This is an Instructor’s Guide for the Saint Leo University Model for Video Teaching and Teleconferencing (VTT) training. It provides a pedagogical foundation for the training that an instructor must participate in before becoming a VTT instructor. While it is primarily designed to guide instructors who are relatively new to VTT technology, it can also be used by anyone wanting to learn more about VTT.
Saint Leo University, as a recognized leader in integrated and interactive delivery methods for undergraduate and graduate courses, actively works to enhance student learning and develop methods to contribute to superior retention and student completion rates.

This is accomplished through excellent proactive and seamless customer service through all pre and post-matriculation processes.

Saint Leo University’s distinct mission, values, reputation, and academic excellence attract top-tier online students committed to a rigorous and productive educational experience that is recognized by regional accreditation bodies, students, and employers as a leader in distance education.

Our relationships, courses, and service systems are scalable and adaptable to accommodate rapid growth and support new market opportunities that satisfy evolving customer needs. Video Teaching and Teleconferencing (VTT) provides Saint Leo University with such a growth opportunity.

Saint Leo University is an institution respected worldwide for its value proposition, the inculcation of its institutional values in every course, and response in meeting student needs in the virtual environment through courses and co-curricular experiences.

Feedback, comments, and questions are welcome; please address them to:

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INTRODUCTION

An Introduction to Video Teaching and Teleconferencing (VTT)
We understand that although you have acquired excellent teaching skills that work well in a traditional classroom, you may be unsure of what works well in a Video Teaching and Teleconferencing (VTT) classroom. This guide helps to alleviate those concerns. In this guide we will share some pertinent background information about VTT technology, relate some best practices for instructing, and illustrate step-by-step instructions on using the VTT basic equipment and interactive tools.

Saint Leo University employs a video conferencing network known as ITEACH. ITEACH connects Saint Leo University Centers around the country and provides opportunities for students and faculty at distant sites (aka far-sites) to participate in courses and collaborate on academic projects. ITEACH utilizes VTT technology. VTT technology allows for streaming of video and audio over the Internet. VTT is seen as an important growth opportunity for Saint Leo University. As a VTT instructor it is important that you are trained extensively in the use of the VTT equipment as well as learning to develop effective coursework that engages all your learners. Using this guide will enable you to pursue excellence in VTT instructing.

HOW TO USE THIS GUIDE
You can use this guide as a starting point to learn about teaching a VTT course. This guide should be used in conjunction with a web-based training demonstration or a VTT training session. The goal of this guide is to provide you with relevant information to ensure that you become a proficient VTT instructor. We also hope that you will strive to maintain a high level of quality and rigor in the VTT courses.

This guide is divided into three sections and a number of sub-sections. The first section is devoted to helping you understand VTT. The second section guides you through best practices for teaching in a VTT classroom. The third section provides detailed information on using the VTT equipment and interactive tools.

BEFORE YOU START
Copyright Issues
Your VTT course is not recorded unless you request that option from a VTT technician. Please understand that if you request your VTT courses to be recorded, you are responsible for addressing any copyright issues involving material in your class that does not originate with you. You can contact our Instructional Technology department for help if you have questions. Copyright laws for a VTT classroom are similar to that of a regular face-to-face traditional classroom. Use of video, audio or other material is allowed but only under certain guidelines and restrictions. Items that might be of a copyright concern include educational videos, print and online articles, and excerpts that constitute more than 10% of the article. If your class is being recorded and you are using commercial videos, ask your VTT technician to place it under password protection on the website. Share the password only with your students. It is much better to address the issue early than face a problem later on, so please contact the Director of Instructional Technology if you have copyright questions.
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SECTION 1. WHAT IS VTT?

Saint Leo University has been using Video Teaching and Teleconferencing (VTT) technology since August 2004. VTT technology was introduced in the 1960's and has improved dramatically over the past few years. It can deliver high quality, real-time instruction and learning. VTT can be defined as learning involving two or more people who are geographically separated but can see and hear one another in real-time using special communication equipment. You will be using VTT to connect to your far-site students; therefore, it is important that you understand the equipment you will be using and some of the technology involved in this process.

1.1 Three Different Types of Equipment Setup

We want you to know that there are three different types of equipment setup at Saint Leo University.

### STUDIO
This type of equipment setup at Saint Leo is known as studio and it is fixed setup, i.e. it cannot be moved.

### PORTABLE
This type of equipment setup is called portable and this setup can be moved between classrooms.

### DESKTOP
This type of equipment setup is called desktop and this setup is used for individual or small group instruction.
1.2 Three Different Ways to Conference

Here we describe three different ways you can connect or “conference” with your far-site learners.

**POINT TO POINT**

Think of this as placing a telephone call. You dial and you speak to someone (one person) at the other end. This is recommended.

**POINT TO MULTIPONT**

Think of this as you (one person) placing a call to a group of friends (many people). We do NOT recommend this because it uses a lot of bandwidth to transmit and this can cause lengthy delays in transmission.

**BRIDGED**

This is the recommended way for you to conference and best of all you, the instructor, do not have to be involved with this connection! This is the way most of our VTT classes conference. The way it works is that the computer automatically sets up, starts and ends each course according to schedule.

**TECHNICAL NOTE:** Saint Leo University uses Polycom equipment for the VTT classes. To record our classes we use the Mediasite recorder. At some centers, the instructor’s monitor is also a tablet so this can act as an additional interactive tool that you can use in your VTT class.
1.3 Advantages and Limitations of VTT

As in most systems, there are advantages and limitation involved. We, of course, would like to tell you that there are no limitations in a VTT classroom, but they do exist. Being aware of both the advantages and limitations will help you become a better prepared VTT instructor.

