

First Worldwide Project Management Distance Learning Course^{1, 2}

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Most afternoons at about 5:00 p.m. I switch on the computer in my study and connect via a modem into the Dialcom electronic mail network. There in my “mailbox” are “messages” from around the world from students in the first worldwide distance learning course on project management. After reviewing the material, I send comments and answers by electronic mail directly back to the students. We know each other quite well now after several months of the course and regular telephone conference calls.

An innovative program to train telecommunications project managers in Africa, Asia and Latin America through distance learning is being sponsored by the International Telecommunications Union (ITU), Center for Telecommunication Development (CTD) through a contract with Telecom/Telematique International (T/TI), a Washington, DC firm specializing in instructional telecom consulting. The pilot semester length course in Project Management for Telecommunication began in the Fall of 1989. Teams from the Telecom companies remain on the job while participating in the global electronic classroom with counterparts in other countries. The faculty include staff from the World Bank and other experts in training project managers and telecom engineers in developing countries. The curriculum builds on World Bank EDI (Economic Development Institute) courses. The design of the course is similar to one I teach in the Masters Program in Engineering Administration at George Washington University.

Tools, techniques and theory of project management taught include modules on the project life cycle, work breakdown structure, scheduling and control, CPM, risk and uncertainty, and start-up and transition to operations. Segments on project accounting include modules on project estimating and budgeting, cost control, reporting and MIS, and project control. Management modules, procurement, negotiation, and contractor cost control are also taught.

This interactive, electronic classroom is delivered to each country through packet-switch network computer conferencing, together with video and audio teleconferencing. The computer conferencing is interactive, flexible and asynchronous. Teams of participants from each company can meet, watch video tape lectures and assignments, respond, comment and ask questions at the time most convenient to them, their work schedules and their time zones.

¹ This paper was written in 1990 for a PMI conference, but was never presented or published. The author thinks it was the first worldwide distance learning course on project management. Long before email became popular, the course was developed with the International Telephone Union (ITU) for telecommunications project managers in many countries. It's a little bit of newly discovered project management history.

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The cost effectiveness of bringing professors and experts to many countries electronically and simultaneously to train managers, engineers, and technical specialists is being tested and demonstrated.

The participants are teams of three to six engineers from the telecommunications companies of the following twelve countries: Barbados, Brazil, Cameroon, Chile, Colombia, Curacao, Egypt, Kenya, Indonesia, Malta, Malaysia and Zimbabwe.

The multi-media course uses seven modes of communication as follows:

1. Workbook with readings (mailed ahead of time),
2. Video tape lectures (mailed ahead of time),
3. Electronic mail via computer network,
4. Facsimile,
5. Audio conferences via telephone,
6. Video conferences via satellite and two-way audio using the USIS WORLDNET, and
7. Mail.

For each of the sixteen weekly lessons the participants do readings, watch a video tape, do exercises, discuss questions in their teams, submit a homework assignment and take a brief quiz. They also apply each week's material to their real team project which will result in a complete project plan by the end of the course. The faculty responds by E-mail via the computer network and during monthly audio and video conferences.

The computer conferencing achieves interactivity with great flexibility. The E-mail text is available to all to receive and store, if desired; the dialogue can remain private between the faculty and student. Following the lectures presented on video cassette and supplemented by mini lectures sent through the network to amplify or update as needed, the regular course instruction occurs over the computer network. This includes faculty responding to questions asked by participants, homework assignments and regular quizzes, recitations and discussions of the specific topics, additional readings, and presentations by country teams of their specific projects.

On-site facilitators administer the course, using the detailed guide that accompanies the courseware. They work closely with the U.S.-based faculty and monitor participation. In addition to the regular curriculum materials, specialized computer-based training courses have been incorporated into the course.

The course uses the Clarinet network. Clarinet has operations worldwide using Telenet and Tymnet links and is hosted on both the New Jersey Institute's EIES computer and Dialcom. Delivery can be arranged to any country that has access to the packet-switched network. Each training site requires a personal computer with a modem, a line to the packet-switch network link, a speaker-phone, and a VCR with a monitor.

