

Week 4 - Technologies in Distance Education

Comment [JMG1]: We modified both weeks 4 and 5 instructions. Some of our recommendations involved "pre-debate" suggestions, which naturally moved us back into week 4. As a result we have rearranged much of the layout of weeks 4 and 5.

Overview

One of the major distinctions in the history of distance learning has been its medium of delivery. Some of the early programs were delivered primarily in print and are often referred to as correspondence courses. Today, print is used to deliver course readings and course study guides. While print may not be as glamorous as some of the colorful computer-based and graphic resources, it is the most frequently used medium for distance learning. Therefore, it is important that we understand its function and design.

Another "old-timer" is radio. There are many examples of the use of radio for teaching and learning. Radio is a synchronous medium; that is, all learners have to be listening at the same time even though they are in different locations. Later, radio learning was enhanced by telephone exchanges. With the advent of the audio tape, radio programs could be recorded and sent to learners who could then choose the time to listen, and respond to the materials covered in the audio tapes by writing or making telephone calls.

Although distance learning is increasingly relying on computer technologies, we have included traditional media in our study of distance learning (covered in week 8) because these traditional media are still effective resources for learning. They are relatively inexpensive and can reach many individuals who can use them whenever they wish. They are used extensively in many developing nations. The downside of some of these media, with the exception of the telephone, is that interaction is limited and feedback is often delayed by the need for using the postal system to communicate. Nevertheless, these media are part of the delivery system package even in computer-based distance education.

As we begin to examine traditional media and web-based technologies in more detail, we will start by reading about the effects and attributes of different media used in distance learning. As you read the articles, collect your thoughts on how different media attributes affect choice of teaching method/applications and how the choice of method affects the learning process and learning outcome. Based on your analysis of the unique attributes of each media, how would you go about choosing the appropriate media for implementing an instructional activity? Does the medium really make a difference? Or is the process/method more important? Does the medium change the process or the choice of instructional method? Bring your thoughts into this week's discussion where you will debate on the role of media on learning.

Objectives

Upon completing this section, you should be able to:

- Describe attributes of various telecommunications systems

- Describe the conceptual differences between *media*, *technology*, and instructional *methods*
- State criteria for making decisions about the selection and use of delivery systems

Activity 4.1 Readings on Media Attributes, Selection & Applications

Read: As you read the articles below, actively collect your arguments for this week's debate

- Chapter 4 Distance Education Technologies (Simonson, Smaldino, Albright and Zvacek's, 2000)
 - [Media Typologies & Attributes](#) (Winiiecki, 1997)
 - [Media makes no difference on learning](#) (Richard Clark, 1983)
 - [Media does make a difference - a counter argument](#) (Robert Kozma, 1991)
- ** The last three articles listed above are also available in the Course Library should the links stop working.*

Supplemental Readings:

- [Communication Technologies Used in Knowledge Utilization](#) by William Paisley (view p. 3 table only)
- [View video on how to use video conferencing in the distance learning classroom](#)http://www3.iptv.org/iowa_database/howto.cfm (11 min 24 sec video)
- [Selecting a technology for online group communication](#) (Jeong, 2004)

Study Questions:

- Are media merely vehicles that deliver instruction and therefore does not influence student achievement any more than the truck that delivers our groceries causes changes in our nutrition?
- How does the research on media effects? How does the research support or oppose the claim that media is merely a vehicle for delivering instruction?
- Does learning occur during delivery (within the vehicle) versus at some point in time after the content has been delivered to its point of destination (outside and independent of type of vehicle - as argued by Clark)? Does

the learner learn as he/she rides the delivery truck? If so, how might the passenger amenities within the truck affect the learner, the learning process, and learning outcomes? How might these ideas affect your views on Clark's arguments against studies on the effects of media.

- o If choice of instructional method or activity is what makes the difference in student learning, does choice of media affect choice of methods? If so, can one then argue that media does affect learning? Can you give specific examples of how choice of media can affect choice of methods or activities? Are there studies that show how choice of media affects choice of method?

Activity 4.2 Pre-debate Collaboration Chat

Requirement::

- (1) Participate in two team meeting chats (20 points)
- (2) Submit a brief synopsis of team meetings (5 points)

Start Time: Monday morning.

Complete by: Chat #1 must be completed by Thursday, & chat #2 by Sunday night.

