



TechChange

the institute for
technology and social change

Technology for Social Change

10 week course (3 credits)

Summer 2011

Course Description

New technologies have fundamentally changed the capacity for collecting, processing and exchanging information in the 21st century. NGOs, governments, civil societies, and companies alike are just beginning to understand the potential that these tools can have in addressing a range of social problems. This ten week online course will explore some of the ways technology is being used to respond to crises, improve health care delivery, monitor elections, provide banking services, ensure effective governance, expand educational opportunities, and more. It will also address some of the key challenges these new tools present, such as lack of access, underdeveloped infrastructure, implementation issues, as well as obstacles for scale-up and evaluation. The course is designed for graduate students and working professionals to assist them in developing concrete strategies and technological skills to work amid this rapidly evolving landscape. Participants can expect an immersive and interactive learning environment with a variety of real world examples from organizations working in the field.

<i>Week 1</i>	Introduction
<i>Week 2</i>	Social Media for Social Change
<i>Week 3</i>	Technology for Crisis Response
<i>Week 4</i>	Technology for Health
<i>Week 5</i>	Technology for Finance, Banking and Livelihood
<i>Week 6</i>	Technology for Governance and Rule of Law
<i>Week 7</i>	Technology for Advocacy and Citizen Journalism
<i>Week 8</i>	Technology for Education
<i>Week 9</i>	Risks, Challenges and Failures in Technology for Social Change
<i>Week 10</i>	Future of Technology for Social Change

Goals

The course is designed to assist both professionals and students in understanding the role that technology can play in responding to different aspects of complex social problems and issues. Participants will develop strategies and skills to assist them in navigating this rapidly evolving landscape. Participants should have interest in the role that technology plays in the peacebuilding, development and humanitarian arenas. No specific technological skills other than basic computer literacy are required for the course.

Learning Outcomes

Participants will be able to critically analyze both the opportunities and the pitfalls that emerge when working with technology to address social problems.

Participants will be able connect relevant development, humanitarian and peacebuilding theories to the technological strategies and tools discussed in the course.

Participants will be able to manage specific software platforms and utilize various technological tools for responding to social problems.

Participants will be able to design dynamic and effective strategies for using technology platforms and tools to respond to social challenges.

Participants will be able to work collaboratively with others using new tools by participating in dynamic group exercises and simulations.

Participants will develop confidence and critical self-awareness in working with technology to address social problems.

Class Assignments

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| <i>I</i> | Week to week assignments will include blog posts reflecting on the topic of the week, case study evaluations, memo-writing exercises, crisis simulations, and role-playing activities using popular tools such as Ushahidi and FrontlineSMS. | 40% |
| | Assignments will give students insight into some ways new technology can aid or hinder various efforts. In addition, they will provide a platform for students to ask lingering questions, make critical insights, and consider how strategies and tools might make a difference in their work, specifically. Participants will also submit a reflection paper at the end of the course that explores key insights, trends, and discoveries made in weekly assignments throughout the course. | |
| <i>II</i> | Action Plan. Participants will be given a description of a real challenge related to a social problem that a specific organization is working on. Participants will (1) research and analyze all dimensions of the challenge, (2) critically consider the role that technology can play in addressing it, and (3) design a comprehensive strategy using both technological and non-technological elements for responding to the challenge. Participants may, alternatively, develop an action plan for their a project pertaining to their current job using the same steps. Participants can elect to work alone or in small teams. | 30% |
| <i>III</i> | Class Participation. | 30% |

Schedule:

The course will consist of ten one-week units. Themes, activities, case studies, sample readings, simulations and multimedia are listed below.

Pre-workshop Questionnaire: Participants will receive a brief training needs assessment questionnaire to share goals and objectives for the course.

Learning Outcomes

Week Session Themes and Activities

Resources, Readings, and Videos

1 Introduction to Technology for Social Change

Themes Introduction to Frameworks and Theories, Statistics and Guiding Questions for Course, Interoperability and Standards, Pace of Digital Change, Digital Divide

Activities Class Expectations and Contributions, Technology Life Maps Activity, Consultant Letter to OLPC CEO

Case Study One Laptop Per Child

Shirky, Clay. *Here Comes Everybody: The Power of Organizing Without Organizations*. Chapter 1. (2008)

Kurzweil, Ray. *Ray Kurzweil on How Technology Will Transform Us*. TED Talk. (2009)

Zuckerman, Ethan. *Listening to Global Voices*. TED Talk. (2010)

2 Social Media for Social Change

Themes Interest Graph v. Social Graphs, Slacktivism and Online Organizing, Analytics and Data Visualization, Access and Variety of Networks

Activities Twitter Exercise, Skype Chat with Classmate, Social Media ToolBox Activity

Case Studies Social Media in Tunisia and Iran, Colombian Facebook Protest, Mobilization of Obama Supporters, Evoke at the World Bank

Gladwell, Malcolm. *Small Change. Why the Revolution Will Not Be Tweeted*. New Yorker Magazine. (2010)

Papova, Maria. *Malcolm Gladwell is #Wrong*. Change Observer. (2010)

3 Technology for Crisis Response

Themes Conflict Mapping, Disaster Preparedness, Crowdsourcing, Information Overload: Verification, Analysis, and Decision Making, Contextualization of Response

Meier, Patrick & Coyle, Diane. *UN Foundation Vodaphone Report: New Technologies in Emergencies and Conflicts*. (2009)

Activities Crowdsourcing Exercise, Exploration of Tools and Resources for Early Warning and Crisis Response

