This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 632694

Setting The Crowd in Motion

Some inspiring crowd sourcing examples

Roxanne Wyns

CIVIC EPISTEMOLOGIES

LIBIS @ KU Leuven

Workshop on innovation policies in CH institutions

Budapest, 10/07/2015

Table of Contents

- The researchers perspective
- Portals, projects, blogs and conferences
- Conclusions

The Vaux family

GlacierChange.org

Our ever-changing glaciers: Imagery, science, and art

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« Blog archives

Recent Posts

- Castle Creek Glacier – 55 Years of Retreat
- 2013 Field Research Teaser: Zillmer Glacier, BC
- 35 Years at Bear Glacier, BC
- Glacier Research History: The Beginnings of the Juneau Icefield Research Program
- Bridge Glacier and the Life-Cycle of a Calving Glacier

The Vaux Family: A Legacy of Glacier Photography

March 21st, 2012 No Comments

By Matthew J. Beedle

1905 Photo: Whyte Museum of the Canadian Rockies (V653/NA-1354, Vaux Family Fonds)

The researchers' perspective

Workshop on innovation policies in CH institutions
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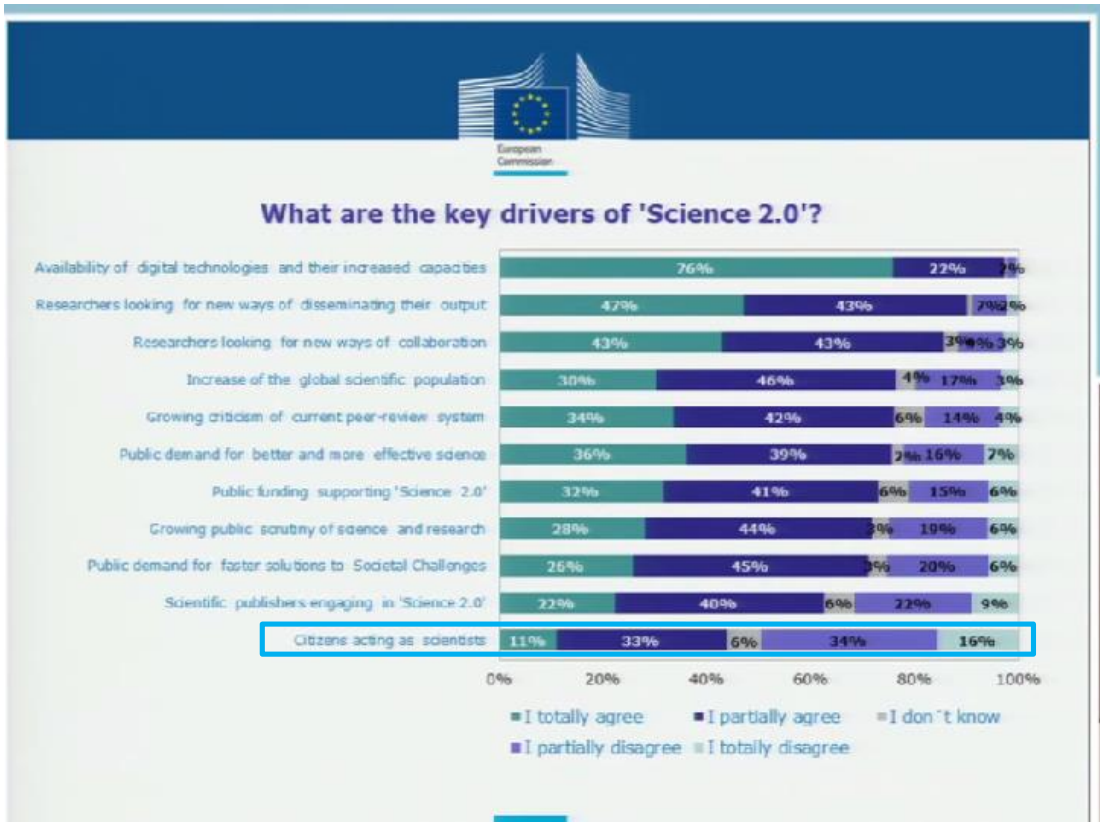
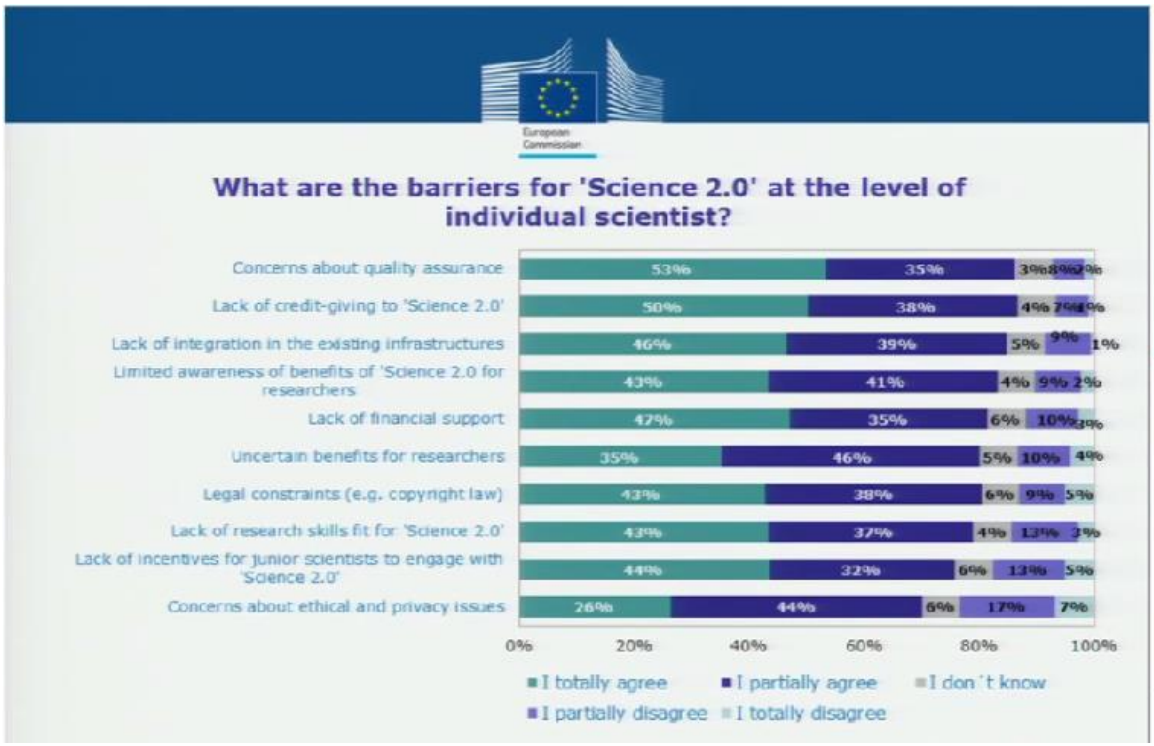
Science 2.0

