



Can we find the next Einstein in Africa?

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AIMS NEI

Building the Scientific Mind 2011  
Sustainability Institute, Stellenbosch  
10 March 2011



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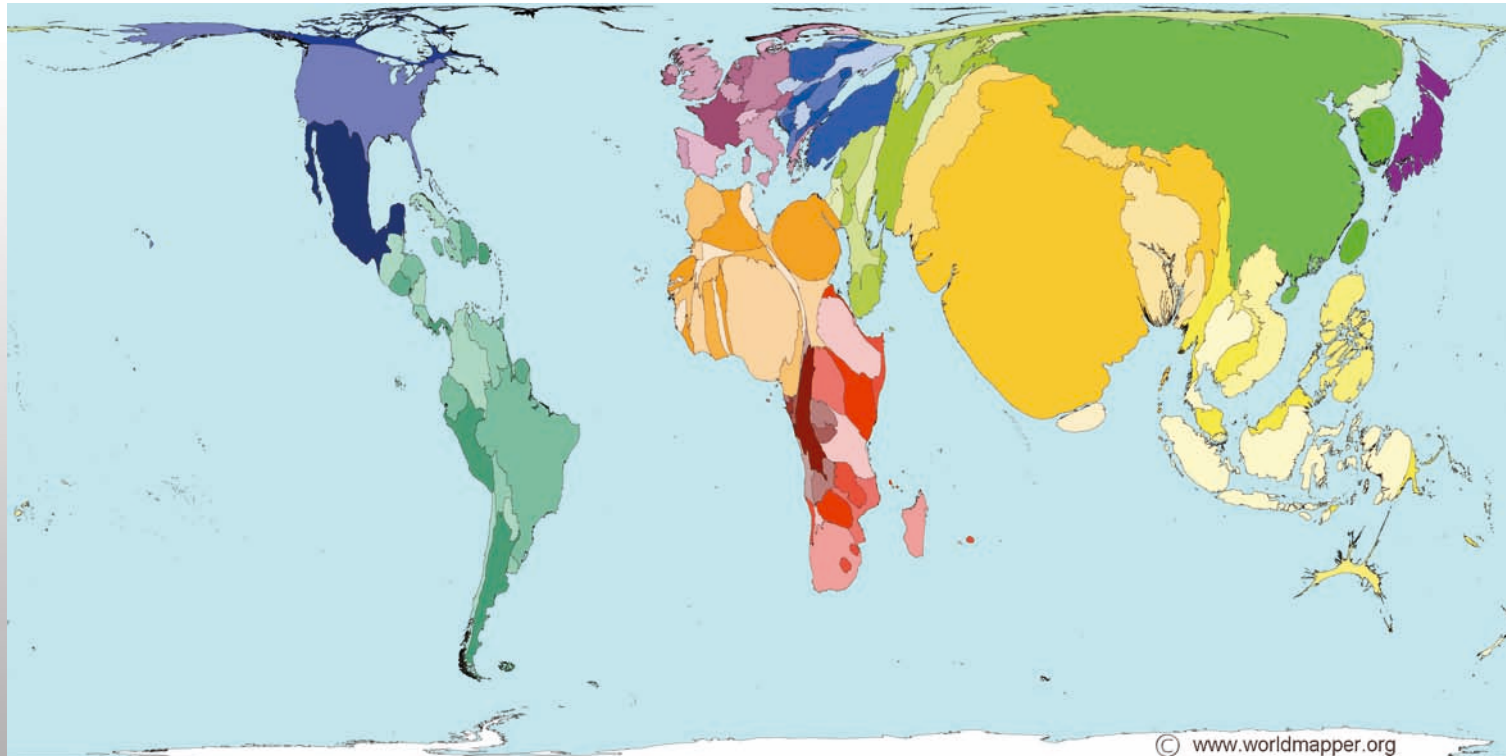
**YES WE CAN**



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# WHY SHOULD WE?



