

Rochester Institute of Technology

## RIT Digital Institutional Repository

---

Presentations and other scholarship

Faculty & Staff Scholarship

---

11-2005

### A Blended Learning Course in Operating Systems for Telecommunications

Anthony P. Trippe

*Rochester Institute of Technology*

Follow this and additional works at: <https://repository.rit.edu/other>

---

#### Recommended Citation

Trippe, A.P. (2005). A blended learning course in operating systems for telecommunications [PowerPoint Slides]. Presented at the 11th Sloan-C International Conference on Asynchronous Learning Networks (ALN): Mobilizing to Expand Community, Orlando, FL.

This Presentation is brought to you for free and open access by the RIT Libraries. For more information, please contact [repository@rit.edu](mailto:repository@rit.edu).

Rochester Institute of Technology



# Computer Engineering Technology

## **Delivery of an Integrated Distance and Blended Learning Course**

**By**  
**Anthony P. Trippe**  
**Rochester Institute of Technology**

# Traditional Classroom Environment - Gone Forever!

- Listening student & Lecturing professor

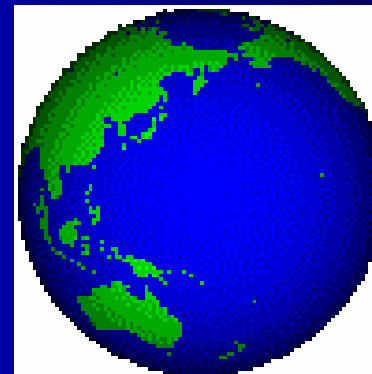


Courseware  
like D2L  
can be used  
online or  
in classroom

# Course in Project Management

## Students from Around the Globe

- Ten week duration
- 20 students (9 on campus and 11 distance)
  - San Jose, California (1)
  - Maryland, Pennsylvania, North Carolina (4)
  - Upstate New York (2)
  - Spain (1)
  - Germany (2)
  - Malta (1)



# Course in Project Management

- Key topics included in the course are project lifecycle, planning templates, project deliverables, project work breakdown structure, estimating resources and task costs, Gantt charts, PERT techniques, project team duties and responsibilities, project team management techniques, project audits, project termination and software tools for large projects
- The course includes an applied project planning assignment in which students define an industrial project and use Microsoft (MS) Project software and "best practices" to properly plan, schedule and budget

# Course in Project Management

- Student Learning was measured by
  - Participation
    - Discussion board – required, rubric, % of grade
    - Weekly summary of learning
  - Written reports on key topics
  - Small group activities
    - Plan and execute a group-selected project
  - Two quizzes and a midterm exam

# Technology has shifted the professor's lecture role to being a guide, a mentor and a facilitator



# Dr. Trippe's Philosophy

- This course is blended – F2F and asynchronous
- I assume that students are motivated to learn, otherwise you wouldn't be here
- Students are considered as a learning resource the same as the textbook and instructor
- Student responsibilities include having to think about the assignments and being prepared at the start of each week
- I envision the role of the instructor as being a mentor, facilitator, therapist, and cheerleader



# Dual Online Course Formats

## Distance Learners and Blended Learners

- Distance Learning Course
  - All content and interactions are conducted in an asynchronous environment with no face-to-face (F2F) contact between course participants
- Blended Learning Course
  - This section met F2F once a week while conducting the remainder of its activities at a distance over the Internet
- Lecture Enhanced Distance Course

# **Distance and Blended Same Course – Different Environment**

- **Same Faculty and Grading Criteria**
- **Same Textbook**
- **Similar Assignments**
  - **All assignments submitted electronically**
  - **All testing done online**
- **Students Drawn From the Same Population**
- **All students interact with each other**