- Acknowledgement by the EC of the systematic change on all levels of science, not just in open science and citizen science
  - Faster
  - More open
  - More distributed
  - More networked
- Stakeholder consultation (7/2014 – 9/2014) on
  - Awareness
  - Opportunities, and are the stakeholders sharing this opinion
  - Potential policy implications
- Open Science: Outcome of the Public Consultation on 'Science 2.0: Science in transition'

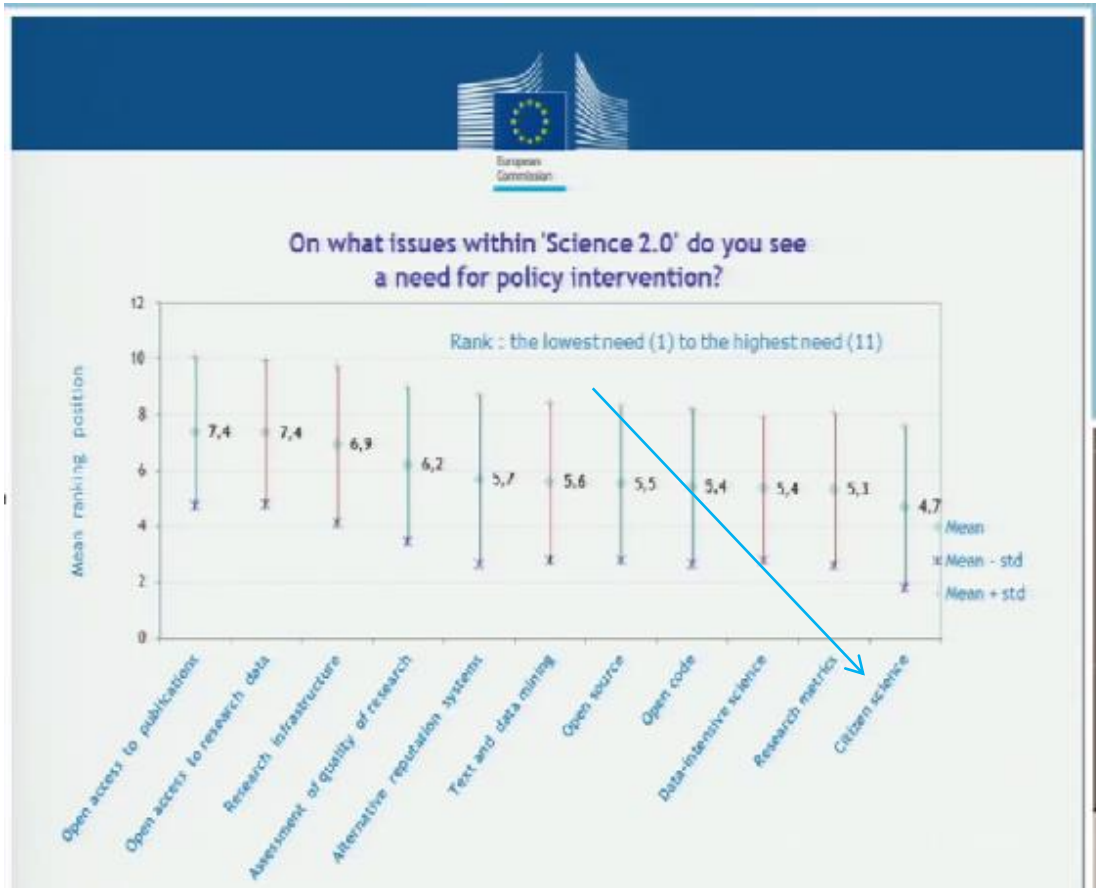
Key Drivers? *Citizens acting as scientists*



Main barriers? *Quality, Infrastructure, Privacy & Copyright*



Policy intervention needed?