RESULTS

The participants response to the course has been very positive. The teams worked hard and their course work has been excellent. A participant from Cameroon recently said "the CPM on Insta-plan really showed us how important it was to schedule the training to be complete at the same time

as the equipment was installed.” The reason for the excellent results seems to flow from the work in teams, on real projects, on company time and with material very relevant to their work. Another interesting outcome is that the problems of project management are almost identical in each country. For example, nearly all of the companies handle projects in a matrix organizational structure without knowing it nor planning for it. At the end of the course a final evaluation will determine if distance learning is cost effective. The costs of worldwide communications are certainly less a problem for telecom companies than for the general public.

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PROJECT MANAGEMENT IN TELECOMMUNICATIONS

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Week 9, Session B	Computer-based CPM: InstaPlan
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WEEK 1-A

TOPIC: INTRODUCTION TO PROJECT MANAGEMENT AND PROJECT CYCLE

SCOPE: Role of Project Management
The Project Cycle
Project Feasibility
Project Planning and Implementation

TIME	ACTIVITY	INSTRUCTIONS TO PARTICIPANTS
2:00	View Video	Please watch “The Project Cycle” video of slide presentation. Identify parallel examples in the telecommunications sector and make a list for transmission to faculty

2:35	Discussion: Part I	Follow manual for discussion of Part I of the Project Cycle module: Phase 1: Pre-identification, develop list of data requirements for telecommunications sector; Phase 2: Identification; Phase 3: Preparation; Phase 4: Appraisal; Phase 5: Implementation; Summarize group input for faculty.
3:50	Break	10-minute break
4:00	Discussion: Part II	Follow manual for discussion of the Project Cycle module. 1. Technical Feasibility; 2. Economic Feasibility; 3. Financial Feasibility; 4. Social Feasibility and Environment Issues; 5. Institutional Feasibility.
4:45	Discussion	Please identify key points in assigned reading of paper by Bruce. Prepare questions and summary of group discussion on project cycles and feasibilities for telecommunications projects to transmit to faculty via CARINET
5:00	End of Class	Please take note of required reading assignments for next session

CLASS MATERIAL

The “Project Cycle” Lecture Narratives available for reference. They are a verbatim transcript of the narrative of the World Bank EDI slide/tape presentation on the video tape. It can be used to review the information in the presentation so it will not be necessary to take detailed notes during the lecture.

READINGS – REQUIRED before Session 1-A

“An Introduction to the Stages of Project Planning and Implementation,” Bruce, Colin (CN-347a), 22 pages

“The Project Cycle” manual pages 1-31; 39-69. Read pages 1-31 in preparation for group discussion following video presentation, make notes for contribution to discussion questions and for identifying parallels to the telecommunications sector. Review “Planning, policy-making and implementation (pgs. 39-69) for key concepts of development planning; this is background information only as no specific activity will be based on it. If desired, group could conduct an additional discussion session on these interesting questions.

OPTIONAL

“The Project Cycle,” Baum, Warren C. (CN-314) 25 pages

About the Author



Robert Youker

World Bank (retired)



Robert (Bob) Youker is an independent trainer and consultant in Project Management with more than forty years of experience in the field. He is retired from the World Bank where he developed and presented six-week project management training courses for the managers of major projects in many different countries. He served as the technical author for the bank on the Instructors Resource Kit on CD ROM for a five-week training course on Managing the Implementation of Development Projects. He has written and presented more than a dozen papers at the Project Management Institute and the International Project Management Association (Europe) conferences many of which have been reprinted in the Project Management Institute publications and the International Journal of Project Management (UK).

Mr. Youker is a graduate of Colgate University and the Harvard Business School and studied for a doctorate in behavioral science at George Washington University. His project management experience includes new product development at Xerox Corporation and project management consulting for many companies as President of Planalog Management Systems from 1968 to 1975. He has taught in Project Management Courses for AMA, AMR, AED, ILI, ILO, UCLA, University of Wisconsin, George Washington University, the Asian Development Bank and many other organizations. He developed and presented the first Project Management courses in Pakistan, Turkey, China and across Africa for the World Bank.

A few years ago Mr. Youker conducted Project Management training in Amman, Jordan financed by the European Union for 75 high level civil servants from Iraq who implemented the first four World Bank projects in Iraq. He is a former Director of PMI, IPMA and asapm, the USA member organization of IPMA. Most recently he has been consulting for the US Government Millennium Challenge Corporation on project management training in Africa. Bob can be contacted at bobyouker@att.net

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