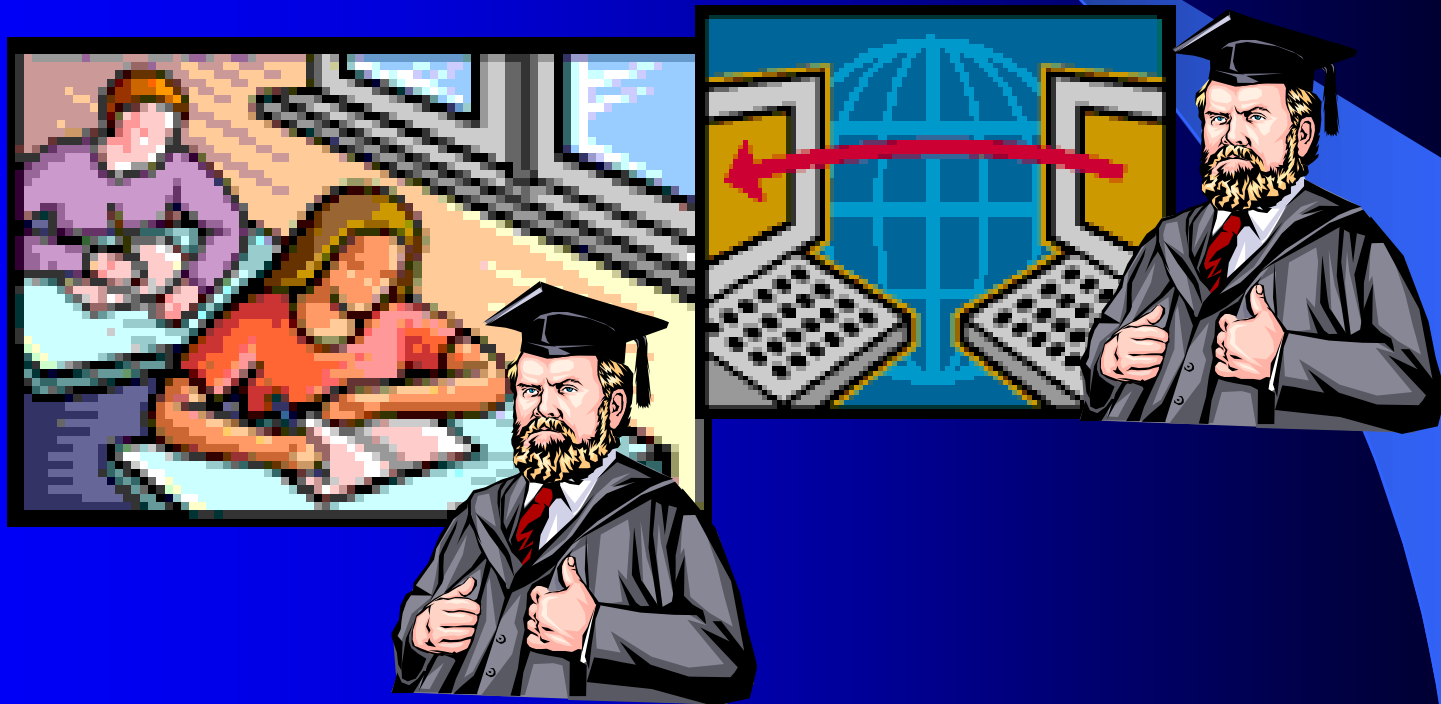
# Section 90: Asynchronous at a Distance



# Participation Expectations of Distance Learners

- All learners were expected to read and monitor the weekly class discussions
- Those in the distance learning section posted at least three substantive messages on three of the seven days of each week
  - A substantial message promotes learning for everyone in the class and is at least 350 words long
  - These messages constitute an asynchronous discussion which promotes student learning
- Post a weekly summary addressing personal learning – approximately 350 words long

# Section 89: Blended



# Participation Expectations of Blended Learners

- The three substantive messages are replaced with a weekly 75-minute long, F2F meeting wherein each learner must contribute knowledge
  - Attendance recorded and participation noted
  - Learners are expected to contribute content and/or raise questions on the topics of that week
- BL students post a summary message to review events and activities for F2F session for that week
- Interaction between the DL and BL sections

# Unexpected Benefit

- Traditional students have little work experience
- Distance students are away from study/class experience for several years
- Ice breaker activities for first week
- Once the questions and discussions started, the faculty member had to get out of the way of the students!