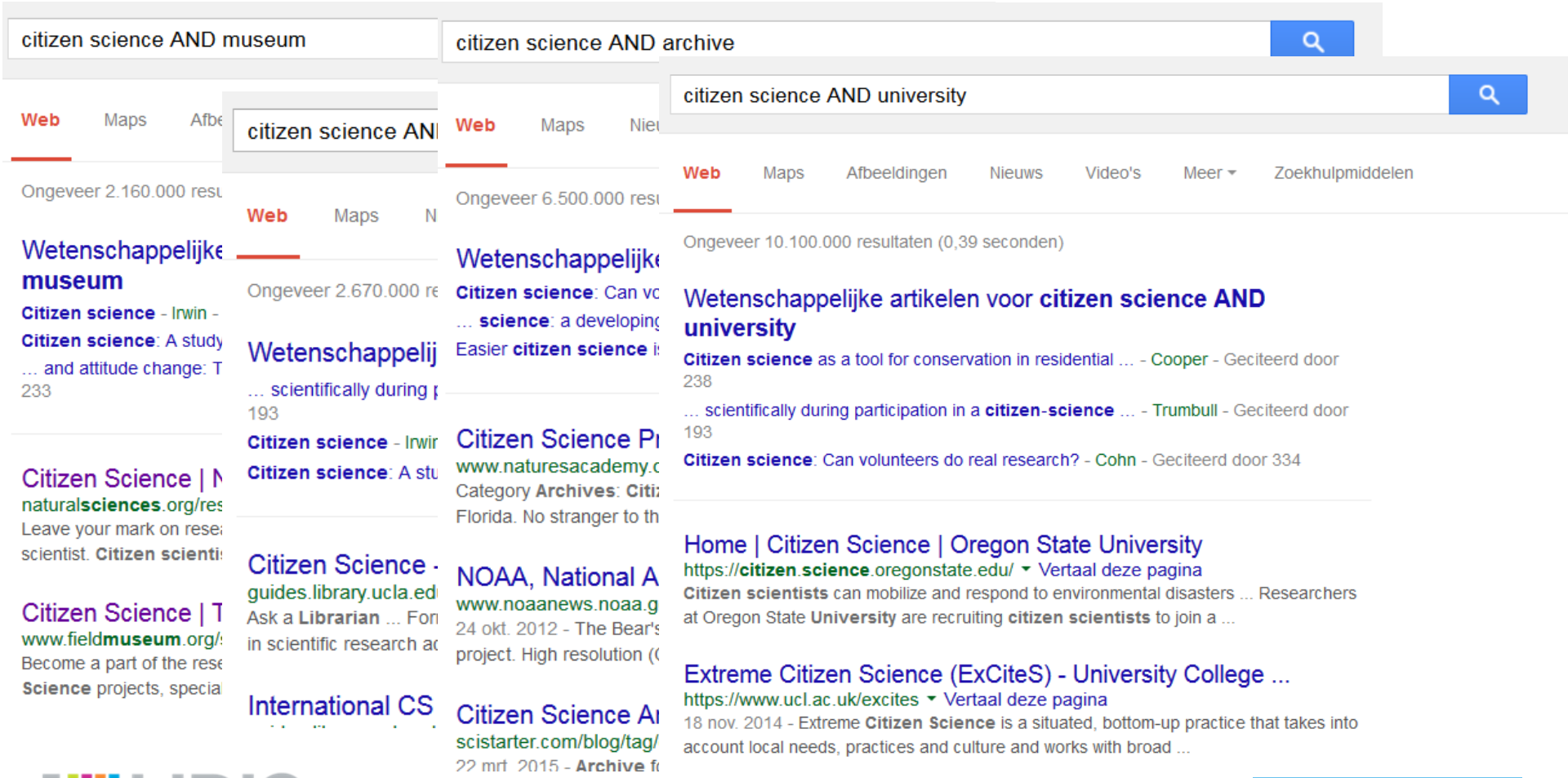
The researchers' perspective

- Citizen science ranked lowest (4,7 score on a scale of 1 -11)
- Consulted participants where related to the research community
- Some awareness on the importance of involving the larger public in research:
  - New media and Open science can help bring science closer to the public through various means (e.g. open labs, engagement of scientist with local communities)
  - Involving the public in a constructive dialogue could help make research more responsive to societal challenges (e.g. shift research to more locally relevant problems)
- More debate needed on the role of citizens in science, crowdfunding and the setting of research agendas:
  - Citizen involvement and democratic policymaking must not compromise the intellectual freedom of science
  - LERU warned that citizen science might not be appropriate to provide an opinion in some subject areas (e.g. where high level of technical expertise is needed)
  - EC to help broker discussions regarding the purpose of citizen science (as public engagement or robust research) and what the role of universities should be

Policy actions

- Overall, 43% of the participants from research community stated that citizen science could have a mutual benefit
- **Policy recommendations relating to civil society groups and societal engagement included:**
  - Enhance recognition of organisations and platforms that bridge the gap between science and society, such as NGOs, science journalists, Wikipedia
  - Support development of citizen science platforms
  - Support discussions on the role of citizen science
  - Discuss and agree best practice in citizen science
  - Encourage communication between scientists and citizens.
  - Rely on crowdfunding as an additional source of funding rather than a substitution to traditional funding sources.

