Exam Editor
User Guide

Table of Contents

Introduction and Overview

This document provides instructions on how to use the new and improved Exam Editor to create exams for Learning Tree courses. The Exam Editor is available for download from pdev.learningtree.com and requires Java 1.6 or later. If you get an error message after you try to launch the Exam Editor, download the latest version of Java from:

http://java.com/en/download/index.jsp

If you are connected to the Internet when you launch the Exam Editor on subsequent occasions, it will check to see if a new version has been released and will update your version, if necessary.

The Exam Editor will place an icon on your desktop. On PCs, you can also find it after it has been installed by going to Start | All Programs | Learning Tree | Learning Tree Exam Editor.

The Exam Editor has been revised so that authors now only need to create 60 unique questions from which three 40-question exams can be created. (Previously, authors were asked to provide 80 unique questions for two exams or 120 questions for three exams.)

The 60 questions are broken down into three groups of 20 (Groups 1, 2 and 3). Two of the three groups are combined to make one exam. For example:

Group 1 + Group 2 = Exam A
Group 2 + Group 3 = Exam B
Group 1 + Group 3 = Exam C

Creating New Exams from Scratch – New Courses

Step 1: Because the Exam Editor calculates how many questions you need from each chapter, it's important that you have the most-current PowerPoint files for each chapter on your computer. Make sure that you don't use the Exam Editor until your PowerPoint files are completed so you get accurate slide counts.

Step 2: Start the Exam Editor. The opening screen looks like this:

Step 3: Click on File/New Exam or click on this icon:

Enter the course number and title in the fields of the New Exam Information box that has appeared:
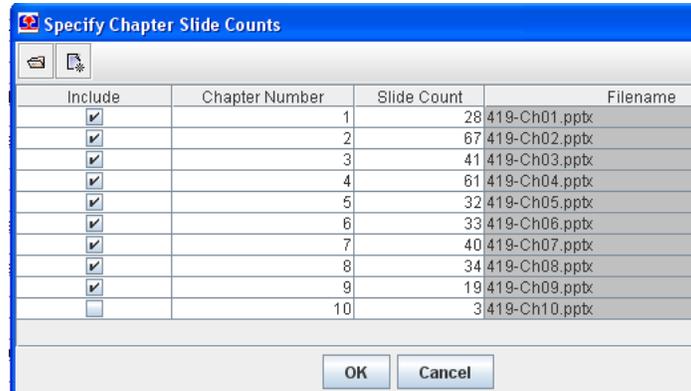

Click OK.

Step 4: You will then be prompted to give the new exam a file name:

The naming convention is xxx-Exam-yy.xml, where xxx is the course number (419), and yy is the revision number (a1). Click on Save.

The Exam Editor main screen will open. You will notice that the default answer for each question is A, and the Chapters and Groups are all in red.

Step 5: Click on Question/Question Calculator or on its icon:

This will open the "Specify Chapter Slide Counts" window. Click on the Open icon in the top left corner:

Navigate to your course's PowerPoint folder with the current revision files and select the folder itself or any chapter file. Assuming the files are in the same folder, all of the chapters will be located by the Exam Editor and will appear in the slide count table:

Include	Chapter Number	Slide Count	Filename
✔	1	28	419-Ch01.pptx
✔	2	67	419-Ch02.pptx
✔	3	41	419-Ch03.pptx
✔	4	61	419-Ch04.pptx
✔	5	32	419-Ch05.pptx
✔	6	33	419-Ch06.pptx
✔	7	40	419-Ch07.pptx
✔	8	34	419-Ch08.pptx
✔	9	19	419-Ch09.pptx
✔	10	3	419-Ch10.pptx

Step 6: The Question Calculator is now showing us how many slides are in each chapter (e.g., 28 slides in Chapter 1, 67 slides in Chapter 2). The Question Calculator uses this information to calculate a target for how many questions you should write from each chapter. You don't want to include Chapter 0 or the Course Summary chapter. In this example, the Course Summary chapter is Chapter 10, so we will uncheck the Include box for that chapter and click OK:

If you accidentally uncheck the wrong box, you may always manually add chapters back in by clicking on the new icon (see below) in the "Specify Chapter Slide Counts" window:

Slide counts can also be manually edited, if needed.

