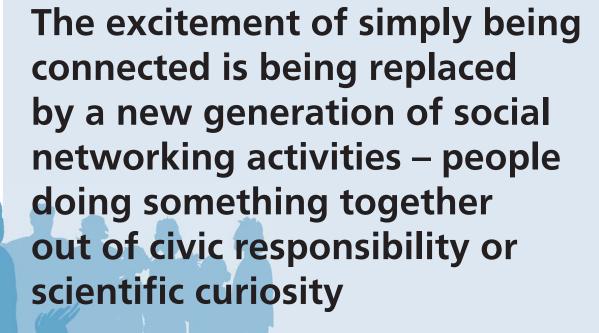
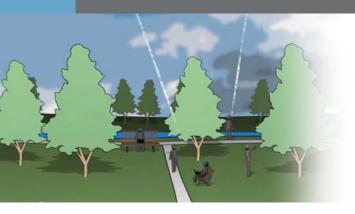


### **CROWDSOURCING**

**DATA SOURCING** 

CITIZEN SCIENCE





According to IBM,
"A whole class of citizen
scientists will emerge
using simple sensors
that already exist to
create massive datasets
for research"

# GlobalLab anticipated this development over ten years ago



Sensors in our phones, cars, wallets, and even tweets will collect data that give scientists real-time pictures of our environments and ourselves

### GlobalLab is a Platform for Citizen Science & Education



### GlobalLab is a framework for education & discovery

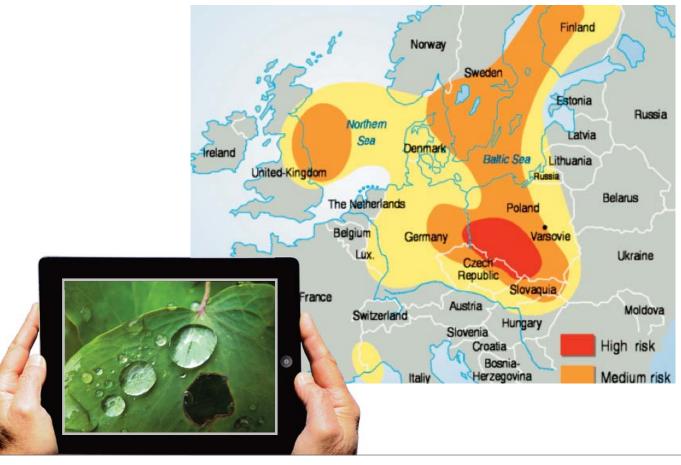
GlobalLab
uniquely provides
a technological
platform, tools,
databases
& resources for
crowdsourcing
and citizen science
projects





### Any probe – even smartphones – can send data to the GlobalLab platform

We work with an increasing number of applications that support environmental monitoring from acid rain to radiation to sound and light pollution





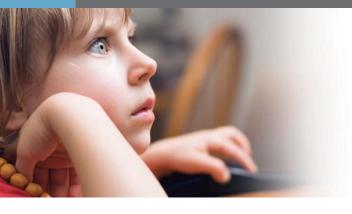
Users can compare their findings with data worldwide

Crowdsourcing & citizen science become

- Relevant
- Engaging
- Easy
- Fun

# GlobalLab not only captures data, it also displays datasets on world maps





### **Education is a \$7 trillion a year** industry worldwide

This is 570 times greater than the worldwide market for online advertising

This is 7 times more than the global market for mobile devices

It is more than the gross domestic products of the United Kingdom, Italy, and France combined





Education is on the brink of a revolution caused by a new generation of digital textbooks







### New type of content

- Dynamic
- Adaptive
- Renewable

### **Beyond content**

- Input from cameras, recorders, digital probes
- Record observations, essays, etc.
- Enable to join social networks
- Aggregate and display crowdsourced data



