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Information Technology, Globalization and Governance

Fall 2010

Preliminary Syllabus

This graduate course provides a broad overview of information revolutions and their impact on global politics. We will examine previous episodes of transformative changes in communications to place contemporary changes in a broader historical context and we will consider theoretical explorations of the relationship between information technologies and world politics. The bulk of the course, however, will examine the practical impact of the information revolution on state sovereignty, democratization, diplomacy, international political economy, international and homeland security and international organization. A particular emphasis will be placed on the information technologies used to run government agencies and other public sector organizations. We will also examine the move from "legacy systems" to integrated suites of standardized software known as Enterprise Systems in back office of government operations as well as the website "front ends" that connect these systems to citizens, private sector entities and other governments. The course will consider the ways in which international non-governmental organizations (NGOs) have taken advantage of the internet and the ways in which states attempt to control flows of information over the internet to their citizens. The course will focus extensively on the use of information technology by the US State Department and other foreign ministries as well as investigate the implementation of management information systems by international organizations such as the United Nations. The course will also consider the global digital divide, efforts to bridge that divide and use information technologies to foster international development.

Prerequisites:

There are no course prerequisites or technical background prerequisites. Students should be open to learning to use specific information technologies if the opportunities to use them for class and research projects present themselves.

Objectives:

By the end of this course: 1) students should have a basic understanding of the current state and historical development of information and communications technologies; 2) students should be able to build a basic website and post documents on it; 3) students should be able to prepare and present a presentation on a research project; 4) students should be able to critically evaluate government websites; 5) students should understand the methods of internet censorship and control employed by governments and countermeasures used by non-governmental organizations (NGOs) and other non-state actors; 6) student should have developed an understanding of the security implications of technology and 7) students should have developed an appreciation for the consequences of information technologies for the conduct of international relations and be able to explain these consequences in considerable detail.

Texts (available at the UAlbany Bookstore):

Ronald J. Deibert, *Parchment, Printing, and Hypermedia: Communication in World Order Transformation* (New York: Columbia University Press, 1997).

Ronald Deibert, John G. Palfrey, Rafal Rohozinski, Jonathan Zittrain eds. *Access Controlled: The Shaping of Power, Rights, and Rule in Cyberspace* (Cambridge, MA: MIT Press, 2008).

Jane E. Fountain, *Building the virtual state: information technology and institutional change* (Brookings Institution, 2001) (selections)

Thomas Friedman, *The World is Flat* (Farrar, Straus and Giroux, 2007) (selections)

John Mathiason, *Internet Governance: The New Frontier of Global Institutions* (Routledge, 2009)

Peter W. Singer, *Wired for War: The Robotics Revolution and Conflict in the 21st Century* (Penguin Press, 2009)

Unless noted, all required journal articles can be accessed on-line at the UAlbany library under “e-journals.” This includes articles in *Economist*, *Foreign Affairs*, *Foreign Policy*, etc.

Additional readings available online – at the Universal Resource Locators (URLs) given

Description of requirements:

Reviews of readings:

Students will submit **three** brief reviews (2 pages each -- approx. 500 words) of required weekly readings at the **beginning** of the session selected. Reviews are intended generate informed class discussion, so they must be written and submitted before class. These reviews should state the main arguments of individual pieces assigned, critically evaluate arguments made and relate the articles to one another (when possible). Each review is about 7% of course grade. Excellent reviews will receive 5 points, good reviews 4 points, passing reviews 3 points, failing reviews 2 points. A total of **four reviews** must be submitted for full credit. Students may choose which week's readings to review, however, readings chosen **must** be distributed in the following manner:

One review of the readings from a session of Part I

One review of readings from a session of Part II

One review of readings from a session of Part III

One review of readings from a session of Part IV

If students do not hand in the required number of reviews by the end of each part of the course, the overdue review will be considered a failing review. They will **not receive credit for the missing reviews**.

Seminar Research Project:

Students are expected to write a research paper of about 7,000 words. While students are expected to draw on the material from the syllabus, the student's research effort will be demonstrated by having the majority of the paper's references from outside material.

Students may select a topic of their own choosing as long as it is within the confines of the course and approved by the instructor.

Students will give a powerpoint presentation of their research project

Class participation --- Students are expected to attend all classes and prepare for class discussions by completing all reading assignments before class. Those students who contribute thoughtful comments and questions about the assigned readings on a regular basis and actively participate in discussions will receive an "A" for class participation. Students who do not regularly attend will receive an "F"; those who attend but do not participate will receive a "D;" those who occasionally participate or whose participation is not on topic will receive a "C" for participation.