**ADVANTAGES OF VTT**

- You can deliver quality teaching and learning.
- You can connect in “real time” with far-site students; you can see, hear and give prompt feedback to your students just like a traditional face-to-face classroom.
- You can make your lecture interactive by using various VTT tools.
- You can use your existing teaching skills to your advantage.
- You can enrich the experience of far-site students and reduce feelings of isolation.
- You can encourage real-time group work and collaboration among your students, even your far-site students.
- You can seek partnership with other classes, institutions, etc.
- You can have access to experts or specialist or practitioners from the field.
- You can create partnerships with national and international institutions.

**LIMITATIONS OF VTT**

- You have to be aware that sometimes transmission of audio and video files is dependent upon network speed, so you may experience some slight delay.

- You can send audio and video files, but they have to be compressed before sending them out over the network and this may delay the transmission process as well. This may cause a slight disconnection between what your far-site students see and hear.

- You may have students at a far-site location that may be prone to technical disruptions. Sometimes at military bases planes flying over may cause a technical disruption. If this occurs, you can contact a VTT technician for immediate assistance.
SECTION 2. BEST PRACTICES FOR TEACHING IN A VTT CLASSROOM

You probably already have the teaching skills necessary to become an effective VTT instructor. We think that it is important for you, the instructor, to design your VTT courses so that rigor and relevance are maintained. You should keep in mind the instructional needs of your far-site students. Interactivity is another key factor that contributes to a successful VTT teaching experience. Researchers of VTT have stated that a key factor for success in teaching a VTT course is the expertise of the instructor. In this section we will include some suggestions that you can follow to modify your teaching techniques to work in a VTT classroom.

2.1 Factors that Affect VTT Instruction

INSTRUCTOR EXPERTISE

A VTT classroom is similar to a traditional classroom so it will be a comfortable environment for you. However, you will have to get comfortable with using the basic VTT equipment such as the microphone, monitors, and especially the remote. There are several things to consider:

- Your level of animation and excitement is captured by the video. Research indicates that VTT instructors should strive to motivate their students. A silent group of students for an entire VTT class may not be the ideal learning situation. As you may have already discovered, if you appear excited and thrilled with the subject you are teaching, your students are positively affected by your enthusiasm. So consider this, if you are a normally quiet lecturer, with no special planned interactions, you should modify your delivery.

- You will need to adapt your style to the camera, for example, look at the camera frequently. We recommend every 2 or 3 seconds. Pretend that the camera is one of your students. This will help you connect with your far-site students.

- Avoid walking off-camera. However, it is not a problem if you like to walk about the classroom; you can learn to use something on your remote called pre-sets. Using pre-sets allows you to move naturally around the classroom with the camera still focused on you. This can prevent your far-site students from looking at a blank screen. To get help using the remote contact your VTT technicians. They will be happy to help you.

- Set the camera so that you fill the screen at least half way with some space above your head. Think about how a newscaster fills the screen. This is how you want to appear to your far-site students. If the camera is set too far away from your face, your far-site students will not see you clearly and that will increase their sense of isolation. You may want to use the Picture-in-Picture feature (see Section 3.1.3) on your remote which allows you to view your image on the screen.
REACHING FOR HIGHER AT SAINT LEO UNIVERSITY

Ms. Susan Ardern is a wonderful example of a VTT instructor who knows how to make her classes truly interactive, enjoyable, and relevant. Ms. Ardern teaches art appreciation classes. She is located at SLU’s Langley center. Her students are distributed throughout the US. Despite the geographical distance, Ms. Ardern manages to make her sessions interactive, cozy and animated. Enter into her VTT classroom and the world of art comes alive! Audio clips from operas, video clips of plays, pictures of famous works of art...

Students are on the edge of their seats, waiting to see what next Ms. Ardern has to offer. When she asks a question, she calls her students by their names. Even though they may be thousands of miles away, her students feel connected. When Ms. Ardern asks her students to do their presentations they are prepared! Students quickly walk to the podium and smartly deliver their speech, and since they are learning from the best, the students make their presentations interactive as well. They are prepared to ask questions and to answer questions. You can see Ms. Ardern at play on Saint Leo’s website. Click “ITEACH on Demand” from the “VTT” main page. Her course is FAS101.

FAMILIARITY WITH VTT ENVIRONMENT
You MUST become familiar and comfortable with using the VTT equipment such as the microphone, monitors and remote. We highly recommend that you contact your VTT technician and schedule a training session. In this session you can ask the technician how to use the remote or the microphone. You can also explore different settings on the remote during this session. Next, to help you practice what you learned, we also suggest that you schedule a practice session in a VTT classroom and ask a friend to critique your lecture. We think getting help from a VTT technician, learning to use the equipment, and doing a practice session are a crucial part of being a successful VTT classroom instructor.

PREPARATION OF LESSONS
Always prepare your lessons for your VTT classes in advance. A well-thought out lesson will help your students learn. If you have handouts, discussion topics, questions, pop quizzes or games, prepare them in advance! A good idea is to post handouts in WebCT so student can easily access them or print them out. Please note that not all centers are created equally. You need to know the capabilities of the centers your students are using. Do not assume they all have wireless access, etc. To get the information of the capability of the centers, either contact a VTT technician or the center director.

PLANNED INTERACTIVITY
Styles of teaching are affected more in a VTT environment than learning. Therefore it is important that instructors develop lesson plans that provide clear details for class interactions. Interactivity is a major factor to be considered in a VTT classroom. As in a traditional classroom setting, interaction with your students helps them to become animated and interested in the topic you are teaching. You should always keep a list of names of all your students and their site location. Smile and make “eye contact” with the camera and pretend it is one of your students. Call your students by their names. Ask them questions, play learning games, have discussions, or involve them in presentations and group collaborations. VTT research has told us that you should NOT just stand and lecture. Be animated and excited about what you are teaching and do not become a boring “talking head”. Later in this section we have a list of interaction ideas. Please feel free to adapt some of these ideas into your VTT class. Also, if you’ve developed interaction techniques of your own, contact us and share your ideas so we can grow our interaction list.

