ICT and Development

Academic Year: 2015-16, Hilary Term
Day and Time: Weeks 1-9, Tuesdays 14:00 - 16:00
Location: Meeting Room, OII, 34 St Giles

Course Providers
Professor Mark Graham, Oxford Internet Institute, mark.graham@oii.ox.ac.uk
Dr Mohammed Amir Anwar
Mr Alex Wood

Background
This course will introduce students to the debates and practices surrounding the uses of Information and Communication Technologies (ICTs) with a focus on the Global South. It will draw on resources from Anthropology, Development Studies, Economics, Geography, and History in order to examine the theoretical and conceptual frameworks that underpin development - as a practice, as a subject of research, and as a discourse. The course will also draw heavily on case-studies in order to ground theory in practice and will introduce students to a range of projects that have employed ICTs as a solution to problems in Africa, Asia and the Americas.

ICTs have the power to fundamentally transform the economic, social and political relationships in poorer parts of our planet. However, potentials often do not translate into realities, and it is important to be aware of not only the promises, but also the perils of the transformative nature of communication technologies. As such, this course will provide an opportunity to reflect on local appropriateness, social inclusion and the range of arguments for and against any ICT for development project in a variety of contexts.

Course Objectives
This course will expose students to some of the most innovative ICTD solutions to economic, social and political challenges in the Global South. Students will be familiarised with a variety of theoretical movements in development studies. Through detailed case studies in weeks 6-8, students will be exposed to a wide range of methods that are employed to study ICTD projects. Ultimately, students will also be encouraged to critically examine the notion of development, how it can be achieved, and whose needs it meets best.

Learning Outcomes
Upon course completion students will:

- Have a familiarity with key debates in ICTD
- Have a sophisticated understanding of the potential for the internet and other ICTs to alter the practice of development in the Global South.
- Be able to formulate well-grounded research questions on ICTD topics.
- Be able to link development theory and ICTD practice.

Teaching Arrangements
There will be eight weekly two hour classes which will cover theory and case-studies. The classes will meet in weeks 1-4 and 6-9 of Hilary term and consist of lectures and discussion. Eight topics will be
covered: (1) Uneven development and the origins of ICTD; (2) Development theory; (3) Critiques of ICTD; (4) Development in the Network Society; (5) Appropriate technology; (6) Social inclusion; (7) ICTs and low income groups; and (8) Knowledge economies and development.

Note
Students should note that over the course of the year, small changes may be made to the content, dates or teaching arrangements set out in this reading list, at the course provider's discretion. These changes will be communicated to students directly and will be noted on the internal course information website.

Google Group Discussions

The class has a Google Group discussion forum, and students are required to post their reflections of the reading material prior to each class. The discussion forum is intended to keep the group on track with the readings as well as connect, ask questions, and share information others might find useful.

The URL for the Google Group is https://groups.google.com/forum/#!aboutgroup/oii-ictd and students will receive an invitation to participate in the group. Students are expected to post a 300-600 word reflection by Monday morning the latest. Each lecture is set up as a separate category and students may post their reflection as a new topic under the appropriate lecture. Beyond posting their own summaries, students are also invited to respond to and ask questions about others’ posts.

Summative Assessment

Students will be assessed through a final essay that is no longer than 5000 words which must be submitted to the Examinations School by 12 noon of Monday of Week 1 of Trinity term. The essay will cover one of the course topics, and students will choose a topic in consultation with the course tutor in advance. The essay should be clearly related to the topics of the course.

Formative Assignment

Each student will be required to give one ten minute presentation on a specific aspect of the session topic or to review the argument of one of the books under the additional readings for each session topic. Details of these presentations will be agreed in Week 2.

Students will also be required to write one short (advised length: 1500-3000 words) essay on any of the 8 topics covered. This essay will provide a means for students to obtain feedback on the progress they have achieved.

Submission of Summative Assignments

All coursework should be submitted in person to the Examinations School by the stated deadline. All coursework should be put in an envelope and must be addressed to ‘The Chairman of Examiners for the MSc in Social Science of the Internet C/o The Clerk of Examination Schools, High Street. Students should also ensure they add the OII coversheet at the top of the coursework and that two copies of the coursework are submitted. Please note that all work must be single sided. An electronic copy will also need to be submitted to the department. Please note that all coursework will be marked anonymously and therefore only your candidate number is required on the coversheet.

Please note that work submitted after the deadline will be processed in the standard manner and, in addition, the late submission will be reported to the Proctors’ Office. If a student is concerned that they will not meet the deadline they must contact their college office or examinations school for advice. For further information on submission of assessments to the examinations school please refer to http://www.admin.ox.ac.uk/schools/oxonly/submissions/index.shtml.
For details on the regulations for late and non-submissions please refer to the Proctors website at http://www.admin.ox.ac.uk/proctors/info/pam/section9.shtml.

Any student failing this assessment will need to follow the rules set out in the OII Examining Conventions regarding re-submitting failed work.

Key Readings
A reading list is given below for each class. Those items marked with an asterisk (*) are essential reading and MUST be read by all students in preparation for the class. Items which are not marked with an asterisk are recommended readings.

