This section contains a tutorial on VITAL version Alpha. Last revision of this document was conducted on Jan. 29, 2003.

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1. Introduction

This Help section contains an overview of VITAL Web application, and updates in recent versions.

1.1: About VITAL

VITAL (Video Interactions for Teaching and Learning) is a Web-based application developed by the Columbia Center for New Media Teaching and Learning, in conjunction with Dr. Herbert Ginsburg, Jacob H. Schiff Foundations Professor of Psychology and Education at Teachers College. The project aims to provide students with unique digital tools for viewing, manipulating and communicating video materials that are at the heart of Dr. Ginsburg’s “Development of Mathematical Thinking” course.

1.2: Who can use it

VITAL is being used for the first time in Professor Ginsburg's Fall 2003 course, "The Development of Mathematical Thinking". This application is currently accessible only to students registered in this course.

2. Access and Login

VITAL main page is located at the following URL: http://www.columbia.edu/ccnmtl/projects/vital/. You can access VITAL from any location on Columbia campus and off-campus so long as your computer meets the system and connection requirements.

At the VITAL main page, click on the “Login” button to begin your session. Important: VITAL uses the AcIS WIND (Web Identification Network Daemon) protocol for login. You must have the Columbia Certificate Authority (CA) installed in your Web browser in order to access the login page. Please download the Columbia CA if you do not have it installed in your browser. (http://www.columbia.edu/acis/access/secure/ca.html)

When you clicked on the “Login” button, you will be directed to the AcIS Login page and within that page, you need to enter your Columbia University Network ID (UNI) and password to login. For most people, the UNI is the same as the AcIS e-mail account they create (example: the UNI for xyz31@columbia.edu is xyz31), and has the same password.

If you do not know your UNI, or are having trouble remembering your password, you can go to the following site and learn more about it: http://www.columbia.edu/acis/access/secure/uni.html
3. Home Page

Once you are successfully logged in, you should be presented with your personal VITAL Home page.

3.1: Global Navigation

The global navigation is located at the top of the Home page (and on every page within VITAL application). Here is a description of the parts of the menubar:

1. The Home icon and your name link you back to your Home page.
2. Logout button. Important: Please be sure to log out of VITAL when you have finished using the application, especially when you are using publicly accessible computers. Note also that if you remain idle within VITAL for more than one hour, your session will automatically expire. When this happen, you will need to re-login to resume your session.
3. Link to Digital Library.
4. Link to your Workspace.
5. Link to this Help documentation.
6. Link to the list of the key contributors and the development team for VITAL.
7. Link to CCNMTL Web site.

3.2: Assignment List

Your Home page displays a list of all your assignments that you are currently working on and those previously submitted. The assignments are broken down into three categories:

1. Video Lessons
2. Assigned Essays
3. Independent Essays

Detailed descriptions of each of these types of assignments is provided later in the document.

You can view each assignment in Web page format by clicking on “VIEW”. To continue working on an incomplete assignment, click “EDIT” for essays or “CONTINUE” for video lessons. You will be able to edit only assignments that have not been submitted (marked “Incomplete” under the Status column). Submitted assignments and lessons are marked “Completed” under the Status column, and they are non-editable.

3.3: Class Assignments

You can also view the assignments of your peers in the course. The viewing preference located at the right-hand side above your assignment list provides you with an option to view the class assignments list sorted by assignments or students.
You will be able to view your peer's assignment only if both of you have submitted the assignment.

4. Digital Library

The Digital Library is a repository of videos, articles, curriculum and terms associated to the course. In VITAL version Alpha, the Digital Library contains a collection of videos that portray issues connected with children's mathematical thinking.

4.1: Video Library

Each video in the Library is described according to the following fields:

1. **Type.** This describes what the content type of the videos: clinical interview, observation, lessons or miscellaneous
2. **Grade Level** of the children in the video clip
3. **Clip Name**, which is a short description of the video content
4. **Week** that the particular video will be used in the course

When you first enter the Digital Library, the videos are automatically sorted by the clip names. If you wish to sort the entries by any of the other fields, simply click the header of the column, for example, click “Grade Level” to sort the list by this field. To sort videos in reverse order, click the arrow button to the right of the column header. The arrow will then change to point in the opposite direction.