NOTE: WebCT is an online course management system and not everyone has access. Contact your Center Director.
ASSESSMENTS
It is important that you use assessments appropriately. You need to know whether learning is actually occurring among your students. Formative and summative assessments are recommended. They can be formal or informal. An example of an informal assessment could be simply asking your students at the end of a class session to write or email you about what they have learned in class so far. An example of a formal assessment is, of course, a formalized exam.

2.2 Practical Guidelines for VTT Instructors

Overwhelmed when you look at the VTT equipment and tools? It is a usual reaction for most people. We would like you to understand that you have several avenues to get help and to become proficient in the VTT environment. This guidebook is just one avenue of support. In this section a list of practical guidelines is offered. We have compiled a list of questions frequently asked by our VTT instructors and we hope that our replies will also aid you.

“I JUST FEEL OVERWHELMED WHEN I SEE ALL THE VTT EQUIPMENT... I AM NOT SURE... HOW SHOULD I ACT OR SPEAK? I KNOW HOW TO MAKE MY NORMAL CLASS INTERACTIVE... BUT A VTT CLASS? WELL, I'M NOT SO SURE...”
I am scheduled to teach a VTT class. How do I get started?

There are several things you need to do:

- Read through this guide completely (VTT Instructor Guide).
- Contact your Center Director and ask for a VTT training schedule. You need to sign up for VTT training.
- After the training, schedule a session with a VTT technician to learn about specific uses of the remote and other interactive tools.
- Plan a practice session. This will help reinforce the knowledge you have gained so far about using the VTT equipment. You can ask a friend to critique your lecture. Another option is to record your session by scheduling it with a VTT technician. Please give the technician one to two weeks notice that you want your session recorded (Note: also let them know it is a practice session so you would like a copy of the recording.) If you record it, you can review and critique later.

I heard that you have to avoid wearing certain clothing items and have to follow certain rules for the camera, is this true?

This is true to a certain extent.
- You should wear solid colors and stay away from busy prints and stripes.
- We recommend simple or no jewelry.
- Please avoid colors yellow, red and violet.
- If you wear eyeglasses, consider (it is optional of course) using non-glare lenses.
- Stay within the camera shot and avoid pacing, or set the camera to accommodate your movements. It will be difficult for far-site participants to feel like they are a part of the class if they can’t see you and you’re a “ghostly voice.”
- Avoid rapid motion. Make movements slow, smooth and confined to a certain area.

Do I have to put on an “actor” voice?

No, definitely not. VTT classes do not require anyone to be an actor. For audio, there are very simple rules to follow:
- Speak naturally.
- Do not shout.
- Speak slowly and clearly.
- Be aware that there may be short audio delays.
- Eliminate excessive noise like paper shuffling, whispering and finger-tapping.
- Turn off phones and alarms.
- Close the door.
QUESTION:
How can I prepare my students for the VTT experience?

REPLY:
There are a number of things we recommend you share with your students. On the first day of class you need to establish certain rules for your students. Remember, some of your students may not be familiar with a VTT class. See Appendix A for a “handout” version of VTT Etiquette for Students that you can scan or copy to distribute to your students.

On the first day we suggest a number of techniques:

• Set expectations: You will have to inform your students that they should not expect a slick TV show production. Your VTT class is more like a reality show. The audio and video are not always perfect and it is not edited, it is “live.” Let your students know that you are not an actor sent to entertain them in class.

• Discuss Etiquette: Your students need to be informed about VTT classroom etiquette. Share with your students some of the etiquette rules for your class. Go over the ones that you believe are important. You can also add to the list we have provided. We think it is important that they learn how to use the microphones, how to ask questions, and a number of other things listed in Appendix A. We suggest that you give each student our handout on “VTT Etiquette for Students”. Give them an opportunity to read it and discuss for a couple minutes.

• Instill Participatory Behavior: Plan a fun “ice breaker” activity for your class. We understand the importance of interactions and have devoted the next sub-section to discussion of several interaction techniques. It is important that from the very first class meeting, you establish the fact that you will call upon students to answer questions, to become involved in discussions, and, generally, to take part in planned class activity. See Section 2.3 to get further ideas on developing class interactions.

At the beginning of your class sessions, plan a fun “sound check” activity. Ask for weather reports or have students see if they can recall their classmate names. This is one way to ensure that the audio and video is working and everyone can hear each other.

Always plan a class activity. See more on this in Section 2.3.

Use WebCT to distribute handouts or to connect students for group discussions. Let your students know how you plan to communicate with them and how they can contact you.

TEACHING TIP: Always keep a list of the names of all your students and their far-site location with you. Therefore, while teaching, you can always call on a student by name. Simple things like this will prevent your students, far-site and local, from feeling alienated.

P.S. It is also a good idea to have their contact information in case of an emergency.
2.3 Interaction Techniques

In a VTT classroom, we place a great deal of emphasis on interaction techniques. We believe that success in your VTT classes is dependent on several things such as state-of-the-art equipment, technical support, instructor expertise and instructor teaching techniques. Of course other factors do exist but we believe that the aforementioned list of factors is of particular importance. We have already described most of the topics in this list. In this section we will present some teaching techniques, in particular, interaction techniques that you can modify and incorporate into your lessons. We are always interested in learning about new interaction techniques, so if you have a technique you would like to share, please contact us. The techniques covered here are ones that we think are popular among our VTT instructors. Appendix B has a list of these and more techniques for you to scan or print and keep for your personal use. As we collect more ideas from you we hope this list will grow.

