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Universiteit Leiden

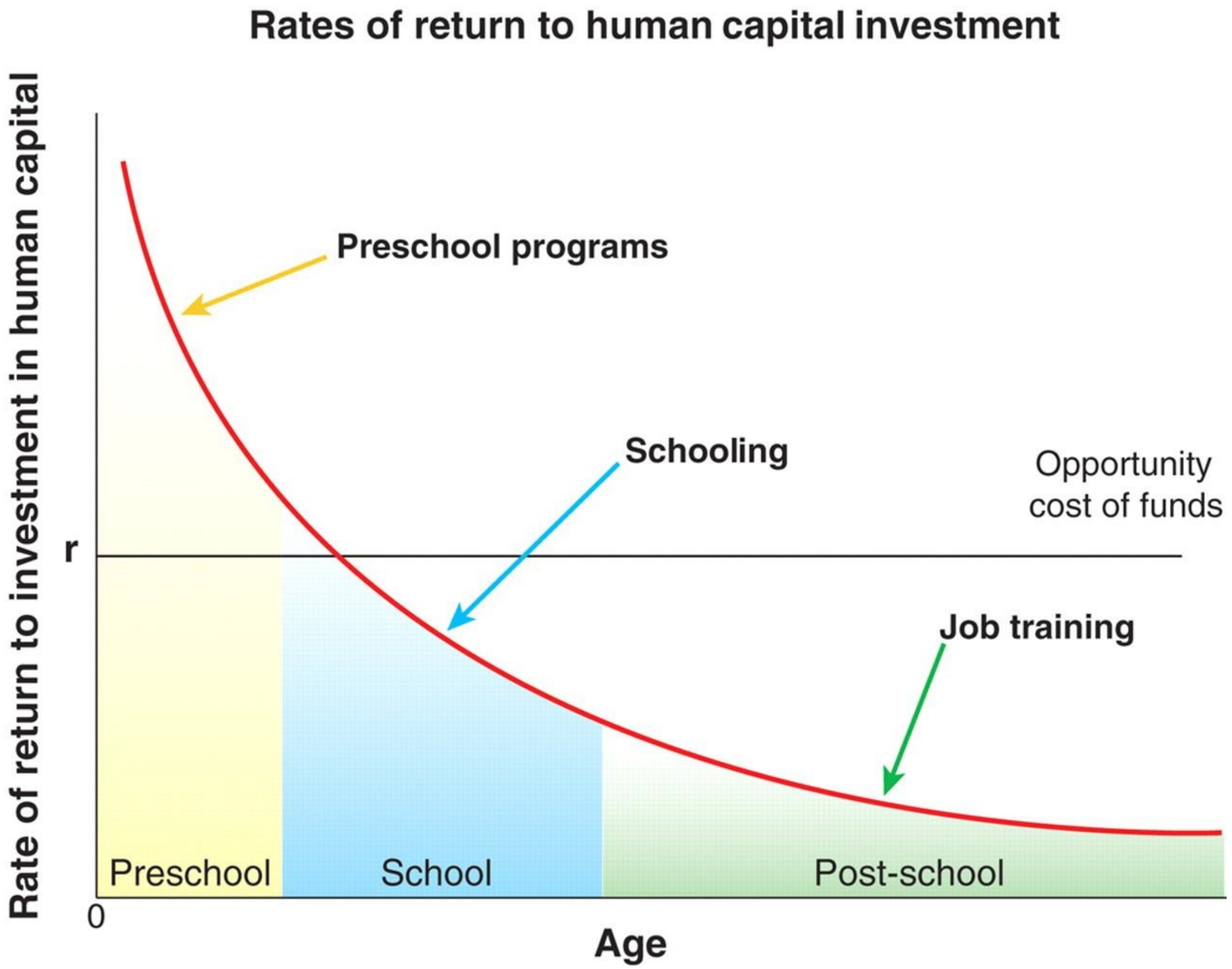
Universe Awareness

- Use perspective, inspiration and fun of astronomy to:
- Introduce young children from disadvantaged backgrounds to the excitement of science
- Enhance their understanding of the world and demonstrate the power of critical thinking
- Broaden children’s minds
- Stimulate world citizenship