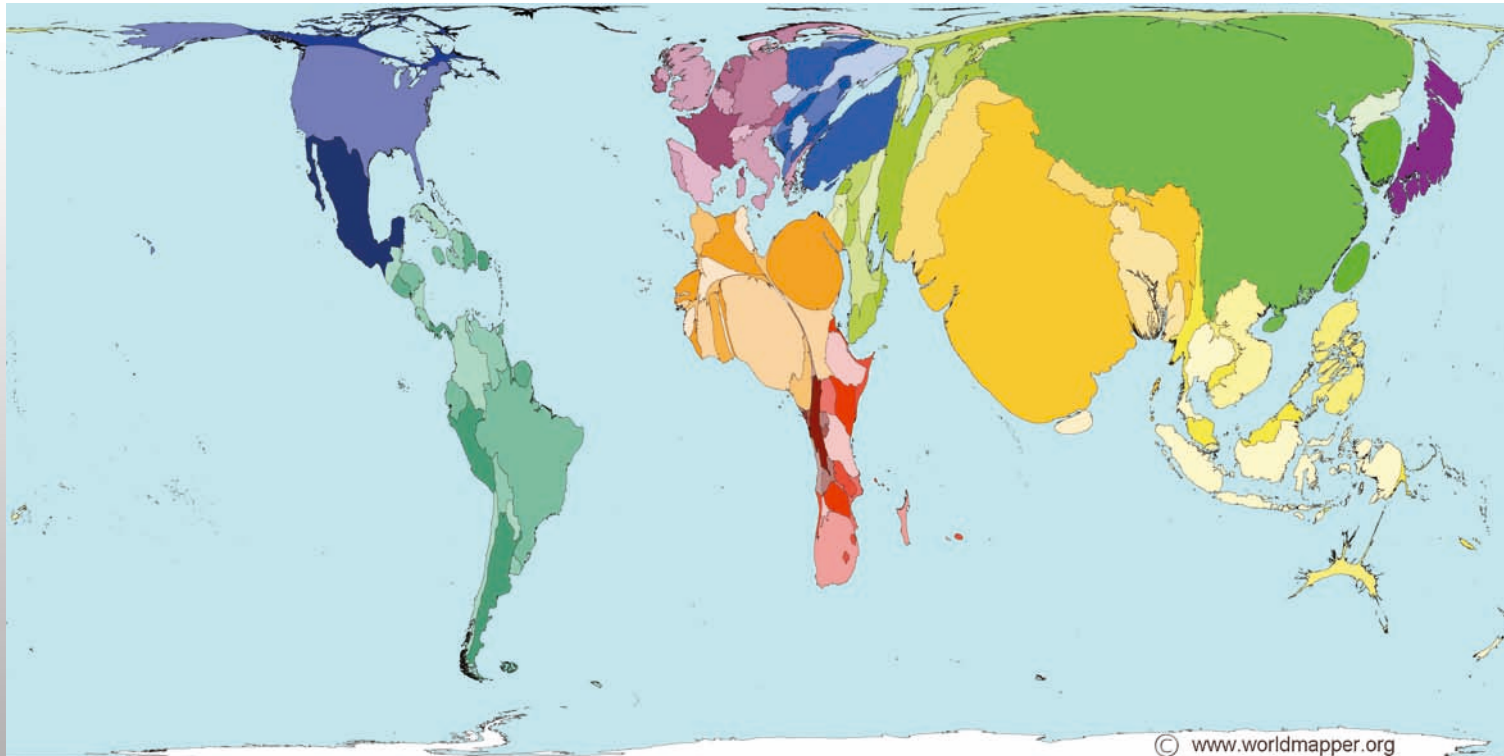
Primary Education



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# WHY SHOULD WE?