FIRST DAY ICEBREAKERS

In a VTT classroom, it is important to get your students comfortable interacting with you. One idea is to have them write an introductory letter and share some unique facts about themselves. Ask them to share things that they would like others to know about them. Also, let your students know that you will be sharing this information with others in the class so please do not reveal any personal or potentially embarrassing information. Read one or two in the first class without revealing names. Read the others at the start of each class as the term moves on. It is a good way to get to know your students and for your students to learn about each other (you should also participate and share something about yourself to your students). Another option if your class is very small (less than 6 or so), have them exchange the letters, and then let each student read the letter at the teacher podium. This will get your students familiarized with the presentation/teacher podium and microphone etc. It is also a fun exercise.

QUESTIONS

Prepare questions in advance. Ask your students questions frequently and wait for their response. Use a student’s name to address a question to a particular student. Try to prepare questions that will use analytical skills. Also, when you ask a question, try really hard not to fill the silence that follows by answering the question yourself. Wait for their reply. If you don’t wait, students will not feel inclined to answer your questions since they see that you answer the question yourself if they do not say anything. You can offer encouragement, but definitely repeat the question and let it stand until you receive a reply. Ask students to comment on each other responses. When a student gives an unclear response, just ask them to clarify it further. Try not to immediately correct an unclear response from your student.

NOTE: Some of the ideas for Interaction Techniques were derived from The Teaching Professor, 2007-2008 (volumes 21-22).
DISCUSSIONS
Prepare discussion topics in advance. You have the option to use WebCT to start an online discussion and continue “live” discussion in your class. You can also give your students prior notice of your discussion topics. Tell them you are going to discuss the topic further in class. Give points for participation in the discussion. Keep the discussion productive. Always give your students a clear purpose for the discussion. When a student gives an unclear response, just ask them to clarify it further. Try not to immediately correct an unclear response from your student.

GAMES
Prepare a game. For example: POP QUIZ Game (you should choose a “nifty” title) – you can have the questions appear one at a time on the screen and the first person to respond (i.e. click on the microphone) receives the point.

Or use your computer to play a computer game – display the graphic from your screen to your students - e.g. Math, History, Geography games.

TOC GAME
Ticket Out of Class (TOC) game. A TOC could be administered with no advance notice to the students. These can be very short questions about the lecture material covered on the same day of the TOC. You have the option to use WebCT to deliver the quiz, or you can ask students the questions before they leave the class and have them work out the answers as a group. If answered correctly, give them points toward their final grade. This will keep them motivated to attend class and stay until the end.

DEBATES
Prepare your students for a debate – break them into groups at the start of the term. Provide them with a topic or you can give them choices and have them choose one. You can use WebCT to create discussion forums for groups where they can work outside of class time. Encourage them to use chat rooms, etc.

The debate should occur in class and you can have it recorded so students can review it later. Far-site students can use the teacher podium to do their portion of the debate.

DESIGNING VISUALS
Remember to keep everything within camera range!

Blackboard/Whiteboard
- Stand still when writing;
- Write using thick chalk or large markers;
- Draw two vertical lines on both sides of the board to keep yourself within camera range;

PowerPoint Presentation
- Avoid using custom animations;
- Avoid slide transitions;
- Keep background colors simple, avoid slide designs;
- Font should be thick, bold and large (e.g. 24 points);
- Avoid colors red, yellow and violet;
- 6 lines per slide;
- 6 words per line;

EXCEL Displays
- Font should be thick, bold and large (e.g. 24 points);
**HUMOR**
Use humor frequently, it breaks up the monotony and helps students enjoy what they are meant to learn. Show a short, funny video clip at the start of class or at a designated class break. Tell a joke or have a student tell a joke.

**BREAKS**
Schedule short one or two minute breaks every half an hour or so. Concentration is difficult for long periods. Discuss it with your class at the start of the term. Get their help to set up some of the rules for their class. Again, a break can be to have them get up and stretch, have them go get water, stop and tell you about the weather, show them a funny video/audio clip or having them show you a funny video/audio clip.

**TEACHING TIP:** Getting your students to answer your questions is sometimes an uphill battle. However a key to breaking their silence is to wait on their responses. Let the “awkward silence” occur. If the silence starts to “get to you”, gently repeat the question and wait. If a student does respond and it is not an ideal response, say something encouraging and either repeat the question or state the question differently. The key is not to answer your own question; if that happens, students will know that they do not have to make an effort.
2.4 Developing VTT Courses Using PIE

Knowing that you should include interaction in your VTT courses is not the only thing to consider for your VTT classroom. If you already have course material or would like to develop new course material for your VTT class, we recommend using an established pedagogical framework: The Saint Leo PIE model. The PIE (Preparation, Interaction, and Evaluation) framework is already being used in our online curriculum. The PIE model includes many strategies that you already use in your traditional classes. The PIE model is designed to help you transfer your teaching expertise from the classroom to the VTT environment. The PIE model (see Figure 1) is adaptable to variations in course content and instructional strategy.

To learn more about using the PIE model contact our Instructional Technology Department and ask for a copy of PIELite.

Figure 1. Saint Leo PIE Model
2.4.1 How to Integrate the PIE Model into Your VTT Course

We are sure that you can integrate some of your existing traditional material into the PIE framework for your VTT course. As in any course design there are several facets to consider. To help you understand how to use the PIE model effectively we will explain some of the most important elements as highlighted in Figure 1.

2.4.1.1 Preparation

Preparation material should be designed to gain the attention of your student and to organize his/her thoughts about the course and each lesson plan. There are three sections in Preparation: Perspective, Objectives and Assignment Overview.