Purpose:

Past class debates have illuminated the fact that when students are not prepared for a debate several things result, including: a lack of collaboration during debate, redundant or inappropriate postings, and missed learning opportunities. Lack of preparation also leads to students debating without an appropriate understanding of the debate topic. This can lead to arguing about opinions rather than researched facts.

In order to help you build a mental model for the topic you will debate next week, (the capabilities and limitations of synchronous chats versus asynchronous discussion boards) and ensure you have actual experience using chats, your team will meet in a synchronous chat using Blackboard this week.

During chat #1 your team will: (1) get to know each other, (2) explore the chat tool features, (3) list out web links to articles that contain arguments supporting BOTH sides of next weeks debate topic, and (4) assign two articles for each team member to read before chat #2.

During chat #2 your team will: (1) Briefly list out any PRO and CON arguments you found in each article you read. (2) Decide as a team the BEST FIVE arguments your team can use to win its side of the debate. (3) Decide which team member will POST and DEFEND each argument during next weeks debate.

Warning: do not wait to be told to set up the chat. On Monday or Tuesday, find your group ([see below](#)), email each person, and decide the best time to conduct a chat by Thursday of this week.

Comment [JMG2]: 4.2 originally involved reviewing the debate rules and procedures. (Moved to 5.3)

Implementing the suggestion that (a) students have a chance to chat before debating on it as a medium (b) students have time to build a familiarity with the research and concepts involved in the topic they will debate on next week.

- **CLICK TO SEE:** the debate topic and the side your team will argue.
- **CLICK TO SEE:** [websites that may contain articles about next weeks debate topic.](#)
- **CLICK TO SEE:** [the debate rules and posting procedures you must use next week.](#)
- **CLICK TO SEE:** [instructions on setting up a chat in Blackboard.](#)

Activity 4.3 Team Argument Diagram

Requirements:

- (1) Turn in a personal copy of your team's argument diagram. (5 participation points)
- (2) Have your team leader submit the link to your published Vyew.com diagram. (10 participation points)

Start time: Thursday of this week.

Complete by: End of next week (this activity spans weeks 4 and 5)

In this activity your team will work together to create a diagram that illustrates the relationship between the main arguments supporting and opposing next weeks debate topic. You will help create it as well as turn in a personal copy of the final diagram.

Purpose: It is helpful for most learners to create a diagram that visually illustrates the relationship between ideas. Rather than try to manage a random list of arguments for next weeks debate, your team will use www.vyew.com to create a graphic organizer to organize them. ([click here for examples of graphic organizers](#)) Your team may select any type of graphic organizer it wishes to. If creating one diagram for everything is too difficult, you may create one for each side of the debate. Whichever you choose, the graphic organizer should help you visualize the main arguments on both sides of next weeks debate. Create any type of diagram that makes the most sense to your team.

How to work with your team: Take your pick from the two options below.

- (1) Create a Vyew "book" and agree with your team during chat #1 that you will all work asynchronously and edit the diagram whenever team members find it convenient.
- (2) Pick an additional chat time later in the week to log on and work together on the diagram in a synchronous chat session using the Vyew chat or conference call number.

Your personal copy: Next week, you will be provided with instructions on how to turn in your personal copy.