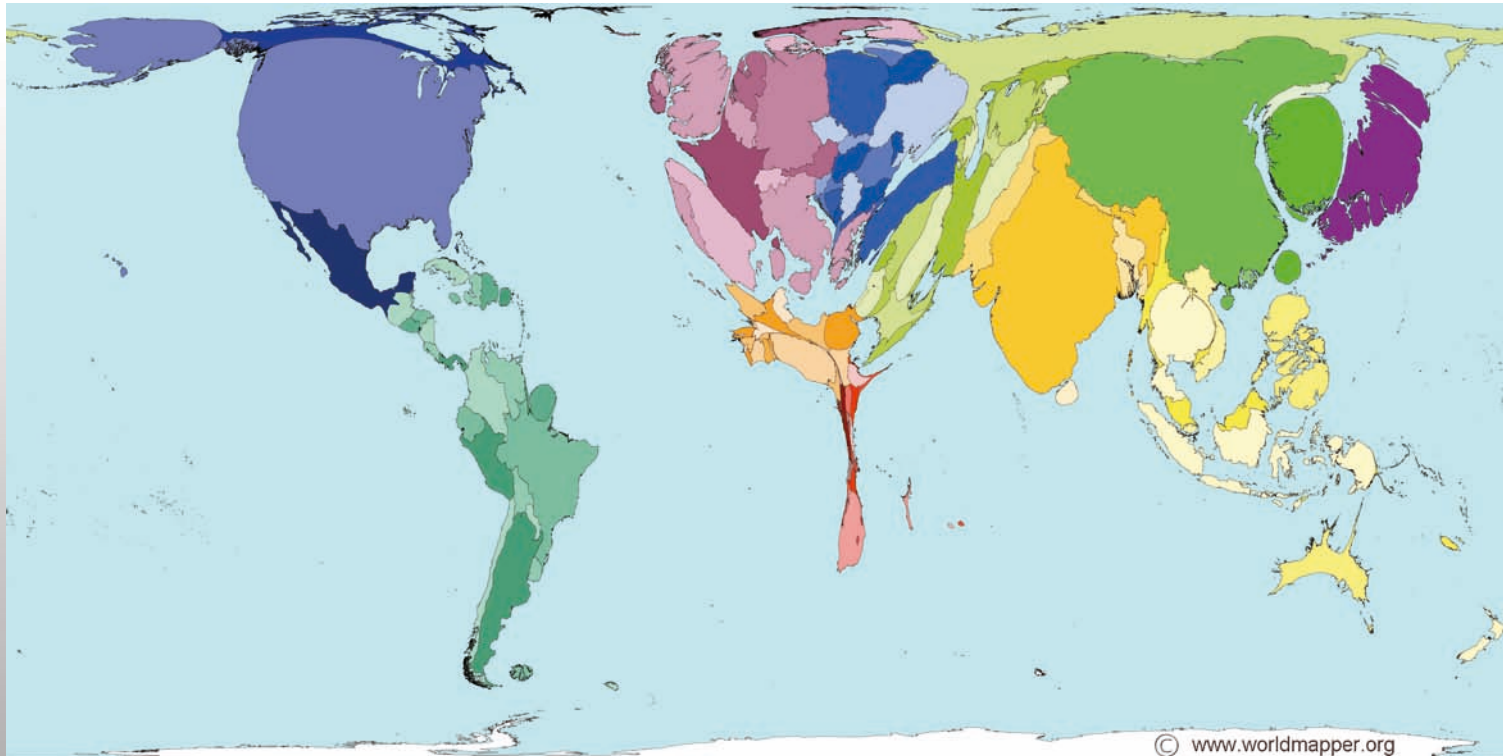
Secondary Education



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# WHY SHOULD WE?