### Our goals

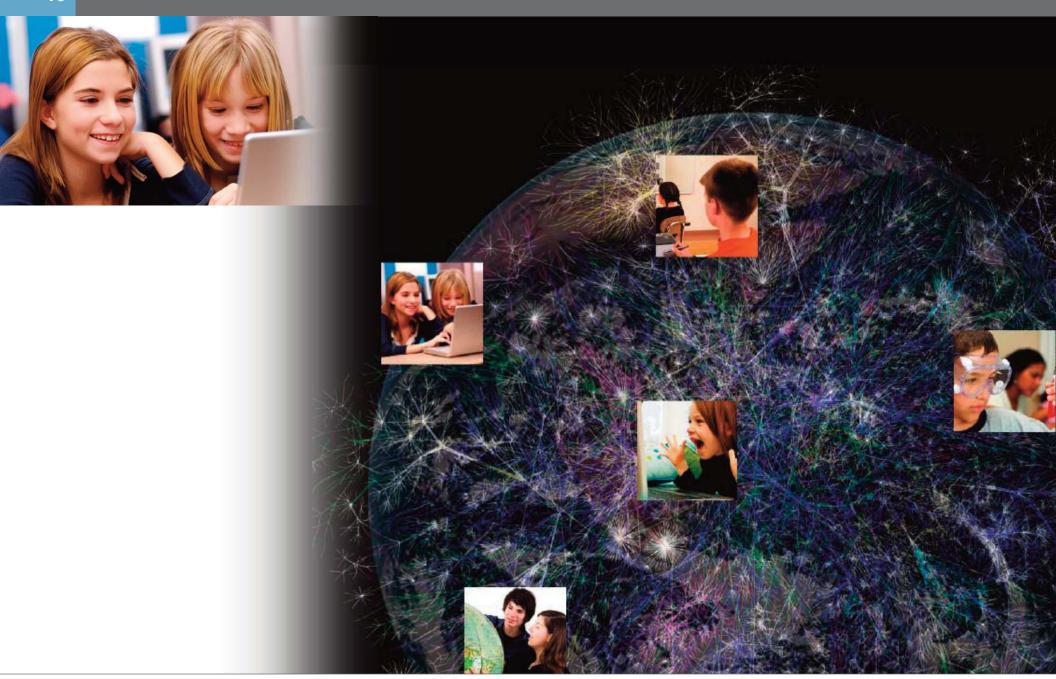
### New types of educational materials:

- Support collaborative investigations by communities of citizen scientists & students
- Allow the implementation of project-based curriculum into school practice
- Meet national educational standards

### Our products

### Internet resources

- A specialized social network for crowdsourcing & education
- Web applications that support citizen science
   & student investigations
- Aggregation & scientific visualizations of data
- Learning modules and integrated science courses & content