Step 7: Now that the Exam Editor knows how many slides are in each chapter, it can give us a target number of questions that should be written from each chapter for each group. The target exam numbers are found in the lower right corner of the Exam Editor's main screen:

To find more detailed information, click on Tools/Display Validation Data or click this Question Validation Information icon:

Step 8: The following box will then appear:

This tells us that there are currently lines for 60 questions in the Exam Editor, although none of them have been written at this point.   It also gives us our target exam numbers. Based on this, we should try to have three questions for each of the three groups from Chapter 1 (total of nine questions), two questions for each of the three groups for Chapter 2 (total of six questions), etc.

In this example, the number of questions from each chapter for each group totals 21. Sometimes that number will be exactly 20. Remember that these are targets, and you may be off by plus or minus one question.

The Question Validation Information box also gives us a target for how many of the correct answers in each group should be A, B, C and D. In the example above, we should strive to make A the correct answer five times in each of the three groups of 20 questions.

The other thing to note is that all of the boxes are in red. This tells us that we haven't hit our goals. Boxes will turn green when the goals are met.

Step 9: The next step is to write your exam questions. To edit a question or assign it to a group or chapter, double click on the question. The question and answers will expand. Assign the question to a Group and Chapter at the top of the page and select the correct answer on the right side. You may move answers up and down using the arrows to the left of each answer. Click OK when you are done with the question and move on to the next.

When a Group and Chapter have been assigned, they boxes will change from red, and the Groups are color coded:

You may also sort the questions by Chapter or Group by clicking on the top of the Chap or Grp columns. A little up arrow will appear. If you click at the top of the column again, the arrow will turn downward, the sorting will be reversed. You may clear any sorting by clicking on Question/Clear sorting.

As long as you have sorting turned off, you may also manually drag and move questions around. **You may not, however, determine the order that attendees will see the questions on the exams.** The questions are randomized by the Exam Editor for the actual exams.

Step 10: Continue on through all of the questions, assigning Groups and Chapters. To delete a question, make sure your cursor is on that question and select Question/Delete Question(s), or click on the trash can icon:

You may also delete a question when you are in edit mode by clicking on the trash can or selecting Edit/Delete question.

Tip: At any time, you may click on the Question Validation Information icon or select Tools/Display Validation Data to see how you are doing toward your goals. In the screen shot below, the boxes in green show that the goals are met. The red boxes indicate that the goals have not been met.

Step 11: Continue until you have 60 questions and all green boxes in the Question Validation Information box.

Note that when all of the boxes are green, the Question Validation Information icon will also turn green:

Step 12: Make sure you have saved the new exam and send the resulting XML file to Publications. You're done!

Editing Exams

Note: This section discusses how to use the Exam Editor for revisions. Please remember that adding/removing content during a revision may affect the question distribution in exams.

Step 1: Make sure that you have the most-current PowerPoint files for your course (the final ones for the revision) on your computer. The safest way is to request them from Publications.

Step 2: Request that Publications sends you the XML file that contains your current 60 exam questions. Save that file onto your computer.

Step 3: Start the Exam Editor.

Step 4: Click on File/Open Exam. Navigate to the XML file you received from Publications and select it. Click on Open. All of your current exam questions will be imported into the Exam Editor. Before you do any work on the exam, click on File/Save As and change the revision level in the exam name.

**Step 5:** You will now see all of the questions from your current exam in the Exam Editor.

Exam Questions						
#	Find	Chap	Grp	First Line of Question Introduction	Ans	Image
1		2	1	What are the values of i and j after executing the following program?	B	
2		8	1	Which level of interoperability exists between .NET components and COM components?	C	
3		2	2	In C#, while is an example of:	C	
4		2	1	What would be printed (displayed) after executing the following program?	B	
5		2	2	Which is correct syntax for throwing an I/O exception?	C	

"Grp" represents the three groups of 20 questions previously created. "Chap" indicates from which chapter in the course you pulled the question.