# D2L Home Page

The screenshot shows a Microsoft Internet Explorer browser window displaying the D2L Home Page. The address bar shows the URL: <https://mycourses.rit.edu/d2l/orgTools/ouHome/ouHome.asp?ou=6777>. The page title is "RIT myCourses". The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The address bar has a search field and a "Go" button. The browser's toolbar includes Back, Forward, Stop, Home, Search, Favorites, and other icons. The page's navigation bar includes links for Finance, News, Phoenix, Reference, RIT, WN, AT&T Mail, MSNBC, myCourses, myRIT, and WPharm. The main content area is titled "0614.726 - Project Mgmt for Telecom" and includes a search bar, "Change Order", and "Add" buttons. The page is divided into several sections: "Updates" with links for New Submissions, New Messages, Ungraded Quizzes, Quizzes Available, and Broken Links; "Events" showing "No Events" and an "Open my Schedule" button; "Bookmark" showing "No bookmark added."; "Role Switch" with a note: "To simulate the view of another Role, select a"; "News" with a "The Course is Over" announcement featuring the RIT logo and a cartoon illustration of two students camping; "Course Tools" with descriptions for Content, Email, Grade Book, and Dropbox; and "Technical Help". The browser's status bar at the bottom shows the Internet icon and the text "Internet".



# Content Conference

My Home - Course Home - Course Information (SIS) - myLibrary - Calendar - Checklist - Journal Anthony Trippe

**myCourses** 0614.726 - Project Mgmt for Telecom

Content - Email - Grade Book - Dropbox - Discussions - Quizzes - Chat - Classlist FAQ - Help - Edit Course - Logout

---

**Unit 1. [Course Information](#)**  
**Unit 2. [Lecture Hall - Week #1](#)**  
**Unit 3. [Lecture Hall - Week #2](#)**  
**Unit 4. [Lecture Hall - Week #3](#)**  
**Unit 5. [Lecture Hall - Week #4](#)**  
**Unit 6. [Lecture Hall - Week #5](#)**  
**Unit 7. [Lecture Hall - Week #6](#)**  
**Unit 8. [Lecture Hall - Week #7](#)**  
**Unit 9. [Lecture Hall - Week #8](#)**  
**Unit 10. [Lecture Hall - Week #9](#)**  
**Unit 10. [Lecture Hall - Week #10](#)**

---

**Course Content**

**Unit 1. Course Information**   
**Unit 2. Lecture Hall - Week #1**   
**Unit 3. Lecture Hall - Week #2**   
**Unit 4. Lecture Hall - Week #3**   
**Unit 5. Lecture Hall - Week #4**   
**Unit 6. Lecture Hall - Week #5**   
**Unit 7. Lecture Hall - Week #6**   
**Unit 8. Lecture Hall - Week #7**   
**Unit 9. Lecture Hall - Week #8**   
**Unit 9. Lecture Hall - Week #9**   
**Unit 10. Lecture Hall - Week #10**

---

[search content](#)  
 [compile for printing](#)

---

Administration

- [Content Display Settings](#)
- [Manage Files](#)
- [Manage Content](#)
- [Add Module](#)
- [Add Topic](#)
- [Import Course](#)

# Quizzes Conference

The screenshot shows a Microsoft Internet Explorer browser window displaying the RIT myCourses website. The address bar shows the URL: <https://mycourses.rit.edu/d2/orgTools/ouHome/ouHome.asp?ou=6777>. The page title is "0614.726 - Project Mgmt for Telecom". The user is logged in as "Anthony Trippe".

The main content area is titled "061472689/061472690.20043 - 0614.726 - Project Mgmt for Telecom". It features a navigation menu on the left with options like "Instructions", "Conditionally Released", "Password Protected", "IP Restriction", "Graded Attempts", "Preview Quiz", "Grade Quiz", "Quiz Stats", and "Quiz Reports".

The main content area includes a "Manage Quizzes" section with options for "Manage Quizzes", "Question Library", "Course Statistics", "Quiz List", "New Quiz", "Copy Quiz", "Re-Order Quizzes", and "Delete Quizzes". The "View" dropdown is set to "By Availability".

The "Current Quizzes" table lists the following quizzes:

Quiz Name	Status	Attempts	Options
<a href="#">0614-726 First Quiz</a>	(inactive)	19/19	📄 🗑️ 🇺🇸 🌐
Always Available			
<a href="#">Practice Quiz</a>	(inactive)	19/19	📄 🗑️ 🇺🇸 🌐
Always Available			
<a href="#">Midterm</a>	(inactive)	19/19	📄 🗑️ 🇺🇸 🌐
Always Available			
<a href="#">Quiz Two</a>	(inactive)	19/19	📄 🗑️ 🇺🇸 🌐
Always Available			

# Drop Box Conference

**Instructions**

- The Dropbox allows you to pick up assignments that have been submitted to Dropbox Folders.
- To add a new Dropbox Folder or to edit the properties of an existing Dropbox Folder, click on the **Admin** button.
- Click on the name of a Dropbox

**Pickup Files**

**Summary**

The file submission area of Dropbox is where you can pick up assignments that have been submitted.