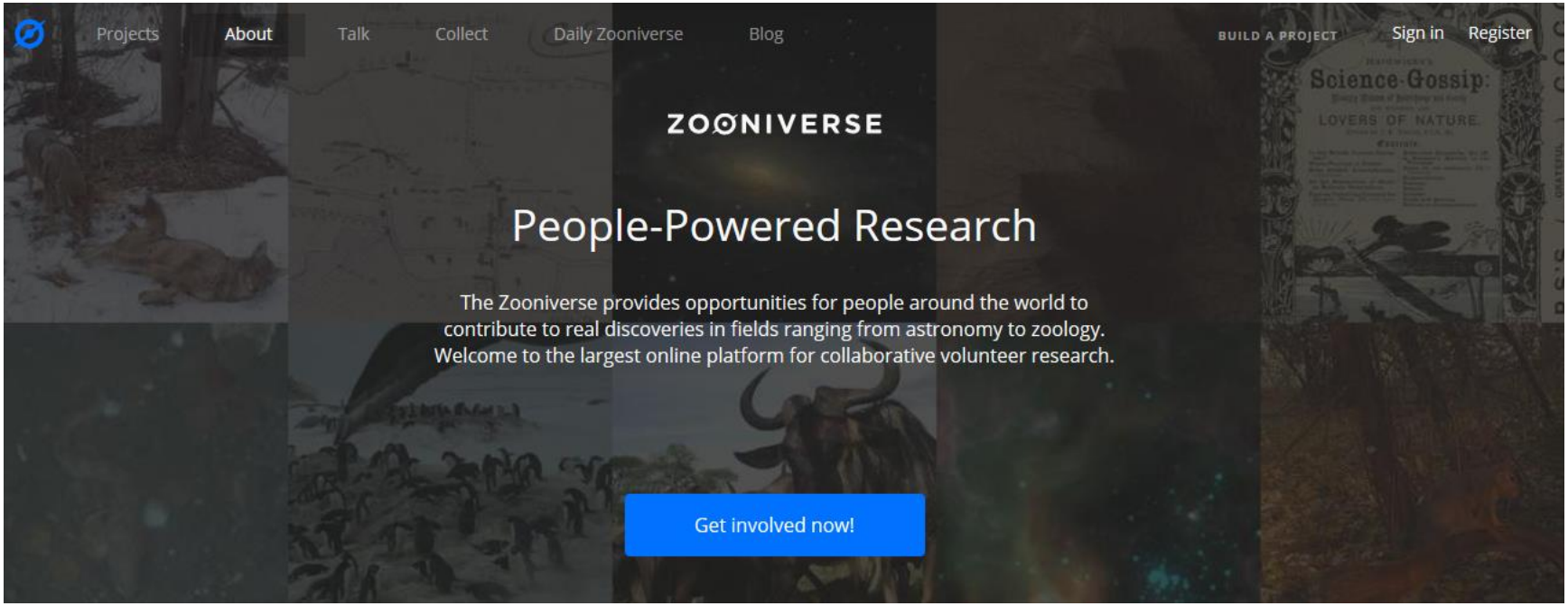
From policy to practice



Citizen Science Portals

Workshop on innovation policies in CH institutions
Budapest, 10/07/2015

ZOONIVERSE



https://www.zooniverse.org/

ZOONIVERSE

- Developed and maintained by the Citizen Science Alliance (CSA)
- CSA is a collaboration of scientists, software developers and educators
- Internet based citizen science projects on multiple topics and domains
- Close to 900,000 people engaging in the 'Zooniverse' citizen science projects
- Goal
  - Enable researchers to engage with a large community of volunteers (>10.000 – 10.0000 of volunteers)
  - To produce results that would otherwise be impossible or impractical to achieve
  - Provide an opportunity for volunteers to make a contribution to the research in question and understand the scientific process

http://www.citizensciencealliance.org/

ZOONIVERSE

Snapshot Serengeti

Go wild in the Serengeti! We need your help to classify all the different animals caught in millions of camera trap images.

Get Started

Notes from Nature

Take Notes from Nature. Transcribe museum records to take notes from nature, contribute to science.

Get Started

Cell Slider

Analyse real life cancer data. You can help scientists from the world's largest cancer research institution find cures for cancer.

Get Started

Higgs Hunters

Uncover the building blocks of the universe. Help search for unknown exotic particles in the LHC data.

Get Started

Worm Watch Lab

Track genetic mysteries. We can better understand how our genes work by spotting the worms laying eggs.

Get Started

Operation War Diary

Explore soldiers' diaries from the First World War. Annotate and tag diaries from the First World War.

Get Started

Penguin Watch

Spy on penguins for science. Tag penguins in remote regions to help us understand their lives and environment.

Get Started

Disk Detective

Find the birthplace of planets. Help comb our galaxy, looking for stars that could harbour planet-forming disks.

Get Started

Cyclone Center

Classify over 30 years of tropical cyclone data. Scientists at NOAA's National Climatic Data Center need your help.

Get Started

Planet Hunters

Find planets around stars. Lightcurve changes from the Kepler spacecraft can indicate transiting planets.

Get Started

ZOONIVERSE – Operation War Diary

ZOONIVERSE – Operation War Diary

- Around 1.5 million pages of unit war diaries covering activity on the Western Front
- Volunteers are asked to classify the type of page and then tag key data
- Goal: a detailed index of the people who appear in these pages and learn more about what they were doing

