

The Institute for Innovation in Education: Overview

“Learning Together to Reinvent Learning”

Background

The Institute for Innovation in Education (IIE) is an incubator of ideas, projects, and partnerships at the intersection of technology and learning, based at the University of Michigan and driven by the expertise of faculty, graduate students, educators of all kinds, and international partners. It builds on the success of UM's Educational Technology graduate programs and over three decades of research and development at the forefront of interactive learning with technology. The work of the IIE addresses three growing local and global needs:

1. The need for agile, creative approaches to the educational and social challenges of our times.
2. The need for stronger connections among educational, social, and commercial organizations working together to nurture more highly skilled, knowledgeable and compassionate citizenries.
3. The need for ongoing professional communities to support creative educators dedicated to the design of immersive learning experiences.

With the above in mind, the IIE aims to create timely, agile responses to current issues in education, by supporting continually inquisitive practice in the design and implementation of inventive tools, programs, and environments for learning. We aim to rethink and redesign environments that bridge the gap between popular and academic culture, and that support transitions among P-12, higher education, and the workplace. Through a global network of creative educators we aim to build human capacity and generate a knowledge base of practical evidence and techniques.

The IIE vision of learning embraces dedication to creativity, playfulness and adventurousness cultivated throughout life. We believe these competencies originate through the work of curious individuals collaborating in diverse and multi-disciplinary teams. We are dedicated to principles of learner centered design, rapid prototyping, and real world piloting, as well as flexible, nuanced and multifaceted assessment methods that measure effects on both individuals and communities.

A centerpiece of the Institute's work is a series of four-day gatherings combining public presentations with intensive project team sessions and idea exchanges on educational innovations. With an emphasis on the interests of the participating group, on intensive collaborative work, and on concrete outputs, gatherings draw upon event frameworks such as “unconferences,” BarCamp, and Startup Weekend. Gatherings take place up to two times per year in a variety of locations around the globe, with a mix of students, practitioners, researchers, developers, partner organizations, and others.

The IIE is seeking opportunities to partner with a wide range of institutions and organizations for future gatherings.

Objectives and Outputs

- 1. Practices:** Explore innovative methods, strategies, and approaches for learning.
Outputs: Proofs-of-concept; case studies; white papers; academic publications; standards and measurements. As one avenue for dissemination, the peer-reviewed journal THEN: Technology, Humanities, Education, & Narrative will be absorbed into the IIE.
- 2. Tools:** Envision and develop tools to support 21st century learning objectives.
Outputs: Software; hardware; media; curriculum materials.
- 3. Partnerships:** Develop collaborative, problem based learning and educational leadership skills, and create new partnerships and peer relationships.
Outputs: Ad hoc working groups that focus on a particular project or problem; grant-writing and fund-raising groups; formal agreements among universities, nonprofits, for-profits, schools, departments of education, etc.
- 4. Community:** Foster supportive relationships and develop a global network of professionals committed to ongoing discourse, improvement and change in education.
Outputs: Ongoing exchange of ideas in multiple venues, face-to-face and online.

Target Participants

The IIE draws members and collaborators from educational institutions, non-governmental organizations, private companies, government institutions, agencies, project partners, funding organizations and entrepreneurs. Core members are faculty and affiliates of the University of Michigan's Interactive Communications & Simulations group.

Teams are formed during IIE Gatherings to actively seek rapidly designed solutions to educational challenges. The greater community of practice is expected to provide continued support throughout the year to sustain an ongoing environment fostering educational improvement. In addition, participants will be provided with the tools to create local mini-gatherings based on their work, with the intention of sharing knowledge, engaging local participants, fostering community development and creating or imagining future learning opportunities.

Venues

International participation and collaboration is central to the ongoing development of a global network of education practitioners and stakeholders. Hosting gatherings in diverse locations around the globe allows for increased participation and knowledge sharing among participants. To date, gatherings have been held in Geneva, Switzerland and in Michigan; plans are in the works for gatherings in Durban, South Africa; Bangkok, Thailand; and Muscat, Oman, among others.