Grading:

Reviews	about 20%
Term project	about 60%
Class participation	about 20%

Late assignments will be penalized.

Students must properly reference **all** sources, including assigned readings, in **all** written assignments. Plagiarism and cheating will not be tolerated.

Course schedule:

8/31 Introduction

Part I: The information revolution and change

9/7 Information technology and the modern world order

Required readings:

Deibert, pp. 1-131

Manuel Castells, Materials for an Exploratory Theory of the Network Society," *British Journal of Sociology*, Jan-Mar 2000, 51(1), 5-24. http://www.georgetown.edu/faculty/irvinem/CCT510/Sources/Castells-Theory_of_Network_Society-2000.pdf

9/14 Computing and the Internet

Required readings:

A Brief History of the Internet and Related Networks by Vinton G. Cerf
<http://www.isoc.org/internet/history/cerf.shtml>

Thomas Friedman, *The World is Flat* (Farrar, Straus and Giroux, 2007), Ch. 2 (pp. 51-199)

Watch: "The Triumph of the Nerds: an Irreverent history of the PC industry" Transcript of the documentary can be found at:
<http://www.pbs.org/nerds/transcript.html>

Deibert, 131-136.

Brendan Luyt, "Who benefits from the digital divide?" *First Monday* [Volume 9, Number 8 - 2 August 2004](http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1166/1086)
<http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1166/1086>

Recommended resources:

One laptop per child
<http://www.laptop.org/vision/index.shtml>
and: http://wiki.laptop.org/go/One_Laptop_per_Child

9/21 Nanotechnology and the Future of Computing

Class webpage due

Richard Feynman, "There's Plenty of Room at the Bottom," Meeting of the American Physical Society, California Institute of Technology, December 29, 1959, at: <http://www.its.caltech.edu/~feynman>

Eric Drexler, *Engines of Creation*, Ch. 1
http://www.e-drexler.com/d/06/00/EOC/EOC_Chapter_1.html

Ralph Merkle, [A brief introduction to the core concepts of molecular nanotechnology](http://www.zyvex.com/nano)
<http://www.zyvex.com/nano>

McCray, W. Patrick. (2005). Will Small be Beautiful? Making Policies for our Nanotech Future. UC Santa Barbara: Center for Nanotechnology in Society.
<http://www.escholarship.org/uc/item/Ovd0v7dx>

Hyungsub Choi and Cyrus C.M. Mody, "The Long History of Molecular Electronics: Microelectronics Origins of Nanotechnology," *Social Studies of Science* 2009; 39; 11
<http://sss.sagepub.com/cqi/content/abstract/39/1/11>

Steve Jurvetson, Draper Fisher Jurvetson, "Transcending Moore's law with Molecular Electronics and Nanotechnology," in Mihail C. Roco and William Sims Bainbridge eds. *Nanotechnology: Societal Implications—Individual Perspectives II* (National Science Foundation, 2007)
http://www.wtec.org/SocietalImplications/2/si2vii_report.pdf

Steve Hamm, "IBM's Chip Breakthrough *Businessweek*," May 3, 2007.
http://www.businessweek.com/technology/content/may2007/tc20070502_768360.htm?chan=search

9/28 The Information Revolution and State Sovereignty

Paper proposals due (Posted online)

Required readings:

Deibert, 137-164

Jessica Mathews, "Power Shift," *Foreign Affairs*, Jan/Feb. 1997.

R. Keohane & J. Nye, "Power and Interdependence in the Information Age," *Foreign Affairs* Sept. 1998.

Geoffrey L. Herrera, "Technology and international systems" *Millennium: Journal of International Studies* 32, (2003): 559-593.

Rey Koslowski, "Understanding Change in International Politics, Again and Again and Again," in Oliver Kessler, Rodney Bruce Hall, Cecelia Lynch and Nicholas Onuf, eds., *On Rules, Politics, and Knowledge: Friedrich Kratochwil, International Relations, and Domestic Affairs* (London: Palgrave Macmillan, forthcoming)

Ken Rutherford, *The Landmine Campaign and NGOs: The Role of Communications Technologies*
<http://www.nautilus.org/gps/info-policy/workshop/papers/rutherford.html>

Saskia Sassen, "The Impact of the Internet on Sovereignty: Real and Unfounded Worries" presented at *The Internet and International Systems: Information Technology and American Foreign Policy Decisionmaking*, December 10, 2000, San Francisco, CA
<http://nautilus.org/archives/info-policy/workshop/papers/sassen.html>

Recommended resources:

Stephen J. Korbin, "The Architecture of Globalization: State Sovereignty in a Networked Global Economy," in John H. Dunning, ed. *Governments, Globalization and International Business* (Oxford U. Press, 1997).