**PERSPECTIVE**

This is probably the most important element in the entire process because it will help your students get ready to learn. This is how you introduce your lessons, whether it is with a story, humor, or any other interaction that will help your students relate with the material. It is important to develop material that is not only important to your topic but that is relevant to your students. You want to teach with a perspective that will gain your students’ attention, make it relevant to their lives, and give them confidence that they can approach the new material successfully. Using interaction techniques such as role-playing, discussing, debating, and sharing stories will help your students relate to the concepts that you are trying to share. The key to Perspective is to remember that it is not the content but it is the way to get your students interested in learning.

**OBJECTIVES**

Objectives, as you may already be aware, are used to tell your students in the very beginning what they will be able to do at the end of a lesson. Use action verbs (avoid “understand” because it is vague) to help your students be aware of exactly what you will want them to do when the lesson is complete.

**ASSIGNMENTS OVERVIEW**

This is a brief overview of what your students will be doing throughout your class. It is a summary of the information found in your Interaction and Evaluation sections. Therefore Assignments Overview is often written after you have completed your Interaction and Evaluation sections. You should include assignment name, description and due dates.

Sample:

<table>
<thead>
<tr>
<th>Action</th>
<th>Items to be completed</th>
<th>Due No Later Than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read</td>
<td>Assigned chapters from your textbook</td>
<td></td>
</tr>
<tr>
<td>Post</td>
<td>Introduction to the discussion board</td>
<td>Wednesday 11:59 PM EST/EDT</td>
</tr>
<tr>
<td>Post</td>
<td>Answer to discussion question</td>
<td>Thursday 11:59 PM EST/EDT</td>
</tr>
<tr>
<td>Post</td>
<td>Response to at least two peers</td>
<td>Sunday 11:59 PM EST/EDT</td>
</tr>
<tr>
<td>Submit</td>
<td>Assignment 1</td>
<td>Sunday 11:59 PM EST/EDT</td>
</tr>
<tr>
<td>Complete</td>
<td>Quiz</td>
<td>Sunday 11:59 PM EST/EDT</td>
</tr>
</tbody>
</table>
2.4.1.2 Interaction

We have already discussed some Interaction techniques. But how can you help your students learn in your VTT class? Learning something new requires a series of interactions. Interaction occurs in 4 ways:

- Student with content
- Student to student
- Student to instructor
- Student with self

**STUDENT WITH CONTENT**

This is where you provide the information the student needs to begin the learning process.

- First select one objective and determine what information the student needs to achieve the objective.
- Second, determine the most appropriate source of this information.

Consider not only textbooks, but consider journal articles, websites, videos, audio, screen captures, animations, simulations, games, case studies, inductive reading exercises, interactive decision trees – anything that provides the building blocks for your students to begin creating the foundation of their knowledge. Include practice tests and exercises that will help your students practice achieving the objectives. Use some of the VTT interactive tools such as the document camera, or interactive panel to display objects or highlight key information. Avoid as much as possible the use of PowerPoint slides, they create passive learners. If you do use them, use sparingly, and they should accompany your lecture – not provide content.

**STUDENT TO STUDENT**

Student to student interaction is where students take the information that they have read or listened to and begin to build their understanding through dialogue with others. It is through using information that it becomes knowledge. In a VTT classroom, student to student interaction usually occurs in discussion forums or group activities. You can use WebCT to enhance student to student interaction by setting up discussion forums and encouraging the use of chats, wikis, blogs, role-playing, web-conferencing and telephone calls. You can learn more about discussions in Section 2.3 “Interaction Techniques.”
STUDENT TO FACULTY

In a VTT class student to faculty interaction is extremely important for keeping students focused on the content and providing feedback – both positive and corrective. It is also an area Saint Leo takes very seriously. Following are some things you should incorporate into your VTT class:

- At the start of each term review your syllabus thoroughly and make necessary changes;
- Share your office hours (online hours for far-site students) and contact information;
- Always check your VTT equipment to ensure you have command of the equipment;
- If you plan to use the teacher podium PC check that you have correct software/plug-ins etc.;
- Consider creating an “Assignment Calendar” with deadline dates to share with your students;
- Provide prompt feedback to your students;
- Give detailed instructions - emphasize your expectations and you may want to provide additional guidelines for assignments;
- Include at least one interaction in each lesson;
- Encourage collaboration and group discussions in class;
- Encourage use of discussion forums, chat rooms etc.;

STUDENT WITH SELF

This refers to self-reflection by the student directed by the instructor. This is most often done through guiding questions and problems that you want the student to consider as they go through your lessons. This will help students to focus on important elements of the lesson.

Here is where your expertise is critical. If students could learn just from reading the textbook that would certainly be easy. However, they are in class to learn from you. Guide them to and through the most important information. In your VTT classroom, your students are in front of you so help your near-site and far-site students to make sense of your material.

You can help your students by a number of methods such as preparing a list of key questions that will help to focus their attention on key concepts or preparing advanced organizers for the next reading assignment. It is critical that you take the time to communicate and guide your students.

2.4.1.3 Evaluation

Evaluation is an opportunity for your students to demonstrate that they have achieved the objectives you challenged them to master. The evaluation may be informal (resulting in feedback) or formal (resulting in grade). You can refer to the PIELite guide to learn more. After completing the Interaction and Evaluation for your VTT class, make sure you go back to Preparation, Assignments Overview to make sure that you have included all of the activities you stated.
SECTION 3. LEARNING TO USE THE VTT EQUIPMENT AND TOOLS

3.1. Basic VTT Equipment
All VTT classrooms have some basic pieces of equipment: monitor/s, a remote, a microphone and a visual concert device.