Week 1: From the Origins of ICTD to Big Data and Development
What is development? In this topic we will closely reflect on the variety of ways in which development can be understood and trace the history of ICTD. While traditionally a variety of economic measurements have been used, notions of ‘developed’ and ‘underdeveloped’ places can also incorporate a range of environmental, social, and political elements. We will additionally engage with the objectives of ICTD. Development can be seen as a desire to bring about positive economic, social and political change in less privileged parts of the world or, alternatively, an external implementation of new forms of power-relationships. We will reflect on the two forms of unevenness that drive ICT projects: (1) unevenness in ‘development’; and (2) digital divides.

The second half of the lecture will review the emerging use of big data for development, discuss the opportunities and challenges of big data analysis for development practice, and examine whether current practice suggests a new dimension of the digital divide in data-based knowledge and decision-making.

Week 2: Development Theory
It is important to become familiar with the variety of development theories that frame ICTD projects and plans. This topic will therefore offer a close look at some of the major movements in development. Dependency, modernisation, structuralism, socialism, neo-Marxism and neoliberalism will all be discussed within the context of international development.

  o Chapter 2: The Five Stages of Growth--A Summary, pp. 4-16 (http://www.mtholyoke.edu/acad/intrel/ipe/rostow.htm)

Week 3: Critiques of ICTD
In recent years powerful critiques have been raised against mainstream development theory and practice. It is thus important to be aware of these alternate approaches. This topic will review the most important feminist, postcolonialist, and poststructuralist critiques. Students will be encouraged to reflect on issues of power, social inclusion and local appropriateness as they relate to a range of ICTD projects.

Week 4: Development in the Network Society

Information technologies are often promoted as an essential development strategy in both rich and poor countries due to their ability to alter economic connections and shape economic space. This topic will allow us to take a close look at the potentials for economic change in the globalised economy by focusing on digital divides, value chain disintermediation and e-commerce within the context of ICTD. The session will examine some of the dynamics of digitally-driven production as well as the opportunities and tensions that arise from non-proximate interactions in order to allow us to carefully consider the various ways in which the internet can influence the global positionalities of economic actors. Examples from both the Global North and South will be used in this session.

  - Chapter 8: *The paradox of a “double-edged geography*, pp. 174-198
  - Chapter 3: *Tangled Webs*, pp. 51-74
  - Chapter 4: *Technological Change*, pp. 75-108
  - Chapter 14: ‘Capturing Value’ within Global Production Networks, pp. 429-453
  - Chapter 16(part of): *Winning and Losing*, pp. 429-453, 492-521

Week 5: BREAK

Week 6: Social Inclusion

There are strong links between measures of development and social inclusion policies (in education, health, poverty, gender) and many of the UN’s Millennium Development Goals revolve around these core issues. This session will focus on how pressing social issues been conceptualised within mainstream development, and the variety of technical solutions have been proposed to meet social inclusion goals. We consider social inclusion projects critically. For all their good intentions, projects can often embed assumptions or power that lead to less than ideal outcomes. Particular attention will
be paid to the success and failures of the application of mobile phone technology as means to achieve social inclusion and development goals.

**Required Readings**


**Other recommended readings**

- Chapter 3: *Information and Communication in Development practices*, 39-75
- Chapter 4: *The Technologies*, pp. 76-124.
Week 7: ICTs and Low Income Groups

Theories and practice of development are changing. Problems of poverty and marginalisation previously seen from the perspective of social inclusion are now recast as market failure. A lack of access to markets and an absence of economic transparency are seen as the fundamental barriers to development, where development will be driven as markets are created, supported or grown.

This session will critically examine some of the ways in which ICTs has been said to alter local information systems and markets of low income groups and drive development, exploring four examples - rural market information, financial inclusion, low income groups as consumers and public sector reform.

Rural market information:


Financial inclusion & mobile money:


Bottom of the pyramid & low income consumption:

Public sector reform:

  o Chapters 1 & 2

Week 8: Knowledge Economies and Development in the Global South

With the growth of connectivity, lower income countries are beginning to look towards new service industries and knowledge economies to spur development. ICTs and the internet are seen as central to the transformation of economies that move away from reliance on agriculture and extractive industries and towards a focus on the quaternary and quinary sectors. This session explores new knowledge activities emerging such as IT and impact sourcing, online microwork and technology innovation hubs. What impact are these having on economies? Are lower income groups able to participate?

- Foster, C.G., Graham, M., 2015. From Connectivity to Digital Contestations: The Effects of Fibre-Optic Infrastructure on Firms in East Africa. Forthcoming paper to be presented at the IFIP 9.4 Conference, Sri Lanka. [contact Chris for copy]
- Friederici, N. 2014. What is a tech innovation hub anyway? Available at http://cii.oii.ox.ac.uk/what-is-a-tech-innovation-hub-anyway/
- GIZ, 2013. Technology Hubs Creating space for change: Africa’s technology innovation hubs. GIZ, Bonn, Germany.
Week 9: Digital Labour and Development

Does ICT facilitated labour have the potential to aid development? The internet is seen as providing a way to boost economic activity in low-income countries by enabling workers to directly connect into the global economic system. In doing so workers are held to overcome the time-space barriers and national boundaries which have traditionally constrained job creation and entrepreneurial endeavour. This session will critically assess the potential for ICT facilitated labour to benefit both workers and governments in the Global South. We will develop a materialist account of supposedly ‘immaterial’ labour. Issues of job quality, casualization, informality, value capture and bargaining power will be considered and digital labour embedded within a wider context of the global third wave of labour commodification.