

**ANALYTIC REPORT
FOR
"DISCUSSIONS" E-CLIP**

Prepared for
San Antonio College
Office of Technology Services

by
Alexis Barrera
Brock Piechota
Andres Leza
Technical Communication Students

April 30, 2012

San Antonio College
1300 San Pedro Ave.
San Antonio, Texas 78212

May 4, 2012

Heather L. Cura
Instructional Technology Supervisor
Office of Technology Services
1300 San Pedro Ave.
San Antonio, Texas 78212

Dear Heather Cura,

We are pleased that you have allowed Dr. Irvin's technical writing class at San Antonio College to work with you. I'm providing you with a report over our completed usability test plan, how-to script and storyboard entitled *Discussions eClip*. This report will consist of every step and action that was planned by our group since your visit with the class.

The reason for this report is to inform you about the background issues of the new Instructure Canvas, our methods toward creating a solution to these problems and the results we received from our usability testing. A copy of our final eClip script and storyboard will be included for the "Discussions" section of Canvas. Furthermore, this report will give you a better insight into what actions we took on to producing this eClip tutorial.

We hope that this brief report will help you understand the goals of this project for Canvas.

Sincerely,

< Signatures here >

Alexis B., Brock P., Andres L. Student,
San Antonio Technical Communication

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This report is final analytic version that discusses the creation of the new eClip guide. and explains the problems and background behind the Canvas program. The usability test and results are also included and explained throughout the report.

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Abstract

San Antonio College is currently in the process of switching Learning Management Systems (LMS) from Black Board Vista to the new Canvas program. This switch is currently taking place, but will be completed in the spring of 2013. This switch creates a problem because students and teachers, will now have to get familiar with an entirely new program in order to participate in their classes appropriately. In order to get students and teachers familiar with the new program, San Antonio College's Office of Student Technology will be creating online support videos that will help explain how the different aspects of Canvas work. In this report, our team will explain the purpose and background of the eClip and will also include a copy of the eClip storyboard, script and an explanation as to how they work. The report will also show the results and findings of the usability testing conducted through five different participants.

I. Introduction

The new Canvas learning management system will allow students and teachers to increase their learning potential with new and advanced features. The Office of Student Technology is in charge of creating the support videos called eClips to help students and teachers better understand the new program. This report contains information on the background of the problem concerning the switch and explains the purpose and objectives that the eClip has. We will also explain the methods and procedures that were associated with the creation of the eClip. At the end of the report, the usability testing document that we used to obtain valuable input for our final development of the eClip will be provided.

II. Problem, background

San Antonio College is currently switching from Black Board Vista to a new learning management system called Canvas and plans to fully transfer to this system in spring of 2013. In order to make Instructure Canvas more user-friendly to everyone, support videos called eClips will be created by the Student Office of Technology that will help guide users through each section. Each member of our group took part in developing a high-fidelity prototype of the storyboard and script that will be used in the production of the video .

By interviewing a few test participants in our usability test we found some common issues of previous learning management systems and how-to tutorials:

- Small, hard to read text/font
- Too many places for the same task
- Hard to understand language
- Fast-faced step-by-step processes

Due to the issues presented, we felt in necessary to create and eClip storyboard and script that met all the needs of our test participants.

III. Purpose, objectives, scope

The whole objective of our project was to create an easy to understand eClip tutorial for Canvas users of all ages. With this objective in mind, our group was able to conduct some usability tests with our low fidelity prototype. With the usability test, our goal was to improve our low-fidelity prototype by eliminating similar struggles students and teachers had experienced before.

Common mistakes would be omitted, and an improved high-fidelity prototype would be produced that would include features such as:

- Larger font/text for hard-to-read users
- Slow-paced step-by-step processes
- Clean and simplified format/language
- Easy to read graphics

The purpose of the usability test was to gain a better understanding of how students and teachers conflicted with current LMS programs. Within these tests, our group was able to ask questions to each individual in order to get some input on common problems they've had with previous or current online courses/learning systems. All information gathered helped improve our production of the Canvas discussion eClip storyboard and script.

IV. Theory, Methods and Procedures

In order to produce our final product, an eClip guide for the Discussions Section of Instructure Canvas, we used the Iterative Development Cycle. This cycle involved the redesign of a low-fidelity prototype, an implementation of feedback and an analysis of the final product. This method is used because it is the most straight-forward cycle that provides an idea of when the project will be finished, what resources will be required to complete the project, and when these resources will be needed.

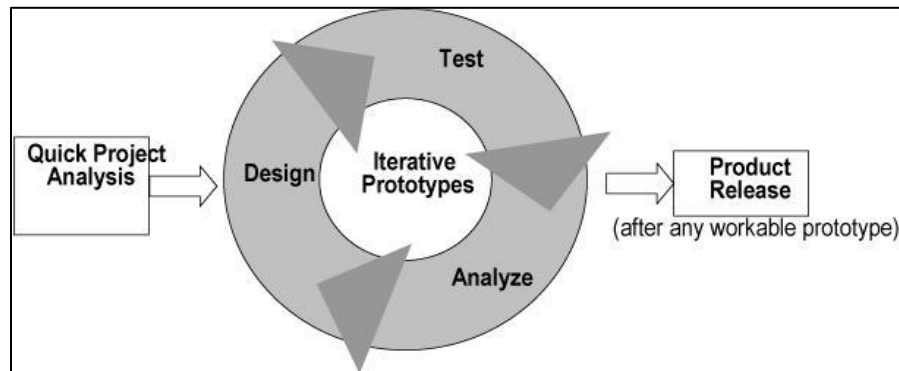


Figure 1

During the Quick Project Analysis, our group was also able to scope the "Discussions" section of Instructure Canvas to familiarize ourselves with each technical task that needed to be included into the eClip tutorial. This helped our group produce a proposal on March 26th that helped guide us and gave us a tentative schedule of what needed to be done in order to produce the most cost-effective and user-friendly eClip tutorial rapidly.