David J. Rothkopf, "Cyberpolitik," *Journal of International Affairs* Spring 1998.

Union of International Associations (UIA)

<http://www.uia.org/>

International Campaign to Ban Landmines

<http://www.icbl.org/>

The Sierra Club: Responsible Trade Campaign

<http://www.sierraclub.org/trade/>

MAI-not

<http://www.flora.org/mai-not/>

Part II: Public Sector Information Technologies and State Capabilities

5/12 Public Sector Reengineering, Enterprise Software and E-government

Required readings:

David Osborne, "Reinventing Government," *Public Productivity & Management Review*, Vol. 16, No. 4, (Summer, 1993), pp. 349-356

Thomas Davenport, "Putting the Enterprise into the Enterprise System," *Harvard Bus Rev*, Jul-Aug 1998

Steve Towns, "Embracing the Enterprise in ERP" *Government Technology*, August 2000

<http://www.govtech.com/gt/2305>

Jane E. Fountain, *Building the virtual state: information technology and institutional change* (Brookings Institution, 2001) part 1. (pp. 3-106)

United Nations e-Government Survey 2008. From e-Government to Connected Governance

http://www.unpan.org/egovkb/global_reports/08report.htm, pp. xii-xviii, 1-67. Skim rest.

Darrell West, *Improving Technology Utilization in Electronic Government around the World, 2008* (Brookings Institution, August 2008).

http://www.brookings.edu/~media/Files/rc/reports/2008/0817_egovernment_west/0817_egovernment_west.pdf

Listen to interview with Lee Rainy, Darrell West and Andrew Rasiej, "The Obama Era and The Digital White House" Kojo Nnamdi Show, Jan.13, 2009. <http://thekojonnamdishow.org/shows/2009-01-13/obama-era-digital-white-house>

Recommended resources:

Darrell West and Jenny Lu, *Comparing Technology Innovation in the Private and Public Sectors* (Brookings Institution June 2009) download report at:

http://www.brookings.edu/papers/2009/06_technology_west.aspx

General Services Administration, Office of Electronic Government and Technology <http://egov.gov/>

U.S. Federal Chief Information Officers (CIO) Council <http://cio.gov/>

Government Technology (Trade Magazine) <http://www.govtech.net>

Government Computer News (Trade Magazine) <http://www.gcn.com/>

Federal Computer Week (Trade Magazine) <http://atlantis.fcw.com/fcw/index.asp>

Institute for Development Policy and Management, The University of Manchester
eGOVERNMENT - Information, Systems, Technology and Government: WORKING PAPERS
<http://www.sed.manchester.ac.uk/idpm/research/publications/wp/igovernment/index.htm>

Some Assembly Required: Building a Digital Government for the 21st Century
<http://www.ctg.albany.edu/research/workshop/dgfinalreport.pdf>

The Harvard Kennedy School, E-Government Executive Education (3E) Project
<http://www.ksg.harvard.edu/stratcom/3E/index.html>
Paper series: Eight Imperatives for Leaders in a Networked World
<http://www.ksg.harvard.edu/stratcom/hpg/index.htm>

United Kingdom Parliament, Parliamentary Office of Science and Technology,
Electronic Government: Information Technologies and the Citizen
<http://www.parliament.uk/post/egov.htm>

IBM's Institute for Electronic Government
<http://www.ieg.ibm.com/>

World Bank E-Government Site
<http://www1.worldbank.org/publicsector/egov/>

10/19 Diplomacy in the Information Age

Required readings:

Joe Johnson, "Wiring State: A Progress Report" *Foreign Service Journal*, December 2005
<http://www.afsa.org/fsj/dec05/johnson.pdf>

US State Department, *Fiscal Years 2006-2010: IT Strategic Plan Empowering Diplomacy*
<http://www.state.gov/documents/organization/96312.pdf>