Step 6: Click on Question/Question Calculator or on its icon:

This will open the "Specify Chapter Slide Counts" window. Click on the Open icon in the top left corner:

Specify Chapter Slide Counts			
Include	Chapter Number	Slide Count	Filename
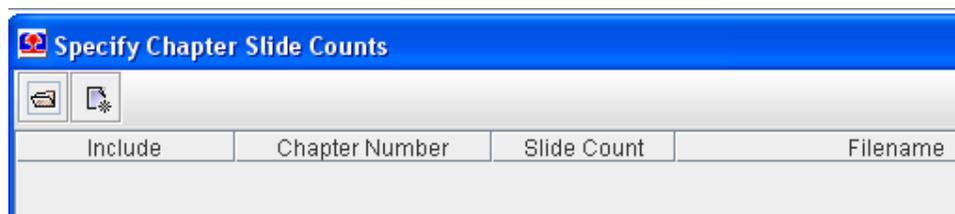
Navigate to your course's PowerPoint folder and select the folder itself or any chapter file. Assuming the files are in the same folder, all of the chapters will be located by the Exam Editor and will appear in the slide count table.

Step 7: The Question Calculator is now showing us how many slides are in each chapter. The Question Calculator uses this information to calculate a target for how many questions you should write from each chapter. You don't want to include Chapter 0 or the Course Summary chapter. If the Course Summary chapter has been included, uncheck the Include box for that chapter and click OK.

If you accidentally uncheck the wrong box, you may always manually add chapters back in by clicking on the new icon (see below) in the "Specify Chapter Slide Counts" window:

Slide counts can also be manually edited, if needed.

Step 8: Now that the Exam Editor knows how many slides are in each chapter, it can give us a target number of questions that should be written from each chapter for each group. The target exam numbers are found in the lower right corner of the Exam Editor's main screen:

419-Exam-i1.xml   Ch1: 2, Ch2: 4, Ch3: 3, Ch4: 3, Ch5: 2, Ch6: 2, Ch7: 2, Ch8: 2
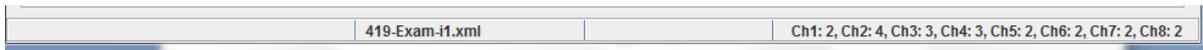
To find more detailed information, click on Tools/Display Validation Data or click this Question Validation Information icon:

Step 9: The following box will then appear:

This tells us that there are currently 60 questions in the Exam Editor. It also gives us our target exam numbers. Based on this, we should try to have three questions for each of the three groups from Chapter 1 (total of nine questions), three questions for each of the three groups for Chapter 2 (total of nine questions), etc.

In this example, the number of questions from each chapter for each group totals 21. Sometimes that number will be exactly 20. Remember that these are targets, and you may be off by plus or minus one question.

The Question Validation Information box also gives us a target for how many of the correct answers in each group should be A, B, C and D. In the example above, we should strive to make A the correct answer five times in each of the three groups of 20 questions.

The other thing to note is that some of the boxes are in red. This tells us that we haven't hit our goals. Boxes will turn green when the goals are met.

Step 10: The next step is to review the questions and determine if any questions, or their assigned Chapters or Groups need to be changed based on the revision.

To edit a question or assign it to a group or chapter, double click on the question. The question and answers will expand. Assign the question to a Group and Chapter at the top of the page and select the correct answer on the right side. You may move the answers up and down using the arrows to the left of each answer. Click OK when you are done with the question and move on to the next.

To delete a question, make sure your cursor is on that question and select Question/Delete Question(s), or click on the trash can icon:

You may also delete a question when you are in edit mode by clicking on the trash can or selecting Edit/Delete question.