To view a video, click on the "Clip Name". A video viewer will be launched on a separate window.
4.2: Video Viewer

1. Video clip and time code
2. Information on the video clip
3. Starttime entry
4. Endtime entry
5. Note to be associated with your selection
6. Status of your submission

In addition to watching the video, you will be able identify the portions of the video that you want to save in your workspace for a later date. There are two reasons that you might want to save a selection of the video:

1. You might want to watch it again the next time you log in
2. You might want to share your ideas about that video in your essays with your professor and your peers

The Video Viewer allows you to identify your selections, and write a note to yourself describing your thoughts on the selection. To do so:

1. Click the play button to watch the video. Note that the time code is located at the bottom of the video, in hours, minutes, second and frame. The example above indicates that the video is at 00 hour, 00 minute, 13 seconds and 27th frame.
2. When you have identified the beginning of your selection, enter the values in the "Starttime" box. Please note that the entry does not require the "frame" part of the time code.
3. When you have identified the end of your selection, enter the values in the "Endtime" box. Similarly, this entry does not require the "frame" part of the time code.
4. Enter a note to yourself pertaining to this selection in the textbox. This note will be associated with your video selection.
5. Click "Save Selection" to save your entry.
6. The status of your submission will be reflected on the screen after you have saved your selection.

You can save multiple portions of the same video. Once you are finished, close the window and return to the main VITAL environment.

You will be able to view all saved selections in your Workspace.

4.3: Known video issues
There are some instances where the video clips are unclear and pixelated for the first few seconds.

The videos were selected for their outstanding content. However, some of the original archival VHS tapes of these clips are old and the image quality have deteriorated over the years. The final transfer of these videos to the digital format may not possess the optimal quality for streaming broadcast.

These streaming videos have been thoroughly tested on systems with high-speed networks and while some of them may demonstrate irregular display quality, the content is not affected. CCNMTL is continuing its effort to improve the quality of these videos.
5. Workspace

In the course throughout the semester, you will be required to write an essay each week in response to the readings and videos, and the assigned essays will be discussed in the next class section.

You can access the weekly assignments from your VITAL Home page and from the Workspace.

5.1: Anatomy of the Workspace

The Workspace is made up of two main areas:

1. The Asset (or Bin) area, which contains the list of all video selections you have saved from the Digital Library.
2. The Essay area, which is the workspace environment allows you to open up, save, and submit essays that you are working on.
5.1.1: Asset/Bin Area

1. The Asset area contains a list of the video segments you have selected from the video library. The list is sortable by the following fields:
   A. Title: a short description of the video content
   B. Name: the name of the child in the video clip
   C. Grade: grade level of the child in the video clip
   D. Week: the week that the particular video is used in the course
   E. Date Added: the date the clip was added to your bin

   If you wish to sort the entries by any of the other fields, simply click the header of the column, for example, click “Grade” to sort the list by this field. To sort videos in reverse order, click the arrow button to the right of the column header. The arrow will then change to point in the opposite direction.

2. You can view the video selection and edit the associated note, start time and end time by clicking on the title of the video. A video viewer will be launched on a separate window.

3. You can also add the video selection to your essay in the essay area by clicking the “add” button. The video will be appended to the last line of your essay. Your annotation will not be added to the essay. There is no limit to how many times you wish to use a particular video clip in one essay.

4. The assets in your bin can be deleted at any time. Check on the boxes in this column, and click the “Delete” button located at the bottom of the list. The application will alert you to confirm your action:
Please note that your selection and your associated annotation will be permanently removed from the bin. If you have deleted a particular selection by mistake, you will need to return to the Digital Library and save a new selection.

5.1.2: Essay Area

1. You can open a pre-existing essay (assigned essay or essay that you are working on) by selecting from this dropdown menu. Each week, a new assignment will be added to this menu. Select the essay you wish to edit from this menu and click “open”. A blank essay box (or a populated essay box if you have already worked on it) will be displayed on the area.

