



## Learners Analysis

### General Characteristics:

- Approximate Age: • Students are all teachers ranging in age from 20's to 60's—beginning teachers to experienced teachers
- Education / Ability: • Students have bachelors' degrees  
• Some students have masters degrees  
• Most all students have graduate or CRU's beyond their degrees
- Behavior: • Students are teachers  
• Unfortunately, teachers—as students—can be quite challenging  
• Material must be quite relevant  
• Course must move at a reasonable pace
- Previous Experience: Students will have varying degrees of ability with and knowledge of computers and their use and function  
• All students will have little knowledge of information security
- Attitude to Content: • Students will have varying attitudes concerning change  
• Students are interested in helping youngsters learn and succeed  
• Students will be interested in technology as it helps students  
• Students will be interested in keeping youngsters safe
- Attitude to Provider: • Students respect the teacher (I hope!)  
• Students have a good rapport with the teacher

## Entry Competencies:

- Be able to start up and shut down a computer
- Be able to use the mouse
- Be somewhat familiar with the Internet
- Be able to save files into specific directories
- Be knowledgeable of basic commands

## Learning Styles

Successful Strategies: Students will benefit from demonstrating and modeling by using a video projection device to put the teacher's screen on a large viewing screen

- Students benefit by group discussion
- Students need hands-on reinforcement periodically
- Students need repetition
- Students need to see and believe in the relevance of what is being taught
- Students benefit by allowing discussion and questions during a presentation
- Students will benefit by endeavoring to "salt" the seating arrangement, placing a more experienced person between two people of lesser experience

Strategies to Avoid:

- Students will find technical terms very difficult; therefore, come up with relevant analogies
- Students will soon be lost and disinterested if the material is vague and not relevant
- Students will soon be lost and disinterested if there is too much lecture
- Students retain less if the training is at the end of the school year—hold sessions as close to the start of school as possible

## Objectives:

- Objective 1: After having heard in class about the deadly HLM computer agents, the teacher trainee will be able to list these agents and briefly explain the threat of each to a computer.
- Objective 2: After seeing a short video clip entitled “O Where, O Where Has My File Gone?” the teacher trainee will devise a management scheme for storing information on the computer.
- Objective 3: After seeing a short video clip entitled “The Password Thief,” the teacher trainee will be able to compose secure passwords incorporating suggested guidelines

## Learning Process:

### 1. Preview Materials:

- Have 3x5 cards ready on which is printed “Beware of the HLM computer agents. *(Decide whether to have these cards already on the desks or to pass them out at the beginning of the lesson.)*”
- Make sure that the HLM PowerPoint presentation is loaded on the workstation and that it is working. *(Make sure that have all of the needed cords and cable, including an extension cord.)*
- Make sure that the screen is available.
- Make sure that the digital LCD projector is working and works with the workstation. *(Make sure that you have all of the needed cords and cables, including an extension cord for power.)*
- Have a warped disk for the demonstration.
- Have the demo ready that throws off steam when water is added.
- Have a clean diskette.
- Have a refrigerator magnet. *(Be careful with the magnet.)*
- Make sure that have a VCR and TV in the room.
- Have the short video “O Where, O Where Has My Little File Gone?” cued up and ready to show.
- Have handouts of the different filing schemes ready.

### 2. Prepare the Materials:

- Prepare the 3x5 cards, printing “Beware of the HLM computer agents.”
- Prepare the HLM PowerPoint presentation.
- Prepare the video “O Where, O Where Has My Little File Gone?”
- Prepare the video “The Password Thief.”
- Make an outline of the lesson.

### 3. Prepare the Environment:

- Make sure that all student desks are arranged so that each student can see the TV or projection screen.
- Checkout the laptop and digital video projector from the library and have them setup.
- If no VCR and TV in the room, check one out.
- Make all of the necessary adjustments for light so that students can see the projection well.

#### 4. Prepare the Learners:

- Provide an agenda for the students and display it on the white board and even print out an agenda and hand out to students.
- Provide an overview of the lesson prior to the start by going to the white board and/or referring them to the hand out that they just received and briefly alluding to the activities of each point.
- Provide handouts for all worksheets, etc.
- As one starts a different point, provide a brief overview of the activities and the goals associated with the point.