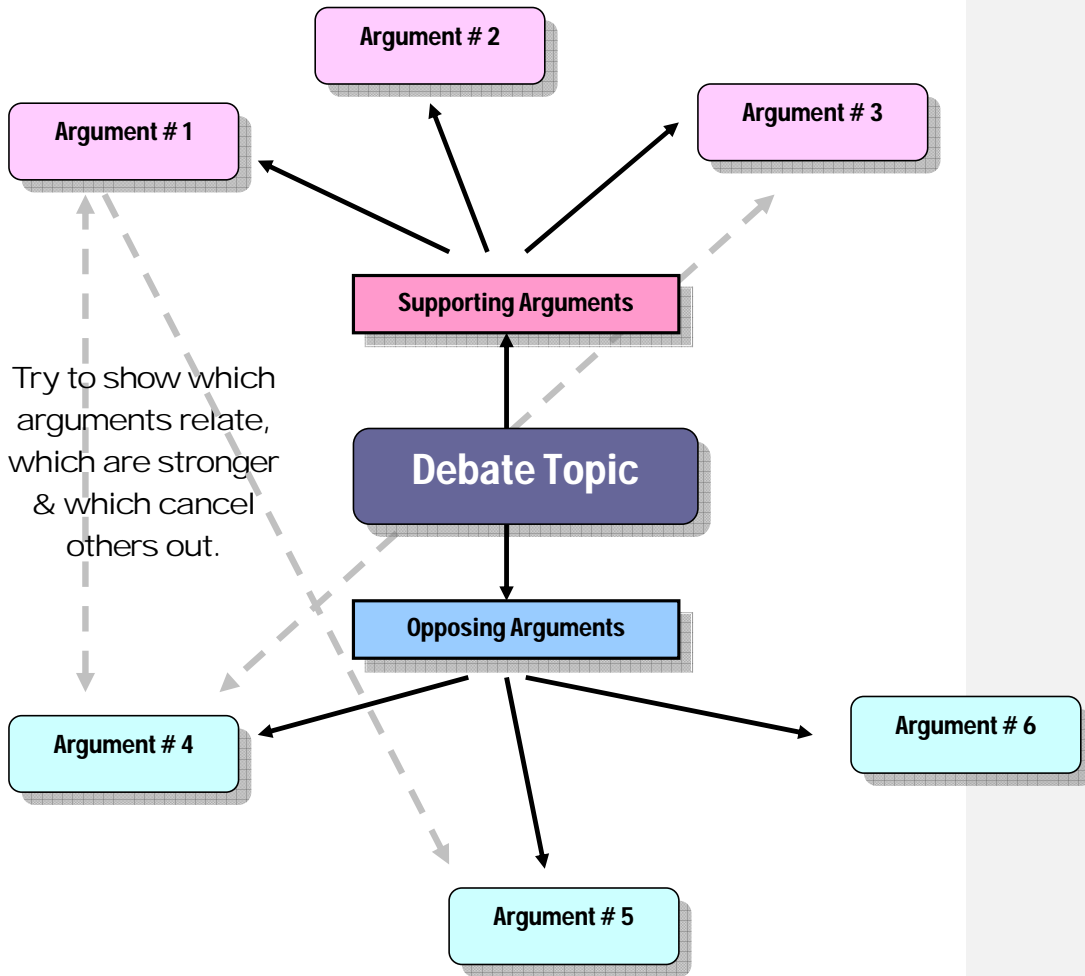
CLICK TO SEE: [Instructions for joining and using Vyew.com.](#) *The last few pages of the Tutorial found at this link contain CRUCIAL information about your diagram.*

Comment [JMG3]: It may be more helpful to have students go ahead and start using a tool like Vyew.com rather than use Blackboard for on chat, but Vyew.com for both chatting and collaboration.

Comment [JMG4]: Project 2 required the use of a concept mapping tool. This activity accomplishes this.

Comment [JMG5]: Individual accountability.

Sample: Team Argument Diagram



Links to websites where you can look up articles in preparation for next week's debate topic.

1. [Course Library](#)
2. [Instructional Technology Counsel – resource list](#). (Links to many sites & libraries)
3. [Distance Education Clearinghouse](#) – long of journals, articles and resources.

Comment [JMG6]: This entire page contains instructions that could be placed on a separate document.

Instructions for setting up your team chat in Blackboard:

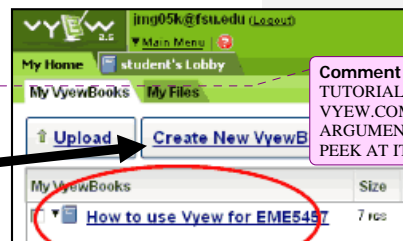
1. Select "Group Pages" from the course homepage.
2. Select your Group Number.
3. Select "Collaboration". (Upon selection, you will see options for Chat and Virtual Classroom.)
4. To schedule (create) a synchronous chat, select the "+Collaboration" label near the top of the page. Fill in the required information and select "Submit".
5. If the chat is already in progress, you will be able to click "Join". (Note: If it is your first time using this Blackboard feature, you may be prompted to install Java software.)
6. When you start a chat or classroom session, someone must click the "Record" button. The Record button is the left round button in the row at the top right of the screen.
7. Participate in your team chat session as described above.
8. Someone fill out the Chat Agenda provided at the end of this document and e-mail it to your course TA.
9. Provide a brief synopsis to me detailing your impressions of the team chats and whether they provide for a collaborative learning experience. Name the file "Team# LastNameSynopsis". Fill in your team number in place of the #. E-mail this file to your course TA.

