



Communities
for Sciences

“Communities for Sciences – Towards promoting an Inclusive Approach in Science Education”

An *Horizon2020* Project
NEW BULGARIAN UNIVERSITY –
FEBRUARY 2023

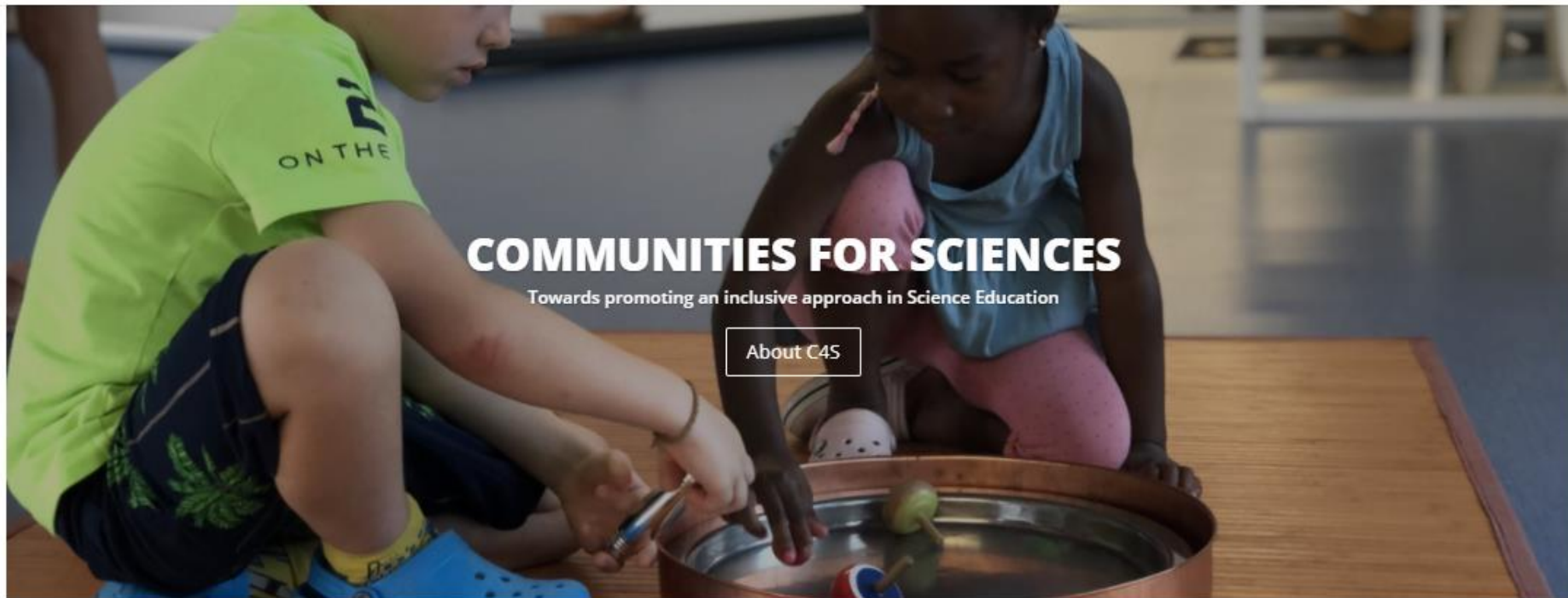
UMANRESA
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COMMUNITIES FOR SCIENCES

Towards promoting an inclusive approach in Science Education

[About C4S](#)