By March 30th, our group started designing a low-fidelity prototype of the eClip that would be showcased in our usability testing. Low-fidelity prototyping is a cheap way of providing models of a design to use in tests. Since the prototypes were a rough drawing of the final product, these "throwaway" prototypes were effective because they allowed us to receive useful feedback from the user that was later used in the development of our final product.

By April 11th, our group had progressed to the testing part of the Iterative Development Cycle and had completed a usability test plan that helped guide us through the usability test. The following section will explain the test's purpose, conductivity and results.

Usability Testing:

In usability testing the eClip, still in its low-fidelity stage, was tested by a group of students to ensure its objective. The purpose of this usability testing was to obtain information that aided us in the creation of our product. For more information on how the usability testing was conducted, please refer to Appendix A.

The target test participants were students who had no prior experience with the new Canvas learning software. In order to understand Canvas, people needed to understand what LMS (Learning Management System) was. Canvas, like any other LMS, contains classroom and online events, e-learning programs, and training content. Canvas also allows professors to become administrators and help guide students as well. The usability test made our product more effective, efficient, and helped in “improving ease-of-use during the design process” (Nielsen). The results of our test allowed us to improve our video’s script and resourced us with the following data.

In order to understand the results given from the usability testing, we had to get to know each test participant. To do this, we asked a series of pre-test questions that concern the different aspects of the eClip.

To understand how often and how familiar each participant was with computer and software technology, we asked them how often they use computers and how computer savvy they believed themselves to be. Our group was successfully able to test out participants who ranged from 2 hours spent with a computer all the way to 5 hours.

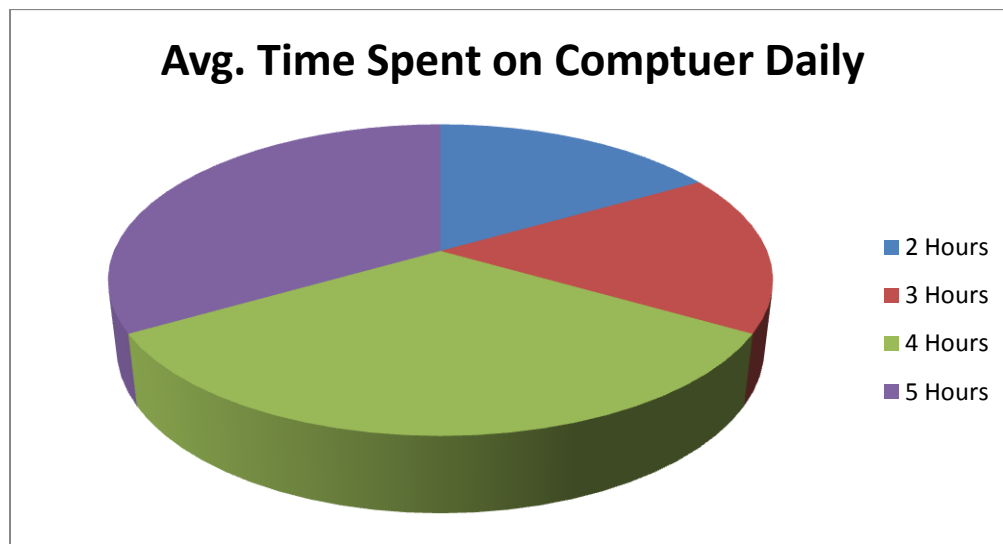


Figure 2

To make the eClip more efficient, we needed to determine how strong the low-fidelity prototype was. Using the think aloud protocol, we recorded each time a participant made an error so we could better understand what type of problems users may run into in the while trying to apply the eClip to their task. The range of errors made within our test varied from zero to four errors.