#### 5. Provide the Learning Experience:

•**Step 1:** Have a 3x5 card for every teacher trainee with the following printed: Beware of the HLM computer Agents!"

•**Step 2:** Explain to the students that HLM is a mnemonic device Has Lost Material in which each of the beginning letters of the three word phrase is the beginning letter for one of the respective agents that can cause damage to a computer or to files.

•**Step 3:** Show the short HLM PowerPoint and after each letter demonstrate the concept.

•**Step 4:** *H=heat:* Discuss the various effects that heat can have on computers and diskettes, tapes, and CD's.

•**Step 5:** Demonstrate how warped diskettes and CD's will not work in a computer and ask the question If this is your only source of data, what are you going to do?

•**Step 6:** *L=liquid:* Explain how liquids in general can be detrimental to computers and keyboards and also what are the other concerns with soft drinks.

•**Step 7:** *M=magnet:* Explain how data is stored electronically and that magnetic fields can alter or completely destroy data.

•**Step 8:** Demonstrate [carefully] how a small refrigerator magnet can destroy data.

•**Step 9:** As a class, brainstorm about places where one might find a magnet.

•**Step 10:** Show the video entitled "O Where, O Where Has My Little File Gone?"

•**Step 11:** As a class, discuss why it is important to know where one has saved a file.

•**Step 12:** Question the class about whether a lost file can ever be found.

•**Step 13:** Ask the class if anyone of the members has a particular scheme that he or she uses.

•**Step 14:** As a class, brainstorm of different ways that information could be logically arranged.

•**Step 15:** Show the video "The Password Thief."

•**Step 16:** Recalling the video and as a class list the various ways that the password was found out.

•**Step 17:** Show the Password Slide on the PowerPoint presentation and discuss the **Dos** and **Don'ts** of password creation.

•**Step 18:** Have the class devise passwords.

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# Learner Participation:

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EDCI 591A—Information Security: 1  
4/26/01

## Step Five: Activity / Participation Chart

<i>OBJ#</i>	<i>ACTIVITY</i>	<i>LEARNER PARTICIPATION</i>
1	1. Have a 3x5 card for every teacher trainee with the following printed: "Beware of the HLM computer Agents!"	Piques learner's interest
1	2. Explain to the students that HLM is a mnemonic device ( <b>H</b> as <b>L</b> ost <b>M</b> aterial) in which each of the beginning letters of the three word phrase is the beginning letter for one of the respective agents that can cause damage to a computer or to files.	Requires active listening skills
1	3. Show the short HLM PowerPoint and after each letter demonstrate the concept.	Requires active listening and viewing skills
1	4. <i>H=heat</i> : Discuss the various effects that heat can have on computers and diskettes, tapes, and CD's.	Requires learner participation through discussion and volunteerism
1	5. Demonstrate how warped diskettes and CD's will not work in a computer and ask the question If this is your only source of data, what are you going to do?	Requires active viewing skills
1	6. <i>L=liquid</i> : Explain how liquids in general can be detrimental to computers and keyboards and also what are the other concerns with soft drinks.	Requires learner participation through discussion and volunteerism
1	7. <i>M=magnet</i> : Explain how data is stored electronically and that magnetic fields can alter or completely destroy data.	Requires active listening skills
1	8. Demonstrate [carefully] how a small refrigerator magnet can destroy data.	Piques the learner's interest and requires active listening and viewing skills
1	9. As a class, brainstorm about places where one might find a magnet.	Requires individual participation in a group brainstorming activity
2	10. Show the video entitled "O Where, O Where Has My Little File Gone?"	Requires active listening and viewing skills
2	11. As a class, discuss why it is important to know where one has saved a file.	Requires learner participation through discussion and volunteerism
2	12. Question the class about whether a lost file can ever be found.	Requires learner participation through discussion and volunteerism
2	13. Ask the class if anyone of the members has a particular scheme that he or she uses.	Requires learner participation through discussion and volunteerism