11

partners

6



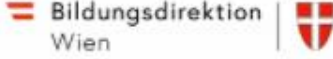








hubs

8

countries

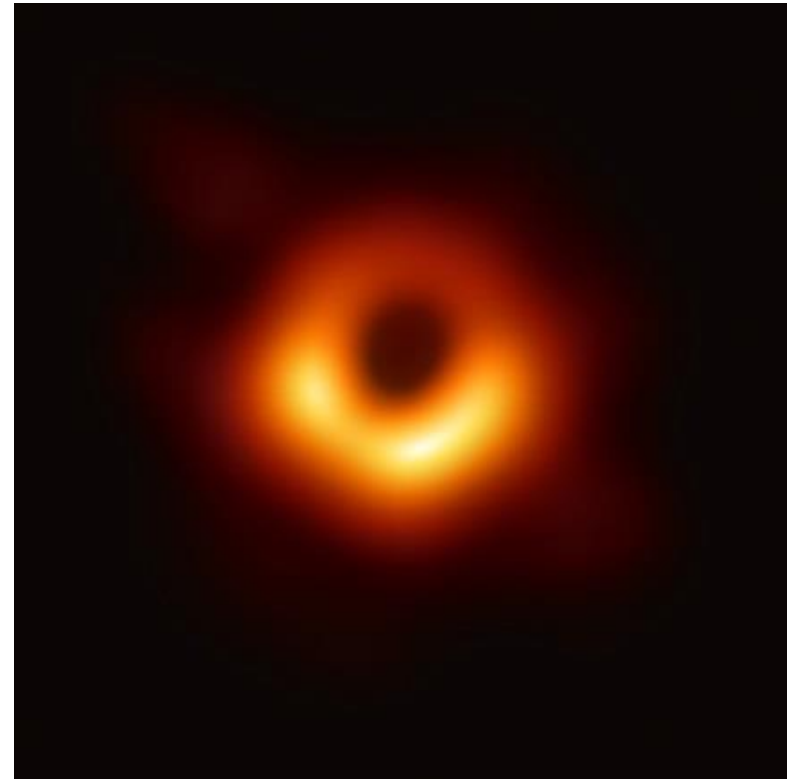
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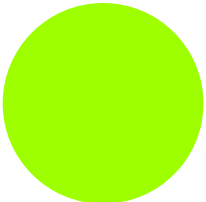
years

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|  <p>UMANRESA UNIVERSITAT DE VIC UNIVERSITAT CENTRAL DE CATALUNYA</p> |  <p>UVIC UNIVERSITAT DE VIC UNIVERSITAT CENTRAL DE CATALUNYA</p> |  <p>Bildungsdirektion Wien</p> |
| <p>FUB (Manresa campus UVic-UCC)</p> | <p>UVic (Vic campus UVic-UCC)</p> | <p>Bildungsdirektion fuer Wien</p> |
|  <p>RCE Vienna Regional Centre of Expertise on Education for Sustainable Development</p> |  <p>Galileo progetti</p> |  <p>CITTÀ DI SESTO SAN GIOVANNI MEDAGLIA D'ORO AL VALORE MILITARE</p> |
| <p>Wirtschaftsuniversität Wien</p> | <p>Galileo Progetti</p> | <p>Comune di Sesto San Giovanni</p> |
|  <p>NEW BULGARIAN UNIVERSITY</p> |  <p>erasmus HOGESCHOOL BRUSSEL</p> |  <p>IB Hochschule</p> |
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|  <p>LUND UNIVERSITY</p> |  <p>UNIVERSITÀ DEGLI STUDI DI MILANO BICOCCA</p> | |
| <p>Lunds Universitet</p> | <p>Università degli Studi di Milano-Bicocca</p> | |



SCIENCE IS IMPORTANT





Sciences



education

inclusion



• What is science? What characterises science?

- ScienceS

- Communitie/s of researchers vs isolated geniuses

- **NOT ONLY EXPERIMENTING!**

- New habits & tools, learning how to...

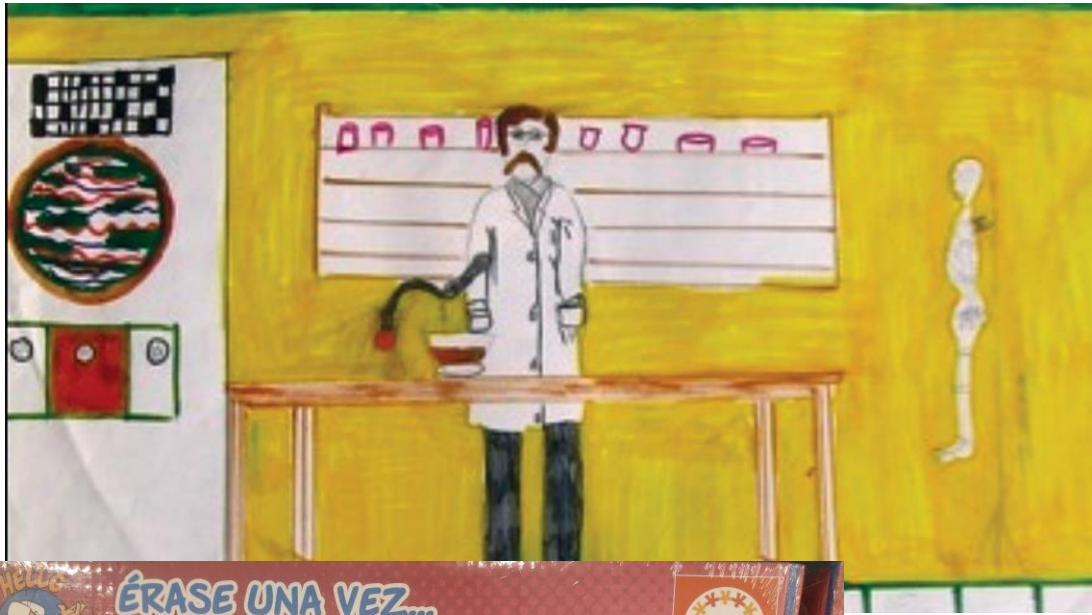
- Seek patterns, get, organise and maintain specimens