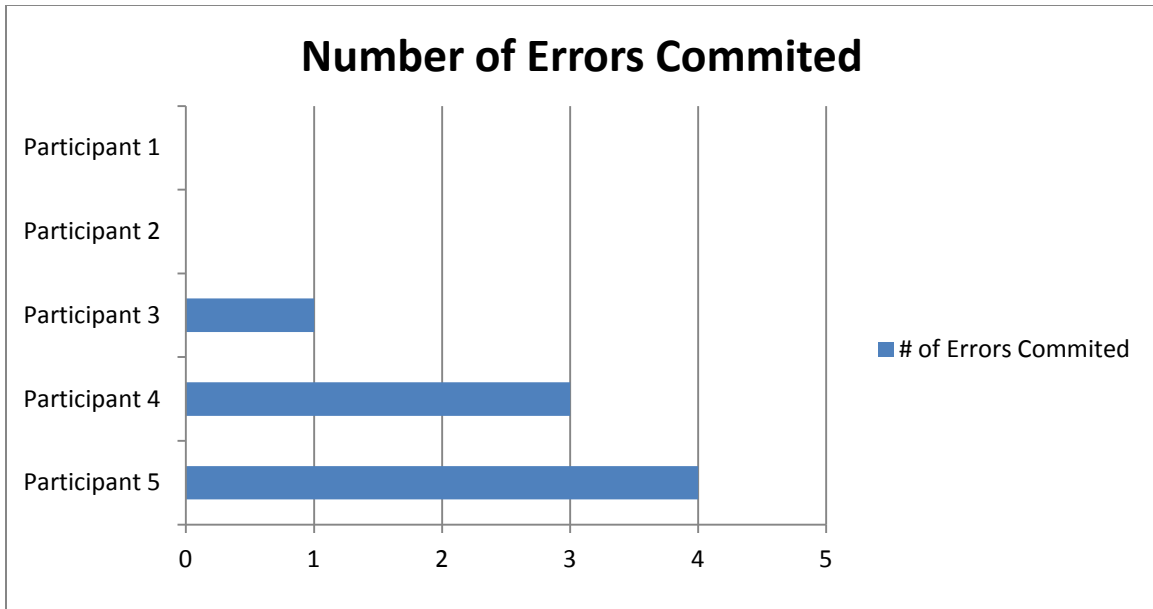


Figure 3

We recorded the amount of time it took each participant to complete each task in the test. This helped us understand what parts of the eClip was efficient and what parts needed work. The times allowed us to determine any irregularities that may have occurred during the testing. Time spent on tasks also had a lot to do with whether or not the participant decided to "re-watch" the eClip tutorial.

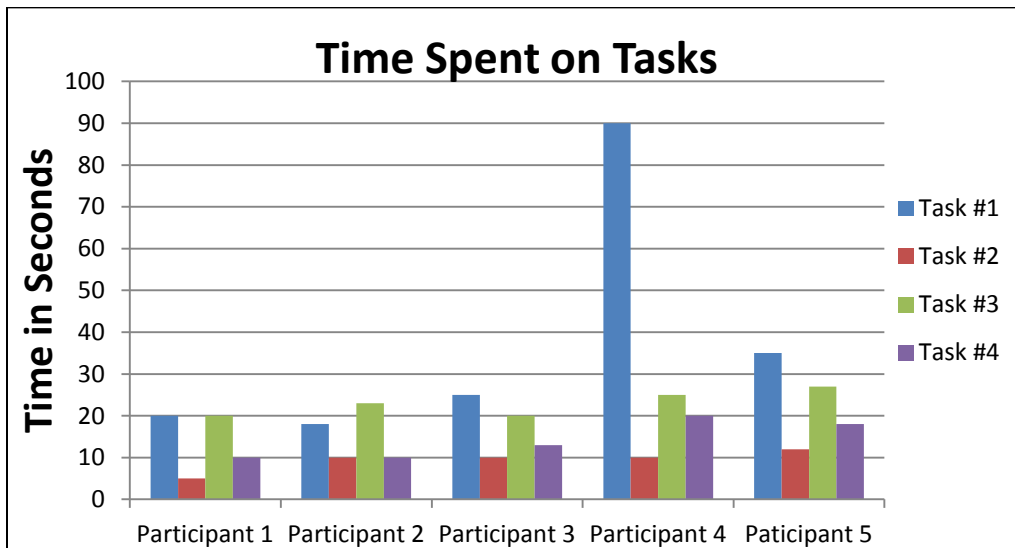


Figure 4

V. Results, Findings

The final product of this project has vastly improved from our original proposal, through the research done and the usability testing results. The problem at hand is for the teachers and students to fully comprehend the new learning management system, Canvas. We have developed a storyboard and script to the support videos called eClips. Usability testing proved to be key to us in the creation of the eClip. We gained valuable information through the results we have gained through the testing. We tested five participants, and gave us a basis of two different results, which we confirmed through our questionnaire before and after the test.

Feedback from this test was vital to the creation of our eClip. We urged the test participant to express what they found helpful and what kind of aspects of the video handicapped its effectiveness. Test participants gave a real life reaction to the product which was vital in our design process. The test was composed of a series of tasks, questions and observations that provided valuable information in the design process of our product.

After the usability testing, the storyboard went through some major changes, because the amount of feedback that allowed us to look at the eClip through a different perspective. We noticed that the testers that were more familiar with computer technology, had a noticeably easier time completing the tasks, while others that weren't computer savvy, had trouble and continued to review the video for assistance. We then worked to clear up the language, to make it clear and concise the first couple of views.

After the development process of the storyboard, the eClip is ready to be created, so students can use the support video to fully understand the new Canvas program and the advantages that come with it.

VI. Conclusions, recommendations

Through the beginning of this project, we have created an eClip which was continually developing through each aspect of the creation. The original script and storyboard for the eClip was developed from ideas we had, as users ourselves. This originally may have had plenty of problems, but it was laid down as the foundation throughout the project. As we commenced with the development of the storyboard, we continued to reduce clutter and make it clearer and easier to understand.

We will be giving the script and storyboard in a paperback format to the Office of Student Technology, so that they can create the final product of the eClip. The detailed storyboard will give the creators an efficient guideline to follow. The storyboard will save the Office of Student Technology time and money, by limiting the research portion of the production, and allowing more time to create the final product. The eClips will benefit the students and teachers at San Antonio College, but will also save funds that would alternatively be used for support lines.