26/01


SONIC

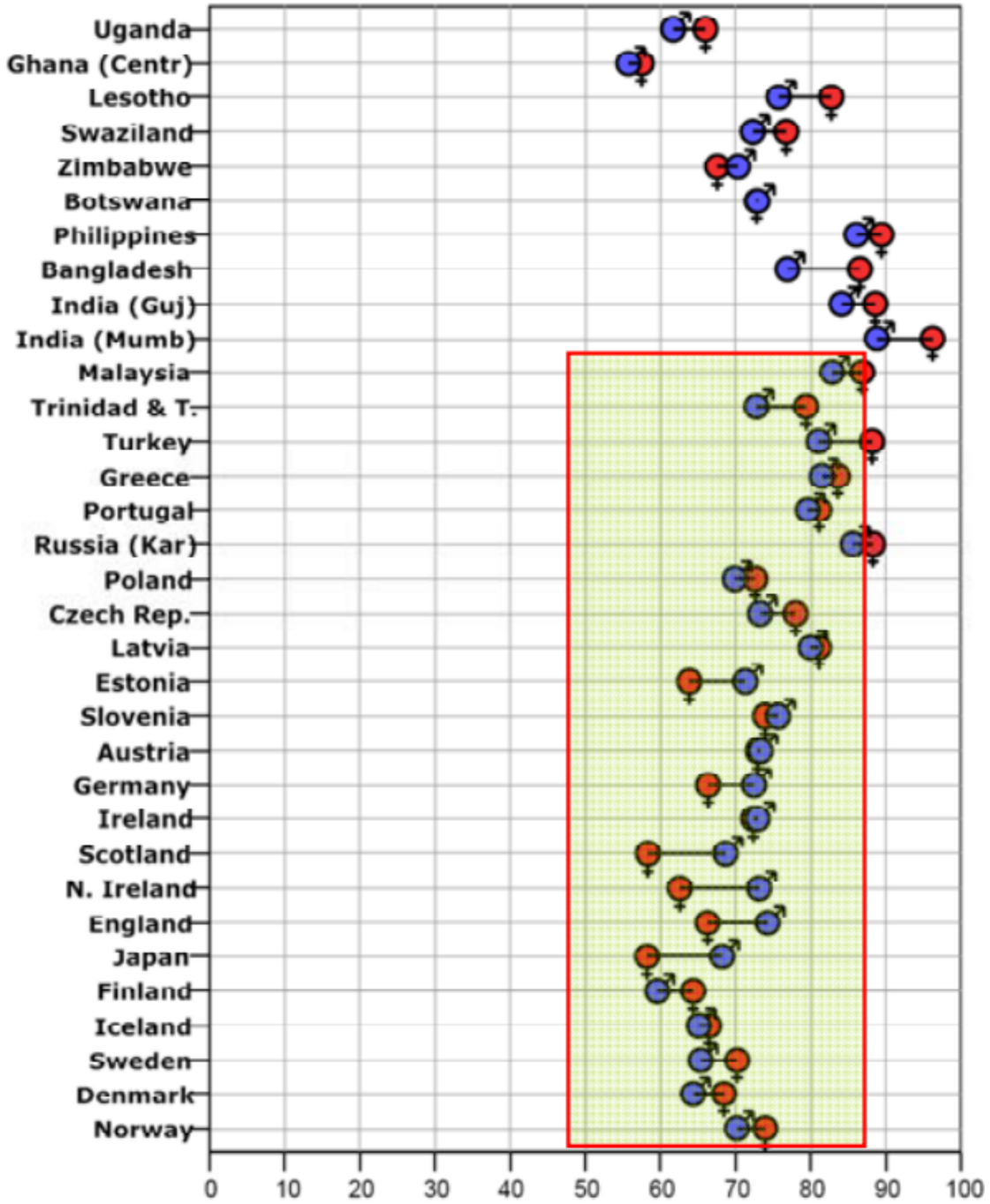
Universe Awareness



Credit: Science Magazine / Heckman

Interest in Astronomy