Instructions on registering a free account and using Vyew.com



1. Sign up for a free account. [\(CLICK HERE\)](#)
~USE YOUR FSU EMAIL ONLY TO SIGN UP~
2. Respond to the validation email Vyew.com emails you.
3. **Before attempting activity 4.3 take the tutorial your instructor created to prepare you.**
 - (a) [\(CLICK HERE FOR THE TUTORIAL\)](#)
 - (b) Login= [img05k@fsu.edu](#), password=[password](#)
 - (c) Click on "[How to use Vyew for EME5457](#)"
 - (d) View all 9 pages!!!

4. When you are ready to create a Vyew book that you or your team can use to create your argument diagram with, click on "Create New VyewBook"



Comment [JMG7]: WE CREATED A 9 PAGE TUTORIAL THAT ILLUSTRATES HOW VYEW.COM WOULD CREATE A DYNAMIC ARGUMENT DIAGRAM. PLEASE TAKE A PEEK AT IT; ESP the vyewbook pages 7-9

Week 5 - World Wide Web & the Internet

Overview

Distance education has combined the use of computers and telecommunications to offer learners various forms of interaction with peers, instructors, and instructional materials. Whereas telecommunications provides the access and connections to remote sources of data (human and otherwise), computers provide the interface and interpret the data received. Combining computers with a telecommunications based delivery system enables users to interact in a variety of ways using a variety of media tools: exchanging text and audiovisual; communicating between teacher and learner in real time; and conferencing among many people at the same time but in different places or at different times and different places. The variations boggle the mind! In this section, we will explore the structure and functions of the Internet and the many ways it can be used in a distance education environment.

Objectives

- Describe current trends in the use of the Internet
- Identify the functions of the Internet that most directly relate to distance education
- Describe the physical structure of the Internet
- List the way the Internet supports the transformations taking place in the general paradigms for teaching/learning
- Define and differentiate between asynchronous and synchronous communication
- Identify the advantages and limitations of Internet-based courses
- Select course activities that maximize active learning
- Identify strategies to assist students in critically assessing the credibility of information on the WWW
- Identify the most important issues to address when planning the development of a distance course
- List the eight major components of an online course

Activity 5.1 Readings

Readings

- Chapter 9 - *Internet-based Distance Education* in the Simonson textbook
- Re-visit "[Selecting a technology for online group communication](#)" (Jeong, 2004)
- Synchronous and asynchronous text-based CMC in educational contexts: A review of recent research (Johnson, 2006)
- [Emerging Educational Technologies Video Lecture](#) (Curtis Bonk, 2005)
[[Download RealPlayer](#)]

Activity 5.2 Internet Communication Tools

<<Individual Study/Activity>>

Review the Internet communication tools described in Simonson, et al., Chapter 10 used to maximize learner support through active and interactive communication between learners and instructors. Then visit the five sites listed below to see specific examples of each communication tool described in Chapter 10. To help you synthesize the reading, write a brief description of the capabilities of each tool. See if you can identify the primary characteristics that distinguish one communication tool from another tool.

- Synchronous Systems
[Yahoo Messenger](#) (software installation required)
[Parachat](#) (Java applet - no software installation required)
- Video conferencing system with white board & application sharing
<http://www.microsoft.com/windows/netmeeting/>
- Email listserv for Distance Educators
<http://f05n16.cac.psu.edu/cgi-bin/wa?A0=deos-l>
- UseNet News Groups - <http://www.google.com/grphp?hl=en&ie=ISO-8859-1&q=>
- Asynchronous Systems with Web Conferencing Software (Woolley)
<http://thinkofit.com/webconf/wcchoice.htm>

(Optional) There is no scheduled class discussion for this activity. However, you can share links to other online communication tools by visiting the wikipedia [CSCL technologies](#).