VII. Appendix

Testing Methodology

A) Overview of the Test

The test will have the scenario of a student at San Antonio College. He/she will be a temporarily student for a class at SAC. The student will be assigned a class assignment and be required to post it on Canvas. The issue will be about a student who is not familiar of knowing how to post a discussion. Unlike the students enrolled for the class, they are familiar with Canvas.

Task #1 - Locate and post a new discussion.

Task #2 – After the post is created, please go back and edit and save it.

Task #3- Delete the discussion post just created

Task #4- Reply to a discussion board that was previously created

B) Script for the Test

Pre-Test Activities Script

Welcome

Hello, welcome and thank you for participating in our test today. We appreciate the time you have given up to aid us in the creation of our product.

Test Agenda

1. We will begin with a few questions concerning the testing and how familiar you may be with this technology.
2. Next we will have you watch our eClip which may played back like any other video clip.
3. We will then have you complete a few tasks through the Canvas program, shown in the eClip.
4. After the tasks are completed, we will ask you a few questions on how you thought the eClip worked and didn't work.

Think Aloud Protocol

We will urge our test participants to speak aloud throughout their progress in the tasks we have given. This will ensure that we fully understand what is going through their head, and interpret what sort of progress that are making.

Pre-Test Questionnaire

- Have you had any difficulty with any features on Blackboard in the past?
- Have you ever taken an online course and simulated an online discussion?
- How many hours a day do you spend working on a computer?
- On a scale of 1 to 5, how familiar are you with computer technology.
- How often do you use support videos when having technology issues?
- What things did you like about those support videos?

Scenarios/Task Based Questions

You're a student at San Antonio College. Today you will be a temporarily student in Dr. Irvin's technical writing class. There are always weekly homework assignments that need to be posted in the course discussion board. You were just assigned a quick discussion to do for you online course and it has to be done by the end of the class within an hour. The issue is you are not familiar with knowing how to post a discussion on Canvas. Now you decide to watch an eClip on "How to Create a Discussion Post" in order to post your assignment.

Task #1 - Create a new discussion post with a subject topic, and a short sentence in the chat box.

Task #2 - After posting, go back and edit the short sentence in the chat box, and save.

Task #3 - After editing, we want you to now delete your post.

Task #4- Now reply a short sentence to a discussion post that has been previously been posted.

Test Script

Slide #1

In this eClip tutorial, we will show you how to post, edit, delete and reply to a discussion on Canvas. Let's get started!

First, we will show you how to get to the "Discussion" tab. After selecting your course, there will be a "Discussions" tab listed on the left-hand panel. Click on it. Now we are ready to post a discussion.

Slide #2

To post a new discussion, click on the "Start a new topic" button.

Slide #3

You can type the subject for your post in the "Title" box and then type your content in the large text box. If you want to insert links, files, or images click into the "Insert Content into the Page" section. To finally post your discussion, click the "Add New Topic" button.

Slide # 4

To review a discussion post, first click the title beside the yellow word bubble and above the poster's name. Great! Now the content of the discussion entry should be ready to review under the poster's name.

Slide #5

If you want to follow a link, simply click on the title of the link. A new window should open up.

Slide #6

To edit or delete a post, response, or side comment, click on the symbol beside the date. A drop down menu should appear. To edit, simply click "Edit". To delete, simply click "Delete".

Slide #7

Once you're done editing your post, click on the "Update Topic" button under the text box.

Slide #8

If you wanted to delete a post, an "Are you sure you want to delete this discussion?" prompt should appear. Click "OK".

Slide # 9

You can reply to a previous reply by typing into the text box labeled "Add side comment...".

If you wanted to reply to a post, you can either type into the text box titled "Write a reply..." or simply click the "Add Reply to Topic" button.

Slide #10

After you're done editing your reply, click on the "Post Response" button to finally post your reply.

Exit Questions

- Did you find anything difficult about this tutorial?
- 1 being you strongly disagree and 5 being strongly agree with this statement, the eClip was easy to understand.
- 1 being you strongly disagree and 5 being strongly agree with this statement, I would use the eClip for further help.
- What things about the eClip did you find most helpful?
- Would you recommend this eClip to a friend?
- Do you think the language in the video was easy to understand?

- 1 being too slow and 5 being too fast, what do you think about the speed of the video and the way it was presented?
- Would you have any suggestions towards the video?

Test Environment/Equipment

The usability test room will allow participants to work in a laboratory setting and will be furnished with the following equipment:

1. Five desks on which computer equipment can be set up to simulate work environment.
2. Three wall-mounted camcorders that will allow filming of participants from various perspectives and angles.

Test Monitors Roles

Our team consists of three members. Since we plan on conducting the test at least three times, each member will rotate to and perform one of the following roles:

Facilitator: This role primarily concerns prompting the test participant to continue to think aloud and share opinions. This team member will be in charge of guiding the test participants in one of the following sections of the test: pre-test activities, task-based questions, or post-test questions.

Data Logger: This role records the test participant's actions and comments.

Test Observer: This role is responsible for taking notes of any observations made during the tests. This member will assist the data logger in identifying any bugs, concerns, and procedural errors made throughout the test.

1. Evaluation measures

Evaluations are taken from the test participant that is taken in the form of qualitative and quantitative.