U.S. State Department, Office of Information Resource Management (especially E-diplomacy Office)
<http://www.state.gov/m/irm/>

Ben Bain, "Chat room diplomacy," *Federal Computer Week*, Sept. 3, 2007.
http://www.fcw.com/print/13_31/features/103633-1.html

Joab Jackson, "State puts social networking to diplomatic use," *Government Computing News*, July 31, 2009. http://gcn.com/articles/2009/07/27/great-gov-web-sites-04-state.aspx?sc_lang=en

U.K. Foreign & Commonwealth Office, *e-diplomacy: the FCO e-business strategy*, July 2001, pdf at:
<http://www.fco.gov.uk/servlet/Servlet?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1007029391494>

Recommended resources:

The Internet and International Systems: Information Technology and American Foreign Policy Decisionmaking, a workshop co-hosted by the Nautilus Institute and the World Affairs Council of Northern California. December 10, 2000, San Francisco, CA

<http://www.nautilus.org/info-policy/workshop/index.html>

US Institute For Peace, Virtual Diplomacy Project: http://www.usip.org/oc/virtual_dipl.html

David Ronfeldt and John Arquilla, "What if there is a Revolution in Diplomatic Affairs,"
<http://www.usip.org/oc/vd/vdr/ronarqISA99.html>

The Center for Strategic and International Studies (CSIS), Diplomacy in the Information Age Project
<http://www.csis.org/pubs/pubsfor.html#dia>

Smith, Gordon, S., "Reinventing Diplomacy: A Virtual Necessity."
<http://www.usip.org/oc/vd/vdr/gsmithISA99.html>

10/5 State Censorship

Required readings:

Deibert, Palfrey, Rohozinski, and Zittrain eds. *Access Controlled* (read all of part 1 and select case studies of several regions and countries of interest).

Kim Zetter, "Google to Stop Censoring Search Results in China After Hack Attack," *Wired* Jan. 12, 2010
<http://www.wired.com/threatlevel/2010/01/google-censorship-china/>

Kim Zetter, "Google Hack Attack Was Ultra Sophisticated, New Details Show," *Wired* Jan. 14, 2010
<http://www.wired.com/threatlevel/2010/01/operation-aurora>

Darrell West, "The Two Faces of Twitter: Revolution in a Digital Age for Iran" *Huffington Post*, 6/22/2009
http://www.brookings.edu/opinions/2009/0622_technology_west.aspx

Recommended resources:

A Web site with a view — The Third World on First Monday Special Issue #8
<http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/issue/view/253/showToc>

Aghil Ameripour, Brian Nicholson & Michael Newman, "Internet Usage Under Authoritarian Regimes: Conviviality, Community, Blogging and Online Campaigning in Iran," IDPM Working papers, Development Informatics 43/2009
http://www.sed.manchester.ac.uk/idpm/research/publications/wp/di/documents/di_wp43.pdf

Part III: Information Technology and Global Security

10/26 Revolutions in Military Affairs

Required readings:

Deibert, pp. 164-176

Arthur K. Cebrowski and John J. Garstka "Network-Centric Warfare: Its Origin and Future"
US Naval Institute Proceedings, 1998
http://www.kinexion.com/ncoic/ncw_origin_future.pdf

Donald Rumsfeld, "Transforming the Military" *Foreign Affairs* 81:3 (May-June 2002), 20-32.

Qiao Liang and Wang Xiangsui *Unrestricted Warfare* (Beijing: PLA Literature and Arts Publishing House, February 1999), (selections from FBIS English translation), Intro to Part 1, chapters 1-2 at:
<http://www.cryptome.org/cuw.htm>

Bill Joy, "Why the future doesn't need us" *Wired* April 2000
<http://www.wired.com/wired/archive/8.04/joy.html>

Jürgen Altmann and Mark A. Gubrud, "Military, Arms Control, and Security Aspects of Nanotechnology," in D. Baird, A. Nordmann & J. Schummer (eds.), *Discovering the Nanoscale*, Amsterdam: IOS Press, 2004.
<http://cnmt.kist.re.kr/data/newsletter/file/discovering%20the%20nano/altmann-gubrud.pdf>

William Tolles, "in Defense of Nanotechnology in Defense," in Mihail C. Roco and William Sims Bainbridge eds. *Nanotechnology: Societal Implications—Individual Perspectives II* (National Science Foundation, 2007) http://www.wtec.org/SocietalImplications/2/si2vii_report.pdf

Recommended resources:

Wired, The Future of War Archive
http://www.wired.com/wired/archive/future_of_war/index.html

Martin Libicki, "Rethinking War: The Mouse's New Roar?" *Foreign Policy*, Winter 1999-2000
<http://www.foreignpolicy.com/articles/winter1999-2000/Libicki.htm>

11/2 Information Warfare and Cyberterrorism

Matt Bishop and Emily O. Goldman, "The Strategy and Tactics of Information Warfare," *Contemporary Security Policy* 24, (1) (Apr. 2003), pp. 113-139.