- Create technologies, products,...

- Making mistakes to learn



Social imaginaries about science





I've seen things you people wouldn't believe...

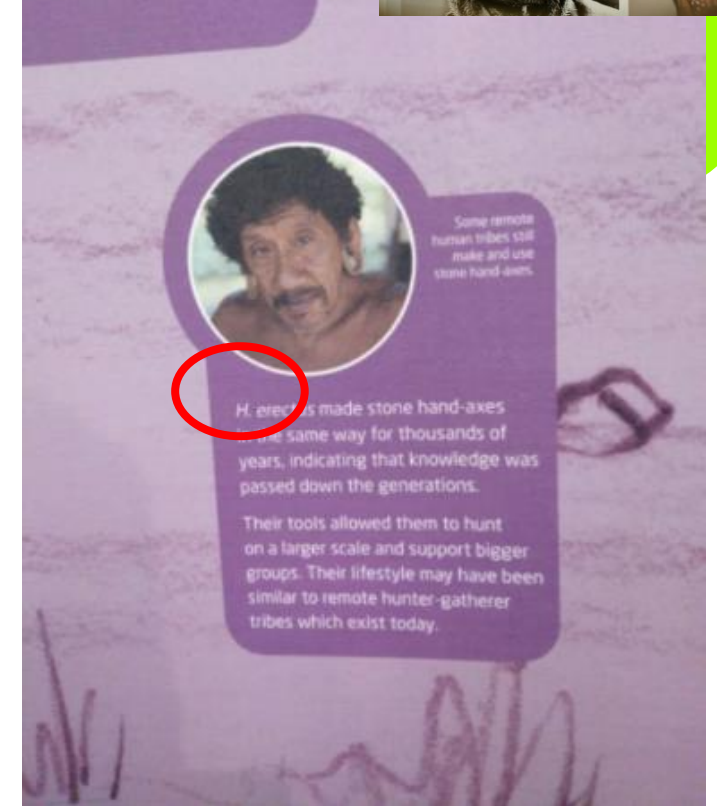
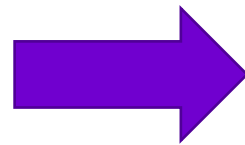
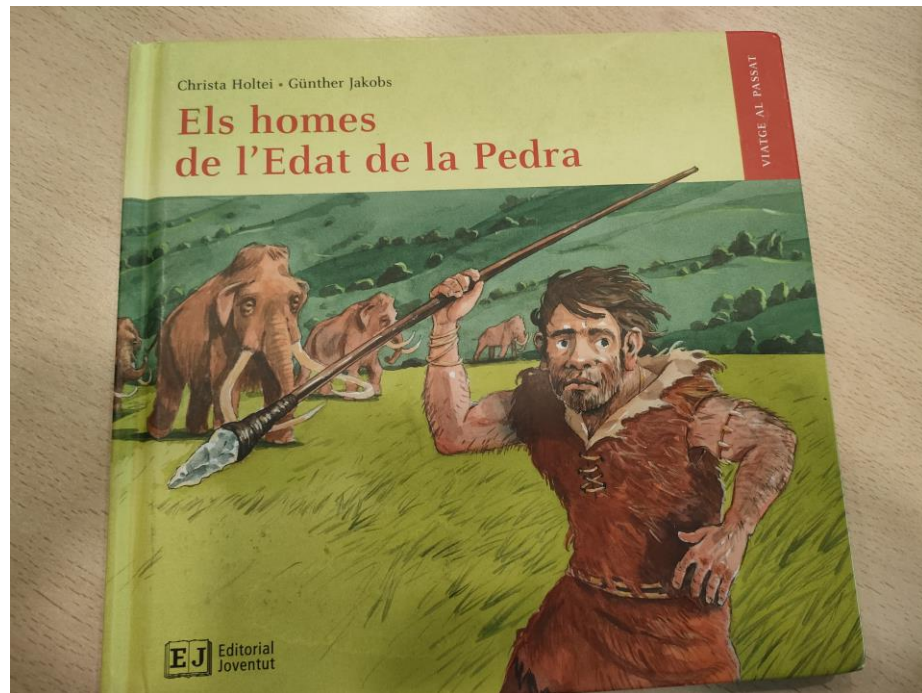