Total Files: 82  
Unchecked Files: 0

**Dropbox Folders**

Folder	Total Files	Unchecked Files	Flagged Files
<a href="#">Week One - Practice Assignment</a>	19	0	0
<a href="#">Week 2 - SOW and Requirement documents</a>	12	0	0
<a href="#">Week 3 - WBS and Plan</a>	8	0	0
<a href="#">Quiz One</a>	0	0	0
<a href="#">Week 4 - Bill of materials and budget</a>	11	0	0
<a href="#">Week 5 - Schedule and a critical path</a>	9	0	0

# Group Discussion Conferences

The screenshot shows a Microsoft Internet Explorer browser window displaying the RIT myCourses website. The address bar shows the URL: <https://mycourses.rit.edu/d2l/orgTools/ouHome/ouHome.asp?ou=6777>. The page title is "0614.726 - Project Mgmt for Telecom". The user is logged in as "Anthony Trippe". The page content includes a navigation menu and a list of discussion groups:

- Group 1 - Applied Telecom - Discussion Conference**
  - [Group #1 - Applied Telecom can collaborate here](#) (316 messages - 0 unread)
- Group 2 - The Bi-Coastal Group - Discussion Conference**
  - [Group 2 - The Bi-Coastal Group can collaborate here.](#) (312 messages - 0 unread)
- Group 3 - Techno Defense**
  - [Group 3 - Techno Defense can collaborate here](#) (40 messages - 0 unread)
- Group 4 - CDMA.ROC.COM**
  - [Group 4 - CDMA.ROC.COM can collaborate here](#) (290 messages - 0 unread)
- Week One**
  - [Let's Get Acquainted](#) (84 messages - 0 unread)
  - [List of Discussion Topics for Week #1](#) (64 messages - 0 unread)
  - [Discuss Team Formation Here](#) (38 messages - 0 unread)
  - [Post F2F Session Summary Messages Here](#) (10 messages - 0 unread)



# Weekly Discussion Conferences

My Home - Course Home - Course Information (SIS) - myLibrary - Calendar - Checklist - Journal Anthony Trippe

**myCourses** 0614.726 - Project Mgmt for Telecom

Content - Email - Grade Book - Dropbox - Discussions - Quizzes - Chat - Classlist FAQ - Help - Edit Course - Logout

**Week Three**

- [List of Discussion Topics for Week #3](#) (99 messages - 0 unread)
- [Post F2F Meeting Summaries Here](#) (9 messages - 0 unread)
- [Post Week #3 Summary Messages Here](#) (20 messages - 0 unread)

**Week #4**

- [List of Week #4 Discussion Topics](#) (80 messages - 0 unread)
- [Post Week #4 F2F Summary Messages Here](#) (9 messages - 0 unread)
- [Post Week #4 Summary Messages Here](#) (20 messages - 0 unread)

**Week #5**

- [List of Discussion Topics for Week #5](#) (99 messages - 0 unread)
- [Post Week #5 F2F Summaries Here](#) (8 messages - 0 unread)
- [Post Week #5 Summary Messages Here](#) (19 messages - 0 unread)

**Week #6**

- [List of Discussion Topics for Week #6](#) (70 messages - 0 unread)
- [Post Week #6 F2F Summary Messages Here](#) (9 messages - 0 unread)
- [Post Week #6 Summary Messages Here](#) (19 messages - 0 unread)

# Gradebook Conference -1

View By:  Search for:  Search

Paging: Show  users per page

Last Name ▲, First Name, UserName	Participation					
	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6
<a href="#">Arocho, Angel, aaa1019</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Bhupathiraju, Gokul, gyb7594</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Cook, Lauren, lrc2572</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Coombs, Norm, nrcgsh</a>	-/2, -	-/2, -	-/2, -	-/2, -	-/2, -	-/2, -
<a href="#">Edwards, Jonathan, jxe1049</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Goddard, David, dag3174</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Holmes, William, wmh2163</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Ivancie, Robert, rcic6682</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	1/2, 50%
<a href="#">Jorgensen, David, dej2913</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Krishnan, Santoshbabu, sxk7583</a>	1/2, 50%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%