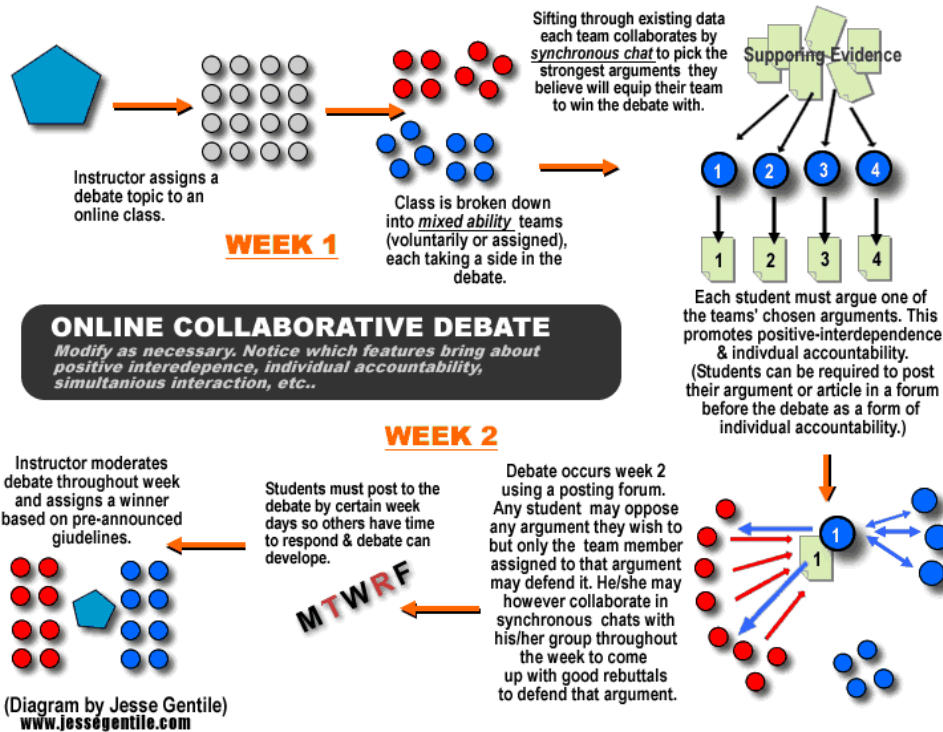
Comment [JMG8]: Carried over from 4.3

Activity 5.3 Review Rules & Debate Procedures

In Activity 5.3, you will be participating in a team debate to make arguments concerning the use of media in online courses. When you post messages to the debate, you will need to follow specific procedures and rules. Please PRINT OUT and review the procedures *before* posting messages to the debate. Pay particular attention to the examples for details on how to follow the procedures. Failure to follow the procedures (*particularly the procedures for "labeling" the function of each message you post to the debate*) will result in **zero participation points**.

[Print Out & Review Message Labeling Procedures](#) (in MS Word)

Diagram Illustrating Debate



Activity 5.4 - Debate on Using Synchronous Chats

Requirements: (10 total participation points)

- 2 postings minimum between Monday and midnight Wednesday (5 points)
- 2 postings minimum Thursday and noon Saturday (5 points)

One of the questions that continuously comes up in this course is whether or not we should use of synchronous chats in some of the weekly group discussions in this course. To build a deeper understanding of some of the issues one ought to consider when making a decision to use or not to use live chats, you will participate in a group debate (please [review and follow the debate procedures](#)) to identify and critically evaluate presented arguments for using synchronous chats and arguments against using synchronous chats in this course for weekly discussions. As a result, you will be assigned to a team (go to the discussion forum to see team assignments) to either support or defend the following statement:

Synchronous chats should be used in some of the weekly group discussions in this course, EME5457

To help you identify possible arguments for this debate, consider the following questions:

- What are the unique advantages & disadvantages of using live chats?
- What are the needs and preferences of the students in EME5457?
- What particular types of activities or task are best supported or not supported by using live chats?
- What are the alternatives to using live chats, and how are the alternatives better than using live chats?
- How and how frequently do other online courses use live chats, and how effective are they?

See one example of a synchronous group activity that uses the chat and whiteboard tools presented in Blackboard's Virtual Classroom (see illustration below).

- [Group activity instructions](#)
- [Example session saved in a chat log](#)
- Try it yourself by clicking Communications >> Collaboration >> Join button

Comment [SDT9]: Changed to require midweek postings. It increases the probability of interaction and depth.

Comment [SDT10]: Instructor should use ForumManager to monitor deadlines. Please see the attached [instructions](#).

Activity 5.5 Deciding the Debate Winner (and Reward)

In order to encourage more authentic interaction and group effort, a winning team will be selected at the end of the debate and announced at the start of next week.

Judge: your class T.A.