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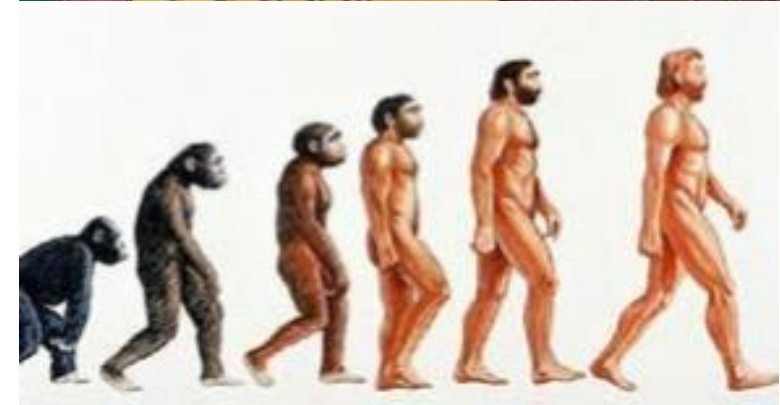
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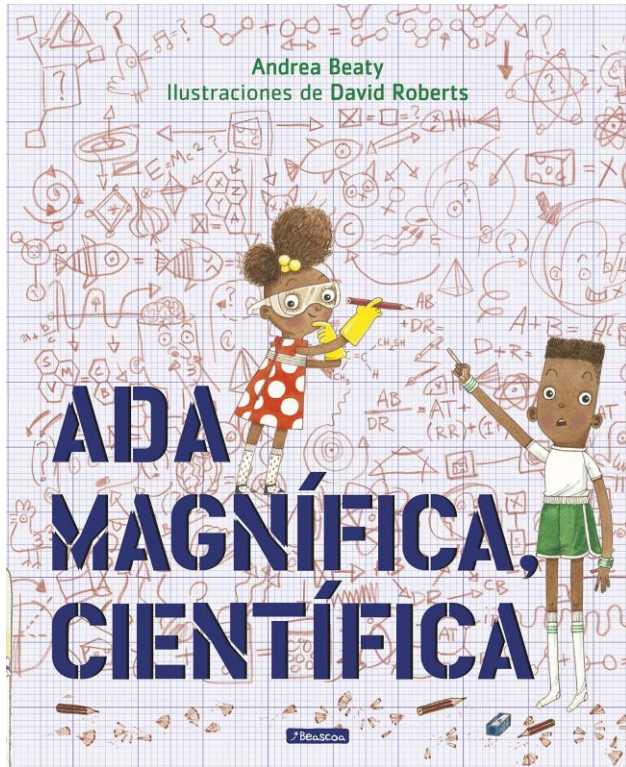
Current social imaginaries IN science



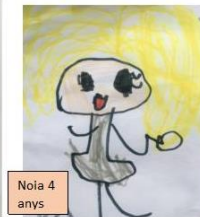




Break with stereotypes in science education: revise and include new pedagogical materials (gender equity, diversity, universal design,...)



1. DIBUJA UNA PERSONA QUE TREBALLA EN CIÈNCIA



Share plural referents in science: overturn implicit hierarchies

Jornada d'Educació Científica Inclusiva




12.30. Taula rodona (moderador: Gabriel Lemkow, professor del grau de Mestre d'Educació Infantil, IP del projecte H2020 "Communities for Sciences")

- Núria López: Centre de Recursos Pedagògics Específics de Suport a la Innovació i la Recerca Educativa (CESIRE).
- Elena Montfort, mestra d'educació especial a l'escola Llebeig de Vilanova i la Geltrú i formadora d'educació inclusiva (FEI-BCO) del Departament d'Educació de la Generalitat de Catalunya.
- Asha Miró, mestra d'Educació Primària, periodista i escriptora
- Quinndy Akeju, experta en salut, estudiant d'Infermeria, afro-activista i coordinadora de la Comunitat afroafricana i afrodescendent de l'Estat Espanyol a Euskadi.