Case Studies Development Seed, ESRI, Ushahidi, FrontlineSMS

Guest Speakers Development Seed and ESRI

Simulation Two-Hour live Online Crisis Mapping Simulation Using Ushahidi CrowdMap Platform for Monitoring Election Violence in Afghanistan

Hersman, Erik. *Erik Hersman on Reporting Crisis Through Texting*. TED Talk. (2009)

Curron, Paul. *If All You Have is a Hammer, How Useful is Humanitarian Crowdsourcing?* Mobile Active Blog. (2010)

4 **Technology for Health**

Themes Access and Equity, Public Health Campaigns, Mobile Diagnostics, Data Management and Collection

Activities Blog Response Activity, Public Health Simulation

Case Studies RapidFTR, SanaMobile, UNICEF Innovation, MobileMedic, OpenMRS

Guest Speakers MobileMedic

Berg, Matt. *Mobiles for Health*. PopTech Talk. (2010)

5 **Technology for Finance, Banking, and Livelihoods**

Themes Mobile Money Systems, Security, Remittances and Savings, Technology and Social Entrepreneurship, Human Capital Development, Microfinance

Activities Case Study Evaluation, Games to Demonstrate Economic Planning (Ayiti, Third World Farmer)

Case Studies M-Pesa/M-Paisa, Grameen Phone, Souktel, TAMAS, SamaSource, Frontline SMS: Credit, txteagle

Himelfarb, Shedlon. *Can you Help Me Now? Mobiles and Peacebuilding in Afghanistan*. USIP Press. (2010)

Qadir, Iqbal. *Iqbal Qadir says Mobiles Fight Poverty*. TED Talk. (2005)

Lyon, Ben *FrontlineSMS Credit*. PopTech (2010)

6 **Technology for Good Governance and Rule of Law**

Themes Election Monitoring, Dispute Resolution, Countering Corruption, Digital Democracy, Land Titling and Digital Records, Gov 2.0

Activities Online Dispute Resolution Simulation, Country Transparency Profile

Case Studies Frontline SMS:Legal, Digital Democracy, National Democratic Institute, Internet Bar Organization

Guest Speakers National Democratic Institute and FrontlineSMS: Legal

Schuler, Ian. *SMS as a Tool for Election Monitoring*. Innovations: Vol 3; Issue 2. MIT Press. (Spring 2008)

7 **Technology for Advocacy and Citizen Journalism**

Themes Security and Privacy, WikiLeaks and the Era of Open Data, iReporting and the Democratization of Media, Connecting Online and Offline Advocacy, Integration of Radio and Mobile

Activities Participate In and Evaluate an Online Advocacy Campaign

Case Studies FreedomFone, Witness, Ground-Views

8 **Technology for Education**

Themes Education in Emergencies, Tools for Collaboration and Curriculum Development, M-Learning: Fad or Future, Blended Learning, Classroom 2.0

Activities Interview Local School, Personalized Evaluation of new Pedagogies

Case Studies Soliya, Hole in the Wall, BRAC Dimagi literacy, Text2Teach, Question Box, Mobile Active

Duebel, Patricia. *Social Networking in Schools: Incentives for Participation*. THE Journal: Technological Horizons in Education. (2009)

Teachout, Zephyr. *Welcome to Yahoo U! The Big Money*. (2009)

Mitra, Sugata. *How Kids Teach Themselves*. TED Talk (2008)

9 **Risks and Failures in Technology for Social Change**

Themes Is Technology even the Solution? Tools for Monitoring and Evaluation, Low Bandwidth and NonTech Alternatives, Technology is Easy/ People are Hard

Activities Class FailFaire

Case Studies HayStack, Facebook and Google in China

Morozov, Evgeny. *How the Net Aids Dictatorships*. TED Talk (2009)

Verclas, Katrin. *Wireless Technology for Social Change: Trends in Mobile Use by NGOs*. UN Foundation. (2008)

10 **The Future of Technology for Social Change**

Themes 10 Year Outlook, Can We Bridge the Digital Divide? Net Neutrality, Can Gaming Make a Better World?

Activities Class Dialogue on Twitter to Engage Broader Audience, Group Reflection on Course

Underkoffler, John. *John Underkoffler Points to the Future of UI*. TED Talk. (2010)

Rosling, Hans. *Hans Rosling Shows the Best States You've Ever Seen*. TED Talk. (2006)

McGonigal, Jane. *Gaming Can Make a Better World*. TED Talk. (2010)

Instructor's Biographical Data

Nick Martin is the Co-Founder and President of TechChange, the Institute for Technology and Social Change. TechChange partners with universities, organizations, and software developers to train leaders to leverage emerging technology for sustainable social change. Nick oversees all strategy and programming for the organization, though he is most passionate about training and curriculum development. Before launching TechChange, Nick was the Executive Director of the US Association for the University for Peace (UPEACE/US). He remains a visiting professor at the United Nations University for Peace (UPEACE), where he teaches courses on the role of technology in peacebuilding, development, and humanitarian work. Nick is the founder of two innovative digital media and conflict transformation programs: DCPEACE and PeaceRooms. In 2009, Nick was selected as a Global Fellow by the International Youth Foundation and a Washington DC Humanities Council Scholar for his leadership in launching the programs and track record as a young social entrepreneur. Nick is also an advisor to Ashoka, the US Institute of Peace (USIP) and a number of other leading organizations. Nick received his B.A. with honors from Swarthmore College and an M.A. in Peace Education from the United Nations mandated University for Peace (UPEACE). He is passionate about ideas and projects that connect the fields of education, peacebuilding, technology, and global citizenship.