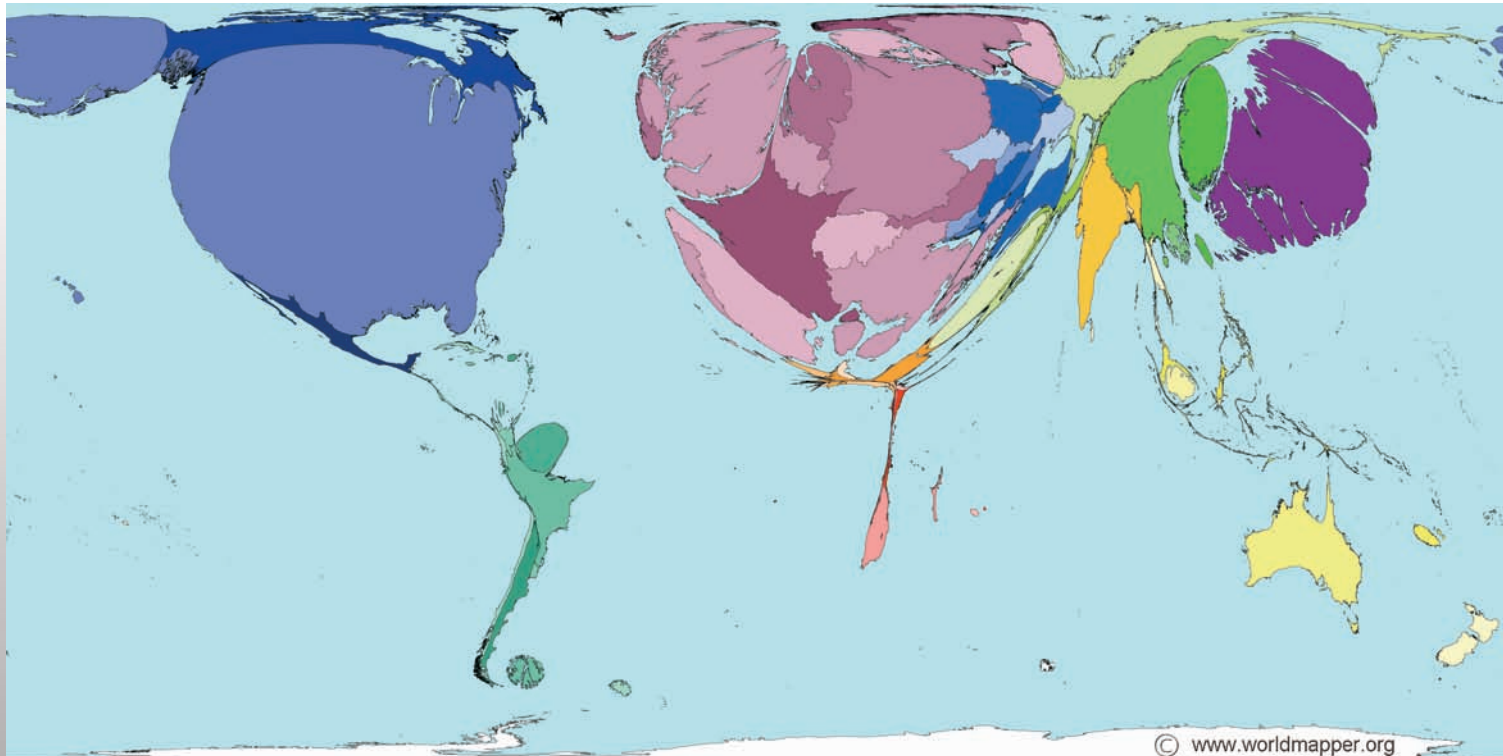
Tertiary Education



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# WHY SHOULD WE?



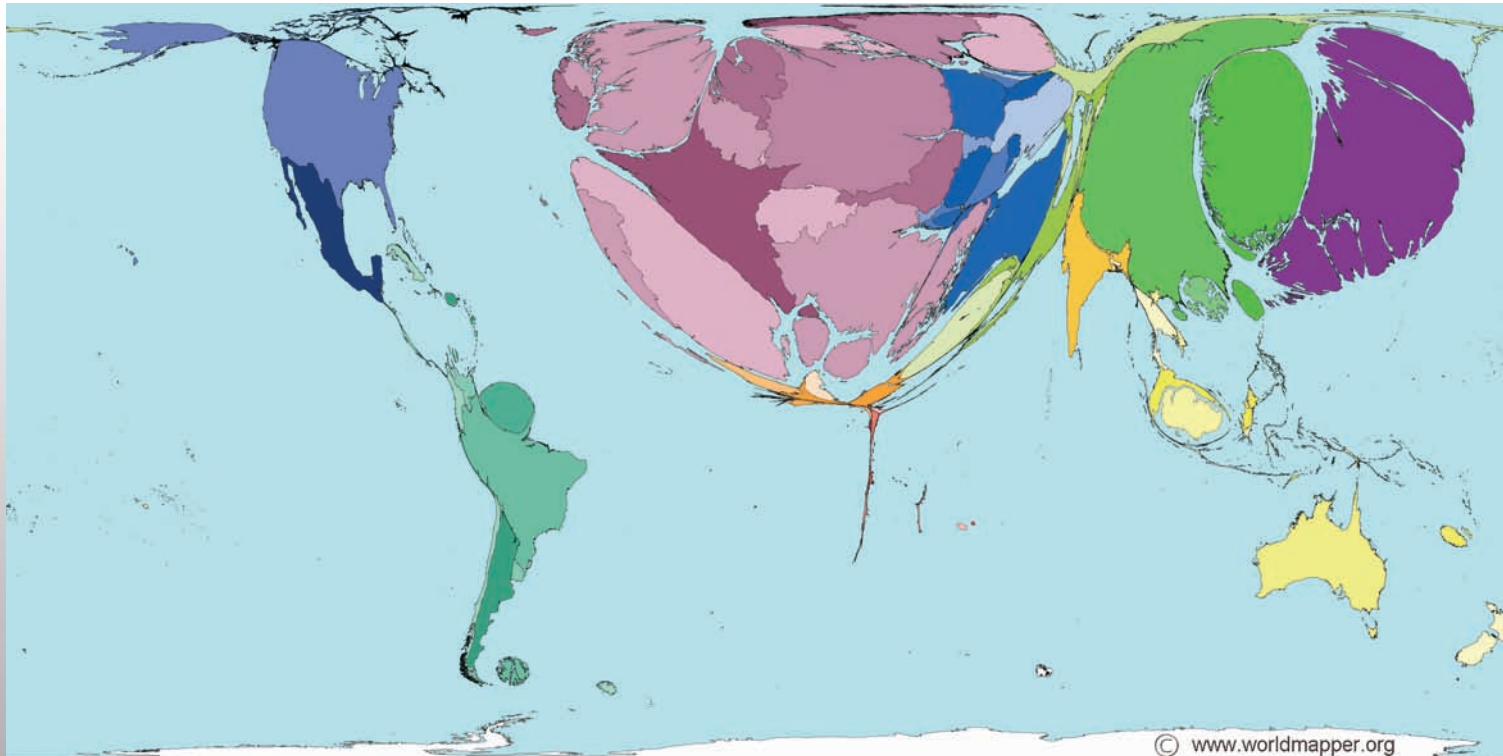
Scientific Research



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# WHY SHOULD WE?