Muel Gámez

Colonització del sament científic



Amina El Joudani
Ingeniera Geofísica



Pili EGEA
Escritora

Entrevistes enllaçades



Zinthia Palomino
Periodista



Andrea Khalfaoui Larrañaga
Doctora experta en Interculturalitat



Jerry Tchadie
Director de Investigativa

STRATEGIC ALLIANCES!

Grup de treball



Generalitat de Catalunya
Departament d'Educació



cesire*
centres específics
de suport a la innovació
i la recerca educativa



STEAMcat



UVIC
UNIVERSITAT DE VIC
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DE CATALUNYA



CIUDAD AUTÓNOMA
MELILLA



UNIVERSIDAD
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FUB
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UNIVERSITÀRIA
DEL BAGES

Lab 0_6

Grup de treball "Educació Científica Inclusiva"
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Ajuntament de Manresa



**MUSEU DE LA TÈCNICA
DE MANRESA**
PARC DE LA SÈQUIA



**MUSEU DE
COMARCAL
DE MANRESA**



**Escodines
pla
comunitari**

Vegetable gardens from
community



**ESCOLA
VALDAURA**

Communitarian
Living Lab:
El Cardener (Riu
Cardenet)

col·legi
OMS I DE PRAT



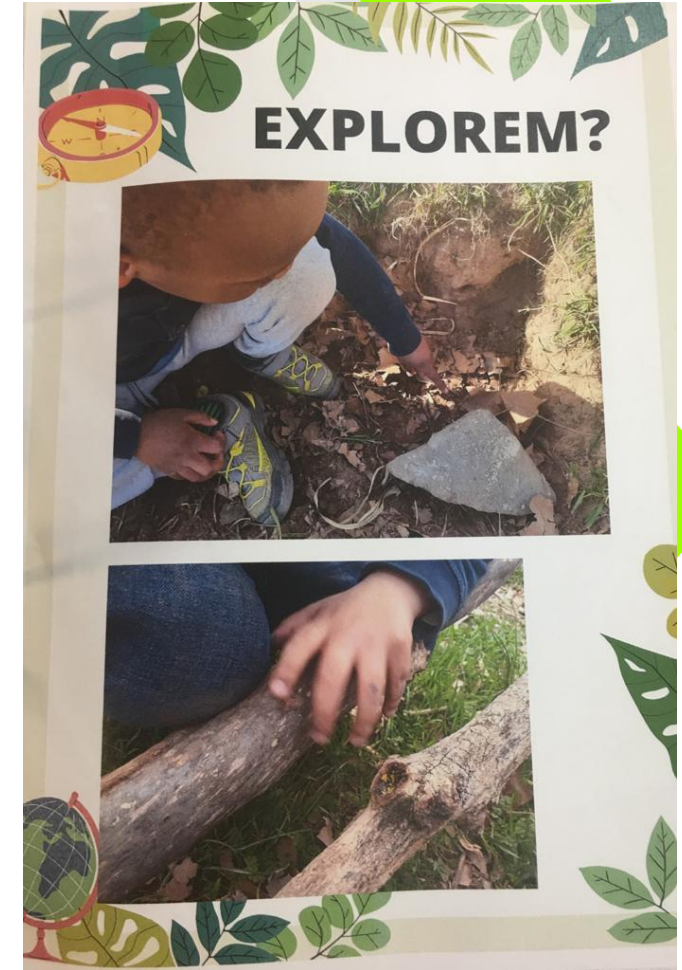
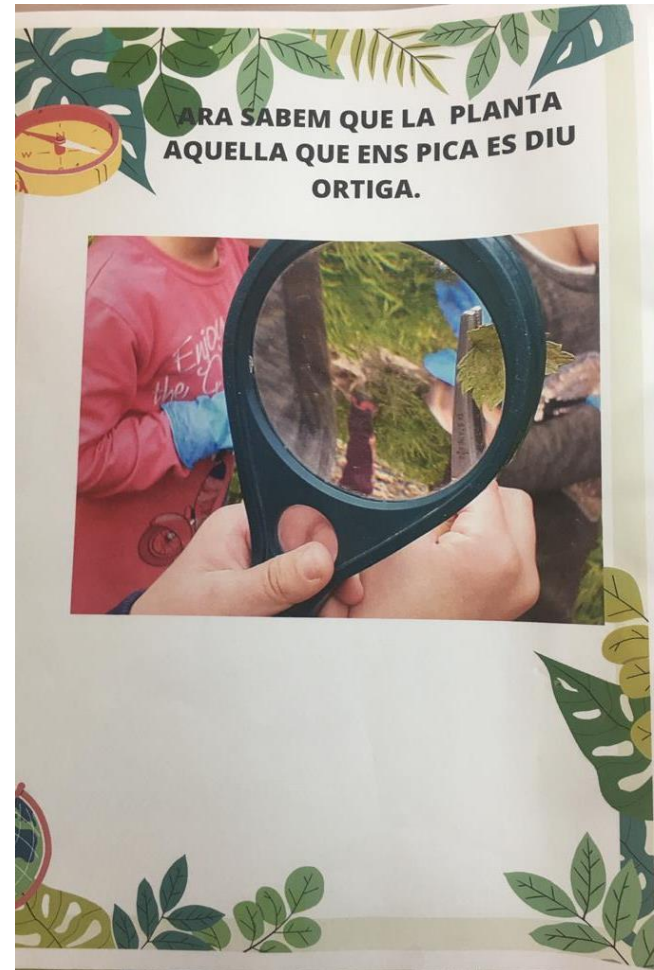
Nanacsf
@nanacsf