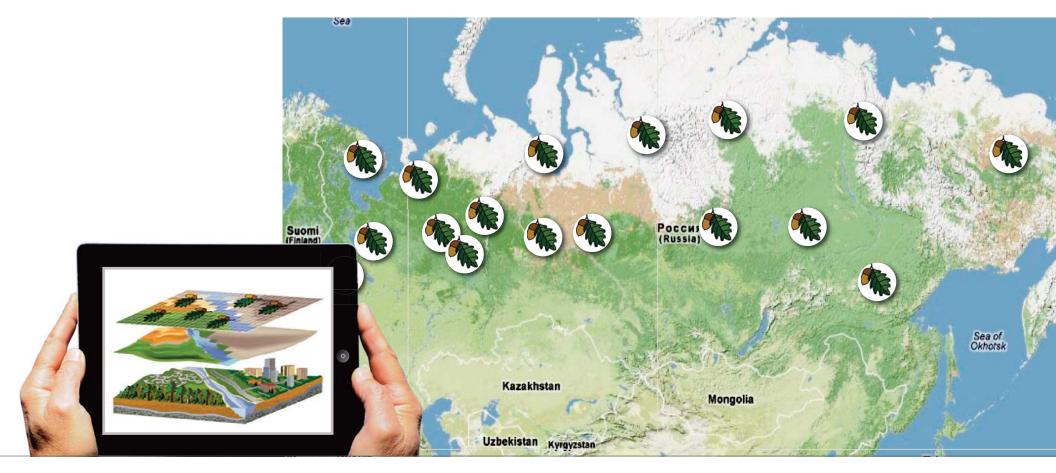


### Wired and Connected



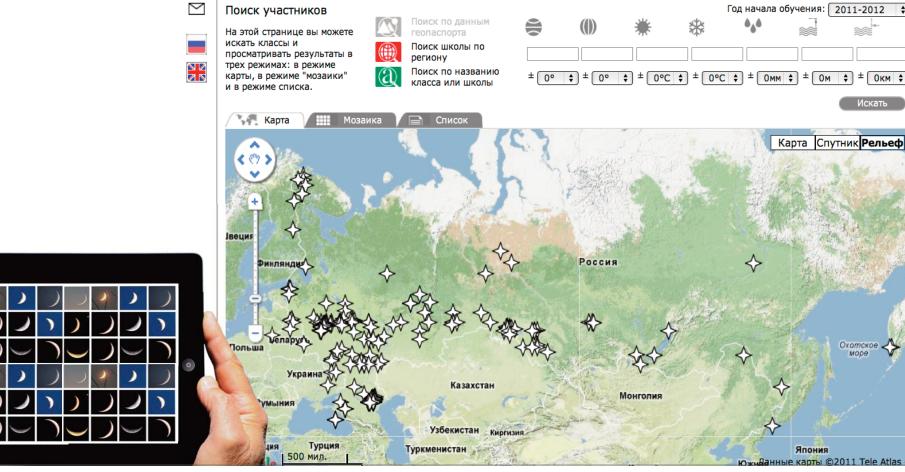


## **Collaborative Investigations** in Biology



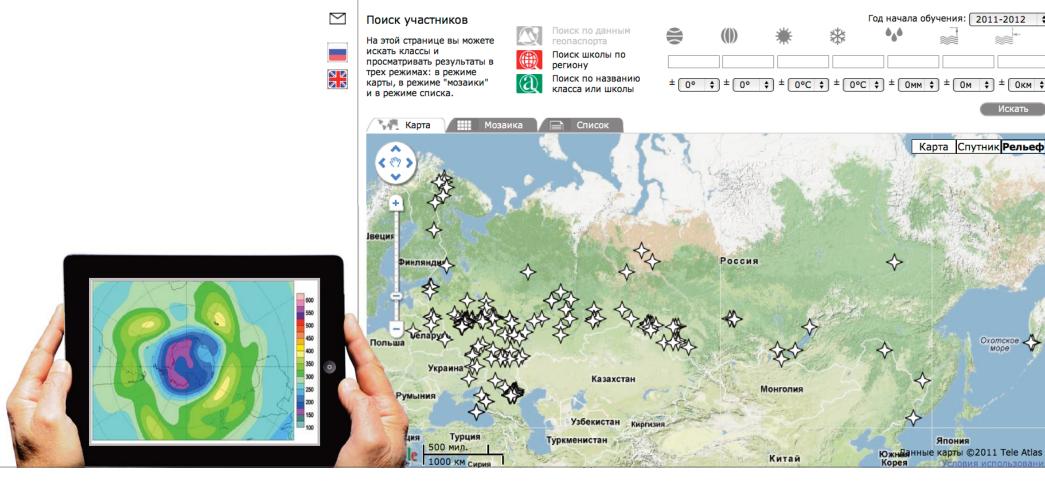


### Collaborative Investigations in Earth Science



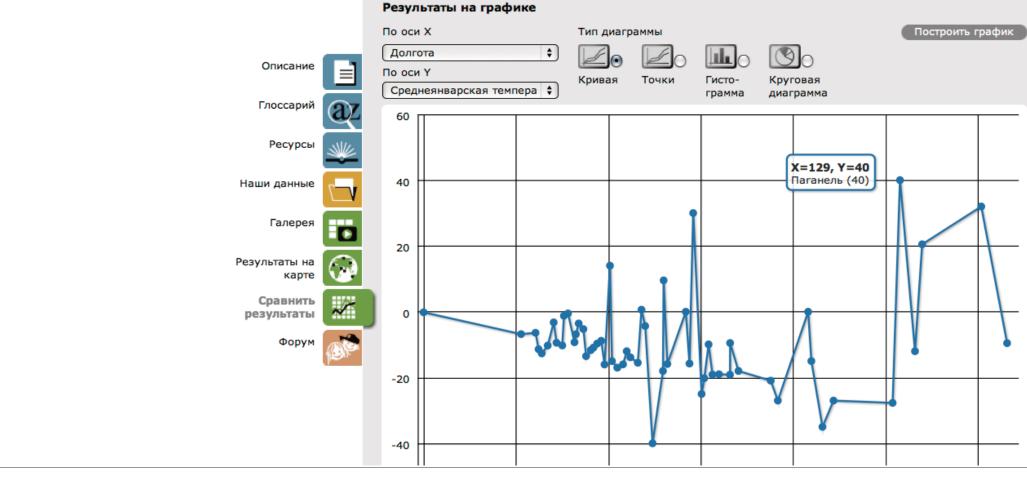


## Collaborative Investigations in Physics





### Statistical Analysis of Collected Data



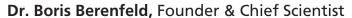
### **Leadership Team**



Team leader
Dr. Boris Berenfeld
is a world renown
expert in the field of
advanced technologies
in education

The team: experts in IT, programming, mobile applications, business development, modern pedagogy and instructional design





Over twenty years of experience in IT solutions in education for leading institutions worldwide (the Russian Academy of Science; TERC, Cambridge, MA, USA; the GLOBE project, USA; the International Center of Information Technologies, Concord, MA, USA)



#### Alexander Kharshiladze, Chief Executive Officer

Mathematician and doctor of science, president and CEO of the Institute of New Technologies in Russia, which has developed, launched, and successfully commercialized products for education markets



#### Dr. Elena Kovalevskaya, VP for Business Development

Expertise in large-scale education collaborative projects; implementation of IT in education; development of new IT-education solutions; teacher IT training and support



#### Arseny Lebedev, CTO/Head Software Developer

Developer of sophisticated search engine technologies (including Omen.ru), lead developer of advanced web-based solutions, and led development of the GlobalLab prototype and its components