2010 Rose Project

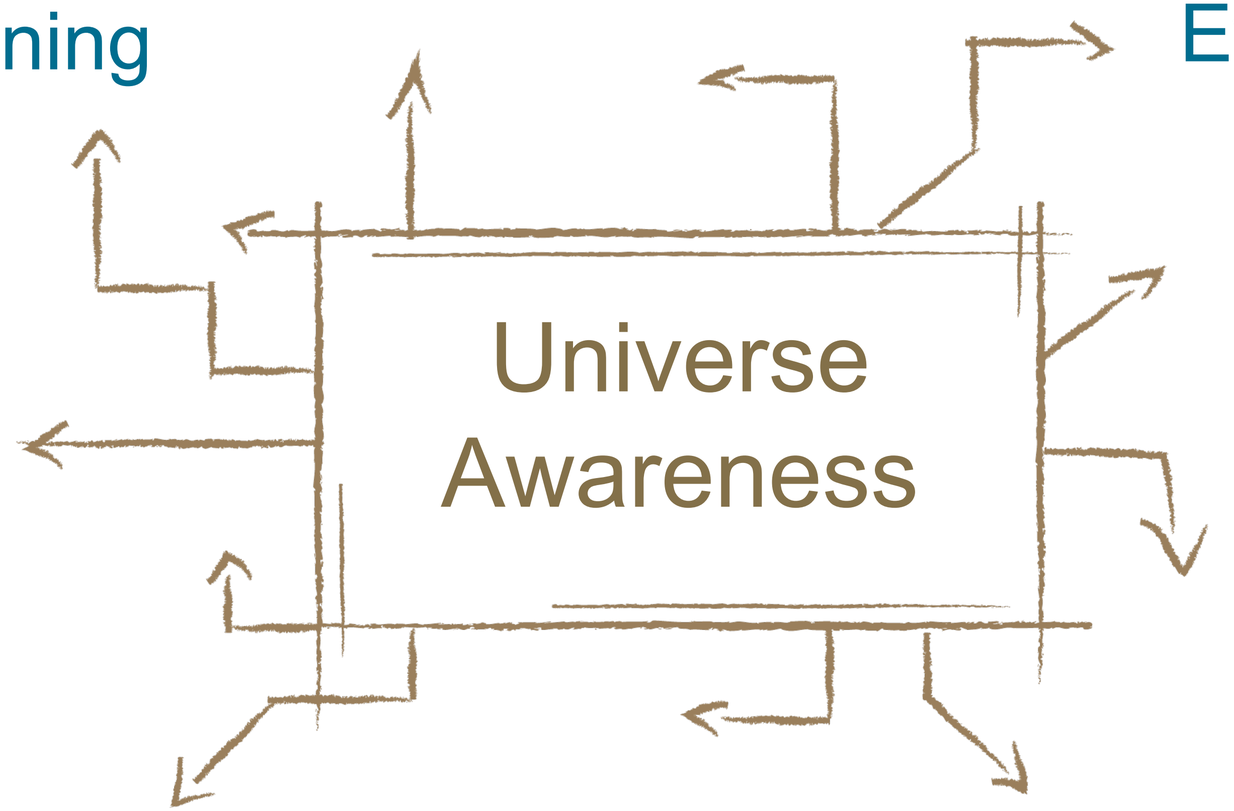
”Space: life, wonder, openness”
The most popular subject (for girls and boys)