Communitarian
Living Labs:



C4S

Seek for more inclusive science spaces & involve the surrounding communities: Hubs & Community Living Labs!



Main C4S Products:

- **White Book for EU policy makers on Inclusive Science Education (ISE)**
- **Style Guide for communicators on ISE**
- **Open Repository of public inclusive images about science**
- **Research through pilots and EU transference & impact**
- **International Observatory on Inclusive Science Education (IOISE)**



>>What science? How science?



LAB 0_6:Center for Discovery, research & documentation in early ages



Sections:

- Observation
- Classification
- Experimentation
- Measure
- Exploratory play
- Sensorial contact

- Library
- Tools



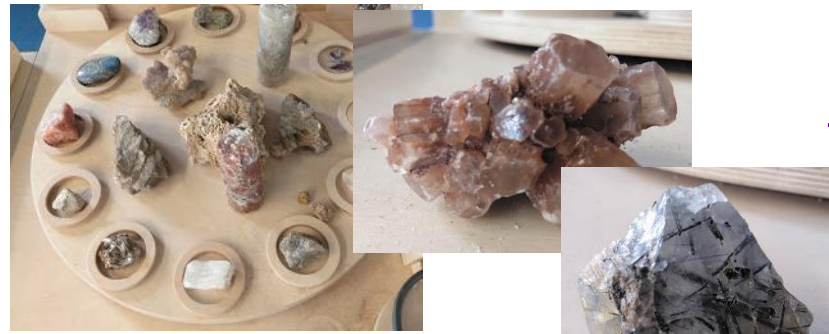
How to do science with children?

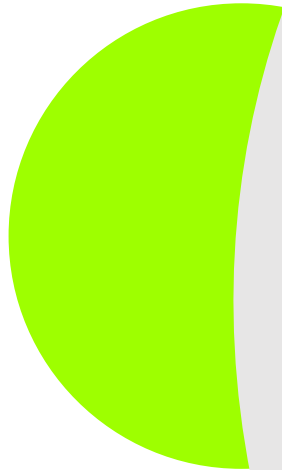
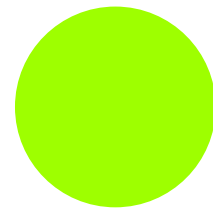


On science education

- role of senses (Harlen)
- theory and evidence (Kuhn) .
- Complex cognitive functions (planning, prediction, self-correction, metacognitive skills,...) (Furman: 2016)
- interpretation (Osborne:2014, Frabboni:2005) → community, language, social interaction, co-construction, culture
- ideas NOT always follow from proofs!(Harlen:2010):
- Environments & attitudes; Space inhibits and suggests behaviours (Loughlin & Suina: 1987).
- Time (Eshach & Fried:2005)
- IN 0-6: Establish earlier procedural patterns of investigative thinking (not building full edifice!) (Eshach & Fried): planning, proofs, prediction, comparison, evaluation, self-correction, tools, discussion, reasoning, attitudes, measures, ...







**Thank you!!
Moltes gràcies!!**

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