Tip: At any time, you may click on the Question Validation Information icon or select Tools/Display Validation Data to see how you are doing toward your goals. In the screen shot below, the boxes in green show that the goals are met. The red boxes indicate that the goals have not been met.

Step 11: Continue until you are happy with all 60 questions and the boxes are all green in the Question Validation Information box.

Note that when all of the boxes are green, the Question Validation Information icon will also turn green:


As long as you have sorting turned off, you may also manually drag and move questions around. **You may not, however, determine the order that attendees will see the questions on the exams.** The questions are randomized by the Exam Editor for the actual exams.

Step 13: Make sure you have saved the new exam and send the resulting XML file to Publications. They will handle everything from here. You're done!

Adding an Image

From time to time, you might want an image to appear as part of a question or answer. To add an image click on this icon on the right side of the question/answer:
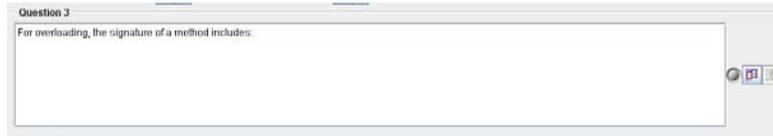
The following dialog box will appear:

If you click on "Provide a description," a dialog box will appear where you may type in instructions for Publications to create an image. The gray circle to the right of the question will turn yellow, and the "delete image" icon will no longer be grayed out:

If you click on "Select an image," the following will appear, allowing you to choose an image on your computer:
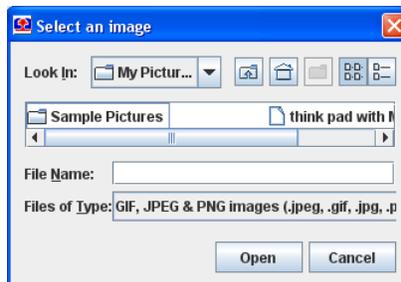
When you insert an image, you won't see it in the Exam Editor until you go to File | Print Preview. You will also notice that the grey circle to the right of the question has turned blue, and the "delete image" icon is no longer grayed out:
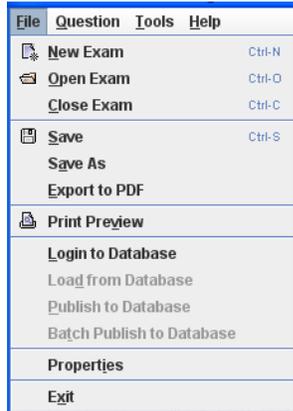
Please submit the image source file(s) to Publications when you return the exam XML file.

Main Screen Menu and Toolbar Options

The previous sections have attempted to explain step by step how to use the Exam Editor. This section provides a brief overview of what each of the menu and toolbar options does on the main screen of the Exam Editor.

The File Menu

New Exam – Click on this to create a new exam from scratch.

Open Exam – Click on this to open an existing exam.

Close Exam – Click on this to close an exam.

Save – Click on this to save an exam with its current name.

Save As – Click on this to save an exam with a new name.

Print Preview – Click on this to see a preview of the 60 questions in PDF format. The questions are in exam format, along with the Chapter, Group and correct answer letter for each question outlined in a red.
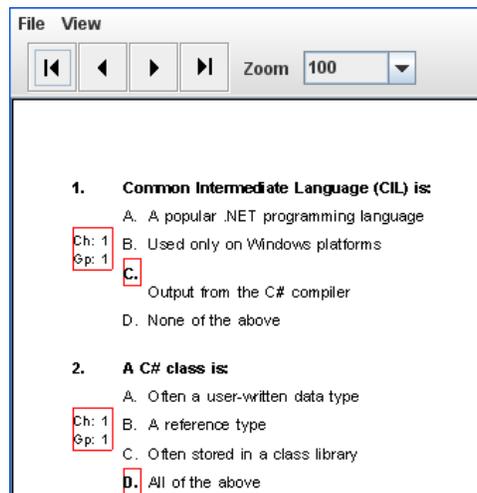
Login to Database – Used by Publications only

Load from Database - Used by Publications to load questions into the Exam Editor from the database. An individual exam (A,B,C) can be loaded or all current questions for a course.