Dorothy E. Denning, "Barriers to Entry: Are They Lower for Cyber Warfare?" *IO Journal*, April 2009.
<http://faculty.nps.edu/dedennin/publications/Denning-BarriersToEntry.pdf>

Listen to interview with Linton Wells II, Charles "Jack" Holt, Mark Drapeau, "Information Technology and the Military," *Kojo Nnamdi Show*, January 12, 2010.
<http://thekojoannamdishow.org/shows/2010-01-12/information-technology-and-military>

Denning, D. E., "Terror's Web: How the Internet is Transforming Terrorism," to appear in *Handbook on Internet Crime* (Y. Jewkes and M. Yar, eds.), Willan Publishing, 2009
<http://faculty.nps.edu/dedennin/publications/Denning-TerrorsWeb.pdf>

Jarret M. Brachman "High-Tech Terror: Al-Qaeda's Use of Technology," *Fletcher Journal of World Affairs*, 30:2 (2006)

Evan F., Kohlmann, "The Real Online Terrorist Threat," *Foreign Affairs*, Sep/Oct2006

Catherine A. Theohary and John Rollins, "Cybersecurity: Current Legislation, Executive Branch Initiatives, and Options for Congress," Congressional Research Service Report, September 30, 2009
<http://www.fas.org/sqp/crs/natsec/R40836.pdf>

Recommended resources:

11/9 Information Technology and Homeland Security

Required readings:

Charles Mann, "Homeland Insecurity," *The Atlantic Monthly*, September 2002.

<http://www.theatlantic.com/issues/2002/09/mann.htm>

Robert Popp, Thomas Armour, Ted Senator, Kristen Numrych, "Countering terrorism through information technology," *Communications of the ACM* Volume 47, Issue 3 (March 2004)

<http://portal.acm.org/citation.cfm?id=971642&jmp=cit&coll=GUIDE&dl=GUIDE&CFID=52380439&CFTOKEN=89519381#CIT>

Jeffrey W. Seifert, "Data Mining and Homeland Security: An Overview," Congressional Research Service Report, August 27, 2008

https://www.policyarchive.org/bitstream/handle/10207/1648/RL31798_20080827.pdf

Rey Koslowski, "Government Information Technology and Border Security: Comparative Perspectives," Manuscript

William J. Krouse and Bart Elias, "Terrorist Watchlist Checks and Air Passenger Prescreening," *Congressional Research Service Report*, December 30, 2009.

<http://www.fas.org/sqp/crs/homesecc/RL33645.pdf>

"Shedding your Identity in the Digital Age," *Wired*, 17.12, December 2009

http://www.wired.com/vanish/2009/11/ff_vanish2/

Recommended resources:

Thomas Homer-Dixon, "the Rise of Complex Terrorism," *Foreign Policy*, No. 128 (Jan/Feb) 2002.

Stephen E Flynn, "America the Vulnerable," *Foreign Affairs*, Vol. 81, No. 1, Jan./Feb.2002, pp. 60-74.

Making the Nation Safer: The Role of Science and Technology in Countering Terrorism

Committee on Science and Technology for Countering Terrorism, Division on Engineering and Physical Sciences, National Research Council <http://www.nap.edu/html/stct/index.html>

Protecting America's Freedom in the Information Age, A Report of the Markle Foundation's Task Force October 2002. <http://www.markletaskforce.org/>

Government Accounting Office, Special Collections - Homeland Security

<http://www.gao.gov/homelandsecurity.html>

U.S. Senate Judiciary Committee, Subcommittee on Technology, Terrorism and Government Information

<http://judiciary.senate.gov/subcommittees/technology.cfm>

Electronic Privacy Information Center (EPIC):

<http://epic.org/>

11/16 Military Robotics

Singer, *Wired for War* (entire)