2. Qualitative Measures

Measurements will be placed on how easy the eClip worked through the demonstration of the test.

3. Quantitative Measures

Measurements that explain the progress of the eClip through things that is possible to count.

- Learnability: How easy was it for the test participant to accomplish each task the first time?
- Efficiency: Did the eClip show the test participant how to accomplish the task clearly?
- Memorability: How effective was the first view for the test participant?
- Errors: What kind of errors was made throughout the tasks?

- Satisfaction: Was the eClip easy and pleasant to watch and use?
4. **Task Success Rate:** A percentage of Tasks that the test participant completed correctly.
 5. **Time Count:** The amount of time it took to finish the tasks.
 6. **Errors:** The amount of errors that was committed during the tasks.
 7. **Quality Opinion:** Test Participant's opinion on the eClip, on a scale of 1 to 5.

Participant	Task Success Rate				Time Count				Errors			
	#1	#2	#3	#4	#1	#2	#3	#4	#1	#2	#3	#4
1												
2												
3												
4												
5												

Work Cited

- "Usability 101: Introduction to Usability." *Usability 101: Definition and Fundamentals*. Web. 04 Apr. 2012. <<http://www.useit.com/alertbox/20030825.html>>.

Slide #1

Discussions Panel

In this eClip tutorial, we will show you how to post, edit, delete and reply to a discussion on Canvas. Let's get started!

First, we will show you how to get to the "Discussion" tab. After selecting your course, there will be a "Discussions" tab listed on the left-hand panel. Click on it [hover mouse to tab and click].

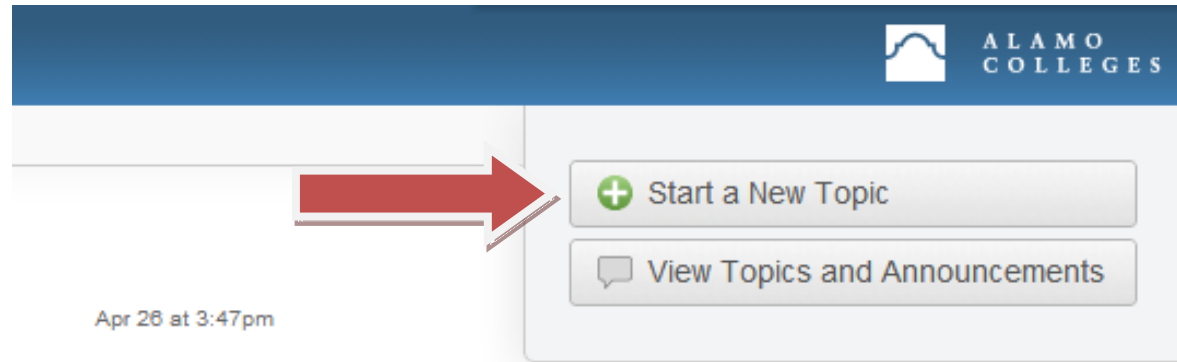
Now we are ready to post a discussion.

The screenshot shows the Canvas LMS interface for the course ENGL 2311 001. At the top, the Alamo Colleges logo and navigation links for Courses, Assignments, Grades, and Calendar are visible. Below the course ID, a left-hand navigation menu lists various options: Home, Assignments, Discussions, Grades, People, Pages, Files, Syllabus, Quizzes, Modules, Conferences, and Collaborations. A large red arrow points to the 'Discussions' tab in this menu. The main content area is titled 'Recent Activity' and displays a list of recent events, including 'Course Conference' (3 participants) and 'Course Conference 2' (3 participants). A green checkmark icon precedes the heading 'Grade Weight Changed: SB-Technical Writing', followed by a notification that the grading policy for the course has changed. The notification text states: 'The grading policy for the course, SB-Technical Writing has changed. Grading is based on the weighted total for each assignment group: - Quizzes: 50% - Assignments: 50% - Ungraded Assignments: 0%'.

Slide #2

Starting a New Topic

To post a new discussion, click on the "Start a new topic" button [hover mouse to button and click].



signments, or do you have any
re change in group dynamics?
ng the students decide whom to
s, ideas, organizational

Apr 26 at 3:47pm

nt or for future classes? You may
each other. Post by due date and

Slide #3

Creating a Discussion Post

You can type the subject for your post in the "Title" box [hover mouse to "Title" box and type] and then type your content in the large text box [click into the large text box and type].

If you want to insert links, files, or images click into the "Insert Content into the Page" section [hover mouse to section].

To finally post your discussion, click the "Add New Topic" button [hover mouse over button and click].

The screenshot displays the Blackboard interface for creating a discussion post in the course ENGL 2311 001. The main content area is titled "Discussions" and features a "Title" field containing the placeholder text "Topic Title". A red arrow points to this field. Below the title is a rich text editor with a toolbar and a large text area. A green arrow points to the right side of the interface, where the "Insert Content into the Page" panel is open, showing options for "Links", "Files", and "Images". A blue arrow points to the "Add New Topic" button at the bottom of the form. Below the form, a list of existing discussion posts is visible, including one by Alexis Barera titled "Discussion Post" dated Apr 13 at 6am, and another by Andres Leza titled "Test" dated Apr 2 at 11:34am. The interface also includes a left-hand navigation menu with options like Home, Announcements, Assignments, Grades, People, Pages, Files, Syllabus, Quizzes, Modules, Conferences, and Collaborations.

