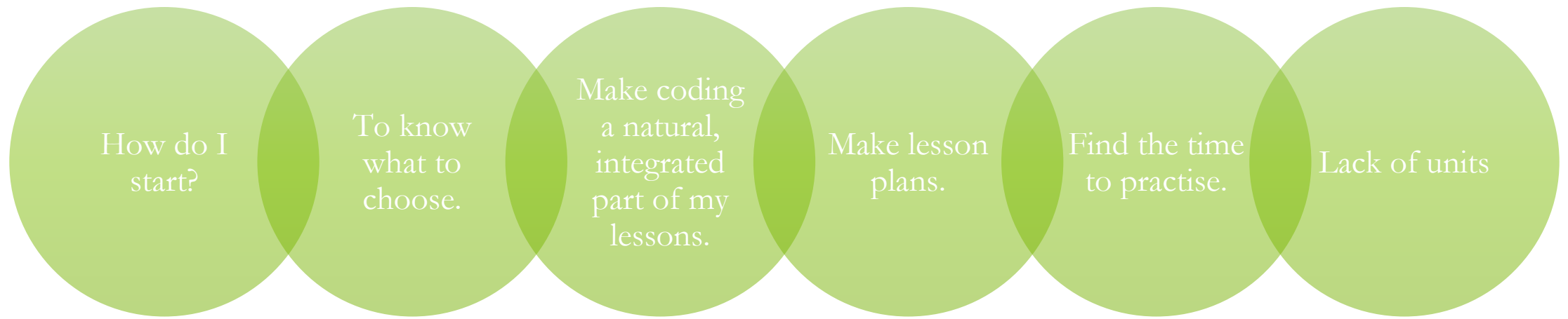
Alternation between theory and practice.

Lesson plans, tutorials and materials online (Google/Microsoft).

Collegiate learning with presentations and discussions.

Regional workshops with Linneus University and The Museum of Technology.

Challenges



Summary

School subject-matter integration

Help teachers to design their own lessons

Help teachers to become part of a community of practice around programming

Film : Redraw the balance

https://www.youtube.com/watch?v=qv8VZVP5csA&feature=emb_logo