David Kushner, "When Man & Machine Merge" *Rolling Stone*, Feb 19, 2009
http://www.rollingstone.com/news/story/25939914/when_man_machine_merge/print

Part IV: Information Technology and Global Governance

11/23 Global Governance of Cyberspace

Mathiason, *Internet Governance* (entire)

Recommended resources:

Lawrence Lessig, "Innovation, Regulation and the Internet," *The American Prospect* November 30, 2002

http://www.prospect.org/cs/articles?article=innovation_regulation_and_the_internet

The Internet Corporation for Assigned Names and Numbers (ICANN) <http://www.icann.org/>

The Internet Governance Forum <http://www.intgovforum.org/>

Internet Policy Institute <http://www.internetpolicy.org>

The Berkman Center for Internet & Society <http://cyber.law.harvard.edu/>

Global Information Infrastructure Commission (GIIC) <http://www.giic.org/>

The World Summit on the Information Society (WSIS) <http://www.itu.int/wsis/index.html>

11/30 International Organizations

Required readings:

Ion Gorita and Sumihiro Kuyama, "Managing Information in the United Nations System Organizations: Management Information Systems," Joint Inspection Unit 2002, JIU/REP/2002/9

Investing in the United Nations: For a Stronger Organization Worldwide: Report of the Secretary-General 2006, Chapter 3, "Investing in information and communications technology"

<http://www.un.org/reform/investinginun/chap3.shtml>

Information and communications technology Enterprise systems for the United Nations Secretariat worldwide: Report of the Secretary-General, A/62/510, October 29, 2007" at:

<http://unbisnet.un.org:8080/ipac20/ipac.jsp?session=12088MY751F62.34916&profile=bibga&uri=full=310001~!845738~!2&ri=1&aspect=alpha&menu=search&source=~!horizon#focus>

First progress report on the enterprise resource planning project and revised estimates under section 28A, Office of the Under-Secretary-General for Management, of the proposed programme budget for 2010-2011, and under the peacekeeping support account: Report of the Secretary-General, A/64/380, Oct. 8, 2009. http://www.un.org/ga/search/view_doc.asp?symbol=A/64/380&Lang=E

Information and communications technology: Tenth report of the Advisory Committee on Administrative and Budgetary Questions on the proposed programme budget for the biennium 2010-2011, Nov. 16, 2009, A/64/7/Add.9 http://www.un.org/ga/search/view_doc.asp?symbol=A/64/7/Add.9&Lang=E

Umoja - The Blueprint for UN Administrative Reform

<http://www.unmoja.org/display/umoja/The+Blueprint+for+UN+Administrative+Reform>

(take a look at the Umoja website)

Recommended resources:

Edward C. Luck, Reforming the United Nations: Lessons from a History in Progress

International Relations Studies and the United Nations Occasional Papers

2003 No. 1 posted at:

<http://www.stwr.org/the-un-people-politics/reforming-the-united-nations-lessons-from-a-history-in-progress.html>

12/7 Information Technology and International Development

Final Paper due

Required readings:

Allen L. Hammond, "Digitally Empowered Development," *Foreign Affairs*, March/April 2001

Charles Kenny "Development's False Divide: Giving Internet access to the world's poorest will cost a lot and accomplish little," *Foreign Policy* Jan/Feb 2003

Daniel H. Rosen, "New Directions in U.S. Foreign Assistance and the Role of Information and Communication Technology," Markle Foundation Policy Brief, posted at:

http://www.markle.org/markle_programs/project_archives/2000/gdop_gdoi.php#report1

Report of the Tunis phase of the World Summit on the Information Society, Tunis, Kram Palexpo, 16-18 November 2005

<http://www.itu.int/wsis/docs2/tunis/off/9rev1.doc>

Richard Heeks, "Understanding e-Governance for Development," *iGOVERNMENT - Information, Systems, Technology and Government: Working paper*, No. 11 (2001) at:

http://idpm.man.ac.uk/wp/igov/igov_wp11abs.htm

Kerry S. McNamara, (2003). "[*Information and Communication Technologies, Poverty and Development: Learning from Experience*](#)" (PDF). World Bank, Washington D.C., USA.

Recommended resources:

The World Summit on the Information Society (WSIS) <http://www.itu.int/wsis/index.html>

The Information for Development Program (infoDev) <http://www.infodev.org/>

The Journal: *Information Technology for Development* <http://www.iospress.nl/site/html/02681102.html>