2. In addition to writing an assigned essay each week, you are able to write as many "independent" essays as you wish. While you will not be graded on this work, the "free" essays will allow you to describe ideas around videos in your bin. This may be useful for your final project, or as a way to communicate ideas to other members of your class. To create an essay of this kind, click “new”. When you save this essay, it will be added to the dropdown menu.

3. You can edit the titles of all your independent essays in this field. The titles for assigned essays cannot be edited.

4. This area is the main area for your essays. It will be empty when you first load an assignment or an independent essay, but will remain populated with content that you have saved.

5. When you add a video clip from the bin, a video link marker will be appended to the last line in your essay box. You can move this marker to any point of your essay by cutting and pasting. There is no limit to how many times you wish to use a particular video clip in one essay.
6. You can save your essay as often as you wish by clicking on the “save” button. Click on “view” to view your essay in HTML format. All finished assigned essays must be submitted and you can do so by clicking the “submit” button. You will be prompted with a confirmation screen:

**Important:** Once you have submitted an assigned essay, you will not be able to go back and edit it. All submitted essays will no longer appear in the dropdown menu in the Essay area. Independent essays, on the other hand, need not be submitted. Instead of the submission button, you will be presented with the option to delete the essay.

When you view an essay, it will be presented on the same window, in HTML format:

1. You can open another essay in HTML format by selecting from this dropdown menu. Select the essay you wish to view and click “open”.

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2. The video that you have added to your essay will appear in the HTML format in the form of a hypertext link. To view the clip, click on the link and it will play in a separate small screen.

3. You can return to the editing workspace from this screen by clicking “edit essay”. You can also submit your assigned essay or delete independent essays.

6. Video Lessons

In this course, you will be asked to complete a video lesson weekly for ten weeks. These lessons can be accessed from your Home page. The format of these lessons can be different, but several features are consistent in all of them.

Every video lesson consists of a series of instructions that requires you to watch a short video and answer a question pertaining to the video.

1. Each lesson number is located on the top-left corner.
2. This feature indicates which question you are at, and how many more you need to complete. This is not a navigational tool; your linear progress in the lesson is guided only by your answer submission.
3. The video is not set to play upon page loading; therefore, click the play button to watch the video.
4. You will be asked for a response on the video you are watching. After you type in an answer in this textbox, click “Save Answer and Continue”. **Important**: You will not be able to go back and modify your submitted answer, so please consider your answers carefully before submitting.
5. At any point in your lesson, you will be able review your progress by clicking on “Progress Report”. This report displays your answers to the previous questions in the lesson. In addition to that, you will be able to view the related video clips from this report.

You will be able to view your peer’s video lesson report only if both of you have completed the same lesson. At times you may be asked to review your peer's video lesson before going on to the next week's lesson.
7. System Requirements & Support

The following hardware, software, plug-ins and network connection are required for this application:

1. **Operating systems**: Windows NT/XP/Me/2000/98/95; Macintosh OS X v10.2 "Jaguar"/OS X v10.1.3-10.1.5/OS 9.x/OS 8.6; Linux
2. **Monitor**: 1024x768 or higher resolution recommended
3. **Browsers**: Internet Explorer 5.1 or later; Netscape 6 or later; or Mozilla 1 or later. Your browser must have JavaScript enabled.
4. **Plug-ins**: Quicktime 5 or later. Download a free version of Quicktime Player (http://www.apple.com/quicktime/download) if you do not already have it installed.
5. **Network Connection**: The recommended connection is institutional T1. Other broadband connections (DSL, cable modem) are acceptable.
6. **Audio Output**: Speakers, or headphones (necessary if you are using this tool in a lab)

7.1: Error reporting

You can report problems and submit suggestions by clicking on “Report Error” located at the bottom of every page of VITAL application.

For critical problems that may jeopardize your ability to hand in your homework on time, please direct your messages to davidvan@columbia.edu and he will respond accordingly.

For technical questions that are not covered in the system requirements, please contact us by e-mail (ccnmtl-vital@columbia.edu) and we will respond to you as soon as possible.