Slide #4

Reviewing a Discussion Post

To review a discussion post, first click the title beside the yellow word bubble and above the poster's name [hover mouse to title of post]. Great!

Now the content of the discussion entry should be ready to review under the poster's name [panel mouse over the content of the post].

The screenshot displays the Alamo Colleges LMS interface. At the top, the Alamo Colleges logo is on the left, and navigation links for 'Courses', 'Assignments', 'Grades', and 'Calendar' are on the right. Below this, a breadcrumb trail shows 'ENGL 2311 001' with a home icon, 'ENGL 2311 001', and 'Discussions'. A left-hand navigation menu includes 'Home', 'Announcements', 'Assignments', 'Discussions', and 'Grades'. The main content area is titled 'Discussions' and features a yellow speech bubble icon next to a blue link titled 'Discussion Post' by 'Alexis Barrera'. A red arrow points to this link. Below the link, the text 'This is the content of the discussion post.' is underlined in red. A 'Link' icon with an external link symbol is positioned below the underlined text.

Slide #5

Following Links

If you want to follow a link, simply click on the title of the link [hover mouse to title of link]. A new window should open up.

The screenshot displays the Alamo Colleges Learning Management System (LMS) interface. At the top, the Alamo Colleges logo and name are visible, along with navigation links for Courses, Assignments, Grades, and Calendar. Below this, the course identifier 'ENGL 2311 001' is shown, followed by a breadcrumb trail: Home > ENGL 2311 001 > Discussions > Discussion Post. A left-hand navigation menu includes links for Home, Announcements, Assignments, Discussions (which is highlighted), Grades, and People. The main content area shows a 'Discussion Post' by Alexis Barrera. The post content is a placeholder text: 'This is the content of the discussion post.' Below the text is a blue 'Link' button with an external link icon, which is pointed to by a red arrow. At the bottom of the post area is a text input field labeled 'Write a reply...'.

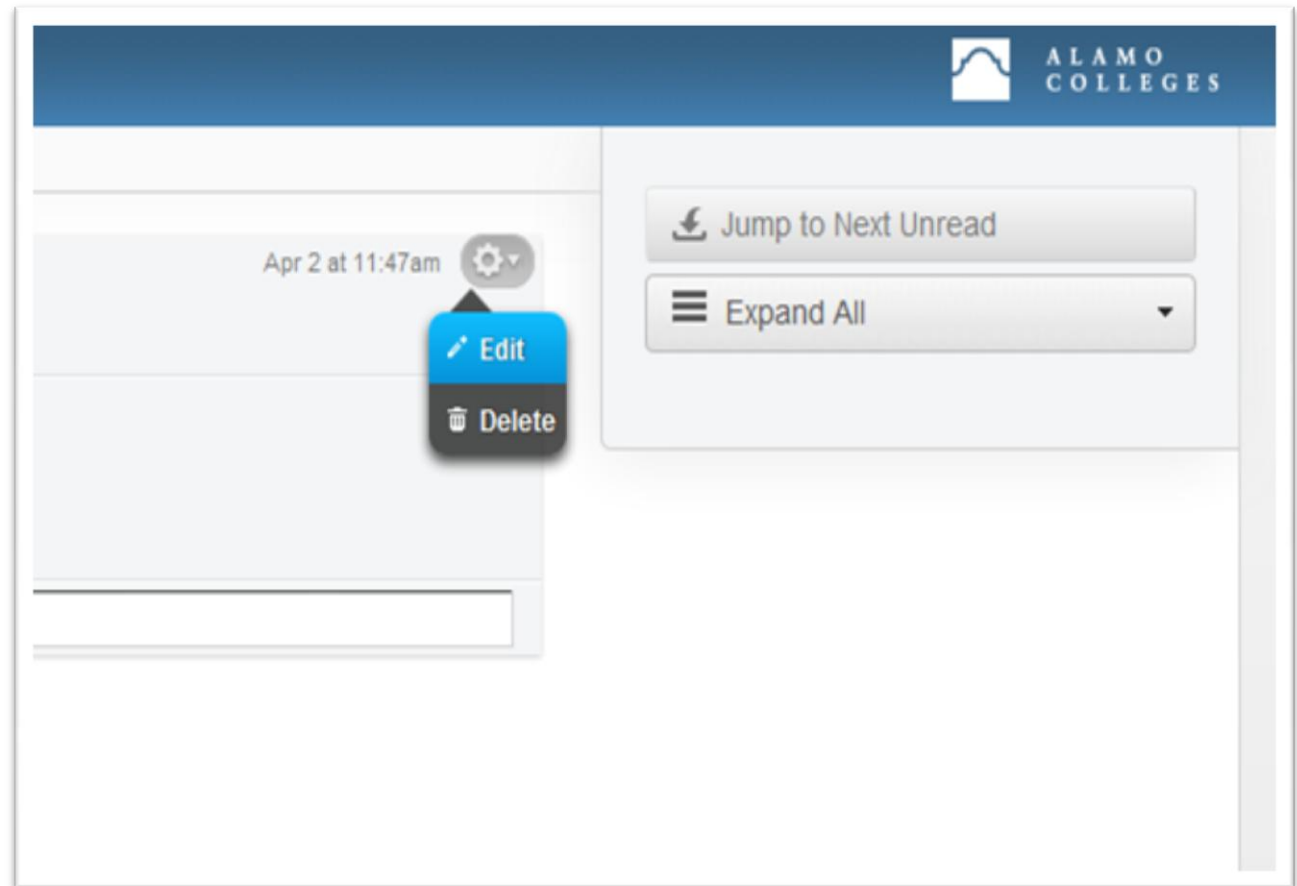
Slide #6

Edit or Delete Option

To edit or delete a post, response, or side comment, click on the symbol beside the date [hover mouse to symbol and click]. A drop down menu should appear.