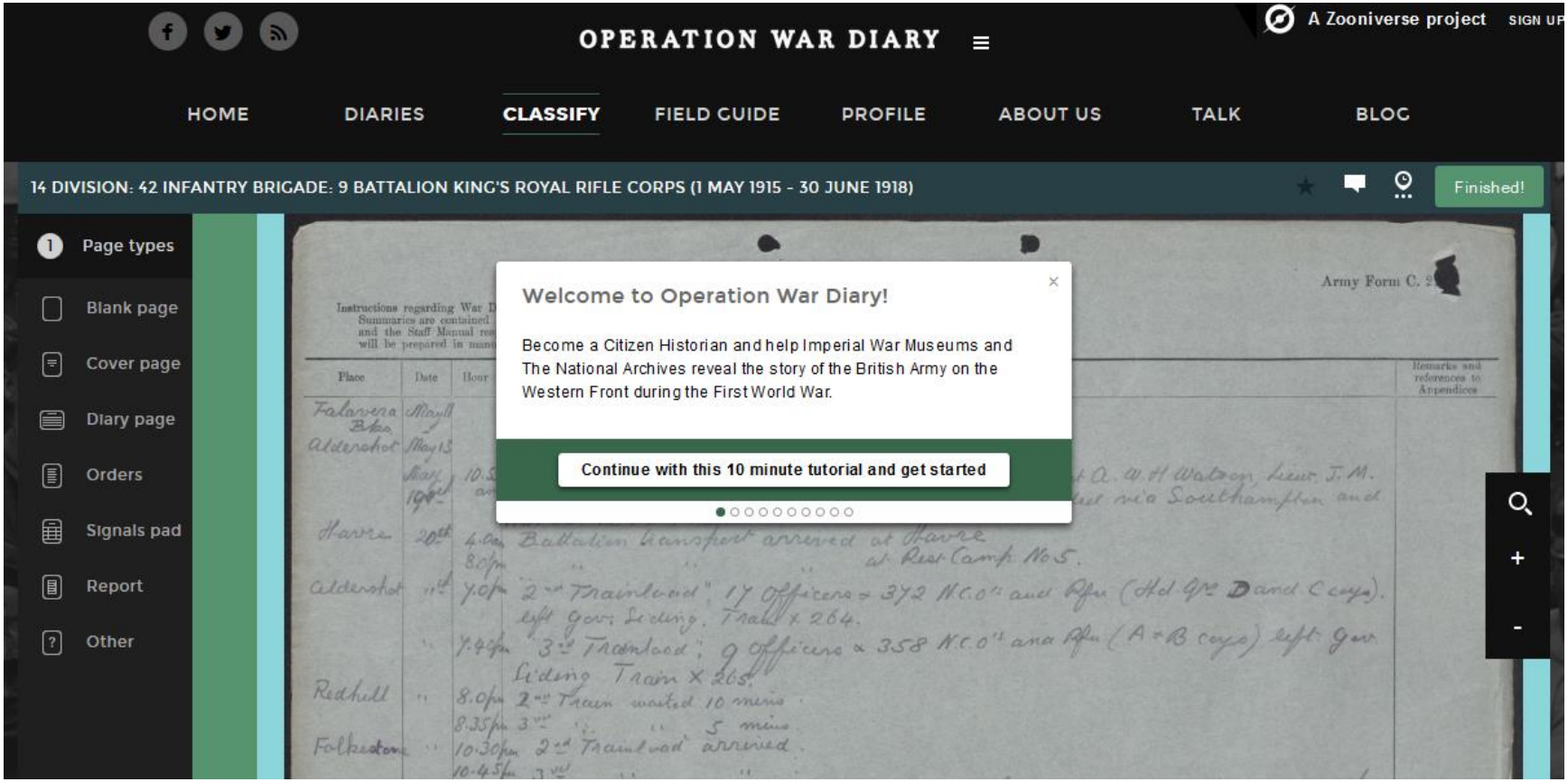
✓ Tutorial and guidance

✓ Trial version

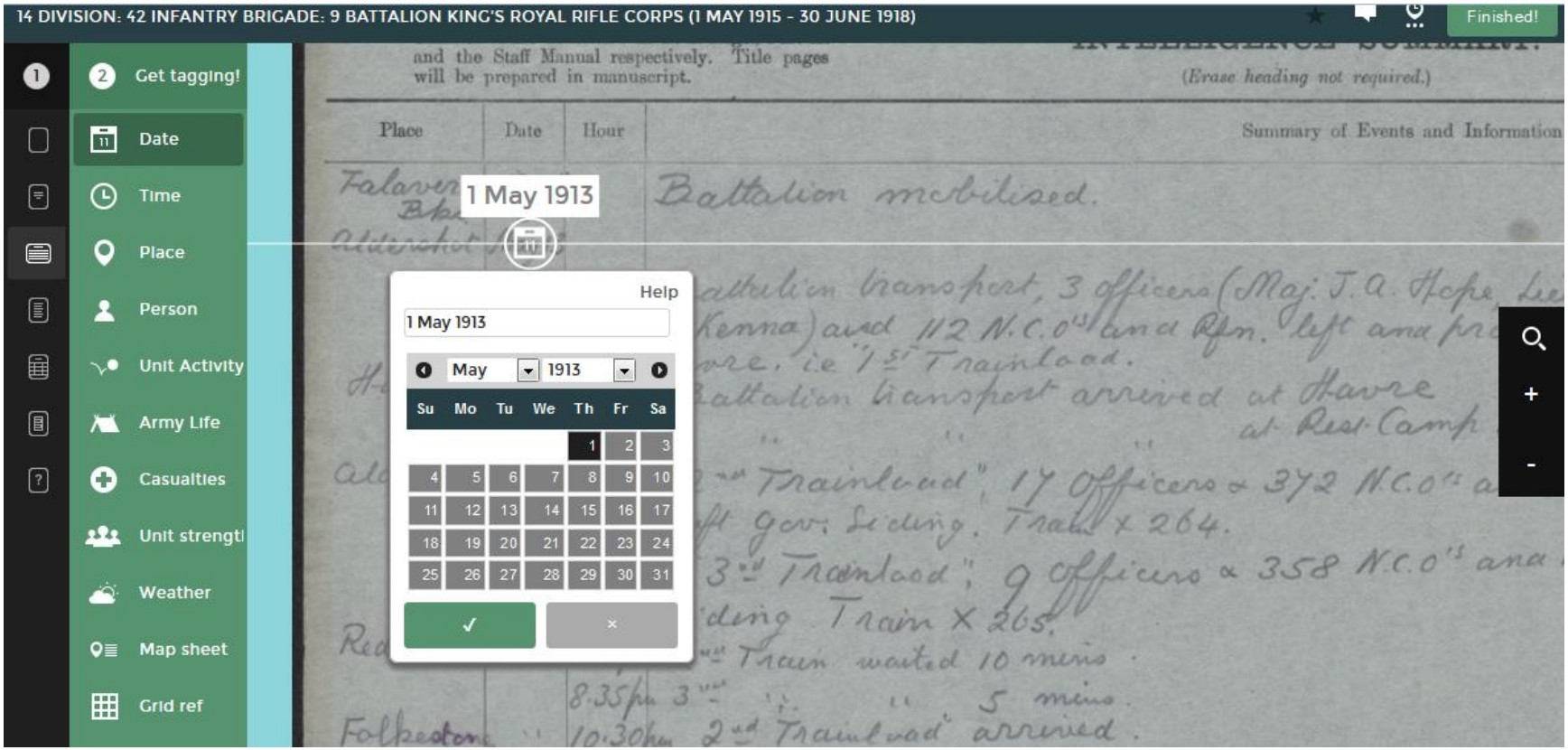
✓ Forum

ZOONIVERSE – Operation War Diary

ZOONIVERSE – Operation War Diary



ZOONIVERSE – Operation War Diary

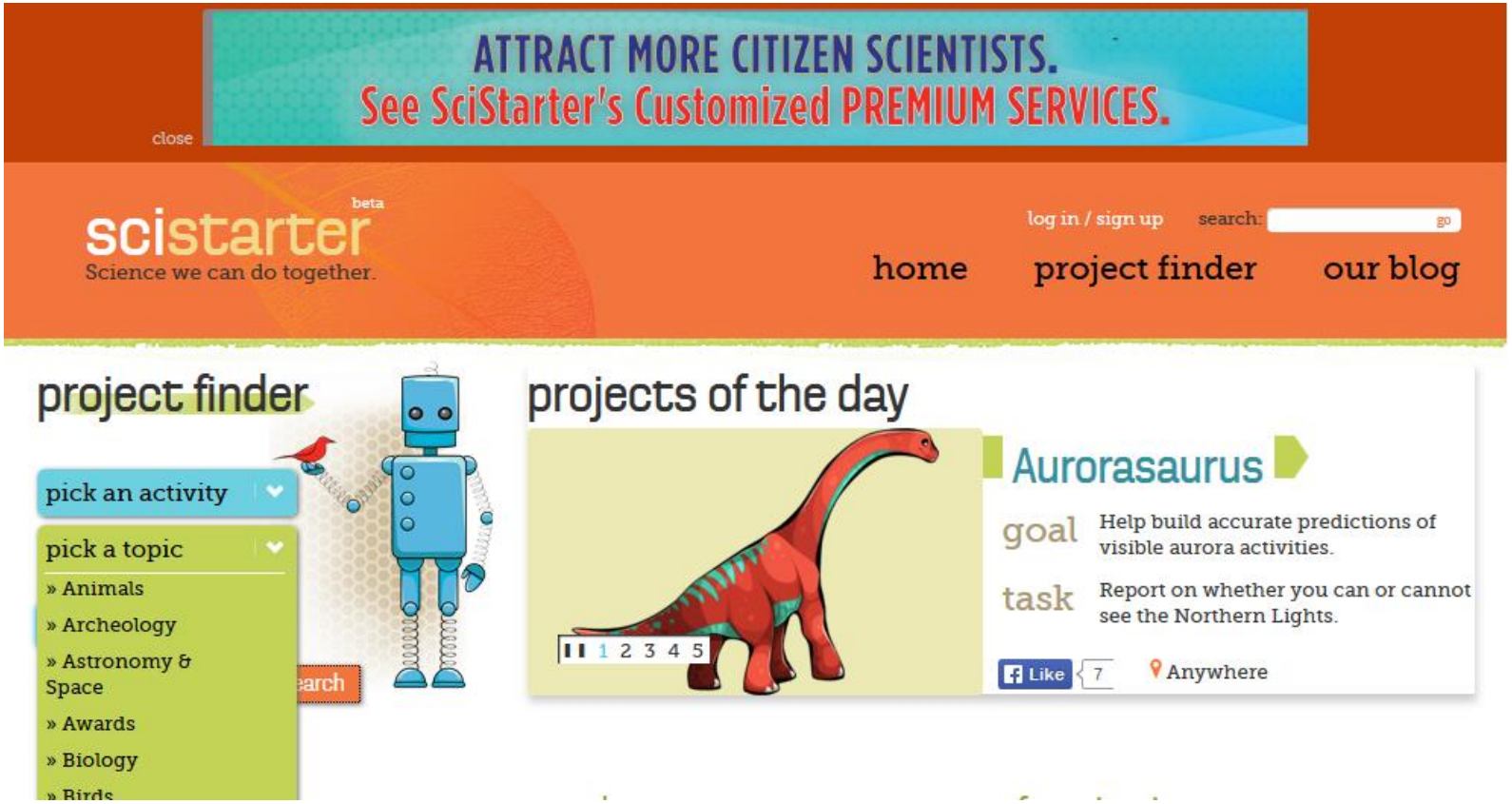


ZOONIVERSE – Operation War Diary

SCISTARTER – Search on type of activity

http://scistarter.com/

SCISTARTER – Search on Topic



Citizen Science blogs

Workshop on innovation policies in CH institutions
Budapest, 10/07/2015

Citizen Science Center

About Citizen Science

What the heck is 'citizen science'?

I'm glad you asked! The term 'citizen science' has been used in relation to several concepts over the years, but for the purposes of this blog, citizen science refers to science conducted by average citizens, e.g., people who are not full- or part-time professional scientists but nevertheless have a keen interest in scientific inquiry.

And so what's this blog for?

This blog has two goals. The first goal is that it will become a comprehensive resource for all things related to citizen science: books, papers, discussions, and so on, but *especially* project listings… categorized and tagged so you can quickly and easily find something you're interested in.

The second goal is that it convinces you that you can, in fact, **do science** too, and that you go get your hands dirty and *do* some… and in so doing, that you **connect with other people** who share your passions. The coolest thing about living in the 21st century is the fact that many of

Join more than 10,000 citizen scientists!

