| Week | Date | Day | Class Activity and Topic | Reading | Recommended Project Milestone |
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| 1 | Jan-17 | Tu | Group Affinity Diagramming: The Case for Technology in Education | There Are No Technology Shortcuts to Good Education. Kentaro Toyama. In edutechdebate.org, January 6, 2011. | |
| | Jan-19 | Th | Lecture: Mobile Phones and English Language Literacy in Rural Developing Regions | Imagining India: The Idea of a Renewed Nation. Nandan Nilekani. The Penguin Press, 2009. | Self-introductions on wiki. |
| | | | | Chapter "S is for Schools: The Challenges in India's Classrooms", pp. 172-194. | |
| 2 | Jan-24 | Tu | Lecture: Primary Schooling for the Poor in South Asia | The Beautiful Tree: A Personal Journey Into How the World's Poorest People are Educating Themselves. James Tooley. Cato Institute, 2009. | |
| | | | | Chapter 1: A Discovery in India ... | |
| | | | | Chapter 2: ... That Was No Discovery After All | |
| | Jan-26 | Th | Lecture: Mobile Learning with Affordable Private Schools in India | Designing E-Learning Games for Rural Children in India: A Format for Balancing Learning with Fun. Matthew Kam, Aishvarya Agarwal, Anuj Kumar, Siddhartha Lal, Akhil Mathur, Anuj Tewari, and John Canny. In Proceedings of ACM Conference on Designing Interactive Systems (DIS '08), 2008. | Summary and reactions to 3 projects featured on Trucano's blog. |
| 3 | Jan-31 | Tu | Lecture: Program Design / Instructional Design | Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns. Clayton Christensen, Curtis W. Johnson, and Michael B. Horn. McGraw-Hill, 2008. | |
| | | | | Chapter 4: Disruptively Deploying Computers | |
| | | | | Chapter 9: Giving Schools the Right Structure to Innovate | |
| | | | | How People Learn: Brain, Mind, Experience, and School. John D. Bransford, Ann L. Brown, and Rodney R. Cocking (Eds.). National Academy Press, 1999. | |
| | | | | Chapter 6: The Design of Learning Environments | |
| | Feb-2 | Th | Class discussion on case study: Mobile Learning in Panama | Utilizing Multimedia Capabilities of Mobile Phones to Support Teaching in Schools in Rural Panama. Elba del Carmen, Valderrama Bahamondez, Christian Winkler, and Albrecht Schmidt. In Proceedings of the Conference on Human Factors in Computing Systems (CHI '11), 2011. | Proposal (Problem statement and intended learners). |
| 4 | Feb-7 | Tu | Lecture: The Psychology of Motivation | Drive: The Surprising Truth About What Motivates Us. Daniel H. Pink. Riverhead, 2009. | |
| | | | | Chapter 4: Autonomy | |
| | | | | Chapter 5: Mastery | |
| | | | | Chapter 6: Purpose | |
| | Feb-9 | Th | Class discussion on case study: The "Quest to Learn" School | Quest to Learn: Developing the School for Digital Kids. Katie Salen, Robert Torres, Loretta Wolozin, Rebecca Rufo-Tepper, and Arana Shapiro. The John D. and Catherine T. MacArthur Foundation Reports on Digital Media and Learning, 2010. | Competitive analysis. |
| | | | | Chapter "Curriculum Structure", pp. 73-90. | |
| | | | | Chapter "Key Characteristics", pp. 91-116. | |
| | | | | Chapter "Sample Discovery Mission and Quests", pp. 117-132. | |
| 5 | Feb-14 | Tu | Lecture: How Experts Differ from Novices | How People Learn: Brain, Mind, Experience, and School. John D. Bransford, Ann L. Brown, and Rodney R. Cocking (Eds.). National Academy Press, 1999. | |
| | | | | Chapter 1: Learning: From Speculation to Science | |
| | | | | Chapter 2: How Experts Differ from Novices | |
| | Feb-16 | Th | Class discussion on case study: Making Computers More Accessible with Intelligent Tutors | Evaluating an Adaptive Multi-User Educational Tool for Low-Resource Environments. Emma Brunskill, Sunil Garg, Clint Tseng, Joyojeet Pal, and Leah Findlater. International Conference on Information and Communication Technologies and Development, 2010. | Proposal (Program design). |

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| 6 | Feb-21 | Tu | Lecture: Prior Knowledge | Pratham ASER (Annual Status of Education Report). | |
| | Feb-23 | Th | Class discussion on case study: Pratham ASER (Annual Status of Education Report) | | How to teach your selected topic in an engaging way? |
| 7 | Feb-28 | Tu | Lecture: Constructivism and Scaffolding | How People Learn: Brain, Mind, Experience, and School. John D. Bransford, Ann L. Brown, and Rodney R. Cocking (Eds.). National Academy Press, 1999. | |
| | | | | Chapter 4: How Children Learn | |
| | | | | Cultural Psychology: A Once and Future Discipline. Michael Cole. Belknap Press, 1996. | |
| | | | | Chapter 10: A Multilevel Methodology for Cultural Psychology | |