Growth of scientific research



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Where is Africa?



Map of scientific collaborations from 2005 to 2009

Computed by Olivier H. Beauchesne @ Science-Metrix, Inc.

Data from Scopus, using books, trade journals and peer-reviewed journals





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# The question

Can we find the next Einstein in Africa?

becomes:

**HOW?**



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## an **African** Institute

- Growth
- Pan-African
- Skills & diversity
- Computing
- International lecturers
- 24-hour learning environment
- Motivation & spirit

African Institute for Mathematical Sciences



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**R**elevant  
**I**nnovative  
**C**ost-Effective  
**H**igh Quality

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Opened in 2003

305 alumni from 31 countries

1/3 women

95% proceeded to study for a masters or PhD

120 Masters & 15 PhDs completed

112 Masters & 114 PhDs underway

(Nov 2010)

Most graduates are still in Africa

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# What happened next?

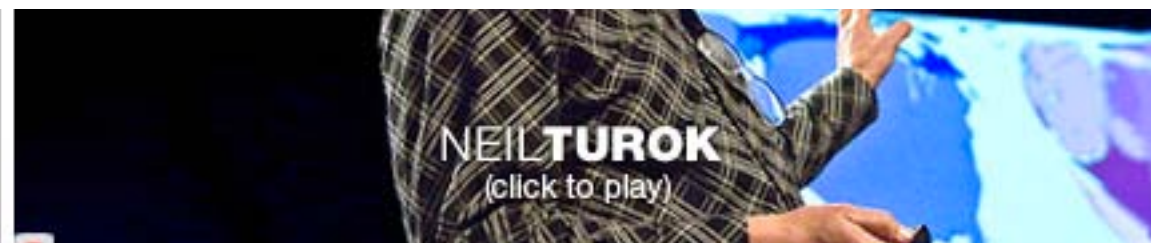
**TED**Prize Wishes big enough  
to change the world

2008 Winners



## Neil Turok's Wish

*"My wish is that you help us unlock and nurture scientific talent across Africa, so that within our lifetimes we are celebrating an African Einstein."*



[View subtitles](#)

[Share](#)



00:00 | 00:00



next  
EINSTEIN  
INITIATIVE  
let Africa  
shine



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Plan:  
To create 15  
AIMS Centres,  
across Africa,  
within a  
decade







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Cost-effective plan

Developing Africa's brightest minds

Expanding a proven model

Building mathematical and computing skills:  
foundational to modern science and technology

Local ownership and international partnership

Reinforcing local universities

Countering the brain drain

Endorsed by AMI-Net, AU, NEPAD



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## TED 2010

Google donates \$1 million to AIMS: A TED Prize wish



Amy Novogratz just announced from stage that Google has donated \$1 million to AIMS, the African Institute for Mathematical Sciences. This follows Daphney Singo's moving talk about how AIMS is helping her gain her PhD in nuclear physics -- a standing-ovation story of one South African woman's determination to become educated. As her mother told her, "Education is the husband that will never let you down."



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## **AIMS-NEI**

**Canada Announces \$20M for AIMS-NEI**



*Canadian Prime Minister Stephen Harper announcing support for  
AIMS-NEI*



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## Next Einstein Initiative Recognized as World Changing Idea with US\$2m Award from Google

Mountain View, CA, September 24, 2010 - As part of a project to fund world-changing ideas, Google has awarded US\$2 million to the African Institute for Mathematical Sciences (AIMS) for its **Next Einstein Initiative (NEI)**, a plan that will accelerate higher education in math and science across Africa.

AIMS is one of the winners of **Google's Project 10<sup>100</sup>**, which gathered over 150,000 ideas, from the public, to change the world by helping as many people as possible. Google today donated \$10 million to five organizations who will bring to life the top 5 ideas, as voted on by the public.

**Google**  
10th Birthday

**Project 10<sup>100</sup>**  
[www.project10tothe100.com](http://www.project10tothe100.com)



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Africa is the world's greatest untapped pool of scientific and technical talent

Developing this talent is essential to the continent's future

AIMS-NEI will have short, medium and long-term impacts on Africa's growth to full educational, political and economic self-sufficiency



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Let us  
work together  
to make this  
continent  
as big as it really is