Email address:

Your email address

SIGN UP

YOUR HOST, CHANDRA CLARKE

FOLLOW ME

http://www.citizensciencecenter.com/

Citizensci

Home STAFF BLOGS ↓ BLOGS NETWORK ↓ COMM

CitizenSci
Projects , people , and perspectives
fueling new frontiers for citizen science

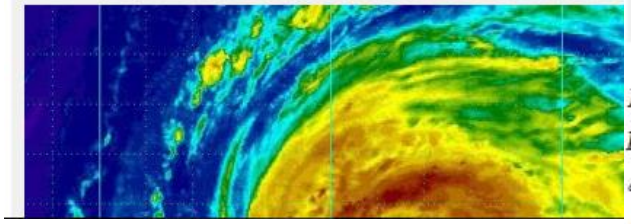
« Older posts

Did you know 'storm spotters' in your community keep you safe during sever weather?

By Carolyn Graybeal
Posted: June 29, 2015

Welcome **Googler**! If you find this page useful, yc might want to **subscribe to the RSS feed** for up this topic.

SHARE



Dragonfly Watch – Find Those Fast and Furious Insects

By ivorster
Posted: June 12, 2015

SHARE

A tandem pair of Common Green Darners (Anax junius) laying eggs. © Dennis Paulson.

Find out more about Dragonfly Monitoring and other great citizen science projects on SciStarter!

"I'm an aquatic entomologist, and dragonflies and damselflies are the most colorful and noticeable insects in the habitats in which I work," says Dr. Celeste

http://blogs.plos.org/citizensci/

Citizen Science projects

Workshop on innovation policies in CH institutions
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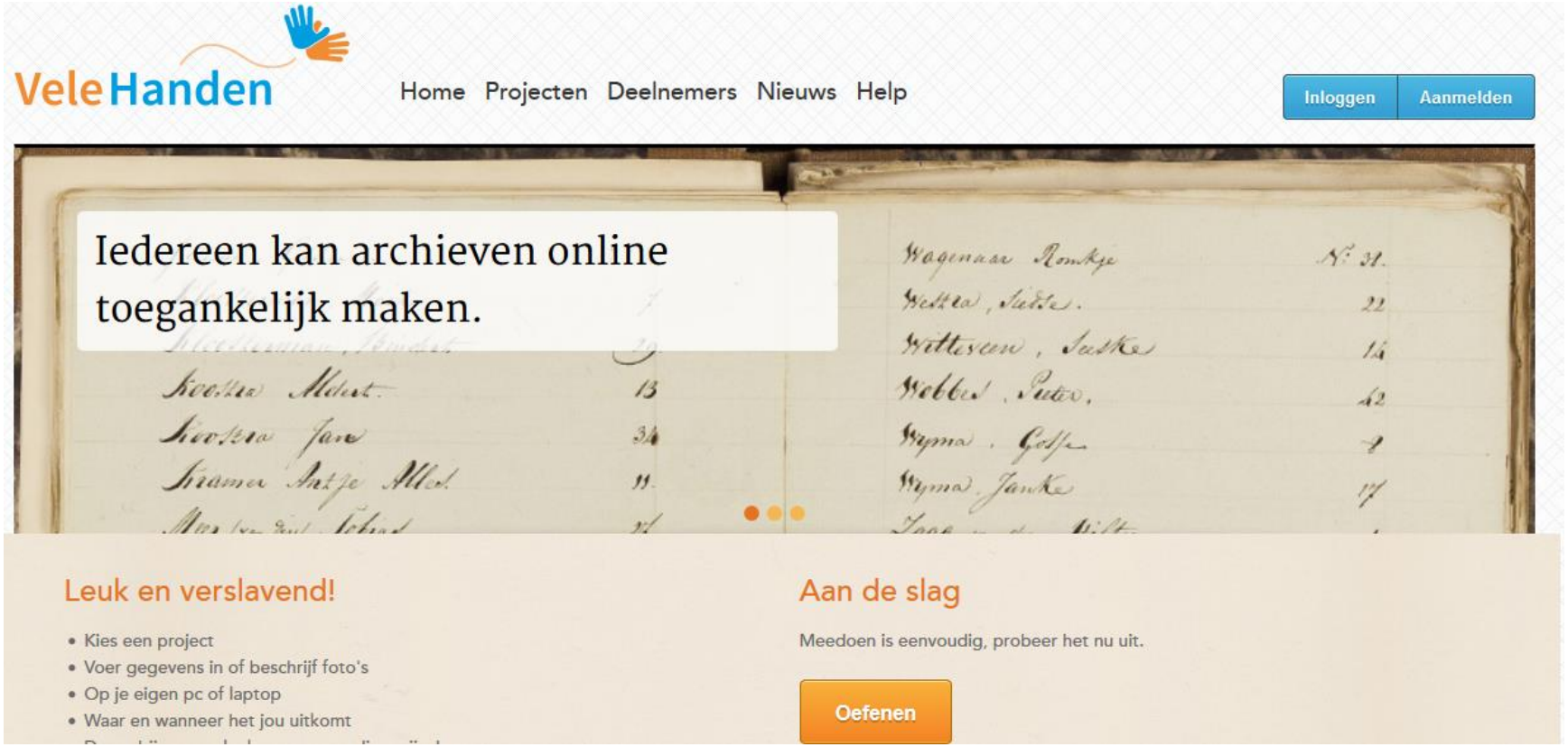
VeleHanden (NL)



https://velehanden.nl/

Project & Approach

- Initiative of the City Archive of Amsterdam (since Nov. 2011)
- Public Private Partnership, 4 types of participants
- Tool for the Heritage sector to provide access to collections with help from the citizen
- Indexing, describing and tagging of material
- Rewards for contributors: material and immaterial
- + 1500 volunteers in first project year
- Personal profiles: + men, 50 – 70 years
- Forum: discussion, support of newcomers by other participants
- Quality control (every scan/item described twice, 3th person checks and validates)

A success story?

- Many volunteers, not so many archives and projects
- Prone to error? Doubts and concerns on crowdsourcing
- Real (if perhaps unconscious) reason?