Publish to Database – Used by Publications to publish an exam from the Exam Editor into the database

Batch Publish to Database – Used by Publications to publish an entire folder of exam XML files to the database

Properties – When you click on this, the box below appears. You may edit the course number, title, exam letter, exam revision, exam revision date, exam prior revision and copyright year. This is mostly used by Publications.

Exit – Click on this to exit the Exam Editor.

The Question Menu
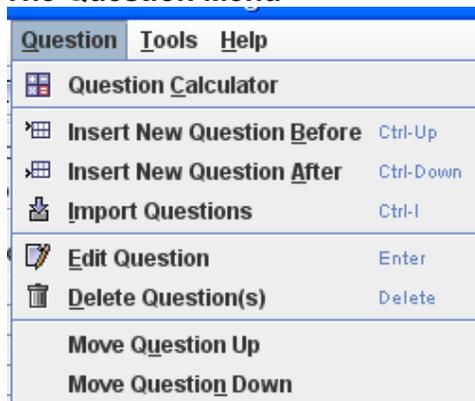
Question Calculator – Click on this to open a new box that will tell the Exam Editor which chapters it should consider when it calculates the target number of questions per chapter.

Insert New Question Before – Click on this to insert a new question before whatever question you have highlighted in the Exam Editor.

Insert New Question After – Click on this to insert a new question after whatever question you have highlighted in the Exam Editor.

Import Questions – Click on this to import questions from other exams into the exam on which you are working.
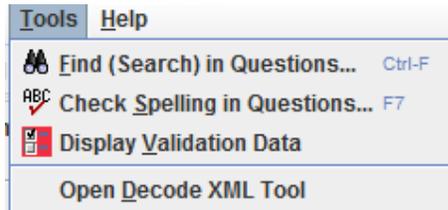
Edit Question – Click on this to open up the question you have highlighted in the Exam Editor so you may edit it.

Delete Question(s) – Click on this to delete the question(s) you have highlighted in the Exam Editor.

**Move Question Up** – Click on this to move the question you have highlighted in the Exam Editor up one position.

Move Question Down – Click on this to move the question you have highlighted in the Exam Editor down one position.

The Tools Menu

Tools Help

   🔍 Find (Search) in Questions...   Ctrl-F
   ABC Check Spelling in Questions... F7
   ▣ Display Validation Data
      Open Decode XML Tool

Find (Search) in Questions – Click on this to search for a particular word in the questions and/or answers. There is also a toolbar icon for this function. See below.

Type in the word you want to locate:

Search

Search for: entity   ☐ Case sensitive

    OK   Cancel
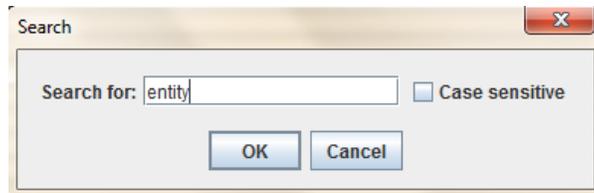
If the word is found in a question, that will be indicated in the "Find" column next to the question with an pair of binoculars in front of a pink background. If you hover your mouse over this, you will see "Search string found in the question intro."

10	🔍	2	2	You have created an En
11		2	1	You have written an Acc
12		Search string found in the question intro		AS

If the word is found in an answer, that will be indicated in the "Find" column next to the question with an pair of binoculars in front of a purple (or "radiant orchid," the Pantone Color of the Year 2014) background. If you hover your mouse over this, you will see "Search string found in one or more question answers."

If the word is found in a both the question and one or more answers, that will be indicated in the "Find" column next to the question with an pair of binoculars in front of a coral background. If you hover your mouse over this, you will see "Search string found in the question intro and also in one or more question answers."