General Schedule for Gatherings:

Day 1-2: *Community of Practice* (Introductions, networking, preparation for public presentations, feedback and problem-solving within and among project teams.)

Day 3: *Collaborative Global Solutions to Educational Challenges* (Project presentations, panels, and workshops, open to public. Each session presents a challenge, which provides a basis for discussion but also frames the work of Day 4.)

Day 4: *Tools, Learning Environments, and Standards*. (Project teams and partners finalize proposals, address technical challenges, and plan next steps.)

Management

IIE gatherings and other activities will be organized by the Institute for Innovation in Education at the University of Michigan in collaboration with InGlobal, a nonprofit organization dedicated to innovation and entrepreneurship addressing the world's educational and social challenges. We seek additional partnerships and collaborators.

For more information, to request an invitation to participate in a gathering, or to propose collaborative activities, please email innovation@umich.edu.

Examples of Projects

What kinds of projects might be developed in the IIE? Here are some projects that have come out of past and current Technology in Education Global Programs, which exemplify the creativity, practicality, and social mission of work that we envision happening within the IIE.

DevInfo GameWorks: Change the World, One Game at a Time (2008-2010)



Over one billion people on our planet live on less than dollar a day. More than 115 million children are denied the right to go to school. Each day, 30,000 children die from preventable diseases.

These facts are part of a growing collection of data gathered by governments and organizations worldwide. For over a decade, the DevInfo initiative has worked to bring these data to an ever broader audience. DevInfo GameWorks (DIGW) aims to dramatically expand the ways in which the global public, and young people in particular, can engage with this information through creating, sharing, and playing on-line games using these data.

DIGW is based on a simple principle: you might learn something from playing a game, but you will definitely learn something from creating a game. By giving learners a platform for creating and sharing games along with free access to rich sets of data, DIGW puts learners in the position of game creators.

DIGW is a 2009 winner of a MacArthur Foundation-funded Digital Media and Learning award, and part of the Humanities, Arts, Science, and Technology Advanced Collaboratory. More information at digw.org.

Sonlig: Every Kid Deserves Light (2011-2012)



Without access to electricity you have no access to technology.

The Sonlig project team aims to reduce energy poverty and provide employability options for youth in areas where rural electrification is a significant barrier to accessing 21st century technology tools. The Sonlig project provides a physical science kit and curriculum introducing learners to solar photovoltaic energy and allows them to build something real, functional and personal. The process will engage the learner in a purposeful learning experience, challenge them to build their own system and inspire them to develop new knowledge and skills. Every kid deserves light. Light for learning, light for jobs, light for the future. Sonlig will be piloted in select rural African communities in 2012. More information at sonlig.org.

Ukuphila: The Community Health Data Project (2011-2012)



Health is by no means solely a medical notion, but predominantly a societal one.
 -- Ernst Bloch, *The Principle of Hope* (1995)

The Ukuphila (oo-goo-PEE-lah) Project's goal is to engage young people in helping to monitor the health of their own community, in partnership with local and international health organizations and technology providers. Participants will choose a local health issue, research and collect data via mobile phones, and then pursue social action based on their findings. In addition to the immediate benefits to the community, the participants will also gain technology, research, and project implementation skills that can help them join the workforce. Ukuphila will provide a curriculum and pedagogical support to guide the individuals through the process. The project will be piloted in South Africa in 2012.

Footprintz of a Nomad



Teach us what you've learned, take nothing but images, and leave nothing but "Footprintz."

We are all explorers. We long to visit the places we learn and dream about. Footprintz of a Nomad allows us to explore other places through the eyes of fellow "nomads," through videos, photos, discussion boards, and interactive games.

This platform will enable young people to share their visits to fascinating places anywhere on the globe, post video and/or photos of their visits, create historical and geographical narratives about those places, share commentary, and create comic strips. While doing so, participants earn and collect virtual "footprintz," based on their level of commitment to play and exploration within the platform. They can also collect "patches" when their efforts are acknowledged and appreciated by a larger audience. This project will be piloted with students visiting World Heritage Sites in Egypt in 2012.