Trial version

Uitleg bij de indexeeroefening

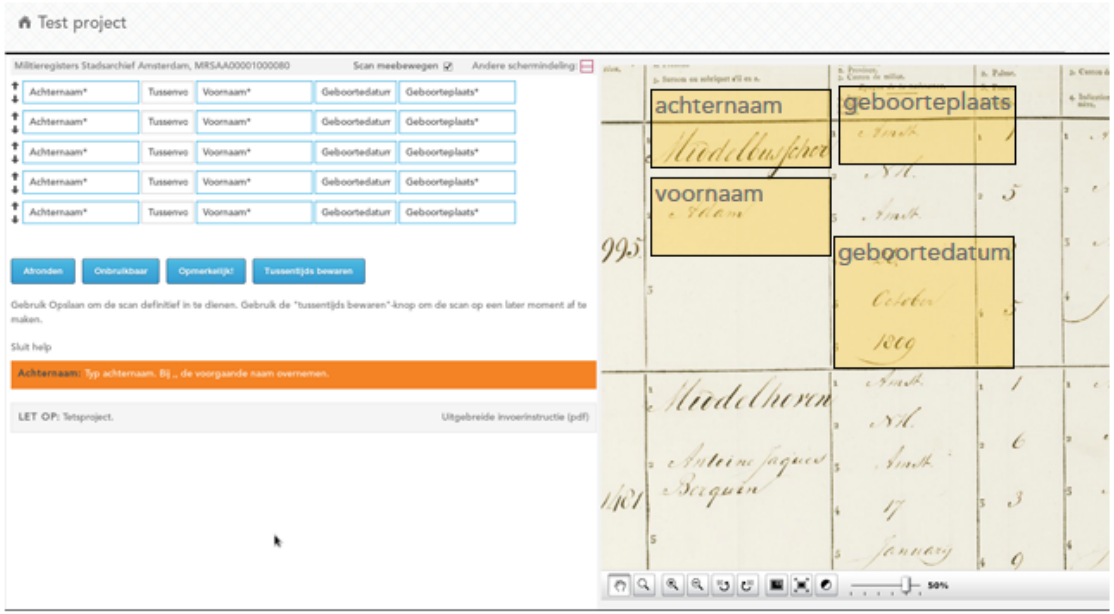
Klik door deze 4 stappen voor u van start gaat met de indexeeroefening:

Stap 1 | Stap 2 | Stap 3 | Stap 4

Stap 1

Bekijk de gescande pagina rechts op het scherm.

Zoek de velden die moeten worden ingevuld.



Paleography not my biggest strength

Some conclusions

GET INVOLVED POST
PARTNERS STORIES
Login to Post | Register
I SEE CHANGE
Score: 8805 of 9850
Sheets like to be alongside each other.
Remember, hydrogen bonds are great for your score.
Tell me more...
foldit BETA
Solve Puzzles for Science
Shake
Wiggle All
Freeze Protein
Remove Bands
Disable Bands
Reset Puzzle
Actions
Undo
Menu
Chat - Group
Chat - Puzzle Levels
Chat - Global
search
Utah
Colorado
Kansas
Missouri
Indiana
Ohio
West Virginia
Kentucky
Virginia
Tennessee
Oklahoma
photographs of Alex Wild. What are you waiting for? Download Dr. Eleanor's Book

Pleasure, profit and praise

- Motivation of the Crowd
- Support
  - Instructions in several different places and formats
  - Trial version!
  - Assistance from project staff
  - Forum facility so more experienced members can help
  - FAQ and links to useful pages
  - → Improves quality, helps people to stay motivated
- Subject and context of a particular project important as well!

Benefits for researchers, citizens and society

Scientist:

- Citizen scientist provide new data and can raise new question relevant for society (environment, justice, public health…)

Citizen:

- The citizen acquire new learning and skills and gain a deeper understanding of the scientific work in appealing ways

Society:

- Restoring public trust in science
- Re-orienting science towards the real problems in society and environment
- Installing democratic governance of science

Many challenges

- Establishing a relationship between researchers, CHI and the public
- Wide disagreement with respect to the question if citizens can, or should be able to deliberate on scientific matters
  - Fear of losing control
  - Reliability of the data closely linked to reputation and authority
- Researchers and specialists need to accept a change of role from gatekeeper to facilitator
- Appropriate technologies needed for
  - engagement with citizens
  - the creation of new knowledge out of this abundance of data
- Data quality assurance & Data policy

References

- Validation of the results of the public consultation on Science 2.0: Science in Transition [Research and Innovation, European Commission]
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- Embracing the vision of Citizen Science: An historic opportunity for science centers
- White paper on citizen science for Europe [Socientize]
- Crowdsourcing: Prone to Error? [Ellen Fleurbaay, Alexandra Eveleigh]
- Civic Science for sustainability: Reframing the role of experts, Policy-makers and citizens in environmental governance
- Zooniverse
- Citizen Science Alliance
- Scistarter
- Citizen Science Center
- Citizensci
- Digitalkoot
- VeleHanden

Questions?

www.civic-epistemologies.eu

info@civic-epistemologies.eu

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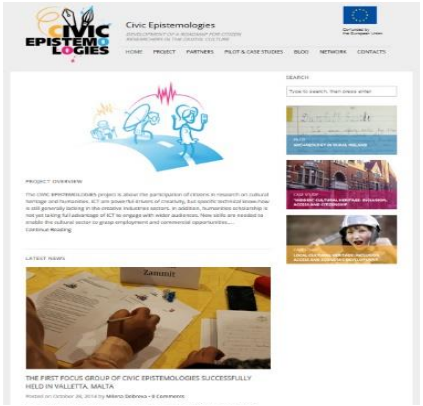
Follow us online !

Project website:

www.civic-epistemologies.eu



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