Check Spelling in Questions – Click on this to check the spelling in all questions. There is also a toolbar icon for this function. See below.

Display Validation Data – Click on this to see your target number of questions per Chapter and Group along with how many A, B, C and D answers you should have.

Open Decode XML Tool – This is for internal use. Course authors do not use this.

The Help Menu
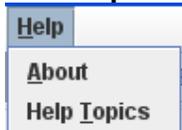
About – Click on this to see the version of the Exam Editor and to find an email address to which you can address comments.

Help Topics – Click on this to go to the Product Development Web site: pdev.learningtree.com. Click on Exam Editor to get to this User Guide.

Toolbar Icons
All of the items on the toolbar also have corresponding menu items. The icons are for your convenience. They all display tool tips when you hover on them with your mouse.
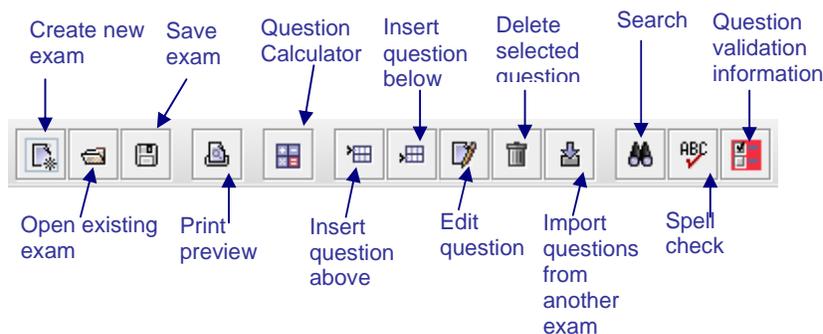
Question Editor Menu and Toolbar Options

This section provides a brief overview of what each of the menu and toolbar options does on the Question Editor screen of the Exam Editor, which is where each individual question is written and edited.
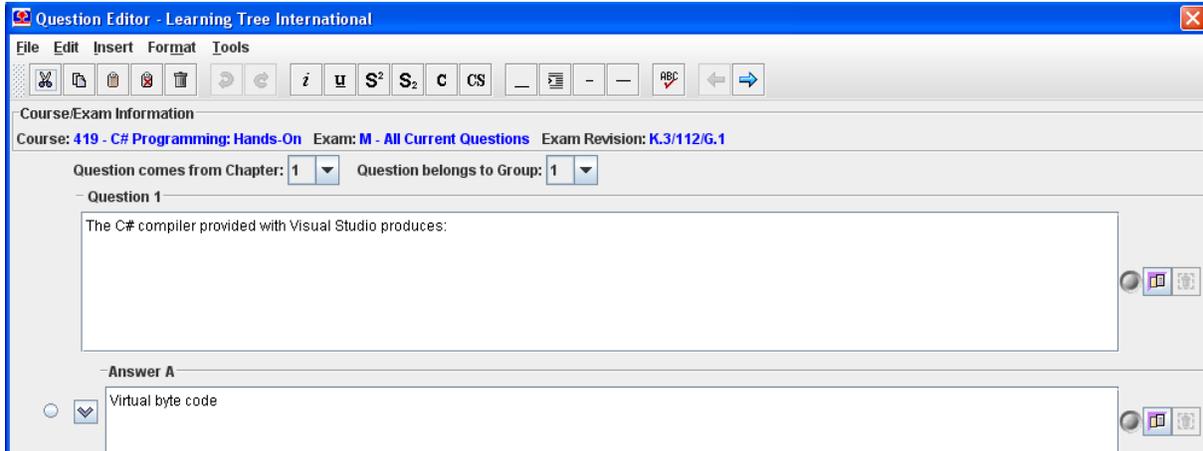
The File Menu

Cancel – Click on this to escape from the current question without saving any changes.

The Edit Menu

Undo – Click on this to undo the last edit.

Redo – Click on this to redo the last edit.

Cut – After selecting text, click on this to cut it.

Copy – After selecting text, click on this to copy it.