#### Yana Zlochevskaya, Curriculum Director

A pioneer of the Russian Global Lab, lead developer of educational and training materials for GlobalLab, implemented GlobalLab in daily classroom practice



#### Julia Alyaeva, Lead Programmer

Specializes in information and communications systems, combined work in programming and teaching as an associate professor in computer science, Ph.D. from Moscow Technical & Computer Science University



### Where technological and pedagogical innovations meet

### Science and technology innovations

An integrated environment to support all aspects of data and crowdsourcing. It includes:

- Virtual research environments
- Online tools and resources that encourage research
- Data enrichment technologies
- A highly intuitive WYSIWYG interface
- Data exchanges, aggregation, and visualization
- Data collected by probes via the Internet

### Social and pedagogical innovations

- A specialized social network for education
- Collaborative pedagogy
- Real world context
- Integrating real science in classrooms
- A new generation of learning materials that transcend national borders and cultural and language barriers

Web applications serving as authoring systems for data- and investigation-driven learning modules

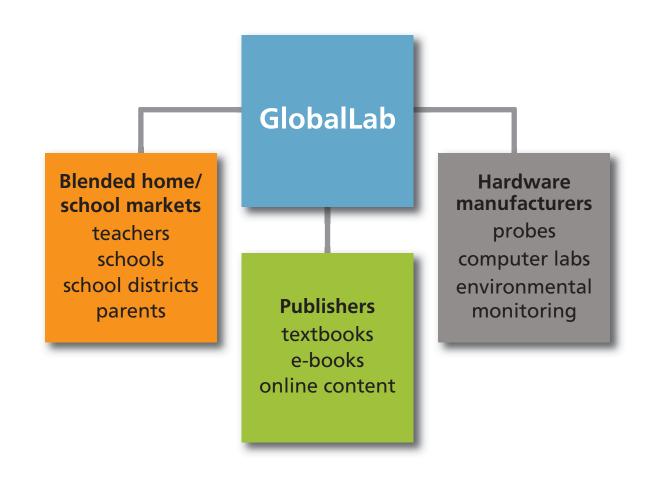
- Developing human capital for knowledge societies
- Implementing constructivist pedagogy based on hands-on learning and social interactions



