GeoGebra
Dynamic Mathematics for Everyone

International GeoGebra Institute

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http://www.geogebra.org/I GI

GeoGebra
Community

If you want to go fast,
go alone.
If you want to go far,
go together.

Warren Buffett

Visitors GeoGebra website 2007-2011

World Wide User Community

- 58 Languages
- 190 Countries
- 85 Institutes (62 Countries)
- GG in textbooks in 30 Countries
- 38 Developers
- 200 Translators
- 15,000 Online Learning Objects

- 900,000 unique visitors/month
- 400,000 downloads/month
- 3.8 million downloads in 2010
- On 5.5 million classroom laptops

Visitors from 190 countries

GeoGebraWiki – Shared examples

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International GeoGebra Institute
2007-2011

Core Aims of IGI
- Teacher training and support
  - Offer workshops & support
- Material and software development
  - Share free materials
- Research
  - Encourage and coordinate collaborative research
- (Outreach)
  - Enable disadvantaged communities

85 Current GeoGebra Institutes
62 countries. More coming soon ...

http://www.geogebra.org/community
Institute numbers by continent

Difficulties of serving large communities
- GIs can reach mostly local teachers/communities
- Members work in different institutions
- Large geographical areas to cover
- If many people involved that results too large staff
- Maintain independence of work

Towards a GeoGebra Institute network
- Rather than country-wide institutes, GI network serves better a country’s needs
- Establishing local institutes, but encourage a coordinating committee (locally decided)
- Individual application followed by a network application

Institute network case: Spain

Planned Institute Centres
- Linz, Austria – Software development
- Budapest, Hungary – Community support
- Cambridge, UK – STEM and Research
- Possible other centres
GeoGebra Events

- Individual Workshops
- GeoGebra Conferences (1 in 2009; 12 in 2010; 25 in 2011)
  www.geogebra.org/events

Conferences/workshops 2011 Jan-Oct

- 29 in North America
- 15 in South America
- 7 in Europe
- 5 in Asia

Being Present at other conferences/events

- Present at mathematics/STEM education conferences
- Answer questions for teachers/colleagues
- Distribute GeoGebra materials

GeoGebra Strategy, Sustainability, Media

IGI Strategy and sustainability

- Support
  - Community
  - Software development
- Engage and encourage the community
- Sustainability
- Fundraising

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Community and project support

- Assist the community with
  - Events
  - Research training
  - GeoGebra materials
  - Activities
- Distribute responsibilities (Committees)
  - Research
  - Coordination
  - Support
  - …

Partner school network

- Involve more teachers in the community
- Schools experimenting with the use of GeoGebra
- Encourage collaboration among schools and teachers
- Be able to offer more support
- Sponsors can donate to schools

GeoGebra Development plans
GeoGebraMobile

- GeoGebra Applets should work on Smartphones
- iPhone, iPad, Android

Gabor Ancsin & Zoltan Kovacs, Szeged, Hungary

GeoGebraTouch

- GeoGebra for Primary schools

Michael Borchards, UK & Yves Kreis, Luxembourg

GeoGebra programming (Python)

GeoGebra for Primary schools

GeoGebraPrim

GeoGebraSTEM: ExpEye, Phoenix
Computer Integrated Science Environments

Tata Institute for Fundamental Research, Mumbai, India

GeoGebraSTEM: Lego Mindstorms Robot project

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GeoGebra STEM:
Game consols, Wii, Kinect, Predator, Leonar3Do

GeoGebra Additional activities

One Laptop per Child Project

Tata Institute for Fundamental Research, Mumbai, India

Argentina 3million netbooks

GeoGebra and assessment systems

- WeBWorK, US
- STACK, UK
- TAO, Luxembourg

Textbooks

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On-line schools websites

GeoGebra Research

Research
- Important part in the aims IGI
- Evidence for improvement
  - Software development
  - Training
  - Teaching and learning
  - User community
- Theoretical basis

Research priorities
- Several current research projects with GeoGebra
  - Teacher research (PD, teaching practices)
  - Research on existing materials (WIKI, workshops)
  - Software development/improvement
  - Community research (WIKI, forum, local groups)
  - Student research (understanding, learning, reasoning, proof)
  - Open-source research (availability, accessibility)
- Other? Research Committee

Collaboration and activities
- Share experiences/results with colleagues and at meetings/conferences
- Engage research students
  - Bachelor, masters, PhD thesis
  - Research assistants
  - Fellowships
- Write up and publish work/results (practitioner/ research journals)
- Reach out to developing countries and disadvantaged communities

Engage with the GeoGebraCommunity

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Share your ideas and recommendations

- Software development
- Material development
- Associated projects
- Contacts (people, media, funding sources…)
- Establish a GeoGebra Institute
- Organise GeoGebra events
- ...

GeoGebra

THANK YOU

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