3.1.1 Monitor/s
Most VTT classrooms are set up with two TV monitors like you see in the picture. You should know that sometimes there are variations such as one big screen and an overhead projector. With a two TV monitor setup, one screen displays graphics (i.e. what is on your PC/Laptop), the other displays what is on camera.

3.1.2 Microphone
We currently use the Polycom PVX 7000 system. When looking at the microphone, note that when the red light is on, the microphone is “off” and no one can hear you. When the red light is off you can speak and everyone will hear. A good way to remember this is to memorize this rhyme: “red light on students cannot share; red light off students can hear.” Maybe not a good rhyme but it can help you remember the correct microphone settings for “on” and “off.” Remember, this microphone is very sensitive so it picks up and transmits every little sound in the room. Sounds like paper shuffling, finger-tapping and even whispers are transmitted on this microphone. It can be annoying to someone! So please be aware of this and tell your students to keep it off (i.e. red light on) until they wish to speak to you.
3.1.3 Remote
This is the remote. It is an important part of the basic VTT equipment setup that you need to get comfortable using. It is very easy to use and with practice it will become second nature to you. On your remote, you see red, orange, blue and gray buttons. You will use mainly the red, orange and blue buttons.

![Remote control diagram]

- **Place or end a call**
- **Open the directory to make a call or work with an entry**
- **Confirm your current selection; perform functions on highlighted items**
- **Return to the previous screen**
- **Switch between the near-site and far-site camera views**
- **Show or hide the Picture-in-Picture (PIP)**
- **Store camera positions (when followed by a number); delete all stored camera positions**
- **Enter a dot in an IP address**
- **Delete letters or numbers**
- **Enter numbers or text; move the camera to a stored position**
- **Access the online help; see current system status while in a call**

Adjust the camera; navigate through menus
Return to the Place a Call (home) screen
Increase or decrease the sound you hear from the far sites
Mute the sound you’re sending to the far sites
Zoom the camera image in or out
Turn automatic camera tracking to presets on or off
Select a camera or other video source
Display the onscreen keyboard so you can enter text
Start and stop sending content to far sites (VSX 7000, VSX 8000)
**RED BUTTONS:** The red buttons can be used to adjust the camera, navigate through menus and to return to the previous screen (see Remote graphic for details).

**ORANGE BUTTONS:** The orange buttons can be used to increase or decrease the sound you hear from a far-site, or you can mute the sound that you’re sending to the far site (see Remote graphic for details).

**BLUE BUTTONS:** Although you will not use these blue buttons frequently, it is good to learn what they accomplish. The left blue button zooms the camera in or out and it can be used to turn on pre-sets. Use this button if you like to walk around in the classroom and have stored pre-sets. You can ask your VTT technician to help you learn how to use this feature. The right blue button switches between the near-site (which is your location) and the far-site camera view. The far-site is your distant student location/s. In addition, the right blue button can also show or hide the Picture-in-Picture (PIP) view. One of the right blue buttons stores camera positions. By the way, the PIP allows you to see what you are sending to the far-site. So you may want to have this on most of the time (see Remote graphic for details).

**GRAY BUTTONS:** Finally, the gray buttons (see Remote graphic for details) are used to type in an IP address. However you will rarely use these buttons.

Please familiarize yourself with this remote and we suggest you use some of these buttons. We also suggest that you arrive a little early to your VTT classroom and get acquainted with the equipment and the camera settings.

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**SUPPLEMENTAL HELP:**
- Training - You have two options:
  - VTT enabled “face-to-face” class (contact Center Director for a schedule)
  - Web based Training: VTT Demo (contact Professional Development @ (352) 588-7567)

- VTT Guide (provides further details on the Polycom System and interactive tools) can be found at the website: http://www.saintleo.edu/vtt

**CONTACT INFORMATION FOR VTT TECHNICIAN:**
- Call us at the VTT Hotline: 352-588-7400
- Page us at the VTT Hotpage: 352-898-7994
3.1.4 Visual Concert Device

Computers are connected to the ITEACH system through the use of Polycom’s Visual Concert device. When you share content in a videoconference, everyone sees the content at the same time, just as they would in a face-to-face meeting. The Visual Concert will scan the computer screen every few seconds and send the updated image to the far-sites.

This results in an efficient use of bandwidth but does not capture the exact movements of items on the screen. As a result, some applications may not appear to move or transition smoothly on the far-sites.

To begin sending the computer screen to the far-sites and the local screen/projector, you can use the Visual Concert or remote.

**USING THE VISUAL CONCERT:**

To show content: Press on the Visual Concert VSX unit.

To stop showing content from a laptop or PC: Press on the Visual Concert VSX unit.

You can also use the Remote Control to show and stop content to far-site and local sites.

To begin sending the computer screen to the far-site: Press on the Graphics button on the remote.

To stop sending the computer screen to the far-site: Press on the Graphics button on the remote.
3.2 VTT Tools
There are several tools that are available to help make your class interactive. In this section we will cover six tools: PC/Laptop; DVD/VCR; Whiteboard/Blackboard; Document Camera (ELMO); Interactive Panel/Tablet, Cursor/Pen (part of the Interactive Panel/Tablet). You do not have to use these tools all at once. The first term, you can use equipment you are familiar with then gradually introduce new ones in following terms. We urge you to register for training and schedule a practice session. If you require further help, contact a VTT technician.

3.2.1 PC/Laptop
Computers are connected to the ITEACH system through the use of Polycom’s Visual Concert device. When you share content in a videoconference, everyone sees the content at the same time, just as they would in a face-to-face meeting. The connection to the PC in the teaching podium is already made. An alternative connection is possible by connecting a laptop to the VGA cable available on the surface of the teaching podium. You will find this cable easily on the teacher podium as it is clearly labeled. The video switch is auto-sensing and will switch to the laptop automatically. To show the content on your PC or laptop to local and far-site students see Section 3.1.4.