Gradebook  
can be  
viewed  
in 3 formats

# Gradebook Conference -2

## by Small Groups

Grades  
can be  
exported  
to Excel

View By:  Groups:

Search for:

Paging: Show  users per page

Last Name, First Name, UserName	Participation					
	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6
<b>Group 1</b>						
<a href="#">Goddard, David, dag3174</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Jorgensen, David, dcj2913</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Krishnan, Santoshbabu, sxk7583</a>	1/2, 50%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Shah, Swapan, sys2786</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Zimmermann, Gregg, grz9346</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<b>Group 2</b>						
<a href="#">Arocho, Angel, aaa1019</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Edwards, Jonathan, jxe1049</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Nemmili Veeravalli, Deepa, dxn3419</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Pail, Michael, mrp8696</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Nemlin, Joseph, jnm0000</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%



# Gradebook Conference -3

## by Section

Students  
can view  
their  
grades  
at any time

Microsoft Internet Explorer provided by AT&T Worldnet Service

Address: <https://mycourses.rit.edu/d2/orgTools/ouHome/ouHome.asp?ou=6777>

My Home - Course Home - Course Information (SIS) - myLibrary - Calendar - Checklist - Journal

0614.726 - Project Mgmt for Telecom

Content - Email - Grade Book - Dropbox - Discussions - Quizzes - Chat - Classlist

<a href="#">Mujumdar, Vidhi, vxm5040</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	1/2, 50%
<a href="#">Sarella, Mani, mks4500</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	0/2, 0%
<a href="#">Shah, Swapan, sys2786</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Taveras Nunez, Nerdin, nxt1484</a>	1/2, 50%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	1/2, 50%
<b>0614.726.90</b>						
<b>Last Name ▲, First Name, UserName</b>	<b>Participation</b>					
	<b>Wk1</b>	<b>Wk2</b>	<b>Wk3</b>	<b>Wk4</b>	<b>Wk5</b>	<b>Wk6</b>
<a href="#">Arocho, Angel, aaa1019</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Cook, Lauren, lrc2572</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Edwards, Jonathan, jxe1049</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Holmes, William, wmh2163</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Ivancie, Robert, rc6682</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	1/2, 50%
<a href="#">Mullaney, William, wtm7649</a>	0/2, 0%	0/2, 0%	0/2, 0%	0/2, 0%	0/2, 0%	0/2, 0%
<a href="#">Nemmili Veeravalli, Deepa, dxn3419</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Pail, Michael, mrp8696</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Poulin, Joseph, jcp9292</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%
<a href="#">Weiss, Martin, msw3985</a>	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	2/2, 100%	1/2, 50%