| | Mar-1 | Th | Class discussion on case study: One Laptop Per Child and the Classmate PC | Infrastructures for Low-Cost Laptop Use in Mexican Schools. Ruy Cervantes, Mark Warschauer, Bonnie Nardi, and Nithya Sambasivan. In Proceedings of the Conference on Human Factors in Computing Systems (CHI '11), 2011. | Curriculum (30 minutes of lesson). |
| 8 | Mar-6 | Tu | Lecture: Transfer | How People Learn: Brain, Mind, Experience, and School. John D. Bransford, Ann L. Brown, and Rodney R. Cocking (Eds.). National Academy Press, 1999. | |
| | | | | Chapter 3: Learning and Transfer | |
| | Mar-8 | Th | Class discussion on case study: Decision Making by Functionally Illiterate Adults | Decision Making and Coping of Functionally Illiterate Consumers and Some Implications for Marketing Management. Madhubalan Viswanathan, Jose Antonio Rosa, and James Edwin Harris. Journal of Marketing, 69(1), 2005, pp. 15-31. | Proposal (Profile of learner's prior knowledge). |
| 9 | Mar 12-16 | M-F | Spring Break;  No Classes | | |
| 10 | Mar-20 | Tu | Lecture: STEM Education (Science, Technology, Engineering and Mathematics) | How People Learn: Brain, Mind, Experience, and School. John D. Bransford, Ann L. Brown, and Rodney R. Cocking (Eds.). National Academy Press, 1999. | |
| | | | | Chapter 7: Effective Teaching: Examples in History, Mathematics, and Science | |
| | Mar-22 | Th | Class discussion on case study: Science learning games | Learning Science Through Computer Games and Simulations. Margaret A. Honey, and Margaret L. Hilton. (Eds.). National Academy Press, 2011. | Storyboard I (Constructivist design). |
| | | | | Chapter 1: Introduction | |
| | | | | Chapter 2: Learning with Simulations and Games | |
| 11 | Mar-27 | Tu | Lecture: Reading Literacy | Print Literacy Development: Uniting Cognitive and Social Practice Theories. Victoria Purcell-Gates, Erik V. Jacobson, and Sophie Degender. Harvard University Press, 2004. | |
| | | | | Chapter 5: Print Literacy as Cognitive Skill Development. | |
| | Mar-29 | Th | Class discussion on case study: Talking Pen | Mobile technology for children: Designing for interaction and learning. Allison Druin (Ed.). Morgan Kaufmann, 2009. | Storyboard II (Designing for transfer). |
| | | | | Chapter 9: Leapfrog Learning Design: Playful Approaches to Literacy, from LeapPad to the Tag Reading System. | |
| 12 | Apr-3 | Tu | Lecture: Bilingualism | How Languages Are Learned. Patsy M. Lightbown, and Nina Spada. Oxford University Press, 2006. | |
| | | | | Chapter 7: Popular Ideas About Language Learning Revisited. | |
| | Apr-5 | Th | Class discussion on case study: Speech Recognition for Language Learning | Improving Child Literacy in Africa: Experiments with an Automated Reading Tutor. G. Ayorkor Mills-Tettey, Jack Mostow, M. Bernardine Dias, Tracy Sweet, Haijun Gong, Sarah Belousov, and M. Freddie Dias. In Proceedings of IEEE/ACM Conference on Information and Communication Technology and Development (ICTD '09), Doha, Qatar, April 17-19, 2009. | Storyboard III (Domain-specific teaching). |
| 13 | Apr-10 | Tu | Lecture: Dual Channel Theory and Multimedia Learning | The Cambridge Handbook of Visuospatial Thinking. Priti Shah and Akira Miyake (Editors). Cambridge University Press, 2005. | |
| | | | | Chapter 12: Multimedia Learning: Guiding Visuospatial Thinking with Instructional Animation. | |
| | Apr-12 | Th | Class discussion on case study: Talking Book | Impact of Low-Cost, On-Demand Information Access in a Remote | Storyboard IV (Domain-specific teaching). |

| 14 | Apr-17 | Tu | Guest lecture by Christopher Wu: The History of Education | School Reform: A Failing Grade. Diane Ravitch. New York Times, September 29, 2011. | |
| | Apr-19 | Th | No class due to Spring Carnival | n.a. | |
| 15 | Apr-24 | Tu | Lecture: Economics of Educational Technology | Learning Science Through Computer Games and Simulations. Margaret A. Honey, and Margaret L. Hilton. (Eds.). National Academy Press, 2011. | |
| | | | | Chapter 6: Bringing Simulations and Games to Scale | |
| | Apr-26 | Th | Class discussion on case study: CMU's Open Learning Initiative | Unlocking the Gates: How and Why Leading Universities Are Opening Up Access to Their Courses. Taylor Walsh. Princeton University Press, 2011. | Storyboard V (Multimedia design) |
| | | | | Chapter 4: Digital Pedagogy: Carnegie Mellon University's Open Learning Initiative | |
| 16 | May-1 | Tu | Guest lecture by Kentaro Toyama | There Are No Technology Shortcuts to Good Education. Kentaro Toyama. In edutechdebate.org, January 6, 2011. | |
| | May-3 | Th | Poster and demo session | n.a. | |