To edit, simply click "Edit" [hover mouse to "Edit"].

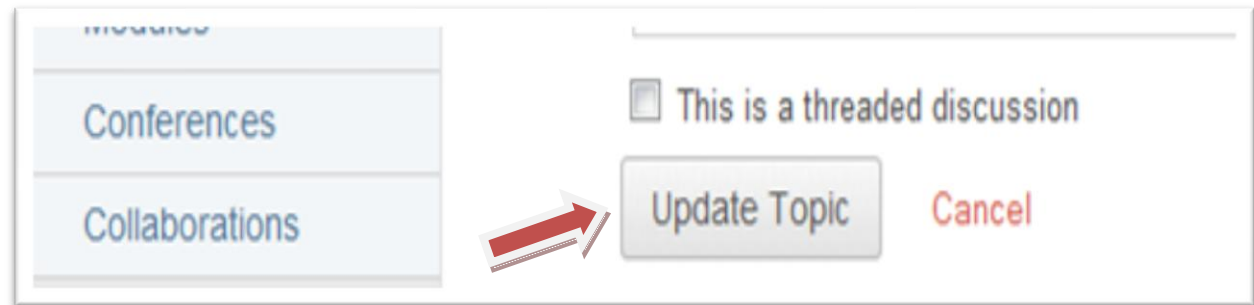
To delete, simply click "Delete" [hover mouse to "Delete"].



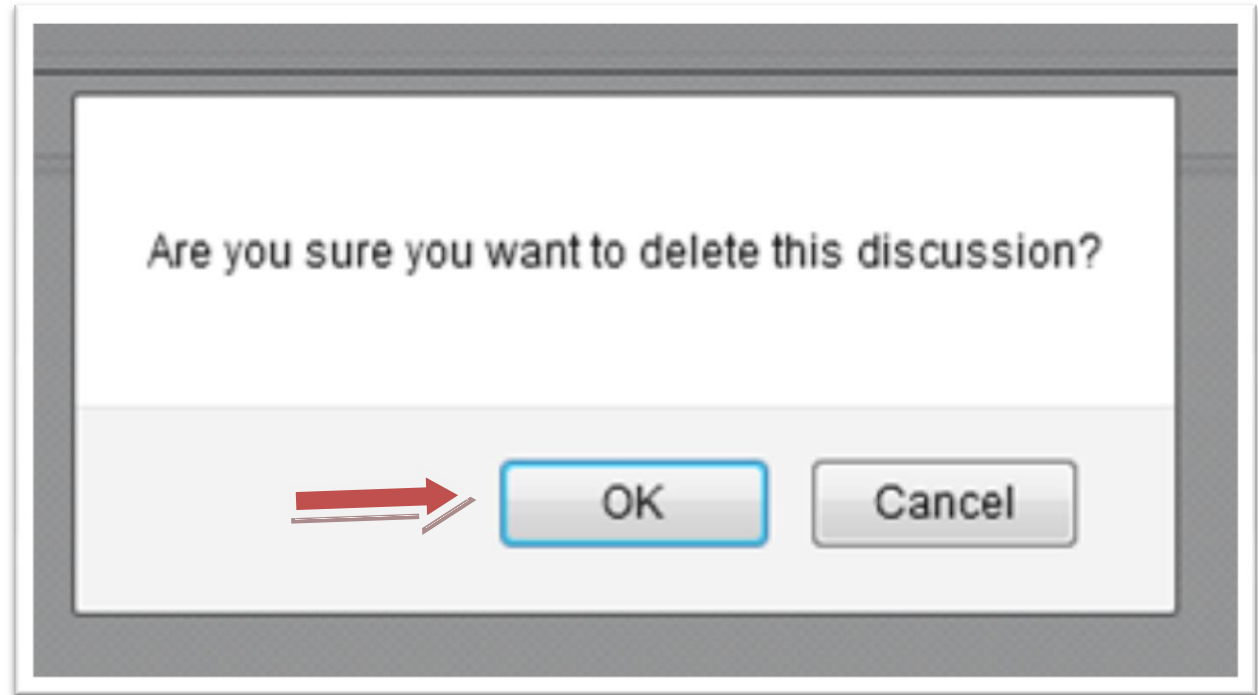
Slide #7

Updating Topic

Once you're done editing your post, click on the "Update Topic" button under the text box [hover mouse to "Update Topic" and click].



If you wanted to delete a post, an "Are you sure you want to delete this discussion?" prompt should appear. Click "OK" [hover mouse to "OK" and click].