Paste – After selecting a location, click on this to paste the selected text with its original formatting intact.

Paste Unformatted Text - After selecting a location, click on this to paste the selected text without any formatting. Use this when copying and pasting from external sources, such as Microsoft Word.
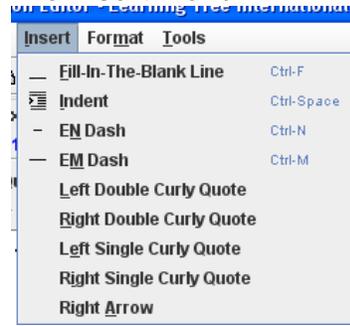
Delete Question – Use this to delete the current question.

Select All – When your cursor is in a field, click on this to select everything in that field.
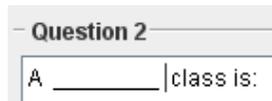
Edit previous question – When you click on this, you are taken to the previous question.

Edit next question – When you click on this, you are taken to the next question.

The Insert Menu

**Fill-In-The-Blank-Line** – When you click on this, a blank line of eight spaces is entered. Example:

Do not use a blank line to end a question; in this case, omit the blank line and use a colon. Do not use a blank line to begin a question; instead, reword the question so that the blank line falls somewhere in the middle.

Indent – When you click on this, the text is indented where you have your cursor.

EN Dash – When you click on this, an EN dash is inserted. Example:

type –
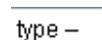
EM Dash – When you click on this, an EM dash is inserted. Example:

type —
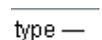
Left Double Curly Quote – When you click this, the following is inserted: "
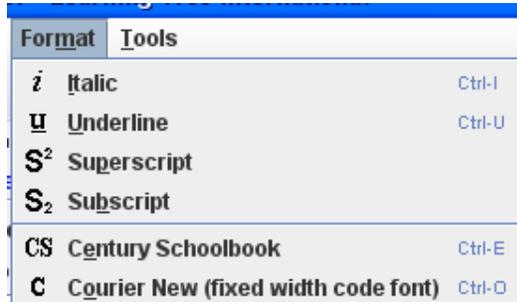
Right Double Curly Quote – When you click this, the following is inserted: ”

Left Single Curly Quote – When you click this, the following is inserted: ‘

Right Single Curly Quote – When you click this, the following is inserted: ’

Right Arrow – When you click on this, the following is inserted: ▶

The Format Menu

Format	Tools	
i	Italic	Ctrl-I
U	Underline	Ctrl-U
S²	Superscript	
S₂	Subscript	
CS	Century Schoolbook	Ctrl-E
C	Courier New (fixed width code font)	Ctrl-O

Italic – When you click on this, any selected text is *italicized*.

Underline – When you click on this, any selected text is underlined.

Superscript – When you click on this, any selected text is ^{raised} and made smaller.

Subscript – When you click on this, any selected text is $_{lowered}$ and made smaller.

Century Schoolbook – When you click on this, any selected text is put in the Century Schoolbook typeface. Apply this plus italics to the word "not" when asking for a choice that is incorrect or unlike the other responses, or to any other word that is to be emphasized in a question stem.

> Example: Which statement is *not* true?

Apply Century Schoolbook plus italics to terms that the question asks the attendee to define.

> Example: In object-oriented terms, a *class* is:

Courier New (fixed width code font) – When you click on this, any selected text is put in the `Courier New` typeface. This is used when questions or answers contain programming code or file names.

For guidelines on exam styles, please see the Product Development website at pdev.learningtree.com and click on:

Publications Style Guide and Writing Manual

The Tools Menu

Tools
ABC Check Spelling... F7
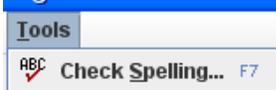
Check Spelling – Click on this to check the spelling for the question and answers on which you are currently working.

Toolbar Icons
All of the items on the toolbar also have corresponding menu items. The icons are for your convenience. They all display tool tips when you hover on them with your mouse.