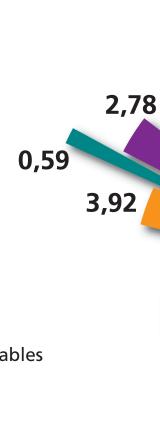
GlobalLab – a leader in supporting collaborative student investigations for the social learning market

#### **Current market volume:**

- Five billion dollars annually
- Annual growth is 5.7 percent

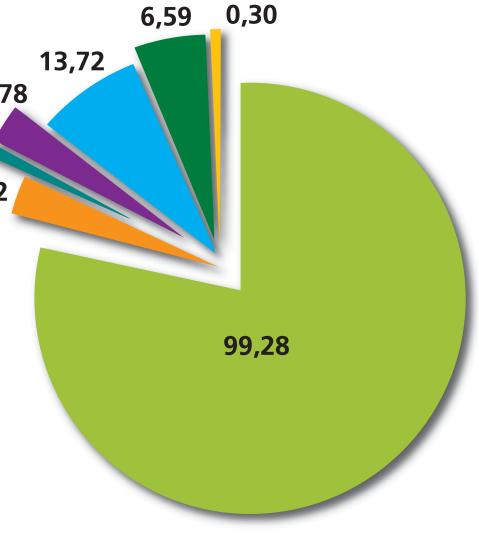




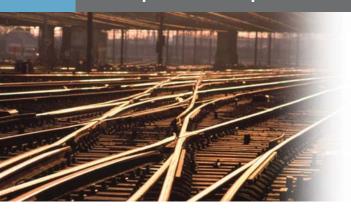




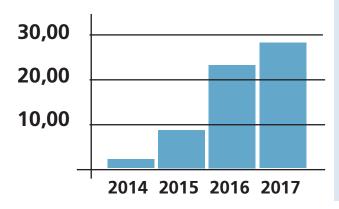
- Equipment & software
- Equipment rentals & consumables
- Consulting & freelancing
- Marketing
- Communications & office rentals
- Other



We expect to recoup investments by the end of 2015



### Sales of student licenses (\$ million ):



### Annual proceeds from student licenses:

- 1 million student licenses for \$28 million
- 5,700 school licenses a year for \$24 million
- 40,000 licenses for probe manufacturers for \$374,700
- 200 000 licenses to publishers for \$587,252

### Road Map

- Contract of the Contract of					
10	2012	2013		2014	
	VI – XII	I – VI	VI – XII	I – VI	VI – XII
Product release	Prototype		Alpha version		Beta version Pilot sales
Recruitment/ talent schedule	Developers (7) Digital Probes Specialist Designers (2) HTML coders (2) Testers (2) System Administrators (2) Potential Customers Support (3) Moderators (2) Technical writer Educators (7) Editors (3) Managing Coordinator International Coordinator Partner Manager Secretary	Developers (2) Potential Users Support (2) Educators (2) Outreach Educators (3) Manager of Business Planning and Development (1)	Outreach Educators (2)	Educators Sales Managers Accountants Technical Staff	
Financing needs/ schedule, Rubles	46.5 million	41.4 million	39.2 million	61.6 million	60 million
Plans for getting international	Participating in international exhibitions	Negotiations with international manufactures of school equipment and content developers.  Seminars outside Russia	Attracting international users Submitting an application for a patent on the protocol of data transmission from remote digital probes	Beta version is to be released on international market	