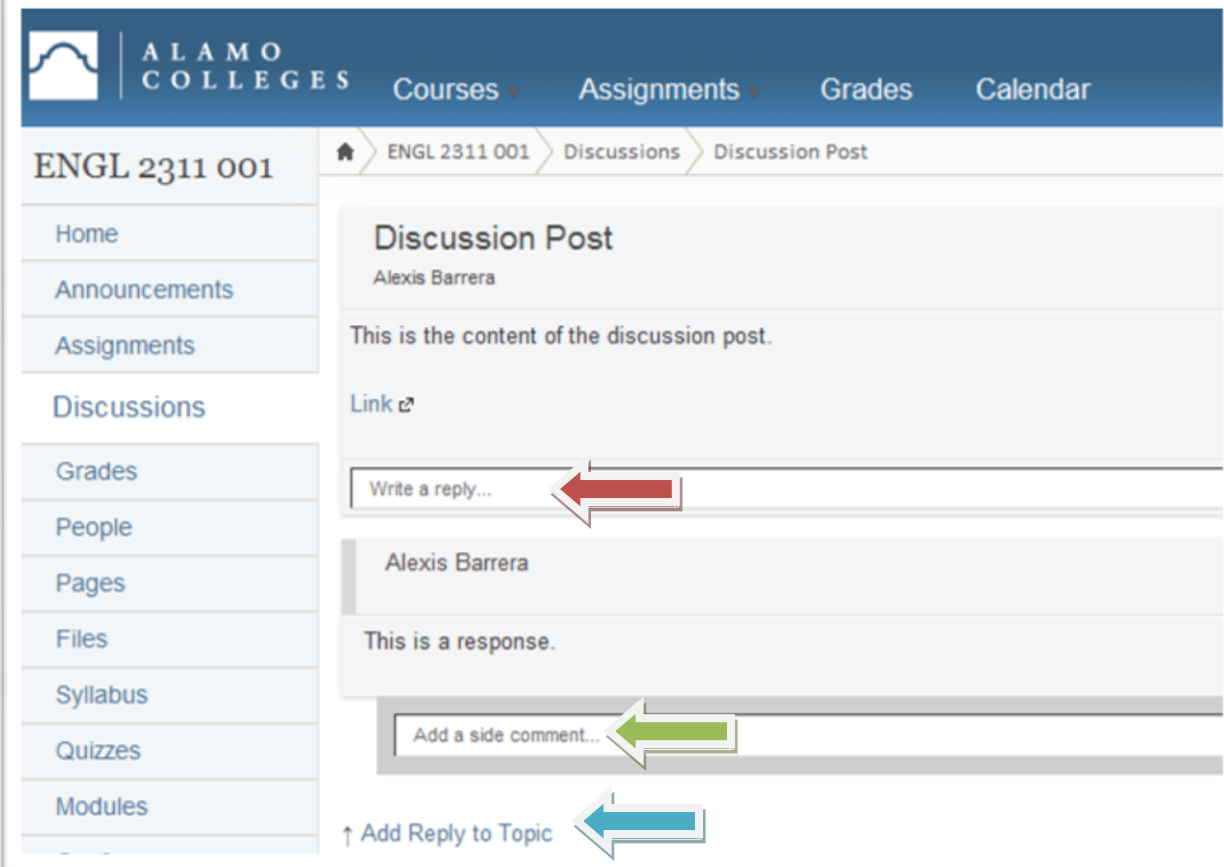


Slide #9

Adding Replies

You can reply to a previous reply by typing into the text box labeled "Add side comment..." [hover mouse to text box].

If you wanted to reply to a post, you can either type into the text box titled "Write a reply [hover mouse to text box] or simply click the "Add Reply to Topic" button [hover mouse to "Add Reply to Topic" button and click].



The screenshot displays the Alamo Colleges LMS interface. At the top, the navigation bar includes the Alamo Colleges logo, the text "ALAMO COLLEGES", and links for "Courses", "Assignments", "Grades", and "Calendar". Below this, the breadcrumb trail shows "ENGL 2311 001" > "Discussions" > "Discussion Post".

The main content area is titled "Discussion Post" by Alexis Barrera. The post content reads: "This is the content of the discussion post." Below the post is a "Link" icon. A red arrow points to a text input field labeled "Write a reply...".

Below the main post is a response by Alexis Barrera with the text "This is a response.". A green arrow points to a text input field labeled "Add a side comment...".

At the bottom of the response area, a blue arrow points to a button labeled "Add Reply to Topic".

A left-hand sidebar contains navigation links: Home, Announcements, Assignments, Discussions, Grades, People, Pages, Files, Syllabus, Quizzes, and Modules.

Slide #10

Posting a Response

After you're done editing your reply, click on the "Post Response" button to finally post your reply [hover mouse to "Post Response" button and click].

The screenshot displays the Alamo Colleges LMS interface. At the top, the Alamo Colleges logo and navigation menu (Courses, Assignments, Grades, Calendar) are visible. The breadcrumb trail shows the path: ENGL 2311 001 > Discussions > Discussion Post. A left-hand sidebar lists navigation options: Home, Announcements, Assignments, Discussions, Grades, People, Pages, Files, Syllabus, and Quizzes. The main content area is titled 'Discussion Post' and shows a post by Alexis Barrera with the text 'This is the content of the discussion post.' Below this is a 'Link' field. A rich text editor is active, containing the text 'This is a response.' and a toolbar with formatting options (B, I, U, A, ab, undo, list). At the bottom of the editor, two buttons are present: 'Post Response' and 'Cancel'. A red arrow points to the 'Post Response' button.