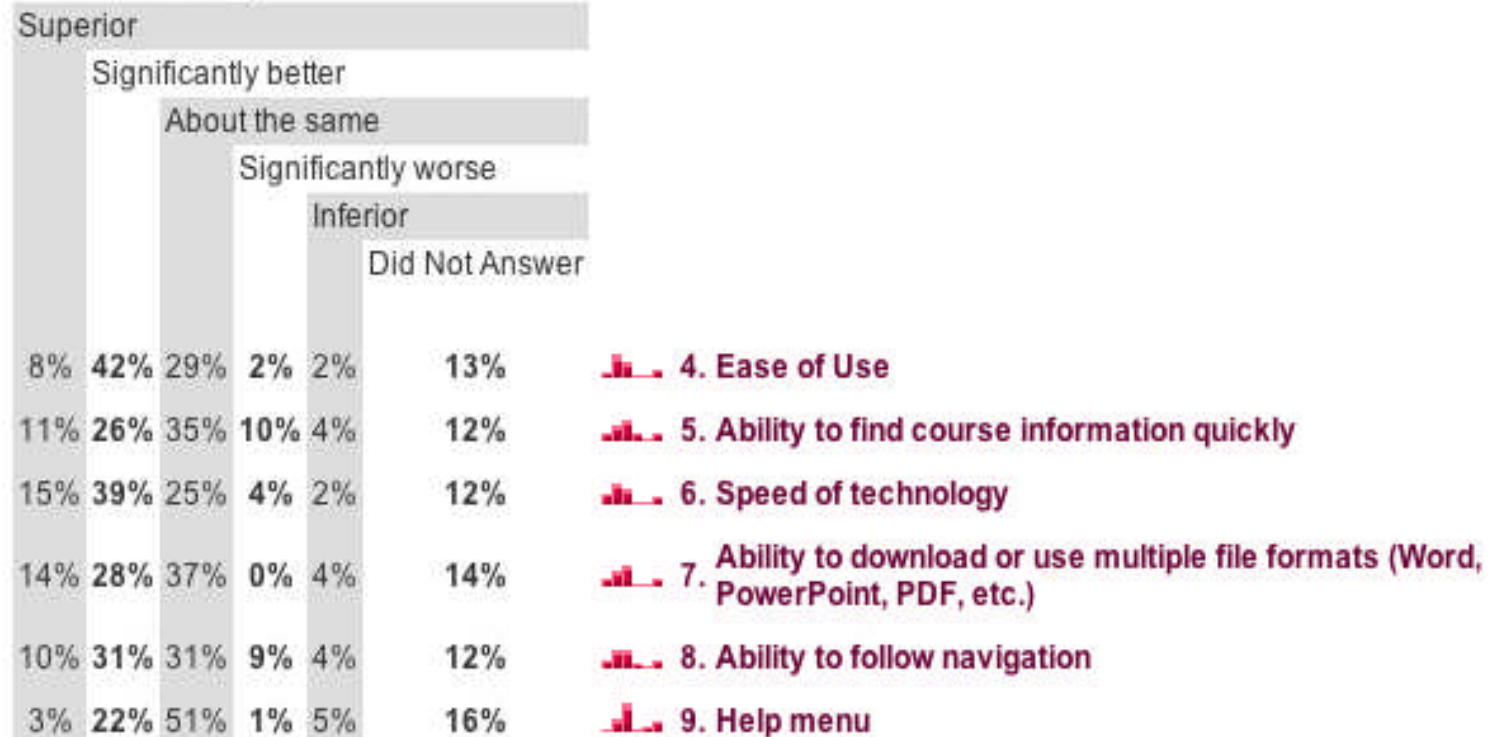
# Measure Student Satisfaction

- Student satisfaction opinions were surveyed for both the distance and the blended students
- Responses reported on a 5-point Lickert scale (5 = best)

# Measure Student Satisfaction

## Comparisons to Other Courseware

If you have used other courseware please rate the New myCourses (Desire2Learn) as compared to what you have used in the past. (If you have not used any other courseware please skip these questions.)



# Student Comments

“I would like to say that i was able to learn a lot from the course, not just about project management but also about working in groups, both face to face and virtually. I think i am much better at working in virtual groups than i was before. The knowledge about the procedures and the technical aspects of Project Management that i gained will be very helpful when i work on actual projects.”

**Question:** How could the online components of this course be made better?

**Answer:** “Allow students to delete only their posted messages sent by mistake.”

# Student Comments

“I thought that myCourses provide a very good online examination environment.”

“I fully enjoyed this course, the instructor and the experiences with my classmates. I have learned a great deal from this experience - Thank you.”

“I liked the combination of the onsite students and the distance learning students within the same course.”

# Student Comments

“Much easier to find out what the assignments are than the previous courseware. Just click on content and the assignment you wish to download. Online notes much easier to access. Gradebook and statistics very informative and useful.”

“You were not able to look at different sections of the site at the same time. for example if I'm the discussion area and want to refer to something in the content area and stay within the site it is not possible. I would have compose something external on MS-Word while referring to the content section and afterwards post the document or copy and paste the text.”

# Conclusions

- Blended Course Format Works for Everyone
  - Traditional, on-campus students
  - Distance students, geographically dispersed
  - Faculty interacts with both types of students
- Faculty appreciate the versatility of Blended
  - Faculty acts more like a mentor or a coach
- Students especially like 24x7 availability
- Blended Students Learn from each other
  - Discussion Conference is easy to use

# Computers are FUN

Questions?