Elster **et al. 2010**

Teacher Training

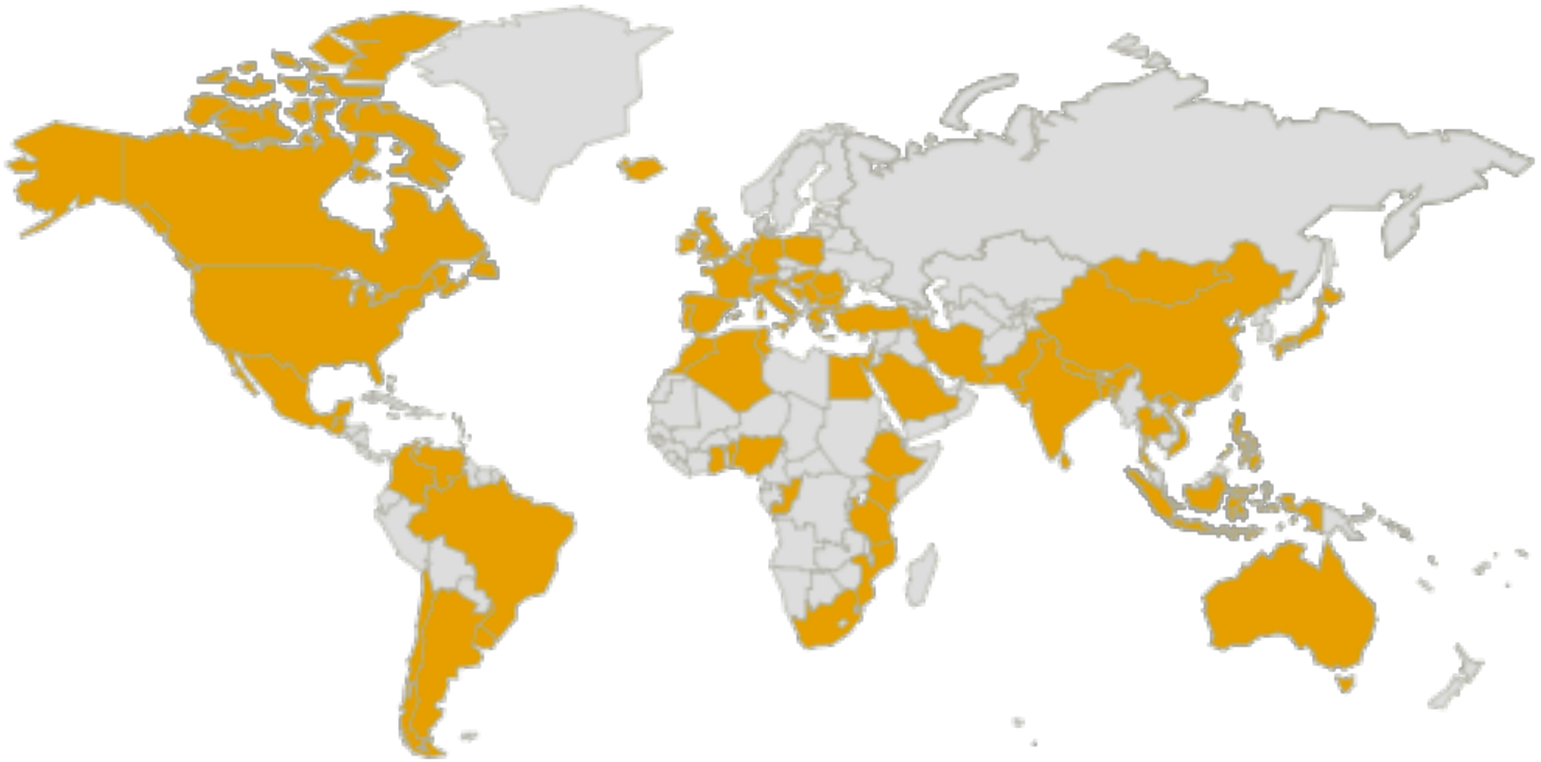
Evaluation



International Network

Educational Resources

UNAWE: Network



62 Countries
(31 from developing world)

1000 Educators, Teachers & Astronomers

UNAWE: Resources

- Online resources: open-source (*creative commons license*)
- ~100 educational resources (from activity plans to books)

- 2011: *Science Magazine's* **SPORE** (Science Prize for Online Resources in Education) **Award**
- 2015: **Scientix Best Educational Resource Prize**

Earth Ball

- **10 000+ distributed to schools and teachers**
- **57 Different countries**

SPACE SCOOP

Bringing news from across the Universe to kids all around the world

EU UNIVERSE AWARENESS

The First Stars in the Universe

The Big Bang that gave birth to our Universe sounds like a spectacular event, an explosion that was unbelievably loud and bright. But the birth of our Universe was probably very subtle.

For a long stretch of time after its birth, our Universe was totally dark, silent and empty. The first stars didn't spark into existence until the Universe was perhaps 100 million years old. At this time nothing existed in the Universe but gases.

The first stars to exist in our Universe have never been seen because they went extinct a long time ago. But many astronomers have discussed their existence. These stars would have been born out of material created by the Big Bang.

The only chemicals that existed before stars were hydrogen, helium and lithium. This means that the first stars must have been made only out of these chemicals, unlike the Sun and all the other stars in our galaxy.

Using the time-travelling powers of light, astronomers have been scouring the distant Universe, where the light set off when the Universe was much younger, in search of the first stars. And they've just spotted a number of amazingly bright and very young galaxies!

One of these galaxies in particular has scientists excited, it's called CR7. CR7 is the brightest galaxy ever seen in the early Universe. You can see an artist's version of the galaxy in this picture. The clumps of what looks like fairy dust in the picture are indeed magical – they show that this galaxy was home to some of the Universe's very first stars!

These are the stars that formed the first heavy particles that eventually allowed us to be here. It doesn't really get any more exciting than this!

COOL FACT

These first stars would have been enormous – several hundred or even a thousand times more massive than the

SPACE SCOOP

•263 Space Scoops in 30 languages


CECILIA SCORZA DE APPL
Star Dial
for
Northen Hemisphere
ARIES

UNAWE: Universe in a Box

- Modular and customizable **Educational Kit**
- Low-cost materials
- Localizable with UNAWE Network
- Easy to reproduce

- Successful Kickstarter Campaign
- Distribution of **1000 boxes to 1000 primary schools**
- **2015 Scientix Prize** for Best Educational Resource

Ramchandani, Russo et al. 2012.

UNAWE: Universe in a Box


UNAWE
COLOMBIA
CUMPLEAÑOS


Dining Hall Rules


Participation + Argument

Numbers 2011 - 2014

7 850
Teachers trained

292 190
Children engaged

293 800
Visitors unawe.org

10 000
Earth Balls in classrooms worldwide

263
Space Scoops published in 30 languages

SPACE SCOOP

Bringing news from across the Universe to children all around the world

1 050
Universe in a Box edu kits produced and distributed

20 000
Cosmos in your Pocket Booklets distributed to children

UNAWE: International Workshop

October 2015 in Leiden, the Netherlands
50 Educators, Teachers from ~30 countries
in collaboration with European Space Agency

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Universiteit Leiden