3.2.2 DVD/VCR
Video works reasonably well in a video conferencing environment as long as we remember that video conferencing does not produce cinema quality video. Still, video can be useful for showing videos but caution is necessary as the quality of video with a lot of motion, abrupt wipes, and minute details may degrade when the video is transmitted over a video conferencing system. Therefore, try to check that it is still of usable quality at the far-site before planning to use the video in a class.

BEFORE THE CALL BEGINS:
Make sure the DVD/VCR player is connected and powered on. Insert the videotape or DVD.

To stop showing a video using the DVD/VCR player in a call:
Press Camera on the remote control.
Select Main Camera source (Choice of 1, 2 or 3).
Press Enter on the remote control.

To start showing a video using the DVD/VCR player in a call:
Press Camera on the remote control.
Select Video source (Choice of 1, 2 or 3).
Press Enter on the remote control.
3.2.3 Whiteboard/Blackboard

Blackboards are much longer than they are high, and most people will use long line-lengths when writing on them. The camera needs to zoom out to see this line length which means the height of the image increases. Letters on the blackboard are small on the video screen, and the low resolution can’t resolve them into a readable image.

When using a blackboard or whiteboard follow these best practices:

- Stand still when writing to keep line lengths short.
- Write using large letters (2”). Use thick chalk or large markers.
- If the camera doesn’t have to move to follow you, you’ll get a clearer picture.
- Shorter line lengths allow the camera to zoom in more. Large, thick-stroke letters are easier for the camera to see.

3.2.4 Document Camera (ELMO™)

A document camera is a very versatile tool. Objects as well as documents can be displayed. The camera will be able to zoom in to reveal detail that could not be seen by students in a conventional lecture if you just held the object. In addition, because you are controlling the environment in which the object is being seen, you can be sure that all students, and not just a few at the front, will be able to see the detail. You can use the Elmo™ document camera as a whiteboard. If using the document camera a whiteboard remember to place a white sheet of paper on the base and use thick dark markers. Here are some features of the document camera:

- The document camera has top lighting and base lighting. The base-lighting feature allows you to use previously created overhead slides and even 35mm photo slides.
- Zoom and Pan
- Automatic or manual focus
- Automatic or manual iris control
- Auxiliary audio and video inputs

BEFORE THE CALL BEGINS:
Make sure the Document Camera is connected and powered on. Place object on camera base.

To start showing the Document Camera as video input:
Press Camera on the remote control.
Select Document Camera source (Choice of 1, 2 or 3).
Press Enter on the remote control.

To stop showing the Document Camera as video input in a call:
Press Camera on the remote control.
Select Main Camera source (Choice of 1, 2 or 3).
Press Enter on the remote control.
3.2.5 Interactive Panel/Tablet
The Polyvision Panel/Tablet is a powerful instructional tool that is easy to operate with a little practice and experimentation. You should note that not all VTT teaching rooms are equipped with this interactive panel. In addition to serving as the computer display screen, it also allows the user to:
- Annotate/highlight items on the computer screen in 4 colors and many styles
- Use as an electronic whiteboard
- Capture and store whiteboard work and computer screens with annotations

3.2.5 Cursor/Pen
To use your Interactive panel effectively, you will have to use the accompanying cursor/pen remote and the stylus. While your computer is being projected, a type of writing is available called “mark-up.” This writing is part of the projected image, not physical ink. To mark-up the computer image, use the stylus provided. The stylus serves two purposes:
- Use it to operate your computer (cursor)
- Use it to mark-up the projected image (pen)

To mark-up the projected computer image:
1. Press Cursor/Pen on the remote to toggle between using the stylus for computer operations and using it for mark-up. The cursor appearance toggles between an arrow for mouse operations and a pen for markup.
2. On the interactive panel, write over the panel using the stylus.
3. Press “Print” or “Save” on the remote control to capture a snapshot that includes the image projected from your computer, plus the mark-ups. Mark-ups leave no ink, but they are part of the snapshot.
APPENDIX A: VTT ETIQUETTE FOR STUDENTS

• Keep microphones OFF (red light on) until you wish to speak or ask a question. To speak, push on the red light – when it is off – everyone can hear what you have to say.

• State your name before asking a question or making a point during a discussion. This way your instructor as well as your fellow students gets to learn each other’s names.

• Be prepared for class participation. Be prepared to answer and ask questions.

• Take turns when speaking. Allow each other to speak.

• Eliminate excessive noise by keeping microphone off (red light on) until you are ready to speak. Also, when the microphone is on (red light off) AVOID whispering, paper shuffling, finger-tapping, etc.

• Turn off phones, alarms, etc. Close the classroom door.

• Remember, this is not a TV production so don’t expect a TV show production. Your instructor is not an actor working to entertain you.
APPENDIX B: INTERACTION TECHNIQUES

Interaction Techniques

FIRST DAY ICE BREAKERS
In a VTT classroom, it is important to get your students comfortable interacting with you. One idea is to have them write an introductory letter and share some unique facts about themselves. Ask them to share things that they would like others to know about them. Also, let your students know that you will be sharing this information with others in the class so please do not reveal any personal or potentially embarrassing information. Read one or two in the first class without revealing names. Read the others at the start of each class as the term moves on. It is a good way to get to know your students and for your students to learn about each other (you should also participate and share something about yourself to your students). Another option if your class is very small (less than 6 or so), have them exchange the letters, and then let each student read the letter at the teacher podium. This will get your students familiarized with the presentation/teacher podium and microphone, etc. It is also a fun exercise.