Reward: the winning side will be granted one free assignment grade. Please notify your instructor at the beginning of the week to ensure you have permission to use your free grade to skip that particular assignment (certain assignments are too important to skip).

What the judge will be looking for:

- a) arguments based on sound logic and especially research evidence.
- b) Arguments that truly counter the statement that you are posting it against. Don't

Comment [JMG11]: Project #1 suggested an actual goal was needed for groups to aim for before the debate could be considered a truly collaborative activity.

Comment [JMG12]: Serves as a form of "attention" and "satisfaction" aspects of Keller's ARCS motivation model.

make the mistake of improperly “opposing” the other side by posting an argument that supports your side but has little to do with what the person you are opposing just said. Make sure your counter-argument deals with what your opponent said, and not just with the overall topic we are debating
 c) Statements that are clear, well written, containing links to research and not designed to just “finish” the debate.

How arguments are scored:

Because posting forums are every changing the following technique will be used to judge the debate:

- 1) Using a tool called “diigo.com” your TA will highlight and post an invisible note on the title line for each argument in the main debate posting forum (including the initial arguments).
- 2) The note will include a score and perhaps comments. Arguments will be given between a score of 0-5.
- 3) As the debate grows, two running tallies will be kept for each argument: a supporting tally and an opposing tally.
 - For example, at the end of the debate, all the supporting comments for Argument #1 might add up to 54 and all the opposing arguments might add up to 36. The supporting side for that argument wins.

(To observe the scoring, sign up for and learn how to use diigo.com. Be sure to load the forum in its own web browser window to see the comments. It won’t work INSIDE Blackboard)

Comment [JMG13]: We tried to create an objective and feasible way that could be used to judge the debate but would not be too burdensome on whoever judged the debate.

Activity 5.6 - After Debate Poll

Requirement: 15 participation points

Start time: noon Saturday

Deadline: by Monday 12 noon

Comment [SDT14]: Increased from 10 to 15 points – for motivation and to signal importance

Comment [SDT15]: Changed to noon Saturday in accordance with debate start and end times.

Purpose: The After Debate Poll is intended to bring closure to the debate and allow you to formally determine your final stance on the issue. This activity requires synthesis and evaluation of the debate arguments.

Comment [SDT16]: Present the purpose or objective for intrinsic motivation.

The goal of the debate was to build a deeper understanding of some of the issues one ought to consider when making a decision to use or not to use live chats. You have identified and critically evaluated presented arguments for using synchronous chats and arguments against using synchronous chats in this course for weekly discussions throughout the debate. Now, you will write an essay explaining your analysis of the debate, your final position, and how you weighed the arguments.

Comment [SDT17]: Reminds students of the purpose of the debate to help identify the relevance of the After Debate Poll activity.

Instructions:

1. Review all the arguments presented on both sides of the debate.
2. Then write an essay (200 word minimum) that explains your final position and viewpoints on the debated claim (strongly agree, agree, neutral, disagree, strongly disagree). For example, explain your decision based on a detailed analysis and evaluation of the arguments presented by both sides of the debate.
3. **Grading Criteria - The essay must answer each of the following questions in order to receive the participation points:**
 - a. Which arguments were the strongest arguments on each side of the debate? Why?
 - b. Which were the weakest arguments? Why?
 - c. Finally, how did you weigh all the arguments altogether to arrive at your conclusion? Did you use a particular technique to weigh all the arguments?
 - d. Can you suggest a particular technique? (optional)

Participation points will be deducted for unanswered questions.
4. To report your final position and essay, click on "Assessment" button in Blackboard, and then click on link titled "Activity 5.4 After debate poll".

Comment [SDT18]: Instructions taken out of paragraph form for clarity, and to help ensure that important points weren't overlooked.

Comment [SDT19]: Previously, these questions were written as recommendations. However, Dr. Jeong's comments, in the debate materials, indicated that he expected students to answer these questions and that it was a critical part of the essays.

Comment [SDT20]: Please see the attached [ADP Grading Checklist](#).

Everyone's responses and the results of the survey will be posted to the Q&A forum for follow-up questions and discussions by the end of next Monday.

Synchronous chats should be used for some of the weekly group discussions in this course, EME5457.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

[/ Take the poll](#) / [/ View poll results](#) / [/ Talk about poll](#) / *Note: Poll does not work with Netscape browser*