QUESTIONS
Prepare questions in advance. Ask your students questions frequently and wait for their responses. Use the student’s name to address a question to a particular student. Try to prepare questions that will use analytical skills. Also, when you ask a question, try really hard not to fill the silence that follows; wait for their reply. If you don’t wait, students will not feel inclined to answer your questions since they see that you answer it yourself if they do not say anything. You can offer encouragement, but definitely repeat the question and let it stand until you receive a reply. Ask students to comment on each other’s responses. When a student gives an unclear response, just ask the student to clarify it further. Try not to immediately correct an unclear response from your student.

DISCUSSIONS
Prepare discussion topics in advance. You have the option to use WebCT to start an online discussion and continue “live” discussion in your class. You can also give your students prior notice of your discussion topics. Tell them you are going to discuss further in class. Give points for participation in the discussion. Keep the discussion productive. Always give your students a clear purpose for the discussion. When a student gives an unclear response, just ask the student to clarify it further. Try not to immediately correct an unclear response from your student.
**GAMES**

Prepare a game. For example: POP QUIZ Game (you should choose a “nifty” title) – you can have the questions appear one at a time on the screen and the first person to respond (click on the microphone) receives the point.

Or use your computer to play a computer game – display the graphic from your screen to your students - e.g. Math, History, Geography games.

**TOC Game**

Ticket Out of Class (TOC) game. A TOC could be administered with no advance notice to the students. These can be very short questions about the lecture material covered on the same day of the TOC. You have the option to use WebCT to deliver the quiz. Or you can ask students the questions before they leave the class and have them work out the answers as a group. If answered correctly, give them points towards their final grade. This will keep them motivated to attend class and stay until the end.

Some resource websites:
- [http://nobelprize.org/educational_games/](http://nobelprize.org/educational_games/)
- [http://www.eduplace.com/edugames.html](http://www.eduplace.com/edugames.html)

**DEBATES**

Prepare your students for a debate – break them into a group at the start of the term. Provide them with a topic or you can give them choices and have them choose one. You can use WebCT, if available to you, to create discussion forums for groups where they can work outside class time. Encourage them to use chat rooms etc.

The debate should occur in class and you can have it recorded so students can review later. Far-site students can use the teacher podium to do their portion of the debate.

**ROLE PLAYING/ACTING**

Introduce the idea of role playing to your students. If you have a poem you want them to recite or a scene from Shakespeare, you can accomplish this via VTT. Even in a business or math class, have them become the teacher for a couple of minutes to teach a concept. Encourage group collaborations to create scenarios so they can act it out in the next class. Also, they can create their own video clips about a particular concept to show in class.
PRESENTATIONS
If your class size is small you can have individual presentations (5 minutes or less). If you have enough students for groups, then consider group presentations. It is possible to link the far-site student with a near-site student to work together. Use WebCT to help them by creating a discussion forum for each group. They can communicate with each other easily this way. Other ideas are to have them dress as if it is a formal presentation. Request the VTT technician to record your class (give a 2 to 1 week notice). Let your students know so they can do a self-critique when they have completed their presentation.

GUEST SPEAKER
Invite a dynamic guest speaker to one of your class sessions. Plan a “Question and Answer” session at the end. The guest speaker can possibly use an SLU center or, if they have the technical capability, they can also connect from work/home. Ask your VTT technician for help.

RESEARCH SHARING
Have students share their research. For example, ask your students to look for newspaper or journal articles about a particular topic that you have covered or will be covering. Call a student randomly to share a summary of the information or you can assign students to share (which may be a better idea for a VTT class). You can also include websites, video and audio in your student research media choices.

LEARNER FEEDBACK BREAK
A good way to get feedback on whether your students are understanding the concepts you are teaching is to ask them directly. You can ask them to take a minute or two to write down what they have learned so far. They can email you a word document with no name attached. Download and go through it yourself to read what your students say about what they have learned so far. At the beginning of the next class, cover some of the feedback and discuss it with your students. This can reveal what concepts students think are difficult and what needs to be addressed again.

PAPER SLAM
If you assign research papers to your students, you can do a “Paper Slam”. The idea is to have your students learn from each other. Also, since students spend a great deal of time writing their papers, they deserve a larger audience. To do a “Paper Slam” in your VTT class, have each of your students create one PowerPoint slide about the paper. They are free to use graphics, sound, etc. Make it a point that they have to do a 60 (or 90 second if you prefer) second presentation about their papers. You can collect all the PowerPoint slides; then designate a day in which you will show the slides. Let your students know in advance the presentation roster (who goes first, second, etc., this will minimize delays). Try emailing them the roster a week or so before the presentations. This will help the students to follow along. Give them the 60 or 90 seconds to present the paper. Have a student time the presentations, or you can download a timer onto your PC. Do not allow them to go beyond the time limit. Finally, let your students know that this is a fast-paced event so keep delays to a minimum. Tell your students to be ready to go as soon as another student is finished, even if it means getting up and moving closer to the teaching podium.
**VIDEO/AUDIO**

Use small video (e.g. YouTube is a resource) and audio clips in your lecture. Discuss afterwards. Make the links available to your students and have them write a “reflection paper.”

Some resource websites:
- http://www.youtube.com/
- http://websearch.about.com/od/imagesearch/a/education_video.htm

**HUMOR**

Use humor frequently, it breaks up the monotony and helps students enjoy what they are meant to learn. Show a short, funny video clip at the start of class (or at a class break). Tell a joke or have a student tell a joke.

**BREAKS**

Schedule short one or two minute breaks every half an hour or so. Concentration is difficult for long periods. Discuss it with your class at the start of the term. Get their help to set up some of the rules for the class. Again, a break can be included to have them get up and stretch, to go get water, to stop and tell you about the weather, to show them a funny video/audio clip, or to have them show you a funny video/audio clip.